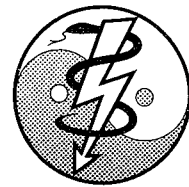


H. Leonhardt

Fundamentals of Electroacupuncture According to Voll



An Introduction



Medizinisch Literarische
Verlagsgesellschaft mbH - Uelzen

Fundamentals of Electroacupuncture According to Voll

— An Introduction —

By Horst Leonhardt, M. D., Salzburg

Completely revised by Reinhold Voll, M. D. and Helga Sarkisyanz, M. D.

Translated by Helga Sarkisyanz, M. D.



Medizinisch Literarische Verlagsgesellschaft mbH. · Uelzen

Leonhardt, Horst:

Fundamentals of electroacupuncture according to Voll: an introd./by Horst Leonhardt.
Completely rev. by Helga Sarkisyanz and Reinhold Voll. Transl. by Helga Sarkisyanz. — Uelzen: Medizinisch-Literarische Verlagsgesellschaft, 1980.

Dt. Ausg. u. d. T.: Leonhardt, Horst: Grundlagen der Elektroakupunktur nach Voll.

ISBN 3-88136-081-6

NE: Sarkisyanz, Helga [Bearb.]

© 1980 by Medizinisch Literarische Verlagsgesellschaft mbH, Uelzen

All rights reserved, including particularly reprint, translation, lecture, radio- and TV emission, adaptation to screen, as any kind of photomechanical reproduction also of extracts

ISBN 3-88136-081-6

Arranged, composed and printed by C. Beckers Buchdruckerei, Uelzen

Contents

Preface	11
Electroacupuncture according to Voll (EAV)	13
Aim of the electroacupuncture according to Voll	14
What does electroacupuncture offer?	14
Electroacupuncture diagnostics (EAD)	15
Foundations of electroacupuncture	16
Indicating diagnosis by electroacupuncture	17
Chinese acupuncture and electroacupuncture	19
Possibilities of electroacupuncture	20
Presentation of the apparatus	22
The "Kraiss and Friz Diatherapunteur" apparatus by Werner	22
The "Kraiss and Friz Diatherapunteur" apparatus	24
Switches for the therapeutic part	24
How to operate the "Diatherapunteur" apparatus	27
List of the technical data of the "Diatherapunteur"	27
Conditions of a satisfying and safe operating of the apparatus	29
Care and maintenance of the apparatus	29
The "Dermatron" by Pitterling	29
EAV-portable	31
EAV diagnostic device	33
Accessories	34
Cables	34
The testing stylus	36
Electrodes	37
Why brass?	40
Cleaning of the electrodes	42
The acupuncture points	43
The equilibrium magnitude	44
Basic conditions of diagnosing	46
a) disturbing factors from the side of place of examination	46
b) conditions for the correct measurement of the side of the examiner	47
c) conditions from the patient's side	49
The basic derivations-hypothalamus	54
What do the individual hypothalamic values express?	54
a) differentiated evaluation of increased hypothalamic values	54
b) lowered hypothalamic measurement values	55
c) unequal hypothalamic measurement values	56
d) indicator drop at the hypothalamic measurement points	56

Focal processes and head focuses	56
Focus processes in the head region	58
25. Governor vessel	59
7. Measurement point of the stomach meridian	60
24. Conception vessel	61
8. Measurement point of the stomach meridian	61
Energetic relations between the teeth, resp. the 8 odontons and the organs and tissue systems (table)	62
Other possible head foci	67
a) frontal sinuses	68
b) maxillary sinuses	68
c) sphenoidal sinuses	68
d) ethmoid cells	69
Verification of focal processes and proof of irritations ("strewing")	70
Multiple foci	71
The diagnostic of primary and secondary foci	71
The diagnostic of the interrelation of focal and organ diseases	72
The technique of finding and measuring the points	73
Basic examination in electroacupuncture	75
A. basic derivations	76
B. organs (table)	76
Positions and competence of the individual measurement points	98
A. Measurement points on the head:	
Hypothalamus	100
Thalamus	101
Somnic center in the diencephalon	102
The mesencephalon (summation measurement point)	103
External auditory passage — external ear (auris externa)	104
Middle ear — tympanic cavity (auris medium and cavum tympani)	105
Inner ear and petrous bone (auris interna et pars petrosa)	106
Meninges	107
Neurohypophysis — posterior pituitary lobe	108
Regulation center of somnic rhythm in the mesencephalon	109
Pineal gland	110
Pons varoli	111
Medulla oblongata	112
Quadrigeminal plate (corpora quadrigemina)	113
Cerebellum	114
B. Measurement points in the facial area	
Vault of the main nasal cavity with the lamina cribrosa ossis ethmoidalis, including the fila olfactoria	115
Frontal sinus — sinus frontalis	116
Eye — anterior region	117

Eye — posterior region	118
Sinus sphenoidalis	119
Cellulae ethmoidales	120
Sinus maxillaris	121
— Lateral wall of nasal cavity with conchae nasaes	123
Nasal cavity — medial portion — nasal septum	124
Medial upper jaw — maxilla, pars medialis	125
Medial lower jaw — mandibula, pars medialis	126
Lateral upper jaw — maxilla, pars lateralis	127
Lateral lower jaw — mandibula, pars lateralis	128
Jaw joint — upper portion	129
Jaw joint — lower portion	130
Lingual tonsil	131
Submandibular gland	132
C. Measurement points of neck and nape region	
Pharyngeal tonsil	133
Sublingual gland	134
Tongue (lingua)	135
Larynx	136
Palatine tonsil	137
Tubal tonsil	138
Laryngeal tonsil	139
Parotid gland	140
Parathyroid gland	141
Thyroid gland	142
Vagus nerve	143
Thymus	144
Lymph vessel point No. 11	145
Lymph vessel point Nr. 12	146
Lymph vessel point No. 13	147
Lymph vessel point No. 14	148
Pituitary gland — anterior lobe — adenohipophysis	149
Pituitary gland — intermediate lobe	150
Spinal cord (medulla spinalis): Summation measurement point	151
Sympathetic nerve: Summation measurement point	152
D. Measurement points at the hand, the forearm and upperarm	
Lymph vessel	153
Lung (pulmo)	158
Large intestine (colon)	160
Nerval degeneration	162
Circulation: arteries and veins	164
Allergy	166
Parenchymal and epithelial degeneration	169
Triple-warmer points — endocrine system	171

Heart (cor)	172
Small intestine	174
Veins of the upper extremity — veins of the arm	177
Arteries of the upper extremity — arteries of the arm	178
Nerves of the upper extremity	179
Elbow joint — articulatio cubiti	180
Muscles of the upper extremity — arm muscles	182
Shoulder joint — articulatio humeri	183
Shoulder-clavicle joint — articulatio acromioclavicularis	186
E. Measurement points at the foot, lower leg and thigh	
Pancreas	187
Spleen	189
Liver (hepar)	192
Articular degeneration	195
Stomach — ventriculus	196
Fibroid degeneration	198
Skin	201
Fat metabolism — fatty degeneration	203
Gallbladder and biliary ducts (vesica fellae and ductus biliares)	205
Kidney (ren)	206
Urinary bladder — vesica urinaria and urogenital system	209
Ea) Lower leg	
Rectum	212
Bone marrow	213
Blood (sanguis)	214
Diaphragma pelvis	215
Diaphragma urogenitale — anterior part of the plate of the pelvic outlet	216
Muscles of the lower extremity	217
Veins of the lower extremity	218
Eb) Transition zone: lower leg-thigh	
Knee joint	219
Ec) Lower extremity — thigh front side	
Veins of the pelvis	221
Veins of the abdomen	222
Arteries of the lower extremity — arteries of the leg	223
Gonads — ovaries — testicles	224
Ed) Lower extremity — thigh back side	
Urethra — anterior region	225
Urethra — posterior region	226
Penis resp. vagina	227
Cowper's or Bartholini's gland — bulbourethral gland	228
Seminal hillock, resp. ligamentum with parametrium	229
Prostate gland, resp. uterus	230

Seminal vesicle (vesicula seminalis, resp. pars interstitialis uteri of the ampulla tubae)	231
Spermatic cord (ductus deferens, resp. ampullae tubae uterinae)	232
Epididymis (resp. ostium abdominale tubae)	233
F. Measurement points at the trunk: front side	
Larynx	234
Trachea	235
Bronchi	236
Esophagus — lower portion	237
Esophagus — upper portion	238
Fa) Measurement points at the trunk: back side	
Spine (columna vertebralis): Summation measurement point	239
Osseous system	241
Diaphragm	242
Adrenal gland (glandula suprarenalis)	243
G. Alarm points	
Triple warmer — endocrine meridian	245
Lung	246
Circulation	247
Liver	248
Heart	249
Stomach	250
Kidneys	251
Pancreas	252
Spleen	253
Large intestine	254
Small intestine	255
Urinary bladder	256
Alphabetic list of EAV measurement points discussed in this book	257
List of the meridian points with their relation to organs and tissue systems, discovered by EAV	272
Supplement to the table: "EAP organometry according to Dr. R. Voll" arranged by running numbers	272
1. Anterior aspect of the body	273
2. Anterior aspect of the head and neck	275
3. Posterior aspect of the body	277
4. Dorsum of the right hand	279
5. Dorsum of the right foot	281
6. Palm of the right hand	283

Preface

Knowledge about the immense and steadily growing number of more and more costly diagnostic facilities and drugs multiplies daily. An also steadily growing flood of printed paper, advertising "the medicaments of your choice" by scores, distracts the practitioner, dulling, by this way, his "Sixth Sense".

With this term, I mean the ability to diagnose safely under even the most primitive conditions, in shortest possible time. And an experience still more disturbing the practitioner is to realize unpleasant and sometimes noxious side-effects of chemical drugs.

These facts are the reasons for an increase in faulty diagnoses and therapies and for the overcrowding of clinics and hospitals with patients whose clinical treatment is objectively not justified. Thereby the practitioner is pressed into the role of a traffic policeman and the hospitals and clinics into that of a kind of assembly-line factory.

In my practice it was a very common experience that patients felt unhealthy, inefficient and even sometimes desperate though by conventional and traditional methods no irregularity or pathological change could be diagnosed. Symptom denominations like, e.g., "migraine", "allergy", "neurasthenia" or "autonomic nervous disorder" might serve temporarily the purpose of appeasement but they offer neither a solution for the problems concerned nor ways to efficient curing.

Every vital process, every motion, every change which means also a chemo-technical process, presupposes the existence of a certain quantity of energy which is required and transformed. Modern electrical measuring implements allow a very subtle and early electrometric recording of such a process and, therefore a very early diagnosis of changes inside of an organism as well as of their extent, long before a chemical or mechanical process is realized.

While still a practitioner and specialist in the field of dental, oral and maxillary medicine, I was always afflicted when, at the end of medical effort, we had to suppose a strewing dental focus — which diagnosis made us persuade the patient to sacrifice at random a number of teeth. By this way, many of teeth were sacrificed in the course of time, with relatively little and minimal success. Numerous testing methods, designed to discover and to localize dental foci, did not bring the desired safe result, in spite of increasing considerable expenses.

In searching for a method which was practicable and safe, I encountered in research the electroacupuncture according to *Voll*. In a relatively simple form, it offers the possibility not only to diagnose safely a focus as such, but also to determine the exact point of its issue which by no means must be always the teeth and nothing but the teeth, and besides to discover the relation between the focus and the organ involved in its irritation.

My increasing knowledge in electroacupuncture revealed not only the sight of a fascinating new field of physics but also to the very origins and bases of medicine itself. However, in the course of all the years since its introduction by *Voll*, so many results and experiences have been demonstrated so that the beginner stood puzzled before

a depressing and confusing number of facts, figures and results and like the proverb, he incurred the risk of not to seeing the forest because of the trees.

I was enthusiastic to have definitely found both an efficient and practical cure and I felt the necessity to share it systematically with other colleagues.

However, in the course of its progress, the work proved to be a more painstaking and voluminous task than I had expected it to be.

In Dr. *Voll* I found a friend, always ready to help me in theory and practice. To him I express here my most cordial gratitude for his essential contribution in achieving my purpose. My thanks also I owe to the Medizinisch Literarische Verlagsgesellschaft, Uelzen. In spite of their commitments and obligations, my book was printed in a fine presentation.

May the result of our common labour open to many colleagues the wonderful field of electroacupuncture, according to *Voll*, in order to bring relief and satisfaction.

Salzburg (Austria), July 1975

Horst Leonhardt, M.D.

Preface

The English translation of Dr. *Leonhardt's* book was completed after a thorough revision and supplementation of the German edition by *Helga Sarkisyanz*, M.D., Ketsch on the Rhine, who has been successful in EAV, and by myself.

Dr. med. *Helga Sarkisyanz*, is married to an American university Professor lecturing at Heidelberg, and speaks perfect German and English. For a long time she lived with her husband in the United States. For her strong engagement in translating and editing the book I have to express my sincere thanks to Dr. *Sarkisyanz*. During August 1979 we were engaged in many hours of discussion about the book on the Island of Oahu, Hawaii. The presence of Dr. *Sarkisyanz* at the EAV courses at Honolulu made it possible to give attention to the problems presented there by colleagues in the translated material. It was a pleasant task for me to co-operate with Dr. *Sarkisyanz* in order to make the eighth book on EAV available in English. This book will certainly serve to make the of new diagnostic methods according to EAV successful.

The sudden death of Dr. *Leonhardt* obliged me to take over the final preparations for the printing of this book. In July 1976 in the age of 58 years he passed away, when he had already written several chapters for the second volume of the present work.

This first volume can be regarded as a unit in itself. I am certain, that the reader will profit from it, the more as the excellent and vivid style of Dr. *Leonhardt* facilitates very much an introduction into the matter.

R. Voll, M.D.

Electroacupuncture according to Dr. Voll

The electroacupuncture according to *Voll* is a method of combining the fundamentals of Chinese acupuncture with the facilities of modern electronics for diagnostics and therapy. Chinese acupuncture uses energy-conducting lines called "meridians" and the acupuncture points situated along them. Additional details will follow later. These are the points where the electric resistance is measured.

Dr. *Voll* is considered the founder of "EAV" since he succeeded not only in finding a method of exact electric localization and in explaining the interrelation between the acupuncture points and their individual organs, but he also succeeded in measuring the resistance of these points and in explaining the diagnostic meaning of the measured values.

According to Dr. *Voll's* instructions, in 1953 the engineer Dr. *Werner* set up the technical conditions for this method by building the "diatherapunteur"; this is a tube-type apparatus, the name of which means a device combining the functions of both a diagnostical apparatus and a therapeutical one. It was demonstrated for the first time in 1955 at an exposition on the methods of electroacupuncture and was a novelty to the medical profession.

Due to Dr. *Werner's* creativity the apparatus could always be adapted to the actual state of technical progress.

A transistor apparatus was developed from the earlier form by the engineer *Pitterling*. Now, we have at our disposition a modern device according to the newest standards of technology.

In the course of his research, *Voll* found numerous new measurement points and energy conducting vessels, unknown to classical acupuncture, but indispensable for a diagnosis of human organic functions. The culmination of these discoveries was the development of a method of drug testing with the aid of the EAV appliances.

The aim of EAV is to establish a functional organ-tissue diagnosis of the energy system of the body. Therapy can be repeatedly performed with the same device, without medicaments, by low frequency current impulses called "relaxation oscillations", or it can be performed with the tested medicaments. For diagnosis there are, at present, 366 known measurement points available out of which 350 are bilaterally situated and only 16 are situated each in the fore and hind parts of the human body.

New in electroacupuncture according to Voll is the possibility

1. to control continuously an introduced therapy, respectively to change it in time and
2. to test a planned drug therapy prior to its application with respect to quantity and quality and, thereby, to reduce the incidence for failure.

Incorrect dosages are, therefore, avoided.

Aim of the Electroacupuncture according to Voll

The EAV is intended to help the general practitioner as well as the specialist to diagnose physical disturbances in their practices in order to achieve a differentiating diagnosis. Through EAV, the general practitioner is able to forward an initial diagnosis to a specialist, a hospital or a clinic, in order to facilitate further clinical investigations.

The EAV does not have the aim to replace traditional methods in diagnosis and therapy but to compliment methods in clinical medicine.

Prerequisite for the practice of EAV is knowledge in:

- anatomy
- clinical medicine
- modern electronics
- allopathic and homoeopathic pharmacology
- Chinese acupuncture

The electroacupuncture allows measurements directly on the patient's body which can be, to a large extent, reproduced and demonstrated.

The measurements allow a glimpse into the physiological processes inside of the living organism and, thereby, into the condition of the patient at the time of the examination.

What does Electroacupuncture offer?

In diagnosis:

1. Guiding value, respectively four quadrant deviation as a reference-diagnostic indicating in which quadrant of the body the disease process is located.
2. Diagnostic at more than 250 skin measurement points, corresponding to the classical acupuncture points.
3. Diagnostic at more than 100 points newly discovered by electroacupuncture.
4. Differential and environmental diagnostics in order to discover the intensity of inflammatory or degenerative processes, or both of them together.
5. Identification of the etiological factor of the disease by aid of nosodes and organic preparations.
6. Stimulating test by slight current impulses for focus diagnostics in order to activate inactive focuses, whereby they can be localized and diagnosed.

In therapy:

1. Therapy with low frequency relaxation oscillations
 - a) for the equilibration of guiding values
 - b) for the equilibration of skin measurement points
2. Therapy with tested drugs
3. Testing of the compatibility and the dosage of drugs and other effective substances.

There are measurement points for all large organs, for the different tissue systems, bone-, joint-, vascular- and lymphatic systems, and for degenerative processes.

This means that EAV is not only of interest for the general practitioner but also for the internist, the pediatrician, the ENT specialist, the dermatologist, the neurologist, the gynecologist, the urologist, the orthopedist etc.

It is important that, by aid of EAV, a functional diagnosis can be made.

Early disturbed organ functions are recognizable through the measurable energetic disturbances shown in the electroacupuncture test. Often, an early therapy or introduction of a preventive measure is possible: all diseases begin with a disturbance of the energetic system and *can* be discovered long before clinical symptoms appear.

From the point of view of bio-electrics, the reaction of the body is measured in EAV from a minimal measurement current tension of 135, up to 2070mV, the average being about 800mV.

This measurement current varies somewhat in proportion to the apparent resistance which may vary because of the skin condition, the measuring skill of the operator and the applied pressure.

The current flowing through the apparatus and the meridian at an indicator position of "50" on the ohmmeter amounts to 870mV, i. e. approximately 1 V., 95 K Ohm and 9 micro-ampère.

Electroacupuncture Diagnostics (EAD)

The electroacupuncture diagnostic is a "reference diagnosis". It is possible by it to obtain quick results without causing pain and without the obligation to endure complicated procedures. These results could otherwise only be found after prolonged and often expensive investigations and examinations or not at all. Additionally, with the electroacupuncture diagnostics, the results obtained enables one to set up an aimed anamnesis. This saves time, since by specific questioning from the part of the practitioner the patient's complaints are explained easier and faster. The patient will be impressed when an EAV practitioner understands his complaints in such a short time.

EAV-diagnostics brings about a quick and safe diagnosis of focuses and fields of disturbances as for example in a focal toxicosis, which blocks the usual therapy. Moreover it renders possible the determination of an allergy and of the causing allergenes (by medicament-testing). It enables us to decide whether in an diseased organ there exists an inflammatory phase, an acute or subacute illness, a degenerative process or a combination of them.

The electroacupuncture, however, does not release us from the obligation to take measures offered by clinical medicine and modern research in focal-toxicosis which cannot be controlled any more conservatively, or in severe inflammatory diseases as well as in progressed stages of degenerative diseases.

Electroacupuncture enables us to fulfill the old dream of all physicians to set up a diagnosis of causes with relatively little loss of time to begin a causal therapy.

Moreover, electroacupuncture offers the opportunity of a *functional diagnosis* instead of conventional static diagnosis.

This enables us to arrive at the following results:

1. an early diagnosis
2. a holistic diagnosis
3. the supervision and close control of a therapy and
4. the exact observation of the progress of the healing process.

Thus not only the purely subjective feeling of well-being of the patient, which often is simulated to get discharged from the hospital earlier, is decisive but the objective statement of the functional condition of the individual organs and the entire organism, which cannot be influenced by the willpower of the patient himself.

Foundations of Electroacupuncture

Every inflammatory alteration of a cell starts with an increased energy-production. This can be found even in those cases where the functions of the organ are still normal according to clinical and laboratory tests.

A "healthy organism" means a normal function of the individual organs. This function presupposes also a normal equilibrium of the energy systems: a balance between production and consumption of energy.

An exact comprehension and control of this energy system offers the possibility of a safe and early preventive diagnosis, reaching from irritation to "obvious illness" or a "derailment" of individual organs, parts of organs or the general condition.

Too much energy means an "-itis", not enough energy an "-ose".

The energy produced by the organs is flowing in certain current courses below the skin into the periphery. The acupuncture points are located on these courses and are used by the EAV for the diagnostic and therapy. The teaching of the energy courses, the so-called meridians, existing in the theory of classical acupuncture, comprises the experiences of thousands of years, the correctness of which has been confirmed by the latest research.

Whoever does study the thoughts of classical Chinese acupuncture, will again and again be surprised how purposeful the ancient Chinese found always the correct response to manifold questions, even without any modern testing apparatus.

So, the course of the meridians, the courses of physical energy, established thousands of years ago, could be confirmed as a fact through measurements of the electric potential. This can also be said about the so-called "acupuncture points" those spots where the current courses, the meridians, approach to the skin surface by 2 or 3 millimeters. Here, the energy potential of individual meridians and the corresponding organs can be measured.

As a part of a research program of the Boltzmann Institute in Vienna, it was proved by instruments of very high sensitivity, that the old as well as the new acupuncture points (found by *Voll*) do differ considerably in energy potential from other areas of the skin.

Also, by aid of the ohmmeter and a buzzing sound emitted from the "Diatherapunteur" apparatus by *Kraiss* and *Friz*, or of the modern "Dermatron" by *Pitterling*, apparatuses serving the performance of acupuncture according to Dr. *Voll* — (see the description in this volume), these acupuncture points can be exactly located, measured and tested.

It would be too confusing to our readers if we would try to repeat the entire doctrine of Chinese classical acupuncture in all its detailed and flowery language. The basic outlines of electroacupuncture can be described without repeating all known acupuncture points or giving a description of their interlaced relations and mode of operation.

For their study, the detailed French works by *Soulié de Morant*, *De la Fuye*, *Niboyet* and *Chamfrault*, as well as the German book by *Bachmann*, "Acupuncture, a regulation therapy" can be recommended.

This "introduction" will describe only the most important facts as clearly and understandable as possible.

Indicating Diagnosis by Electroacupuncture

As already explained, every vital process in our organisms brings energy to flow which follows certain predetermined courses, the meridians. At the acupuncture points it is exactly measurable. With the knowledge of the mechanical and anatomic-topographical conditions of the application of electroacupuncture, supplemented by methods of clinical medicine, a safe and successful therapy is possible.

In addition to this, the indicating method of electroacupuncture discovers interactions which, otherwise, can hardly be diagnosed. Thereby it offers the possibility of a holistic diagnostic and a comprehensive therapy even in refractory or chronic cases to improve the condition or restore the function (partially or possibly totally) of the organs.

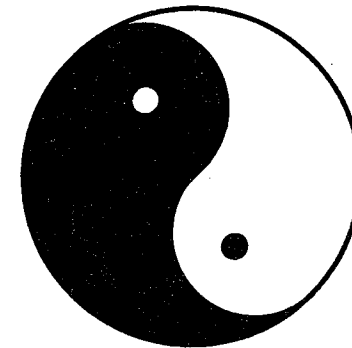


Fig. 1: Chinese "Monad"

The theory of classical Chinese acupuncture is part of a cosmic view of life, which is based on the concept of completion of contradictory pairs (Yang — Yin, strength — weakness, light — dark, above — down, day — night, heaven — earth) with the aim of harmony. The symbol of this principle is the "monad". It is formed like a circle, which is divided by a wavy line into two equal halves contrasting to each other in their color values. In the one half there remains still a rest of the opposite side, as a symbol for the fact, that there exists no phenomenon which does not bear in itself the germ of the opposite.

Transferred into the field of medicine, this means that our life is passing in a constantly oscillating state of balance between two extremes and that there is neither a perfectly stable health nor a total illness. The only exception is death. In other words, every phase of health in our existence bears the germ of illness while every illness contains the germ of recovery. The union of the egg cell with the sperm can already be termed the beginning of dying. The gerontologist *René Schubert* (Erlangen) formulated this with the words: "Being born, we start to die."

The Chinese concept of the chief task of medicine says that it consists in the preservation of the balance to recognize in time eventual deviations and to exclude disturbances through proper measures.

As previously mentioned, a balance of energy can only be reestablished by application or distraction of energy.

As this was possible in those days only from outside the method of "needling" was found, consisting in the puncturing of corresponding acupuncture points in varying depths, with gold or silver needles. The surprising fact was found that gold needles attract energy and concentrate it at the point of puncture while silver needles push it off or disperse it.

By this discovery is possible to bring the energy in both direction, the positive as well as the negative and to steer it.

In particular conditions of lack of energy "moxing" was in use besides needling or also as the only therapy, by which to one or several acupuncture points warmth (= energy) was delivered through the burning of moxa-herbs (artemisia cones put on the skin). For thousands of years with the use of needling and moxabustion astonishing therapeutical successes were brought about in the Far East. It is the merit of the French to have succeeded in understanding the flowering Oriental language of the Chinese texts at first. They made it accessible to the other Europeans.

By their colonial possessions in Indochina, the French came into touch with acupuncture already in the beginning of the 19th century.

It was the lack of age-old experience and training of the Chinese colleagues which hindered the European acupuncturists to conquer its appropriate place in modern medicine.

As recently as in 1953, Dr. *Voll* succeeded in replacing the Chinese gold and silver needles with two different low frequency current impulses of a modern electrical apparatus. This ingenious idea slightly opened the door of contemporary European medicine. This seemed to justify the hope that also Chinese acupuncture, now in the new garb of acupuncture according to *Voll*, might be incorporated into our medical system and acknowledged universally.

Chinese Acupuncture and Electroacupuncture

In relation to classical Chinese acupuncture, electroacupuncture diagnostic according to *Voll* offers many advantages.

One doesn't need any more the pulse-diagnostic which is difficult to learn. One gets measurable and reproducible data. In classical acupuncture the needling was done intuitively not only at the correct point, but also into the corresponding depth.

In EAV the indicator deflection of the ohmmeter or the maximum value of the measurement point in the "Kraiss and Friz Diatherapuncteur" apparatus of *Werner* or in the "Dermatron" of *Pitterling* allows the immediate control of full contact with the acupuncture point. Acquiring the measurement technique assumes training and intuition ("sensitivity of the fingertips") on the side of the physician. Presupposing the mastering of the measurement technique the acquired measurement results are reproducible. After finding the maximum measurement value this value cannot be altered any more by physiological (not pathological) increase of pressure.

Since EAV is dealing with the measurement of energetic potentials of portions of organs or small organs — a measurement accomplished on an electrical basis, in contrast to the needle where the energy course is directly entered — there has to be established a safe contact with the acupuncture point by pressure. Hereby, the pressure applied with the active point electrode has to be strong enough to compress the tissue layers between the skin-surface and acupuncture point.

This pressure varies according to the situation of the acupuncture point, the age of the patient and the condition of the skin which, in exceptional cases, can be altered by heavy physical work (callosities) etc., between 600 and 1400 pond (1 pond corresponds to a weight of 1 g mass).

With some training one will get the proper feeling and will not be dependent as in the beginning, on observing of the pointer deflection or the buzzing sound.

When taking up contact, the pointer will move towards the normal 50 partition point. Full contact is reached when the pointer stops rising even with increased pressure of the active point electrode or when the buzzing sound does not rise any more.

The appreciable advantage of electroacupuncture in relation to classical acupuncture lies in the possibility of immediate diagnosis and of controllable therapy.

The indicator drop of the ohmmeter in the "Diatherapuncteur" switchboard does not only indicate the discovery of an acupuncture point but also roughly outlines the potential derailment of an organ, the necessity of therapy. Moreover, the extent and kind of indicator drop will allow to read the kind of therapy. Moreover, the decrease of pointer oscillation towards "normal" gives a safe measure for the therapy.

Classical acupuncture offers only the possibility to guess how far a therapy might be successful. Electroacupuncture enables the physician to state this exactly in the very moment of the diagnosis and therapy. Neither classical acupuncture nor clinical medicine can offer a control system to prevent overtreatment. In electroacupuncture the permanent existing possibility of selfcontrol of the physician can prevent too much or not much enough treatment.

Lastly, in classical acupuncture, be it by concentration or by dispersion energy, only the energy still existing in the patient's body can be utilized. Electroacupuncture has

at its disposal the unlimited possibilities of electric supply and can lead any quantity of energy in the desired area.

This comparison with classical acupuncture points not the far-reaching, possibilities of electroacupuncture in medical practice. It seems superfluous to ask here, which kind of energy might be in question. Already from school, we know that energy is a phenomenon representing itself in different manifestations and forms. It is also known that energy easily undergoes a metamorphosis: We may remember an inflammation with its color, rubor, tumor and dolor. Lastly it is, therefore, of no importance which kind of energy — in this case, of "flowing energy" — we seize: All measurements allow a more or less safe conclusion concerning the summation of organic energy and its influence on the vital energy of the patient.

Possibilities of Electroacupuncture

Electroacupuncture offers the possibility of a safe and early indicating diagnosis which is of a very high value in the sense of the always propagated prophylaxis. According to Dr. *Reckeweg*, every illness expresses the effects of homotoxines, that is, of substances produced by the body itself. This self-poisoning process can be subdivided into six distinct phases for which *Reckeweg* invented the following nomenclature, adapted to the state of development of the illness:

1. Excretion phase
2. Reaction phase
3. Deposition phase
4. Impregnation phase
5. Degeneration phase
6. Cancer- or malignant degeneration phase

The first three phases are developing within the "humoral" processes, that means, do not touch the chemical composition of the cell content, or the surroundings of the cell without influencing its structure. The following three phases comprise processes leading to damage, transformation and final destruction of the cell. *Reckeweg*, therefore, called them "cellular phases" in contrary to the first cited ones, the "humoral phases".

By clinical testing methods known up to now and in general use, can only be recognized the last three phases; may be, in some special cases, the last of the humoral phases, the deposition phase. The mentioned methods can neither recognize nor influence the latent period, the time of preparation and production of a disease or illness which, diagnosed and treated immediately might easily be influenced and eliminated.

Considering that within the astronomical number of a trillion cells of human body in every minute 30 000 chemical reactions occur it is easy to understand that, with the relatively gross and rough methods at the disposition of the clinics and laboratories, only processes can be seized which are already grown to a certain size, which means that they represent already a state of advanced illness.

Since the minute chemical reactions inside the cell represent displacements of energy, these shiftings can be seized and registered by electroacupuncture, long before the beginning of acute illnesses. So, this method allows early or, at least, well timed countermeasures consisting in prophylaxis or in an accurate therapy.

Electroacupuncture can find these processes in the state of their very beginnings, enabling the physician to take prophylactic or early therapeutic action.

In the field of early diagnosis, electroacupuncture can differentiate five all-comprising stages. It can signal:

1. an inflammatory phase
2. a degenerative phase
3. in chronic cases, a combination of partially inflammatory and partially degenerative phases
4. an acute focal irritation or field of disturbance
5. a chronic burdening by focal irritation or a field of disturbance.

Moreover, the EAV can be used for exact checking of success or failure of a therapy, indicating the progress of healing or worsening of a pathological process.

In relation to the clinical nomenclature of diseases, the functional diagnosis by electroacupuncture offers certain obstacles for the beginner. For the practitioner with some experience in "energetic thinking", however, it becomes relatively easy.

By the EAV-diagnosis a sector of clinical medicine is covered which has been disregarded up to now — the energy household. The functional diagnostic of electroacupuncture is not to be understood as "competing method" to clinical medicine, but, also in the field of therapy, only as a useful supplement to clinical medicine.

With the "Diatherapuncteur" apparatus of *Kraiss* and *Friz* or the "Dermatron" of *Pit-terling* the electrical resistance of individual organs or sections of organs is measured at the individual acupuncture points. The reaction potential of a certain organ or its portions in relation to the minimal measurement current is diagnostically used.

From the extent and kind of this reaction potential, conclusions can be drawn concerning individual organs of the entire body, which allows a decision whether there might be in question:

- an inflammatory phase
- a degenerative phase
- a combined partially inflammatory and degenerative phase
- a focus burdening of acute or chronic nature and fields of disturbance
- a tendency towards healing
- a worsening of the illness.

After the above general introductory remarks, we shall now proceed to the description of the fundamentals of EAV as such.

Presentation of Apparatus

The application of electroacupuncture depends on the possession and the proper handling of the necessary apparatus. In the course of the last years, quite a number of devices were offered on the market which made it difficult for the practitioner to select.

Only those types of apparatus developed and designed for EAV representing the latest technical developments will be mentioned here: the apparatus used and recommended by the International Society for Electroacupuncture according to *Voll*.

The "Kraiss and Friz Diatherapuncteur" Apparatus by Werner

The two key stones of the structure of EAV are the exact knowledge of the acupuncture points, respectively of the individual measurement points and the proper apparatus. The "K + F Diatherapuncteur" by *Werner* and the new generation of the "Dermatron" series by *Pitterling* as the most common prototypes combining the apparatus for diagnostics and therapy.

We shall start our introduction into the electroacupuncture with the diagnostic part of the "K + F Diatherapuncteur" and with the principles of its working and handling. Electrical processes being discussed here, that means, manifestations of electrical power as a form of energy, it seems useful to start with a description of some fundamentals of electrotechnology:

1. Volt = Electric potential (voltage)
Comparable to the pressure in a water pipeline or inside the tire of a car, also an electrical current has a tension. Though recently changed internationally, most apparatus indicate its measure as "Volt" (V)
2. Ampère (A) = Electric intensity of a current
Comparable to the output of a source or pipe, its water quantity flowing through it in the course of a certain time, e.g. liters per second, the current flowing intensity in a conductor is measured. Most existing appliances still use "Ampère" which unity can be subdivided into Milliampère (10^{-3}) or Mikroampère (10^{-6}). One Ampère as a quantity of current necessary to precipitate 0,0011800 grams of silver per second when passing through an hydrous solution of silver nitrate.
3. Watt (W) = Electric power (wattage)
From the pressure of a water duct and its output, in this case, from voltage and intensity of the current, the total power of the product can be calculated. In comparison, one might imagine the measurement of the number of revolutions of a turbine in a certain time. In the domain of electricity, voltage, multiplied by electric intensity has for result the power or efficiency, named "Watt" (W). Volt (V) multiplied by Ampère (A) shows the electric power given in Watt (W). This unity can also be subdivided into Milli- or Mikrowatt, respectively Nanowatt (10^{-3} , 10^{-6} , 10^{-9} W) Correspondingly enlarged measuring quantities like Mega-

watt etc. are not be discussed here, as exceeding the frame of our object and being of no value for us.

Definition: One Watt (W) is the electric power of a current of one Ampère (A) caused by the tension voltage of one Volt: $W = A \times V$

4. Ohm (O): Resistance
The resistance which, e.g., a water pipe opposes to the water pressure or a car tire tube to the air pressure from inside, or a water mill wheel to the streaming water because of its axle's friction with the bearings is given in the domain of electricity in "Ohm". Here also exist subdivisions, like Kiloohm (10^3) Megaohm (10^6) etc.
5. Frequency (HZ) = Number of surges of current (oscillations, waves) per second:
The number of surges of current with which, comparable to a fountain pump's strokes the current is sent through the conductor, is named "Hertz" (Hz) in electricity. Hertz (Hz) is, therefore, the measurement unit of frequency, i.e. of current oscillations per second. In the therapeutic part of the K + F "Diatherapuncteur", this number can be exactly regulated according to necessity, in the scale corresponding to purpose, between 0,8 and 10 Hz.
6. Siemens (S) = Conductor quality value (capacity)
Dimension and descent of a water duct, e.g., are named, in the domain of electrics, "Siemens" (S), giving here the conducting quality of a current conductor, defined by its material, diameter, number of wires joined etc. S is the inverted or reciprocal value of the electrical resistance, i.e., a resistance of 25 Ohm means a conducting capacity of 1/25 to 0,04 Siemens.

Two further electrical measuring units are for the diagnostic purposes of the practitioner, of subordinate, but basically of decisive importance:

7. Coulomb (C) = Electrical charge.
One Coulomb is the charge flowing through a conductor cross section at a current intensity of one Ampère within one second.
8. Farad (F) = Electrical capacity of condensers:
One Farad means the capacity of a condenser charged up with the charge of one Coulomb to the tension of one Volt:

$$F = \frac{C}{V}$$

Tension, resistance and capacity of a current are in close interrelations and influence each other, following *Ohm's Law* for continuous current which is formulated as follows:

Volt (V) = O \times A (Ohm Ampère or, tension) is equal to resistance \times capacity, or $U = R \times I$. (U = tension, R = resistance, I = intensity or capacity.)

Ohm's Law, however, cannot be applied universally in the domain e.g. of biology where different factors play their role, like the actual state or age of the tissue, contributing to certain even minimal oscillations. These are, however, so unimportant that in practice they can be neglected as not influencing the accuracy of measurements with the K + F "Diatherapuncteur" apparatus.

The Kraiss and Friz "Diatherapuncteur" Apparatus

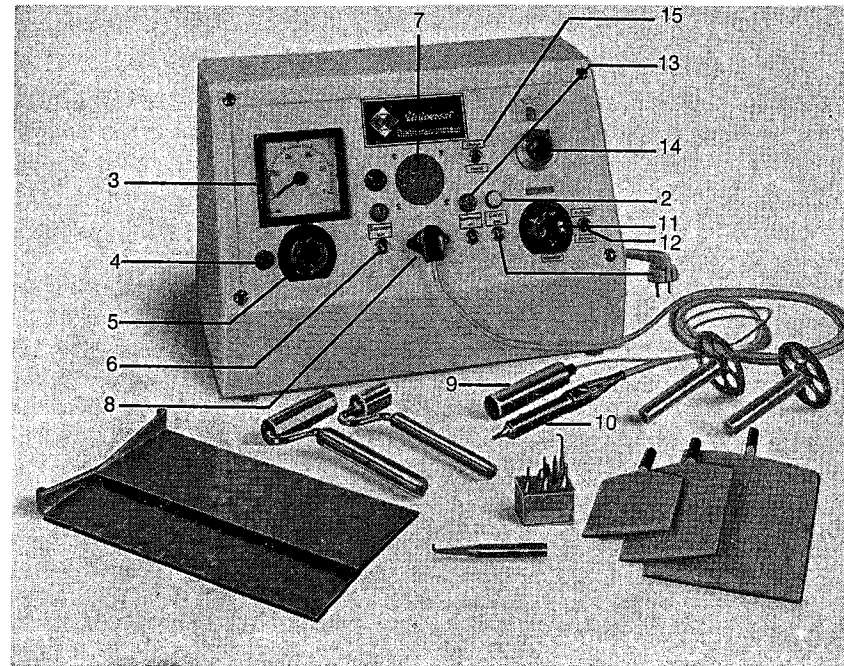


Fig. 2: The K + F Diatherapuncteur

Accessories and fittings (from left to right):

Foot electrodes, roller electrodes in two different sizes, point electrode and inactive electrode joined by cables in three different sizes, tooth-electrode with extension piece joined, different point electrodes stored in an acryle bloc

For the Therapeutic Part there Exist the Following Switches:

As already mentioned, the K + F "Diatherapuncteur" apparatus consists of two different apparatus set in a common casing: the diagnostic part to be discussed here and the therapeutic set to be dealt with later.

This apparatus, applied already for more than 20 years, can be regarded as the prototype of all other apparatus used in electroacupuncture. It is, therefore, sufficient to get acquainted with the principles of the structure of this "Diatherapuncteur": Starting, as already said, with the diagnostic part, here is the description of the parts whose knowledge is necessary to the practitioner. Anyone, interested in the complicated electrical structure, valves and wirings inside of it, may get a thorough informational sheet from the producer, respectively the inventor, Dr. *Werner*.

For the interest of the physician are:

1. Main switch
2. Red control lamp checking general function
3. Reading scale of ohmmeter
4. Contact button for calibration of the apparatus
5. Hand regulator for control of ohmmeter scale
6. In newer devices the switch for the buzzer
7. Loudspeaker outlet
8. Special plugs
9. Plug for outgoing cable for negative hand electrode
10. The same for the positive or active pencil electrode, also termed "Measurement electrode"
11. Intensity control switch
12. Switch regulating the kind of current impulse
13. Therapy control light
14. 10 Wendel calibrated potentiometer for adjustment of frequencies from 1 to 10 Hertz
15. Wave swing switch

Both apparatus, the diagnosis as well as the therapy set, are calibrated for a tension of 220 Volt and are supplied by a common circuit which is connected with the general household system by means of a safety plug. If, eventually, the average oscillation of tension in the local system might exceed 10%, i.e. the current oscillate between 200 and 240 Volts or, if the local tension is a different one, e.g. 110 Volts, in any case, a transformer ought to be interconnected in order to keep the tension constantly at 220 Volts.

The most important sector of the diagnostic part, the tube ohmmeter, or better, tube voltmeter, is connected with the potentiometer whose turn knob is fixed below the dial. By turning this knob somewhat to right or left, current oscillations below the a.m. 10% limit can be safely controlled as to supply the apparatus with a current of exactly 220 Volts.

This state is reached when, by the pressing of the contact button or by the short circuit touch of metallic hand electrodes the voltmeter dial pointer stops at the 100-mark.

The measuring voltage of this adjustment, meeting the patient at the acupuncture point, oscillates, according to the fictive resistance, between 135 and 2070 Millivolts which makes an average of about 900 Millivolts, indicated on the dial by the 50-mark.

The current flowing through the patient's body at that voltage, reaches an intensity between 5.50 and 11.25 Mikroampère. That means, that even an eventually oversensitive patient cannot get aware of it, because it is below the level of the natural electric energy intensity of the human body.

So, at the first glance, the diagnostic part of the apparatus seems to be a resistance measuring implement measuring the static electricity resistance of the skin at the acupuncture points.

The dial of the tube operated ohmmeter, the calibration of which is based on empiri-

cally found results, indicates a resistance of 50 units, once the organ corresponding with the measured acupuncture points is free from pathological disturbances and functioning normally, i.e. is healthy. Indicator deflexions of some units more or less are to be regarded as normal deviations, being caused by, e.g., an inexact hitting of the proper acupuncture point, a not optimal pressure, skin humidity and the like.

By aid of somewhat complicated comparative measurements, Dr. *Werner* could find out that a dial indication of 50 units means that the body is opposing a resistance of 0.87 Volts to the energy used for measuring. This tension of 0.87 Volts can, therefore, be regarded as the normal, biological, so to say, sound tension of body electricity, or, as the untested energy potential of our organs. For the daily practice, it is, however, sufficient, to know that at the 50-mark of the tube ohmmeter dial a tension of approximately one Volt is opposed to the body energy. Which provisional theory can now be based on the said results of Dr *Werner*, obtained with the *Kraiss* and *Friz* diagnostic apparatus?

The Boltzmann Institute in Vienna found recently that the electrical properties of acupuncture points differ from those of the rest of the human skin surface. Also the resistance against alternating and direct current is lower at the acupuncture points compared with other parts of the skin.

The acupuncture point shows optimal values only within a diameter of 2—3 mm. The safe knowledge of the situation of these points or their exact location by aid of the K + F Diatherapuncteur apparatus are the indispensable presuppositions for finding exact values and, with them, to get a safe diagnosis. The acupuncture points are situated on the energy conducting lines, the "meridians", i.e. a kind of leads of body electricity. Not only the acupuncture points but also the meridians can be followed in their full extents with very sensitive measuring instruments, so that their very existence can now be regarded as a proved reality.

This reality has also been confirmed by the experiments of Dr. *Niboyet* and his colleagues who found that a direct current of biological intensity, when lead into a piece of skin separated from the organism, is measurable only along the course of the meridians leading through this part of dermal tissue.

Inside of the organism meridians are not to be understood as particular, isolated current leads but contact each other over more or less densely arranged interconnections. These interconnections which also might be termed "secondary vessels" render possible a constant exchange of energy between otherwise distant organs and, by that way, also a general energetic diagnosis, respectively, as we shall see later, an energetic therapy using for detour other organs not yet affected by pathological changes. This proves in another way that there is no pathological change in an organism not affecting more or less the rest of the organs.

As long as there is bioelectrical energy at all in a body, all the meridians and, in first line, the acupuncture points will contain a more or less great portion of bioelectrical energy.

That means that the "EAV" enables a holistic entity diagnosis.

How to Operate the "Diatherapuncteur" Apparatus

Supposing that the order comprises no special wishes of the customer — the apparatus basically is delivered for alternating current of a tension of 220 Volts and 50 cycle per second (Hertz). For other tensions (e.g. 110 Volts, still in use in parts of Italy and France) or another kind of current (DC) the appliance is not constructed, at least not in its customary presentation. Before starting to work, eventually before buying the apparatus, one should examine the electric mains of the kind of current and its tension to which it will be connected.

Unusual kinds of current must be mentioned in the order, otherways, a transformer would be necessary.

Besides, the apparatus can be connected to the general system only by a safety plug with protective ground contact. Operating is then started with putting the main lever (1) on "Ein" (switching in).

The flashing up of the red control light shows then (2) that the apparatus is ready for operating.

After warming up the appliance for one to two minutes, operating can be started.

In order to eliminate slight current fluctuations, existing in almost every household current system and, so to say, to calibrate the apparatus for exact and safe measurement results, the next step is short-circuiting the apparatus by pushing the respective button (4). Then, by turning the control knob (5) the pointer of the ohmmeter dial is to be fixed on the 100 mark.

Now, the contact or short-circuit button (4) is let out and the appliance is in full working condition.

Through the connection of the electrode cable with the apparatus by the six way plug also both electrodes are well connected with it and now, measurements of the individual points on which the later diagnosis can be based, can start. The practical way of operating will be described later.

Apparatuses with a built in buzzer sound device can work with acoustic point finding aid — if wanted — by pressing the button "Ton" (= sound). The then found acupuncture point and its energetical potential is additionally indicated by the intensity of the buzzing.

On the same principle as above, also all supplementary appliances or simplified models are constructed: appliances with automatic commutation, the combined form, also the EAV "Dermatron" or the portable whose proper description — with the exception of *Pitterling's* "Dermatron" can be excluded here.

For readers who are technically interested in the matter, we insert here two tables taken from the book of *F. Kramer* "Introduction into the electroacupuncture according to Voll" published at Uelzen in 1972 and now out of print.

List of technical data of the "Diatherapuncteur"

Supply tension	220 V/50 Hz
Safety (apparatus)fuze	0.5 A

Tension control swing	+ / - 10%
Extent of frequency of therapeutic set	0.8 - 10.0 Hz
Transformer efficiency required from an additional transformer or regulator	appr. 100 V
Energy consumption	48 to 58 W
The measurement current of the diagnostic set amounts at the 50 partition of scale	8 - 10 × 10 ⁶ A (MA) 10 MW, appr. 1 V (V × A = W)

In Dr. *Kramer's* work, the basic pattern of the "Diatherapunteur" and the new generation of EAV apparatus, the "EAV-Dermatron" by *Pitterling*, are compared as follows:

Diatherapunteur	Therapeutic set	EAV Dermatron
Mains operated Valve set		Battery operated with rechargeable accumulator, mains independent
Apparatus in desk or box form trunk extra		Transistorized Portable with carrying- and supporting folding frame
2 impulse forms	current impulse forms as before	3 impulse forms
Motor operated	WS (Wave swing) = automatic change of frequency from impulse to impulse	Electronic switch gear
Calibrated by aid of 10 Wendel potentiometer, at newer models directly, at older one's with a gauging scale	dialling in of an aimed frequency	Dialling by aid of potentiometer; but precise indication of frequency values on frequency meter dial belonging to
"Magic Line" as extra, serially in newer models	Impulse indicator	Luminescence diode (pulsed) Skin test, connection to a writing mechanism as extra, (controllable by the stylus)
As "extra" only delivered	Quadrant shifting gear for 4 guiding value measurements Automatic shifting switch	Automatic shifting gear built in

The diagnostic set for indication of absolute values with or without indicator drop is equal in both apparatus.

Conditions of a Satisfying and Safe Operating of the Apparatus

The best technical apparatus and the easiest and safest handling arrangement do not guarantee its fulfilling the purpose entirely. Every apparatus, the "Diatherapunteur" or the "Dermatron" too, are only so far efficient in the hands of the physician, as he knows how to master its functions.

In order not to disappoint the individual patient of deceptions and, also, to prevent a generalizing discrimination of electroacupuncture, everyone interested in this fascinating field of medical science, is recommended to study the matter thoroughly before purchasing an EAV apparatus, or to pass at least two introduction courses in electroacupuncture, as they are held periodically by the International Society for Electroacupuncture. Date and place of these introduction- and advanced training courses can be learned from the Secretariat of the International Society for Electroacupuncture, Richard-Wagner-Straße 5, 7310 Plochingen, Germany.

In addition such courses are arranged yearly in spring and fall as part of the regular congresses of physicians practising naturopathy, at Freudenstadt/Black Forest (Germany).

The electroacupuncture apparatus is not a magic box, dispensing the physician of his duty of check-up, diagnosis and therapy. It delivers, however, if correctly operated, a clear and well-differentiated general survey of the patient's health state and of the functioning of his organs.

Servicing and Maintenance

At the delivery of every apparatus the buyer is also informed of addresses where a proper service can be found, specialized in the repair of possible damage.

Even in most robust, fully transistorized appliances, occasional malfunction cannot be excluded, the repair of which should be performed by a skilled specialist. In very urgent cases, however, a well-skilled all-round electronic technician might also be able to eliminate lesser faults, such as cracked soldering points and the like. The wiring diagram he will need is to be found on the inside of the top cover of the "Diatherapunteur". As a general rule, one might say that the apparatus requires nearly no maintenance. In order to guarantee an always exact functioning, it should be submitted to a thorough inspection at least every two years. This inspection can be performed already during the attendance of an advanced training course or of a congress at Freudenstadt, so to say, in an ambulatory way, that nobody will miss his apparatus in the regular practice.

The "Dermatron" by Pitterling

A further development of the EAV devices is the "Dermatron" produced by "Pitterling Electronic" (D-8000 Munich 40, Akademiestr. 5).

This is an apparatus both for skin resistance measurements and for therapy.

1. On the right side wall of the casing, there is for the writer steering cable socket. Further explanations are not necessary here.
2. The next socket receives the six pole plug of the two cored electrode cable. At the positive element of this cable, there is a bayonet joint for fixing the so-called point pencil with a point-electrode screwed in. At the negative element (black) of the two cored cable, a brass hand-electrode is fixed.
3. Also on the right side wall of the casing, there are four colored sockets destined to receive banana plugs of cables for the so-called four sector measurement and -therapy.

Now the front side of the apparatus:

4. The left dial with the 0 to 100 calibration serves for diagnosis. When ready to be operated, the red pilot lamp will flash up.
5. The right dial with a 0 to 10 partition is a frequency meter and shows the frequencies used in therapy in "Hertz".

Frequency is understood to be the number of electrical impulses per second. That means that 1 Hertz would be equal to 1 impulse per second, 10 Hertz 10 impulses etc.

As soon as the therapy part of the apparatus is operated the pilot diode will start pulsing according to the frequency chosen while the diagnostic part pilot lamp is automatically switched out.

6. Now the upper row of keys:
The first three are mutually locked, i. e., as soon as one of them is pressed, the formerly locked one will jump out. They refer to the three different forms of current output which the apparatus can produce:

- a) alternating relaxation oscillation-impulse
- b) positive direct current relaxation oscillation-impulse
- c) negative direct current relaxation oscillation-impulse

7. The next button is marked "W. S." — Wave swing, the button below it with the note "Hand" means hand control.

The "wave swing" is always used in therapy with alternating relaxation oscillation impulses when it is desired to change the frequency, the number of impulses per second automatically. The "wave swing" will lead faster to a therapeutical success than the apparatuses working only with 10 Hertz.

"Hand" control frequency is chosen when the therapy is with a fixed frequency: 10 Hertz or other frequencies adapted to certain organic changes (according to

Clauss).

8. The next pressbutton is marked "Auto", that means "automatic". It is pressed to get in therapy an automatic continuous switching over from diagnosis part to therapy part of the apparatus to control the result of charging and discharging by hand or foot electrodes. It serves also the purpose that the patient himself or the assistant can control automatically the state of therapy without being obliged to switch the button "therapy" to "diagnosis" from time to time.
9. The next pressbutton is marked "Ton" (sound). When pressed down, a buzzing sound is audible. This sound serves the finding of acupuncture points and is

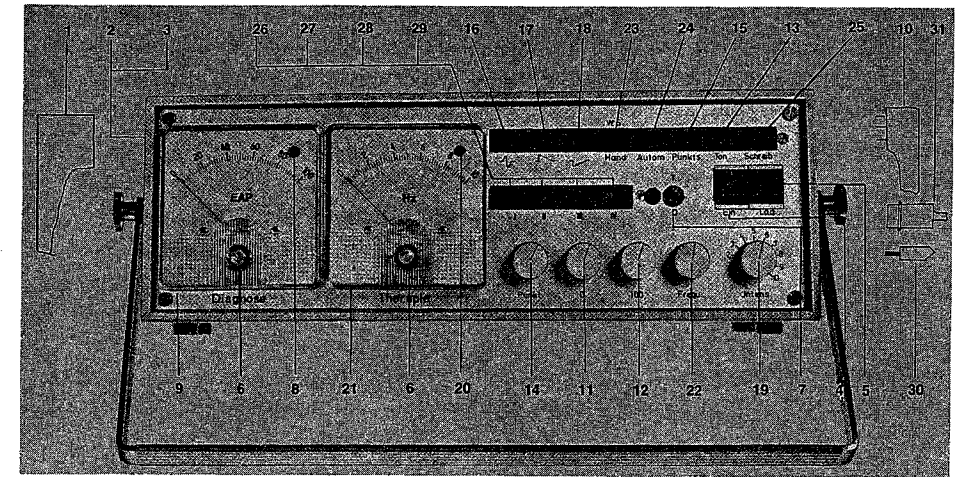


Fig. 3: EAV-Dermatron

1. Mains cable
2. Mains socket on left wall of casing
3. Mains fuze
4. Main switch (green)
5. Charging switch (red)
6. "Zero" control
7. Tumbler switch "Diagnosis or Therapy" (D/T)
8. Red light indicator for diagnostic gear control
9. Dial for diagnosis and point finding
10. Measurement cable socket (6 poles, uninterchangeable)
11. 0-calibration knob for diagnosis (0)
12. 100-calibration knob for diagnosis (100)
13. Buzzer control knob for acoustic EAP-control (Ton)
14. Sensitivity control knob for point finding gear
15. Shifting button for changing to point finding from diagnosis
16. Key pressed: wave swing charging impulse \int
17. Therapy key pressed: wave swing discharging (positively rectified) impulse \int
18. Key pressed: wave swing pseudocharging (negatively rectified) impulse \int
19. Intensity control knob
20. Red light indicator for therapy gear control
21. Therapy frequency dial
22. Regulator for frequency
23. Switch for shifting over from wave swing to fixed frequencies
24. Automatic shift key from diagnosis to therapy
25. Shifting key for pencil control from therapy to writer control
26. 1st button pressed: hand/hand
27. 4 quadrant selector: 2nd button pressed: left hand/left foot
28. buttons: 3rd button pressed: right hand/right foot
29. 4th button pressed: foot/foot
30. Connection sockets for the 4 quadrant electrodes (marking by colours)
31. Connection sockets for the writer

particularly helpful for the beginners in EAV. The pitch of buzzing indicates whether one is approaching the acupuncture point or withdrawing from it. The pitch is highest when the point is located and reached. It is an acoustic control dispensing of watching the dial.

10. The last button in the upper row connects the apparatus with an automatic writer for documentation of measured values.
11. In the row below, there follow 4 knobs marked I to IV.
They switch together the corresponding cables for the four-quadrant-measurement for reference diagnosis and therapy:
Key I: Hand — hand (red = right hand, black = left hand)
Key II: Left hand — left foot (black — yellow)
Key III: Right hand — right foot (red — green)
Key IV: Foot-foot (green = right foot — yellow = left foot)
12. There is also a tiny tumbler switch to change over to the desired kind of operation. Position "T" means "therapy", "D" = "diagnosis"
13. The lowest row of control handles consists of 5 turning knobs. The first is marked "Punkt" (Point) which is an abbreviation for "point finding device switch".
By this knob the sensitivity can be regulated in connection with the pressbutton "Punkt". Compared with its surrounding the acupuncture point itself shows the highest reading. This is, however, a relative kind of measurement. By pressing the button "Punkt" (point) (upper row) a particular function of the apparatus is switched in: the point finding part. It enables the examiner to locate an acupuncture point exactly. It has to be added that for this function of the apparatus the normal diagnostic cable has to be changed for a particularly connected point finding cable with the stylus belonging to it. The full indicator deflection on the diagnostic dial by a corresponding pressure is indicating the exact location of the point. A deflection resulting just from touching the skin indicates the approximate location of the point and is of no diagnostical value.
14. The next knob, marked "0" serves the 0-calibrating of the dial, the knob marked "100" the 100-calibrating. For these purposes one has to make a short-circuit between both measuring electrodes. That can be established simply by touching the hand electrode with the pointer electrode or by pressing simultaneously the two buttons marked I and II. When by this the position of "100" can not be achieved, when the pointer does not arise to "100", it indicates that the device is badly charged and has to be recharged urgently.
Charging is done by pressing the button "Ein" (on) and the key "laden" (load). If the loading button is flashing up red, the apparatus is in the loading position. For starting to work the "Ein" (on) button has to be pressed and has to flash up green.
The next turning knob serves the control of the frequencies by hand. It is operated together with the "Hand" key. The actual state of adjustment can be read from the second dial.
With the last turning knob the current intensity is controlled.

EAV Portable

This device is of the smallest possible size for performing electroacupuncture.

Dimensions of the device:

Breadth 210 mm, depth 115 mm, height 90 mm (appr. 8:4:3 1/2 in). It is operated with dry batteries with three mono batteries, independent from mains.

It can be performed with it: diagnosis of organs, focal diagnosis and testing of medication as with larger-sized apparatuses.

Therapy is also possible. Frequency, intensity and wave lengths can be controlled by the aid of easily distinguishable knobs and keys. It includes the "wave swing" gear.

For therapy, however, the device possesses only two kinds of current impulses: the positive and the negative, not the alternating one. A therapy with fixed frequencies (according to *Clauss*) can be performed only in rough outlines, because there is no fine adjustment dial.

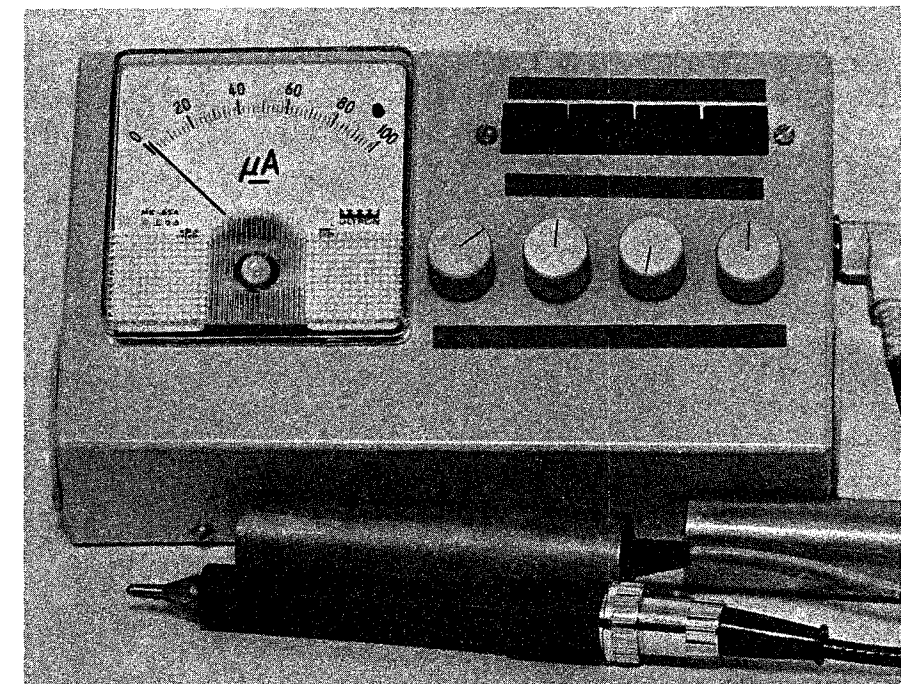


Fig. 4: EAV-Portable

Accessories

With the purchase of an electroacupuncture apparatus the majority of accessories for diagnosis and therapy are delivered with it.

Included with the basic equipment are:

1. The electrode cable
2. The electrodes
 - a) the testing styluses (pencils)
 - b) the point electrodes
 - c) the tooth electrodes
 - d) the hand electrodes
 - e) the foot electrodes
 - f) the body electrodes (flat electrodes)

Also included are banana plugs to be screwed in and out for changing of the individual electrodes.

Cables

The kinds of cables used in electroacupuncture are:

1. Diagnostic gear cables (universal cables)
2. Quadrant cables
3. Connection cables
4. Therapeutic gear cables (banana plug connected cables)
5. Cables during operations guiding value controls.

1. The Diagnostic Gear Cable (Universal or All Purpose Cable)

The diagnostic cable is connected to the device by means of a six pole plug. This plug is connected to two differently shaded single core cables (usually grey and black). The one of them ends in an ordinary banana plug for the negative hand electrode, the other in a bayonet joint socket for the positive testing — or stylus (pencil-) electrode. Here the so-called stylus or pencil is fixed which the examiner holds in his hand and by means of which the individual acupuncture points can be found. Both cables are so well insulated that during the examination neither the patient nor the examiner can be affected or harmed by possible straying of electromagnetic fields.

2. The Quadrants-cable

These simple two core cables are only used when a so-called combined apparatus is used as a supplementary device to the K + F "Diatherapuncteur" for the four quadrants measurement and when the operator wants to save time for the re-poling of the different electrodes.

They also possess a six-pole plug and end into each a simple banana plug for connection of two hand and two foot electrodes so that the basically deriving quadrant measurement, on which we are coming back (hand-hand, hand-right foot, hand-left foot and foot-foot) can be performed by simple switching over by means of the switch at the combined implement. In the EAV "Dermatron" apparatus, the switch gear for the four-quadrants measurement is built in.

3. The Connection-cable

These are one core cables ending at both ends into banana plugs. They serve only, to connect the basic appliance with the combined implement. For the four-quadrants measurement by aid of the "Dermatron" there exist cables with black, yellow, red and green banana plugs.

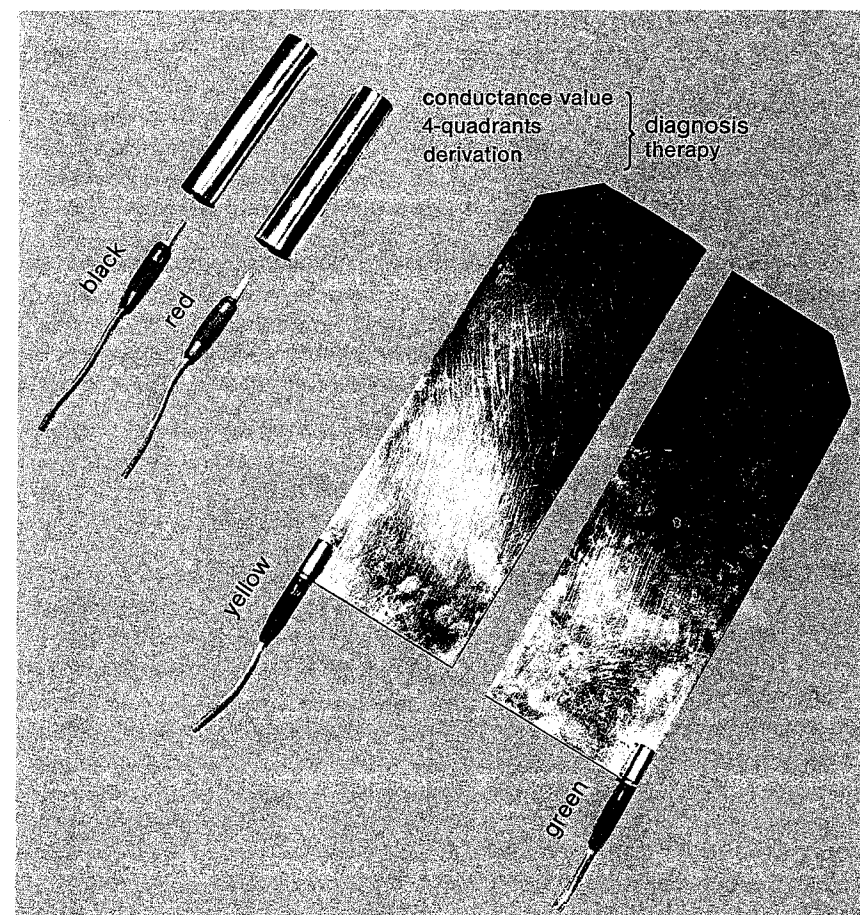


Fig. 5: Different electrodes

4. Therapy-cable (banana plug cable)

This is an additional or supplementary cable taking over a part of the tasks of the diagnostic cable, if necessary. Connected with the appliance through a six-pole plug, both cables end into simple banana plugs, where the negative pole is marked black and the positive one red. To these banana plugs, different electrodes can be connected. This type of cables offers certain advantages in the case of a permanent therapy where the treating physician must not always be present and the patient can be controlled by the doctor's assistance.

5. The Cable for Operational Guidance Control

In principle, this cable is similar to the therapy cable. The cable length can be 5 or more meters so that the basic values of a patient can be measured also during an operation and so be surveyed without disturbing the surgical activities.

When, during the operation, the basic values of a patient sink to less than 80, his energy system can be instantly recharged. This prevents complications and accelerates the healing process.

The Testing Stylus (All-round-pencil)

This is a supplementary gear shaped like an overdimensioned pencil, coupled to the three core diagnostic cable by means of a combined bayonet-screwing joint. Thereby, the conducting element is insulated by a hard, non conducting material so that the treating person obliged to hold the stylus firmly in his hand, will not get in contact

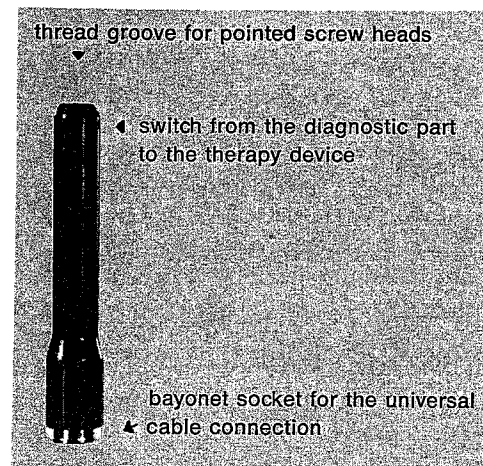


Fig. 6

with the measurement current and the reacting potential. At the second pole of the stylus there is a screw joint into which the different electrodes, respectively banana plugs can be inserted.

Additionally, there is a not conducting plastic button at the side of the stylus which, when pressed, switches over the apparatus from diagnosis to therapy.

As long as the plastic button is pressed, the apparatus remains switched on "therapy", i. e. the ohmmeter is eliminated from the circuit and the patient can be supplied with energy or energy can be taken from him. When the button is released, the new measurement value is instantly visible.

Electrodes

Among the electrodes available, there are:

1. Hand electrodes
2. Point electrodes (see fig. 6)
3. Tooth electrodes (see fig. 7)
4. Foot electrodes (see fig. 5)
5. Unipolar roller electrodes (see fig. 8)
6. Bipolar roller electrodes (see fig. 9 and 10)
7. Vaginal electrodes (see fig. 11)
8. Rectal electrodes (see fig. 12) also for prostate testing and treatment.

The hand electrode is a handy brass tube which is plugged to the banana plugs of the cable ends or the stylus. It is to be gripped firmly by the patient and serves as the negative or neutral pole for measurement or therapy.

Point electrodes are screwed on the stylus and serve for the point diagnosis resp. therapy at measurements or influence acupuncture points by means of current impulses.

Different shapes of point electrodes are:

1. The 4-mm half-round electrode. This was the former standard shape of electrodes used in point diagnosis and therapy in the beginning. Today it is replaced by the ball-shaped electrode which can be particularly recommended to beginners.
2. The ball electrode ends into a ball form of 3 mm of diameter. The ball shape offers the advantage to be less painful with point measurements because of a better distribution of pressure on the surface. With it, it is also easier to slide into different angles and joints between bones by slight turning movements of the point stylus.
3. The four tags electrode has a quadrupartition of the end of the half round electrode. When wetted between the 4 "tags" some humidity is preserved facilitating point measurement, particularly in the facial area by penetrating an eventual make-up.

Tooth electrodes are point electrodes with very fine ends which are also screwed to the stylus and are insulated on a more or less long part of their length by a synthetic material non conducting current. They enable a trained examiner to take very exact point measurements inside of the patient's mouth at the gingiva or at the dental root of individual teeth. They are chiefly used in search for foci.

Flat or foot electrodes are brass plates insulated against the floor, on which the patient rests his feet. Connected to the apparatus by banana plugs and cables, they are used for the main derivation in diagnostics and in basic therapy. They are also used for quadrant diagnosis and therapy.

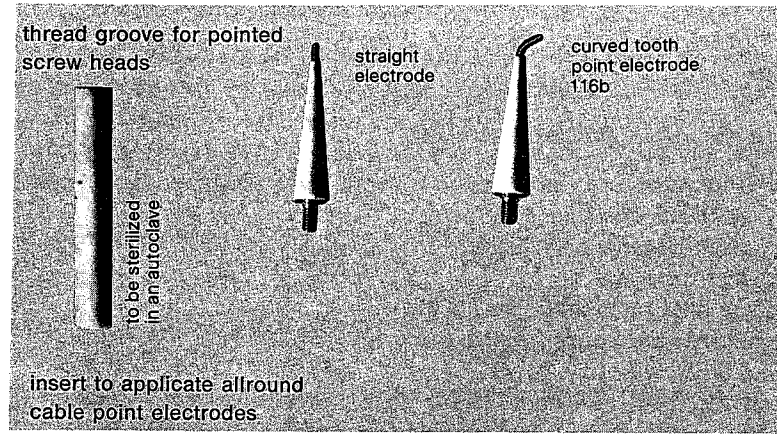


Fig. 7: Tooth electrodes

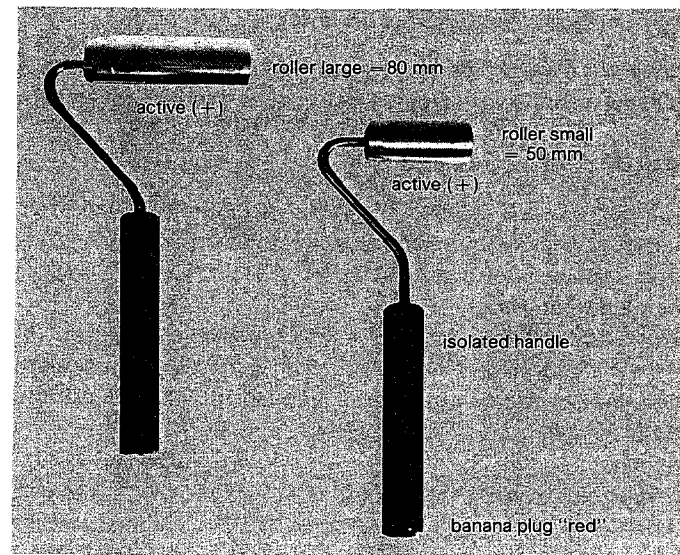


Fig. 8: Roller electrode

Fig. 9: Bipolar roller electrode

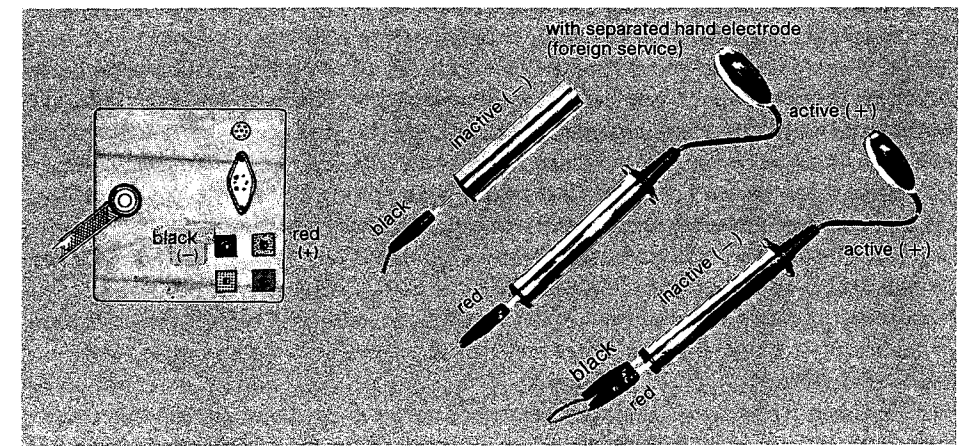
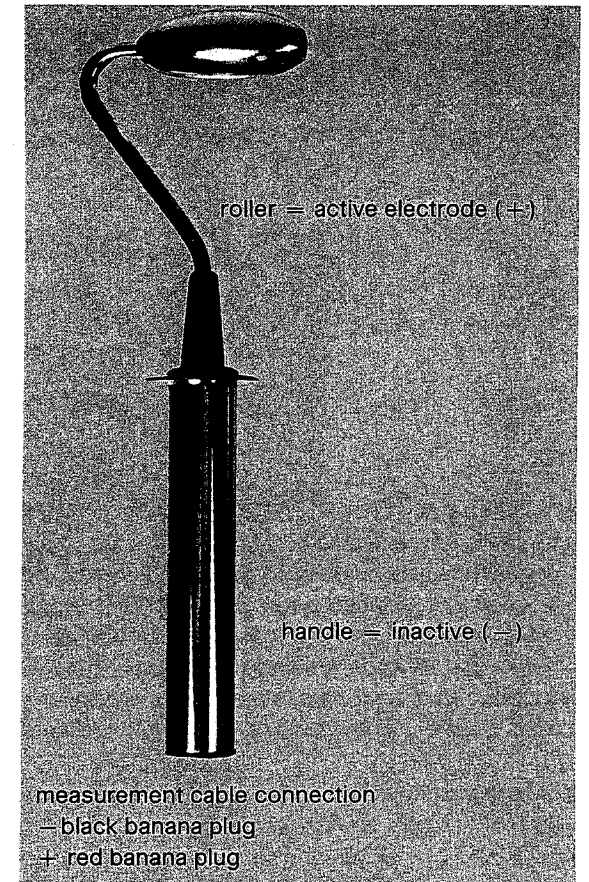


Fig. 10: Bipolar roller electrode connection diagram



Fig. 11: Vaginal electrode

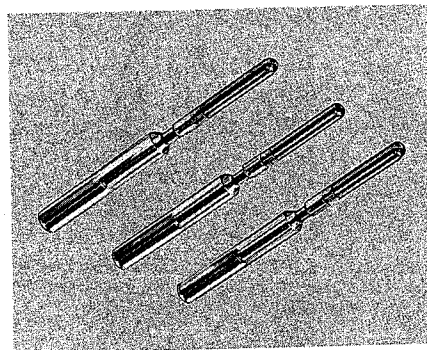


Fig. 12: Rectal electrode

Why Brass?

All electrode sets used in electroacupuncture according to *Voll* except the rectal electrode consist of brass. This leads to the question why this metal was chosen and not another more hygienic with easier maintenance, such as gold, platinum, silver, chrome, nickel or graphite?

With body temperature and humidity brass is easily covered with a thin oxide layer and it has to be cleaned constantly. Besides economic advantages it is preferred because of its qualities for measurement operations, so that for all purposes of electroacupuncture according to *Voll* it has proved to be superior to all other materials.

Research done by *Bergold* and *Becker* (Euratom Ispra) found that "graphite and brass show approximately equal measurement values within the quota of usual measurement errors. Silver compared with brass suppresses small or slow indicator drops if the maximal value is slightly reduced. Chrome, compared with brass, produces artificial indicator drops, if the maximal value is stronger reduced. Nickel shows reduced maximal values between them of chrome and silver, but does not change the size of the indicator drop".

The following table of measurement values, obtained under equal conditions, shows the superiority of the brass especially with respect to the so important indicator drop:

Material	Guiding value hand-hand by aid of the "dermatron"	ID (indicator drop)
brass	89	no
graphite	88	no
silver	86	no
chrome	80/64	yes
nickel	86	no

These research results prove the superiority of brass over silver, the latter being recommended by certain producers of electroacupuncture apparatus as electrode material. Even disregarding the fact that the conducting capacity quality of this metal is reduced by formation of an oxide layer (sulfide), indicator drops can only be registered when a certain maximal value was obtained before. Especially for focus diagnosis, above all in the dental area, even small indicator drops are decisive.

Any early diagnosis of a beginning functional disturbance cannot be recognized by using silver electrodes, because they cannot produce the very slow indicator drops of the brass electrodes.

Additionally brass has such an effective conducting capacity that even a light oxide layer or the resistance caused by it barely influences measurement results. So it can be neglected.

Besides, brass-unlike other metals is not contained in any form in a natural liquid or substance of the body or in artificial material brought into the body for medical reasons (bone suture, nailing, fillings) which would influence or falsify the measurement results.

Concerning the problem of the choice of electrode material, *Voll* revealed an interesting detail. It was tested by *Bergold* and the members of the executive committee of the International Society for Electroacupuncture according to *Voll*, including Dr. *Voll* himself, at occasion of the spring congress 1973 of the Central Association of Physicians Practising Naturopathy, in the practice of Dr. *Kuhn* and in presence of Dr. *Bergold*:

Dr. *Kuhn* discovered in the cases of patients with silver allergy in the mouth due to many silveramalgam fillings that an indicator drop at the allergy measurement point was only to be seen when using brass electrodes. It could not be produced when using silver electrodes.

In cases of the so-called "homeopathic argentum types", asthenic patients with pale faces, a measurement with silver electrodes showed an increased number of indicator drops, of which only a part were reproduced when brass electrodes were used.

These are the reasons why silver electrodes are not suitable for electroacupuncture examinations according to *Voll*. So brass as well as graphite is regarded as an ideal electrode material. The insignificant polarization tension with brass is balanced by adjusting of the zero stroke on the dial.

The application of the same brass alloy in all electroacupuncture apparatus of the International Society for Electroacupuncture according to *Voll* — and in all examinations performed by them — allows a comparison of values, a procedure being the basic of all types of scientific work. Since many years these brass electrodes were tested daily use in all medical practices.

For the brass electrodes, brass of a proper composition of alloy according to technical quality standard is used.

Cleaning of Electrodes

All metal electrodes can be cleaned with water and soap and a clean duster or a so-called "silver rag". The screw-fixed point electrodes should be screwed off every fortnight and the winding should also be cleaned of dust and dirt particles in order to guarantee permanently free contact over the cables with the apparatus.

Naturally, all electrodes, consisting of pure metal, can be sterilized in autoclaves or hot air sterilizers. All other electrodes, however, like the foot electrodes insulated from below by a rubber plate, or the tooth- and roller electrodes, surrounded by insulating plastic layers, can only be submitted to cold disinfection.

When changing the patient, cleaning of contact surfaces of the electrodes with cotton dipped into alcohol or other disinfectant should be sufficient:

No germs can stick to metal surfaces. Furthermore, the copper contained in brass has a certain, though limited, bactericide quality.

The Acupuncture Points

The acupuncture points themselves, situated in the course of a meridian, can be regarded as energy concentrating points, comparable to electric batteries in which, up to a certain extent, physical energy is stored.

This thesis can be proven through a high-ohmed galvanometer showing an increased electric potential in acupuncture points. Certain natural qualities of the skin surface like perspiration, produce occasionally, a polarization current which is due to the element formation between the electrodes and the sweat layer, whereby the different sizes of electrodes are of importance. These polarization currents, however, are very feeble and can be excluded from the measurements by aid of the so-called "Zero-Point"-button on the apparatus. The individual organs deliver the energy produced by them to the meridians in order to conduct them in direction to the peripheric parts. By way of these meridians, the energetic tension reaches the acupuncture points where it is stored until the biological optimum is reached.

Charging an individual acupuncture point by aid of an exactly measured small dose of current from the apparatus means a stimulus to the potential of the body opposed to it. In case of a biological equilibrium the indicator of the ohmmeter will show 50 partitions and will stay in this position.

In pathologic changes indicator drop and movement is changing corresponding to the cause and degree of the pathologic alterations.

In the acupuncture point itself, the organism respectively the organ is reacting according to its actual state of health to the weak, but sufficiently stimulating electrical potential conducted into it by the measurement apparatus.

This means, that in a healthy organism the body potential prevents the measurement current to penetrate into the body which makes the indicator stop at the neutral reading of "50" on the dial.

The following should be accentuated: it is not the electrical resistance of the organism but the reacting potential of the body or the individual organ responding to the burdening with the measurement current, that is measured. According to the "All-or-Nothing-Law" a reaction of the organism is only possible when the inductive stimulus surpasses the individual limits of stimulus sensitivity. This law is valid when a stimulus is conducted through the neural system, the reflex curve and the central nervous system to the organ.

In electroacupuncture, however, the applied measurement current lies within the biological dimension from 8—10 milliampère and is therefore considerably below the stimulation of the cerebrospinal nervous system. In spite of that fact, distinct and measurable reactions are produced. So the process cannot pass off through the cerebrospinal nervous system. We must suppose primarily the autonomous nervous system to be stimulated through the mesenchyma. In order to get, in spite of this, a useful and exact differentiation measurement results, the measurement tension and intensity of current of the measurement apparatus had to be chosen in dimensions which enables the organs to answer in any case.

In case the stimulating intensity would be too high already in the beginning, the

organs would have no possibility to preserve their reacting potential to that there would be an indicator drop at any measurement.

Only the exact dosage of stimulating current, its bio-physiological intensity extent render it possible that in a normotonic organism there exists an equilibrium between stimulus and reaction, producing the fixation of the indicator at the reading "50" of the dial. Otherwise, only this exact gauging of the appliance makes it possible to get such a safe diagnosis like, "inflammatory phase", "degenerative phase", "pathological burdening of the organ — of the body" or "normotonic situation" just by observing the indicator reading.

In case of a too low electrical stimulation the reaction of the organ would be either sufficient to cope with it or in excess. The result would be: always only high readings and a nonappearance of the diagnostically so important indicator drop.

The Equilibrium Size

The equilibrium-stimulating current of the "K + F Diatherapuncteur" is about 0.87 Volts. As one can deduct from mathematical laws that whenever two quantities are equal to a third they are equal among themselves, the logical conclusion is that the reacting potential of a normotonic body also has an intensity of 0.87 Volts. The intracellular body liquid of the mesenchyma can influence in the course of the measurement with electroacupuncture the measurement result.

The state of ionization of this intracellular body fluid can be modified through changes of the concentration of its individual components, a need or a surplus, a blockade or elimination obstacles of electrolytes, or the admixture of elements of higher ionization capacity like, the "homotoxins", that means, toxic substances adapting themselves to the proper structure of organism and acting, that way, inside of it.

A measurable disturbance of the energetic equilibrium, therefore, is not only derivable from the measurement apparatus but also from the body or organ, if this, weakened by pathological changes, is no more able to put up the necessary, lasting resistance to the measurement current. This results in an indicator drop, a more or less quick, respectively great indicator drop of the measurement apparatus, after an initial high reading. This is, probably, the most important and safest diagnostical sign of a pathological change in the measured organ and should be an alarm signal in our examinations of the patient. For establishing a contact between the stylus, the active measurement electrode and the acupuncture point, generally, a wetting of the electrode and a more or less accentuated pressure on the acupuncture point are sufficient.

With this, the resistance of the upper layers of the corium — increased, usually in the structure by age or pathologic changes — is eliminated once one has got a certain experience in the application of electroacupuncture.

As soon as the physical energy sources get into contact with the measurement apparatus through the stylus, the indicator on the dial of the ohmmeter begins to rise until reaching a point, which cannot surpass even by increasing the pressure on the skin and indicates the measured acupuncture point. At an exact position of the

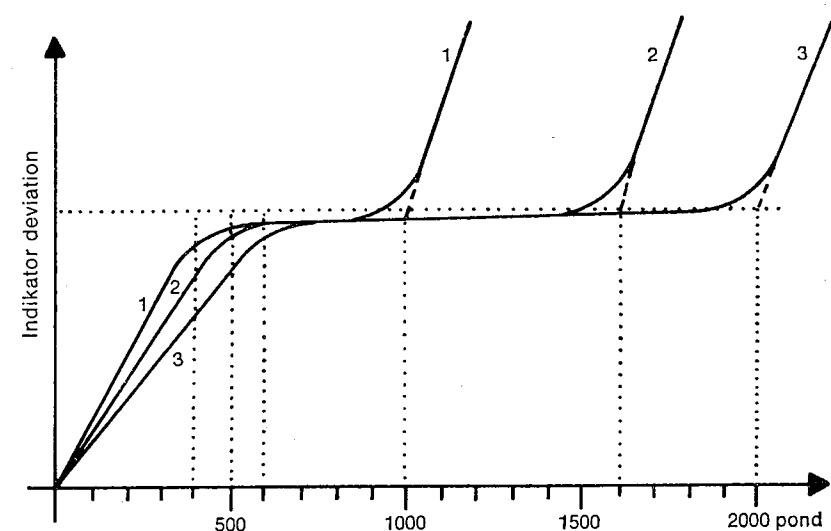


Fig. 13: Relations between stylus pressure and measurement result on the diagnosis dial of electroacupuncture according to Voll, see also EA-Primer, page 37.

1 = pointed electrode 2 mm dia. 2 = Four peg electrode and 3 mm ball electrode.
3 = half spheric electrode, 4 mm diam

testing stylus on the center of the acupuncture point, measurement oscillations or swings of no more than $\pm 1,5\%$ have to be expected. This is such a small margin of variation that the measurement result is not impaired and, therefore, may be neglected.

When measuring the acupuncture point of pathologically changed alteration of the organ the already mentioned "indicator drop" can be observed, a phenomenon which cannot be altered or stopped by increased or lessened pressure with the measurement stylus.

The basic presupposition or precondition of this is the safe and exact location of the acupuncture point.

To facilitate this location for beginners, in the newer models of the "K + F Diatherapuncteur" a buzzing sound has been built in which indicates by rising or lowering of the humming or buzzing the approach to or the deviation from the acupuncture point.

The "Dermatron" apparatus, locates the acupuncture point by a sound of very high frequency. The sound varies when the stylus is moved from neutral skin areas towards an acupuncture point in the way, that a steadily rising pitch is heard until the point is reached. It indicates the exact location of its center.

The tests performed by Dr. *Kracmar* in Vienna have shown that the pressure applied

to an acupuncture point to get a contact to the 4-mm ball-electrode has to have the average weight of 700 up to 1000 pond.

It is a matter of quickly acquired experience to get a feeling for this pressure intensity, in view of the fact, that a proper control is given by the indicator deflection of the valve ohmmeter, and by the buzzing accessory. The pond-values of the ball point electrode with 3 mm of diameter correspond to the pond values of the four pin electrode. These move between 600 and 1400 pond, the ball electrode has, therefore a pressure swing of 800 pond inside of which the maximal measurement value is not altered.

Under the above presuppositions we measure in electroacupuncture diagnosis with the aid of the K + F Diatherapuncteur the reaction of the organ at the acupuncture points from a stimulating direct current with a physio-biological intensity and strength, varying between 5,5 and 11,25 Mikroampère, corresponding to the organic potential which has to be surmounted, i. e. between 1070 and 135 Millivolt (vM).

Basic Conditions of Diagnosing

After having discussed the technical conditions of electroacupuncture we should investigate the general conditions which should be regarded to get exact measurement values on the individual test points.

As, in all our procedures, only very small current capacities and low intensities are applied, many factors can influence the measurement results. From the side of the surroundings as well as from that of the patient there are possible or potential disturbing factors which should be eliminated before operating.

A. Disturbing Factors from the Side of Place of Examination

One should consider that every examination-room is full of potential energetic disturbing factors. Therefore, there should not be any other electrical appliances in the examination room, operated by electrical or other power producing means. Particularly, X-ray apparatus, short-wave diathermic appliances etc. should not be in the same room with our Diatherapuncteur apparatus.

If this is unavoidable, these apparatus should be completely switched off during an acupuncture examination by removing the plug from the wall socket.

Unfavorable is also a hidden current conduct, even under plaster which surrounds the patient in a half-circle or entirely. The patient should sit in a distance of at least two feet from any electrical line in or on a wall. Also similar metallic ducts, e. g. water pipes, sewage tubes and the like might influence the measurements if they are not, or insufficiently insulated and grounded.

Particular attention should be directed to the floor cover and the wall paint. Plastic floors have the quality to charge themselves by rubbing with static electricity when marching over them bare foot. The energy is flowing into the patient if he is not sufficiently insulated from the floor. It is the same with certain plastic wall paints as they are preferred in examination rooms generally because of their hygienic qualities.

A further potential source of disturbances can be issued from the examination couch if it is of metal and, moreover, covered with washable plastic. Generally, a wooden chair is sufficient, respectively a seat with metallic feet put on a wooden platform the surface of which is covered with linoleum.

In unfavorable cases, floor, examination couch or chair have to be grounded by means of a proper wiring, soldered to the water piping, as far as this is still metallic and leads into the open and there into the earth. Plastic pipes, more and more in use now, are not qualified for this purpose.

Particular insulating mats on which chair or couch can be put, can be bought also from the apparatus producers *Kraiss* and *Friz*. In no case the patient should stand with his feet on grounded flooring. If he does all measurement values found would be incorrect.

The optimal installation of an examination room would have a wooden plank (or parquetry) flooring, also linoleum, covered with a natural wool-, sisal- or coconut matting, and walls painted with neutral and non-conducting chalk, earthen or glue-paints with examination chairs and couches entirely of wood — without metallic parts or plastic coverings.

High tension power lines, overhead systems of streetcar or railroad lines, TV and radio stations etc. in the neighbourhood of the house can, eventually, render the use of the working room for acupuncture examinations completely impossible.

B. Conditions for Correct Measurement on the Side of the Examiner

A second minor source of disturbances can be issued by the examiner himself, if he happens to carry too much metallic substances in his pockets or electrically chargeable clothing.

Also during his examinations, the examiner should wear cotton clothing. At least he should cover nylon or synthetic fibre underwear with a doctor's operation overall made of cotton. Synthetic overalls should be avoided.

The examination chair on which the patient is sitting down and the examiner's seat should be entirely wooden and should have, if at all, an upholstering of pure, natural cotton.

A problem are eventually wet hands of the examiner leading to disturbances of measurements through a transmission of energy from the examiner to the patient. This can be avoided by wearing dry cotton fibre gloves during the examination.

In the contrary case of a too sturdy or callous skin of the examined patient, opposing an increased resistance to the contact of electrode and measurement point, the problem can be solved by wetting the measurement point or rubbing it with electrode gel.

C. Conditions from the Patient's Side

These postulations from surroundings and examiner are also valid for the patient. As a general rule, exact values can only be measured at normal, healthy and free areas of the skin. A pathological alteration of the skin surface at the acupuncture

points or their covering with creams, make-ups and the like are obstacles to an exact testing at these spots.

All energy influencing objects or measures must be kept out or eliminated during the examination.

During 24 hours before the examination, the patient should not take any drugs. With tranquilizers or analgetics the time of abstinence should be extended up to four days.

Sulfonamides, antibiotics and cortisones can influence measurement results, particularly when applied in depot form, though their efficiency, will be diminished with duration of cure and excretion of the drug.

Coffee, alcohol and extensive misuse of tobacco are also unfavorable to measurement results.

At the condition that the examination serves the purpose of putting up a complete basic diagnosis and not only a partial examination designed to test out a certain suspect focal process (teeth, tonsils etc.) or an allergy at an allergy point, the patient should take off all jewellery (rings, bracelets, watches etc.) and all other metallic objects (hair clips etc.).

Also nylon- and other synthetic clothes have to be taken off, as far as they have direct contact with the skin. The patient should be cleared off all things, which are put on as body contracting rubber-materials or tight bandages (brass, garters etc.), if he cannot or badly be charged.

Blood pressure measurement, and this bilaterally, is a first measure to precede every acupuncture examination. Blood pressure differences between right and left of more than ten partitions are referring to existing focal and disturbance field processes as well as for unilateral illnesses of the kidney.

All EAV measurement values are only valid, if the measurement values of the four basic derivations have readings above 80, since the body must be in the sympathicotonic phase during each testing. If not, the patient has to be charged by alternating direct current oscillation of large intensity until the patient feels a prickly sensation. The guidance value of 84 should be reached.

In cases of disturbed pancreas functions, dry or callous skin, there exists an increased contact resistance making the indicator fall back behind the real values which can be overcome the easiest by wetting of the acupuncture point surface, or the electrode.

This passage- or contact-resistance, however, should not be too low (indicator leaping upwards) as this is the case with patients with sweating wet hands and feet. The measurement points on the skin of such a patient should be rubbed dry with a cotton towel.

When all this has been carefully observed, the guiding values, respectively basic derivations of all four quadrants have to reach or to surpass the minimum value of 80. Once this is not the case, the physical energy potential, as already mentioned, has to be recharged up to the value of 82-84 because, otherwise, eventually registrable indicator drops cannot be seized and recorded.

The Basic Derivation

There are four basic derivations for the four quadrants of the body, and one can begin the examination by measuring them in the following order:

- I. Measurement value hand—hand — whereby the positive (stylus) electrode is kept with the right hand
- II. Measurement value hand—foot left — here, the positive (stylus) electrode is kept with the left hand
- III. Measurement hand—foot right — the positive (stylus) electrode is kept with the right hand
- IV. Measurement foot—foot — here, the positive (stylus) electrode is connected with the right foot electrode.

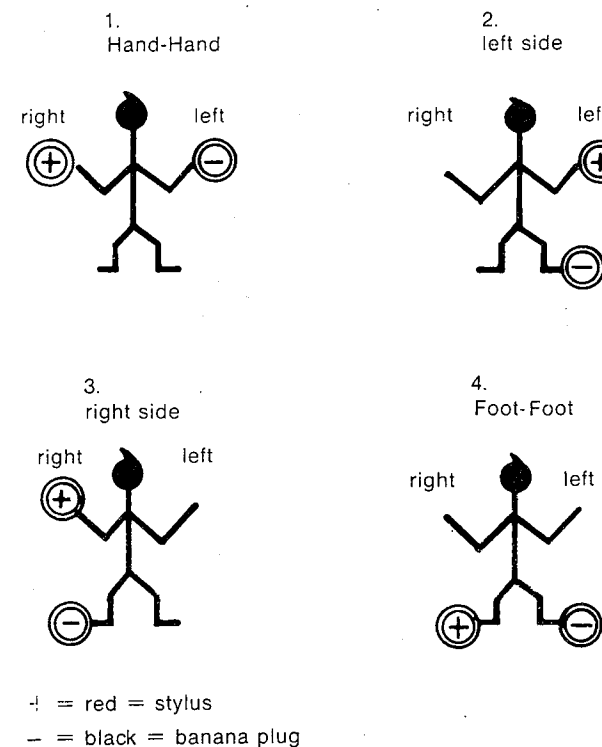


Fig. 14: Polar diagram at four quadrant measurement

For the measurements the cables have to be inserted as described on page 32, point 11. Hereby the inactive valve electrode can be connected to the stylus electrode (positive electrode) the point electrode or a screwed-on banana plug.

In a sympatheticotonic situation of metabolism and a healthy organism these values in daytime are all above 80, i. e. between 82 and 84.

1. The 1st measurement value, hand—hand has already been discussed. Its measurement shows up the total of energetic potential of the upper part of the body.
2. At the 2nd measurement value, hand—foot left side, the energy potential of the left half of the body is measured. Changes, as in the left lung region, the spleen, the flexura coli sinistra, the colon descendens, the sigmoid flexure and the left kidney will produce values of between 82 and 84, exceeding the norm.
3. At the 3rd basic derivation, the patient keeps the positive or stylus electrode with the right hand while he rests with his right foot on the brass plate connected with the apparatus as a negative foot electrode. Here, the energy potential of the right half of the body is measured, that means of the great organs situated there, as right lung, liver, pancreas, cecum with appendix and right kidney.
4. Now, the patient stands with naked soles on both foot electrodes in order to establish the 4th measurement value. The right plate is connected with the apparatus through the positive, or stylus electrode, while the left one by the negative electrode. In view of the fact that, usually, human soles are covered with a ticker skin layer than the rest of the body, wetting them might be recommendable to get a better contact. The current passes through the inner pelvis so that the values measured concern above all the urogenital organs, the rectum and the anal passage.

At an undisturbed energy potential in the region of the inner pelvis and of both legs, the ohmmeter will indicate a value of somewhat more than 80, exactly between 82 and 84 units.

By this way it is possible to measure the four quadrants of the body separately and to get an indication, in which quadrant a pathological process can be suspected.

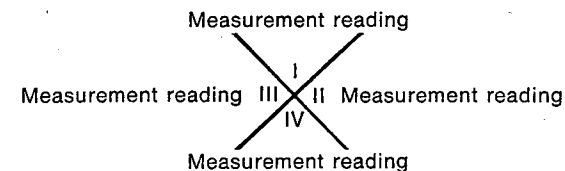
At the examination itself it is comfortable to use an x-shaped cross as a symbol. The individual values can be easily written down in its sectors then.

In the language of electroacupuncture, these basic derivations are termed

hand—hand = HH = measurement value I
 hand—foot left = HFL = measurement value II
 hand—foot right = HFR = measurement value III
 foot—foot = FF = measurement value IV

In spite of observing the already mentioned precautions, the values of this basic measurement can be:

1. all about 80, exactly between 82 and 84
2. all be above 84
3. all below 80 and



How to register the 4 conductance readings in the file

Fig. 15: Diagram of measurement values on the patient's card

4. show definitely different values among themselves, whereby these values in their total can again be
 - a) all above 80
 - b) all below 80
 - c) partly below, partly above 80
 - d) in some cases all of them or one show an indicator drop.

In principle, the 80 value represents the turning point between vagotonia and sympatheticotonia.

"Indicator drop" means that the indicator of the valve ohmmeter rises up to a certain point on the dial and then drops to a much lower point without the examiner taking off the measurement electrode or lessening the pressure exerted on it.

1. Measurement values between 82 and 84 signify a normal healthy state of the energy system. This healthy total state of body energy does not exclude, however, that one or the other organ might be irritated, thereby disturbing his well-being. Such an irritation is in this case covered up by the total amount of physical energy. Values above 80 of the basic derivation do not dispense the examiner from checking through all organs individually. In fact such values mean only that an eventual illness can still be controlled and limited by the organism's own defense system. In accordance with *Reckeweg's* theories one might say that in this case the irritation or illness of an organ is corresponding to the reversible "humoral phase".
2. If all the values of the four basic derivations are above 84 a general overcharging of the energy system has to be stated which can be, depending from the amount indicated, an excitation or a general state of irritation, presupposing that contact intensifying facts like wet hands or soles are excluded. General increases of efficiency as in the case of athletics, young people, impacts of medical drugs, of stress situations or general intoxication might be reason of such a result. In this case the examiner should observe symptoms like sweat which, by means of a short circuit produced by the thin fluid layer on the body's total surface, might lead to wrong measurement results. In this case hands and feet should at first be rubbed dry with a paper or cotton towel at first.
3. Would the indicator show a value below 80 at all four basic derivations, would this be a symptom of general fatigue, a dysenergy caused by sleeplessness, exhausting excesses, overworking or also chronic and energy consuming (malignant)

nant) pathological processes — to be discovered and defined in the course of further examination.

But also a dry, wrinkled skin can be the reason, as often older patients have it. In this cases the palms and soles should be wettened by aid of some humid piece of cloth or paper pulp.

4. In all this cases in which an indicator drop at all four basic derivations is stated, it should be tried to "charge up" the patient's energy system by the so-called alternating current oscillations until values over 80 are obtained. This will guarantee the other tested values to be real ones. They do not have to be corrected by complicated mathematical calculations with increasing or decreasing the results of the basic derivation measurement.

- a) If the values of the basic derivation do differ they refer to different inflammatory or degenerative processes. According to the measured value they point to one or another quadrant which should be examined closer.

- b) An indicator drop is always an alarm sign!

It points (at the basic examination) to an acute pathological process which means an illness involving one or several of the organs situated in the current circuit HH-HFR-HFL-FF described above. In this case, the progress of the illness process is already so considerable that the energy potential of the other organs situated in this part are not sufficient to cover it. According to *Dr. Reckeweg* a "cellular phase" could be in question or an illness of a system of neural or humoral kind. In this case, a thorough checking of every individual organ and of the so-called "alarm points" has to clear this definitely.

In rare exceptions, not only at one of the four basic derivations but also at every individual organ meridian, respectively all organ measurement points an indicator drop can be observed.

As we know 12 meridians at every half of the body, in this case, the phenomenon is termed a "24-indicator-drop" ($12 \times 2 = 24$). According to *Voll*, the reasons can be:

1. Beginning of an acute infectious illness resp. the end of its prodromal stage
2. acute septic states
3. chronically recidivating or wandering thrombophlebitides
4. acute chemical intoxication
5. acute strong allergies
6. expression of a vegetative irritability, particularly of female organisms during the pre-climacteric period with delayed menstruation
7. beginning of a stone colic (kidney, gall or pancreas stones)
8. heavy climatic burdens (warm wind, general weather sensitivity etc.) when the vegetative balancing capacities are exhausted
9. electrical fields to which the patient is exposed at his working place or in his bedroom
10. Two infectious diseases meeting the patient simultaneously in a moment when his defensive mechanisms are exhausted show also the 24 indicator drop.

Summarizing, *Voll* writes: "The 24 indicator drops are the expression of a general vegetative failing to answer the irritative burdenings of the body. The body is no more able to put up its resistance through controlled vegetative counter-actions against multiple irritations. After all one has to realize that an additional toxic irritation besides the daily natural ones can exceed all measures of the still tolerable.

Hypothalamus

One of the most important measurement points in electroacupuncture is the hypothalamic point.

Here are the control centers of the autonomous nervous system which, in fact, controls the self-regulation systems of organism, particularly

- the thermoregulation
- the awaking-and-sleeping mechanism
- the fat-and-water metabolism
- the genital functions
- the perspiration.

All these main control functions cannot only be measured but also influenced over the hypothalamus. This important point in electroacupuncture, the test point for the hypothalamus, is the 20th measurement point of the "triple warmer", the meridian which is chiefly competent for hormonal processes.

According to *Voll*, the 20th Triple-warmer acupuncture point is situated above the linea temporalis representing the end of the processus zygomaticus of the temple bone. Exactly above the porus acusticus externus, upwards of the starting point of the vascular groove of the arteria temporalis media in a small palpable pit. (Fig. 18 and 25). As a reference how to find safely this point of the 20th triple warmer, *Voll* writes: "One seeks the highest attachment point of the ear, where the skin of the ear goes over into that of the temple, palpating with the finger for the small pit situated somewhat distal of that point, or the sulcus leading upwards diagonally-distal. Here, the active point electrode is not put vertically on the skin but tangentially so that it does not touch the ear, which might lead to result-falsifying contacts with the ear energy potential.

Hypothalamic values around 80 show that there exist no inflammatory processes in the body though chronic irritative situations may be possible which, however, have no consequences.

The value 80 at the hypothalamic point indicates that no strong changes in the large organs are to be expected. This does not exclude, however, that parts of these large organs, or other sectors of the organism, covered by the functions of the large organs, may be irritated.

In the case the examiner's finger would not palpate a small dimple but a narrow fissure, one has to slide across it with the point electrode using the tangential measurement technique. In such a case the fissure has to be located with the wet fingertip to avoid a confusion with another not classical acupuncture point.

In order to get a correct value difference between the right and the left hypothala-

mus, particularly important when focal disturbances in the head are existing, one should measure the 20th Triple warmer point three times on each side of the head. The hypothalamic measurement point is never situated in front of the attachment of the ear. The point situated here is called "wrong hypothalamic point", showing lower values. Somewhat distal along the linea temporalis in a larger deepening, the measurement point of the 19th Triple warmer can be found, competent for the meninges. As with all other measurements it is important to consider the state of the skin over the measurement point. It should not show any inflammations, rhagades, eczemas, scales or wounds etc. In such cases the results obtained are of no diagnostical value.

What Do the Individual Hypothalamic Values Express?

The measurement values of the hypothalamus correspond to the organ functions of the homolateral half of the body. Are the readings around 90 or more inflammations can be expected in one or several organs. If the values lie between 82 or 88, then there has to be looked for a partial inflammatory process: the decline of a complete or partial inflammation or for a focal process.

This does, however, not exclude that states of chronic irritations in individual parts of organs or other body regions exist, which are covered by the dominant functional energy influences of the large organs.

A. Differentiated Evaluation of Increased Hypothalamic Values

Values of 90 on both sides occasionally can be the result of a pansinusitis.

Values of 90 to 94 on both sides point to an inflammation of one or several large organs.

Higher values than 94 on both sides exist in cases of acute infectious diseases or strains by chemical toxic substances as insecticides, plumb, mercury, arsenic, or by physical influences as X-rays, radium, or radioactive burdening, at sensitive persons even by intensive sunbathing or perpetual watching TV. Chemical-toxic burdening is characterized by a bouncing indicator deviation. The indicator dashes at once to the last margin of the scale.

For a diagnostic evaluation, the hypothalamic values have always to be compared with the peripheral measurement values. High hypothalamic measurement values and peripheral values at hands and feet differing by more than 20 from each other, can mean disturbing irritations, acting directly on the hypothalamus. As a rule, however, in all cases the kind of irritation should be exactly defined. This can be done by aid of the toxic substances and medical drugs test.

The influences in question which are able to produce an increased hypothalamic measurement value are:

- a) Chemical toxic substances, as:
 1. Insecticide burdening
 2. Arsenic burdening (e. g. in the cases of the so-called "Arsenic Eaters" in Upper Austria).

3. Plumb burdening — particularly in the body of persons living near streets with high traffic density forced to inhale constantly gasoline containing plumb. Plumb burdening can be found also in persons who worked prolonged periods in plumb using industries, printing shop, cable production etc.
 4. Mercury burdening in persons working in industries where that metal or alloys of it are used. At the moment it can be found also in the body of fishers or persons eating often sea fish from areas polluted more and more by poisoned industrial and other toxic liquids led into the sea. Mercury burdening shows up also in cases where patients have to live with a larger number of amalgam fillings in their teeth.
- b) Physical noxious influences as:
 1. X-ray irradiation — at X-ray sensitive persons or patients professionally working with X-rays, particularly physicians and their assistants.
 2. TV-irradiation burdening — in sensitive persons after longer intensive watching TV emissions without keeping themselves at distance from the set, particularly when this is an older, unipolar model.
 3. Radioactivity burdening — particularly at therapeutical or diagnostic application of isotopes. Increased hypothalamic values can also be found on persons working in nuclear centers when the screening is not tight or safe enough.
 4. Burdening by constant influence of low frequency alternating electrical fields near the head, existing e. g. in bedside lamps, radio sets in the bedroom or electrical conducts inside of the wall at the head of beds. This can influence sensitive persons when the distance is less than 2 feet. Very noxious is a vertical plank. Sensitive persons should turn the foot end of the bed to it in such a case.
 5. Increased hypothalamic values can be caused by the fields of electrical machineries or larger appliances in the next room to the patients bedroom or in the floor below it, being switched in at night, like electrical heating radiators or heatings.
 - c) Bacterial and virus-toxic substances increase also the hypothalamic values
 - d) Noxious stimulants: misuse of cigarettes (nicotine) and coffee (drinking excessive quantities — coffee addicts), alcoholism and drug addiction can disturb the function of the hypothalamus and by this the control of biological rhythms of perspiration, heart activity, sleep etc. Also spastic disturbances of the circulation of eye and ear can be caused by it.

B. Lowered Hypothalamic Measurement Values

Lower hypothalamic measurement values with relatively high peripheral values at hands and feet give reason to suspect the diencephalon to suffer of degenerative disturbances of its functions.

Lower hypothalamic measurement values on both sides can be registered in cases of cerebroscerosis or of excessive misuse of sedatives and hypnotics, particularly of the centrally-effective barbiturates.

C. Unequal Hypothalamic Measurement Values

Lower values where the indicator only unilaterally rests on a reading between 50 and 60, are found after events like concussion of brain or skull base fracture. Values of 82 to 88 indicate some strewing foci inside the same side of the head.

So, values between 82 and 88 — also when found bilaterally — oblige the examiner to search for one or more strewing foci on each side of the head.

Should the hypothalamic measurement values rise unilaterally by more than 90, this would show up the existence of an acute sinusitis of one or more paranasal sinuses of the same side of the head.

Unilateral hypothalamic measurement values between 92 and 94 show an osteomyelitis or ostitis of the jaw bone.

As a principle it can be considered as a rule that measurement value differences of the hypothalamus point indicate an acute focal process when between 6 and 10, while differences between 2 and 4 partitions indicate a subacute focal process which is inactive at least at the moment of measurement. The unequal hypothalamic measurement value arises from the fact that head focus processes as odontogenous, tonsillo-genous or otogenous ones cause exclusively unilateral increased measurement values. The reason is, there exist no rami communicantes between the ganglia cervicales superior, medium and inferior as in the case of other autonomous ganglia of the human body. In fields of disturbances of the abdominal region or the small pelvis the hypothalamic measurement values of both sides are increased because the left and the right side ganglia of the abdominal and pelvis region have interconnections.

D. Indicator Drop at the Hypothalamic Measurement Points

1. Consequences of recent skull base fractures or of a grave commotio cerebri, as long as not entirely healed, may cause a unilateral or bilateral indicator drop at the hypothalamic measurement points. They can, however, as already mentioned, produce lower values after longer periods and complete healing.
2. An indicator drop at the hypothalamic measurement points can occur also in organic cerebral and nervous diseases like multiple sclerosis, lateral sclerosis, syringobulbia, encephalomalacia etc., when these diseases start, primarily from brain foci and when the spinal cord is not yet affected.
3. Finally, also toxic long-time strains upon the paranasal sinuses, chronic sinusites with empyema etc. can lead to an indicator drop on the side affected by the illness. Also narrow teeth distances, inclined position of teeth or impacted teeth can influence the hypothalamic measurement value on the same side.

Focal Processes and Head Foci

For dentists and ENT specialists who are more often concerned with focal processes than other physicians, this theme should be discussed more intensively.

It is generally assumed that a focal process, by different ways, influences the whole humoral system of a body and also has different possibilities to affect the so-called "success organ". The electroacupuncture according to Voll can be supposed to be the only method of clearing such a process. With every focal process, the following burdenings can arise:

1. Vasal burdening:
 - a) It causes an indicator drop at the arterial measurement point of the circulation meridian (= 9th circulation) on the side of the focal process in the head and an increased hypothalamic value on the same side of at least 6 to 10 partitions.
 - b) The vascular focal irritation is combined with a lymphogenous burdening which is always confirmed by an indicator drop at the 1st measurement point of the spleen. The neurocirculatory dystonia of this group of cases has to be regarded as a consequence of the focal process.
2. Neural burdening
When all measurement points of one hand and one foot of the same side of the body show indicator drops, a unilateral burdening can be assumed, issued probably from a focus, presumably situated in the head region. This is particularly true, when the hypothalamic measurement value on the same side is increased, too.
Such a case is called a neural, vertical burdening expressed by a 12-indicator drop.
3. Allergenic burdening
Indicator drops at all measurement points of both hands mean a horizontal burdening which has an allergenic cause.
Obviously, the existence of a focus is not only possible in the head region, but can also be found in the entire organism. It can be caused by different kinds of allergenes. Also the reaction of the organism is not limited to the three mentioned possibilities alone. We know quite a lot of mixed forms of focal processes which should not surprise us, even if it is impossible to distinguish them always from each other.
Particularly in long-time focal processes the limits are flowing and the different actions and reactions are closely interconnected. So Voll speaks of
 - a) the neural-allergising burdening with indicator drop at both hands and the foot of the focus side, i. e. a combination of horizontal and vertical burdening.
 - b) the vascular-lymphogenous-neural burdening with indicator drop at the hand and the foot of the focus side and another drop at the first spleen measurement point.
 - c) the vascular-lymphogenous-neural-allergising form. Here indicator drops are to be found at all measurement points of both hands, the foot of the focus side and the spleen.

Focus Processes in the Head Region

Up to this date, most attention in medical examinations was and is paid to the head foci because, indeed, the organs of the head are mostly exposed to focus affections. It is, therefore, to be understood that at a general test of the patient's body this complex is of a particular importance.

The more so, as most patients asking for electroacupuncture diagnosis and treatment are so-called chronic, "unclear cases", and the reason for the complaints is usually sought for in a focus process. From the discovery and elimination of a "focus" the treating physician as well as his patient expects a definite healing after a long period of endeavour or, at least, an improvement of the patient's state of health. As already mentioned, the indicator drop is a typical signal of an active strewing focus once the starting value is between 82 and 88.

Cases of paranasal sinusitis with free flowing secretion show only measurement values increased by 10 to 20 partitions of the affected side of the body at the corresponding measurement points, but no indicator drop. Indicator drop at the MP. of the paranasal cavities always indicates their osseous affection. The following diagnostical possibilities have to be considered when searching for foci of the head:

1. the teeth with the 6 jaw measurement points for the upper and lower jaw
2. the sinuses
 - a) maxillary cavities
 - b) frontal cavity
 - c) sphenoidal cavities
 - d) ethmoid cells
 - e) tympanic cavity, respectively mastoid process with its pneumatic cells
3. the different lymph nodes
 - palatine tonsil
 - tubal tonsil
 - pharyngeal tonsil
 - lingual tonsil
 - laryngeal tonsil (folliculi lymphatici aggregati laryngii).

The proper description of the individual measurement points competent in each case will follow in the chapter on the basic tests. Because of their special position in this complex, here only the teeth are to be discussed.

In the development of the focal doctrine up to our times, again and again the teeth were mentioned before all other organs as possibly strewing foci. In fact, they are particularly exposed to outward influences and irritations as their morbidity rate is very high, especially in the older adult.

In the meantime it has been proved that it is not always a tooth which has to be discovered as a "focus" and becomes active. In most cases of severe chronic illnesses several foci are strewing which have to be found and tested by means of the electroacupuncture according to *Voll*.

Concerning the question of the general practitioner to the dentist whether a focal process exists, it is as a rule not enough to test only the teeth or the other alternati-

ves of head focus activities. The entire organism should be thoroughly examined whether fields of disturbance in the abdominal, small pelvis or, sometimes, in the chest region can be found.

As a "pilot test", however, the dentist and the ENT specialist can test just the measurement points of the different head organs in question. The total examination has only to follow if in the head region no strewing focus is found or if after elimination of the fields of disturbance that were found, no improvement occurs. A general indication of possible strewing head foci is — as already mentioned — the following: the measurement value at the hypothalamic points respectively a difference between both sides between 6 and 10 partitions in an acute and between 2 and 6 partitions in a latent potential process.

By head foci caused unilateral increases of the hypothalamic measurement value up to 82 to 88, are often covered by values of the hypothalamus between 90 and 92 as a result of inflammatory diseases of organs, since the disease of a total organ induces a higher measurement value than the focal process. To cope with this situation and if one does not want to dismantle this superimposition by tested medicaments, *Voll* suggests the measurement of the 2. lymph measurement point (see page 83), which by indicator drop of any height exhibits the signs of an odontogenic focal disturbance.

The measurement points for the 6 groups of teeth — 3 for the upper and 3 for the lower jaw — are:

- a) $4 + 1 / 1 + 4$ for the incisors, the two canines and the first premolar in the upper jaw at Gov. 25.
From an anatomical point of view one might expect this field of energy to be limited to the middle jaw and the axis of the canine. It actually, however, includes, as its counterpart in the lower jaw, the premolars, a fact proven in numerous experiments and tests.
- b) $8-5 + / 5-8$ for the group of teeth from the second bicuspid to the wisdom tooth in the upper jaw right and left at the 7th point of the Stomach meridian.
- c) for $4-1/1-4$ the group of frontal teeth in the lower jaw from 4 to 4 at the 24th point of the conception vessel.
- d) $8-5/5-8$ for the dental group from second bicuspid to the wisdom tooth of the lower jaw on the right and left side at MP. St. 8 of each side.

The situation of the different measurement points is defined, as follows, by *Voll*:

25. Governor Vessel

The point is situated on the vessel nearly in the middle between upper lip and nose. Its anatomical location can be defined as the base of the muscle fibres bundle starting from the center of the nose and spreading in radiating fascicles towards the circular muscle orbicularis oris.

The easiest way to find this point is to follow the septum of the nose down to the

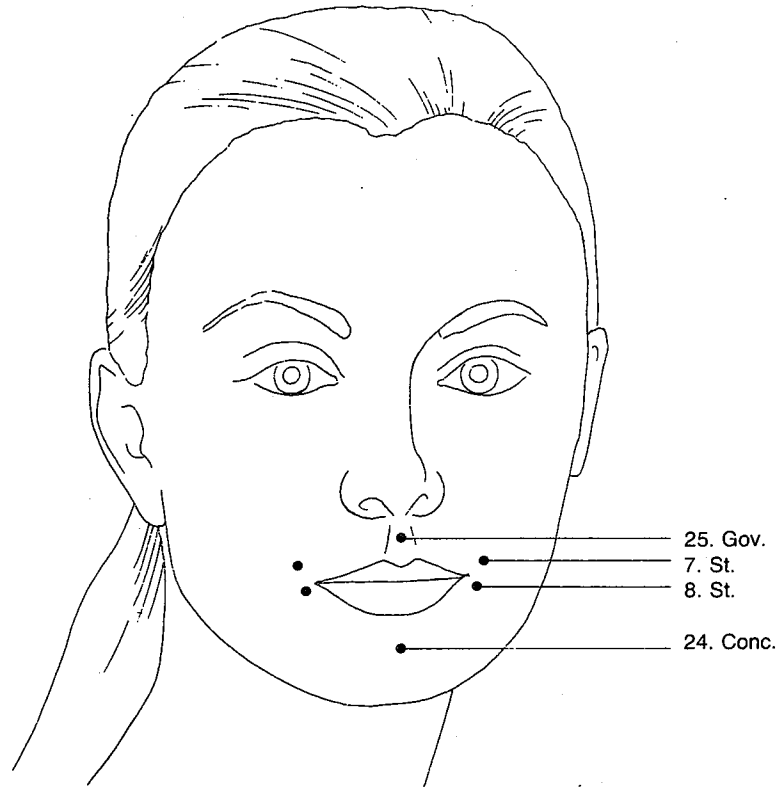


Fig. 16: The six jaw measurement points

upper lip with the active point electrode, in order to find the exact situation of the point. (The so-called "stroke technique"). The highest reading on the dial, respectively the highest pitch of buzzing sound will then indicate the point's exact location.

7. Measurement Point of the Stomach Meridian

This point is situated in the angle between the lateral margin of the musculus zygomaticus (major) approximately a half to a third finger's breadth from the lateral corner of the mouth, on a line going upwards towards the cheek-bone in an angle of approximately 135 degrees. The distance from the mouth corner can differ according to the individual features of patients.

Also this point, like the above described Gov. 25 point, can be located by stroke technique with the active point electrode on the described imaginary line from the mouth corner upwards diagonally and laterally until the highest reading appears. The method is the same for the right and the left side.

24. Conception Vessel

This MP is situated in a small depression about halfway between lower lip and chin tip. Here, the musculus orbicularis oris and both meridian lines of the musculus quadratus labii inferior (right and left) meet in an acute angle.

As described before, one has to follow an imaginary line with the point electrode, a line which descends from the center of the lower lip towards the chin tip, until the highest reading or the highest buzzer sound are reached.

8. Acupuncture Point of the Stomach Meridian

This point is situated in an angle formed by the musculus orbicularis oris, the central margin of the musculus triangularis and the lateral margin of musculus zygomaticus major.

Here also, as already described the point electrode has to follow a line, descending diagonally in an angle of 135 degrees, starting from the mouth corner, until the highest reading is appearing or the highest buzzer sound is audible.

In comparison with measurement point Stomach 7 above the mouth corner, that for the lower jaw is situated closer to the corner.

A reading of more than 80 to 88 shows an irritation which may be caused by an acute caries of one or several teeth of the measured group, a gingivitis, a paradontose or by extended fillings or bridge metal work producing electric tension, or by an allergic irritation. In cases of inflammation of all 4 teeth of a group, respectively the odontons of the side of the jaw, the reading can arise to 90, occasionally even to 92 with indicator drop. The same is valid for the frontal jaw.

When there exists only a partial burdening of the frontal jaw, the values measured lie between 82 and 88, with indicator drop. When, however, all 8 odontons are burdened, the readings can be 90 and more.

Low readings indicate a degenerative process with osteoporosis of the jaws.

The indicator drop, as always the most important and decisive signal means an acute irritating focus process in the checked group of teeth, when the starting value lies between 82 and 88. In this case every tooth has to be tested with a special fine tooth electrode screwed on the stylus. By touching the margin of the gingiva of the region over the tip of the root of the suspected tooth the focus can be found by indicator drop.

Voll was the first author to point out the energetic relationships between a tooth, respectively the 8 odontons, to organs, parts of the vertebra and spine marrow, joints, sense organs and endocrine glands, results found in many years of research work based on daily practice. *Kramer* did then systematize these results in tabular form.

This table informs, if at all and what a tooth can be responsible in the case of a focus process.

Each individual tooth has its own fixed and distinctly limited field of influence and its

extraction can influence primarily an illness only as far as it is really related to it, respectively occurs inside of its influence zone.

The following table I shows, distinctly and clearly arranged, these interrelations as found by *Voll*, i. e. which zone belongs to which tooth and in which cases sacrificing of one tooth or several teeth might be promising.

The table, however, is valid only for a complete set of teeth in normal position. If the teeth did move, the relations with the organs have to be defined by aid of the adjacent odontons.

In detail, the table shows the relations of teeth to other organs in the following order:

1. organs
2. vertebra sectors
3. spinal cord segments
4. joints
5. sense organs
6. endocrine glands — tissue systems
7. central nervous system, psyche, mammary gland, energy system.

Energetic relations between the teeth, resp. the 8 odontons and the organs and tissue systems

Table I

1. Upper Incisors Right and Left

- | | |
|--------------------------|--|
| 1. Organs: | kidney right, resp. left
urinary bladder right, resp. left
(incl. urogenital organs) |
| 2. Vertebra: | lumbar vertebra 2 and 3 on both sides
sacrum 3, 4 and 5 on both sides |
| 3. Spinal cord segments: | lumbar segment 2 and 3 of both sides
sacral segment 4 and 5 of both sides |
| 4. Joints: | knee, posterior part, both sides
os sacrum, coccygeal bone, both sides |
| 5. Sense organs: | frontal sinus, both sides |
| 6. Endocrine glands: | pineal gland, both sides |

2. Upper Canines

- | | |
|--------------------------|--|
| 1. Organs: | liver, both sides, gallbladder and bile ducts right and left |
| 2. Vertebra: | thoracic vertebra 9 and 10, both sides |
| 3. Joints: | hip, both sides, knee lateral and medial, both sides |
| 4. Spinal cord segments: | thoracic segment 8, 9 and 10, both sides |

- | | |
|----------------------|---|
| 5. Sense organs: | eyes, both sides |
| 6. Endocrine glands: | pituitary gland, posterior lobe, both sides |

3. Upper Premolars or Bicuspid

- | | |
|--------------------------|---|
| 1. Organs: | lung right and left, large intestine right and left |
| 2. Vertebra: | cervical vertebra 3 and 4 both sides, lumbar vertebra 4 and 5 both sides |
| 3. Spinal cord segments: | cervical segment 5, 6 and 7, both sides
thoracic segment 2, 3 and 4 both sides
lumbar segment 4 and 5, both sides |
| 4. Joints: | shoulder, frontal part right and left
hand radial side right and left
elbow lateral right and left
foot and big toe right and left |
| 5. Sense organs: | ethmoid cells right and left |
| 6. Endocrine glands: | 1. bicuspid for posterior lobe of pituitary gland
2. bicuspid für thymus gland, both sides |

4. 1st and 2nd Upper Molar

- | | |
|--------------------------|--|
| 1. Organs: | stomach right, resp. left
pancreas right
spleen left |
| 2. Vertebra: | thoracic vertebra 11 and 12 right, resp. left
lumbar vertebra 1 right, resp. left |
| 3. Spinal cord segments: | thoracic segment 11, resp. 12 right and left
lumbar segment 1 right, resp. left |
| 4. Joints: | temporo-mandibular joint right, resp. left
upper ankle-joints |
| 5. Sense organs: | maxillary sinus right, resp. left |
| 6. Endocrine glands: | 1st molar for thyroid gland right and left
2nd molar for parathyroid gland right and left |
| 7. Other points: | mammary gland right and left |

5. Wisdom Teeth resp. 8th Upper Odonton

- | | |
|--------------|--|
| 1. Organs: | duodenum right
heart right
jejunum-ileum left
heart left |
| 2. Vertebra: | cervical vertebra 7 right, resp. left
thoracical vertebra 1, 5 and 6 right
sacral vertebra 1 and 2, both sides |

3. Spinal cord segments: cervical segment 8, both sides
thoracic segment 1, 5, 6 and 7, both sides
sacral segment 1, 2 and 3, both sides
4. Joints: shoulder, posterior part both sides
elbow, medial part both sides
hand-joint, ulnar side, both sides
iliosacral joint
foot, plantar side and toes, both sides,
with exception of big toes
inner ear, both sides
5. Sense organs:
6. Endocrine glands: anterior lobe of the pituitary gland, both sides
7. Other points: central nervous system, both sides, psyche

6. Lower Incisors Right and Left

1. Organs: urinary bladder right, resp. left
and urogenital system both sides
kidney right, resp. left side
2. Vertebra: lumbar vertebra 3, 4 and 5, both sides
coccyx, both sides
3. Spinal cord segments: thoracic segment 8, 9 and 10, both sides
4. Joints: knee, posterior part, both sides
sacro-coccygeal bone, both sides
foot, both sides
5. Sense organs: frontal sinus, both sides
6. Endocrine glands: adrenal glands, both sides

7. Lower Canines

1. Organs: gallbladder and bile ducts right,
bile ducts left, liver right resp. left
2. Vertebra: thoracic vertebra 9 and 10, both sides
3. Spinal cord segments: thoracic segments 8, 9 and 10, both sides
4. Joints: knee, medial and lateral part, both sides
hip, both sides
feet, both sides
5. Sense organs: eyes, both sides
6. Endocrine glands: gonads, both sides

8. Lower Premolar and Bicuspid Teeth

1. Organs: pylorus
stomach right and left
pancreas right and spleen left

2. Vertebra: thoracic vertebra 11 and 12, both sides
lumbar vertebra 1, both sides
3. Spinal cord segments: thoracic segment 11 and 12, both sides
lumbar segment 1, both sides
4. Joints: frontal part of knee right, resp. left
5. Sense organs: maxillary sinus right, resp. left
6. Endocrine glands and tissue systems: 1. bicuspid for gonads right and left
2. bicuspid for lymphatic vessels right, resp. left
7. Other points: mammary gland, right, resp. left

9. Molars (6 and 7 Lower)

1. Organs: large intestine right
ileo-cecal region right
ileum left
lung right
large intestine left
lung left
2. Vertebra: cervical vertebra 5, 6, 7 both sides
thoracic vertebra 3 and 4 both sides
lumbar vertebra 4 and 5, both sides
3. Spinal cord segments: cervical segments 5, 6 and 7 both sides
thoracic segments 2, 3 and 4, both sides
lumbar segments 4 and 5, both sides
4. Joints: shoulder, elbow right, resp. left
hand, radial side right, resp. left
5. Sense organs: ethmoid cells right, resp. left
6. Tissue systems: arteries, veins right, resp. left

10. Wisdom Teeth resp. Lower Odonton 8

1. Organs: ileum right
ileo-cecal region right
ileum left
heart left
2. Vertebra: cervical vertebra 7 both sides
3. Spinal cord segments: cervical segment 8, both sides
thoracic segment 1, 5, 6 and 7 both sides
sacral segment 1, 2 and 3 both sides
4. Joints: rear part of shoulder, both sides
medial part of the elbow right, resp. left
hand, ulnar part right, resp. left
foot, plantar part right, resp. left
toes, exc. big toe right, resp. left
ileo-sacral joints right, resp. left

- | | |
|-------------------|---------------------------------------|
| 5. Sense organs: | ear right, resp. left |
| 6. Tissue system: | peripheral nervous system, both sides |
| 7. Other points: | energy household both sides |

When a patient, sent to a dentist because of a supposed focus process, is complaining about pains or aches in certain parts of his body, it can be sufficient to look into the above table in order to suspect a certain tooth. An exact electroacupuncture test will answer the question whether there exists an acute irritating tooth focus or whether the field of disturbance has to be sought somewhere else.

The use of the table is only restricted by one limitation: It only works exactly if the position of the teeth is a regular one.

Dislocations of the teeth would bring them according to their changed position in relation to other regions of the body. The scheme has to be altered too in case of impacted teeth, i. e. of teeth not grown out of the jaw bone. On condition of a regular position and a positive test by extraction of the tooth found "guilty" an influence on the focus-caused illness can be expected.

All other teeth would be needlessly sacrificed, even in the case the X-ray would show a so-called "focus shade". In most cases, anyway, it would not be possible to discover with certainty an acute strewing focus with the aid of X-rays. Granulomas, often looking so impressive in an X-ray of a tooth, do only indicate the death of a tooth under dramatical circumstances. The organism, burdened with the residues of such a useless fight, was able to cope with it and could already prevent a "breakthrough" of an illness. It did build a tissue dam around the possibly infectious bacteria which then could be seen as a cyst or granuloma by X-ray. By that way, the process is stopped and neutralized for the moment. It remains, however, a potential danger-focus, being able to break out again at any time, i. e. when, occasionally, the organism might be weakened, to become, by then, a real "strewing focus".

Accordingly, the removal of such a "granuloma tooth" is unavoidable and nothing but a preventive measure. It can have an indirect influence on a focus-caused illness as the measure contributes to the general relief and basic improvement of the state of health of the organism.

The removed tooth focus can, however, produce after a longer period of time in certain cases a new focus, a so-called rest-ostitis (residual ostitis).

This is originated by an incomplete removal of ostitic osseous masses at the extraction (therefore residual ostitis). There are, however, other forms of originating an ostitis in the empty jaw by chronic irritation, emerging from the organ which corresponds to the odonton.

The oral cavity as such, however, can also turn into a field of disturbance, if during a dental treatment or for denture materials are used, which the patient does not tolerate or against which he develops an allergy (different synthetic material as they are used for denture bases or in plastic teeth). Also different metals, which are incorporated into the oral cavity as fillings, crowns, clamps or framework, can develop active fields of disturbances by their electric charging and tension in the milieu of the saliva, and thereby impair the patients's well-being. The effect of such foci can be deter-

mined at the 2nd lymph measurement point and at the individual jaw measurement points.

Not only teeth and empty alveoles (by a residual ostitis) can become irritating foci but also parts of the hollow organs as parts of the appendix, a diverticulum of the intestine etc. Any scar can develop into a field of disturbance.

Other Possible Head Foci

Under certain circumstances further strewing head foci have to be considered as:

1. The paranasal cavities:
 - a) frontal sinuses
 - b) maxillary sinuses
 - c) sphenoidal sinuses
 - d) ethmoid cells

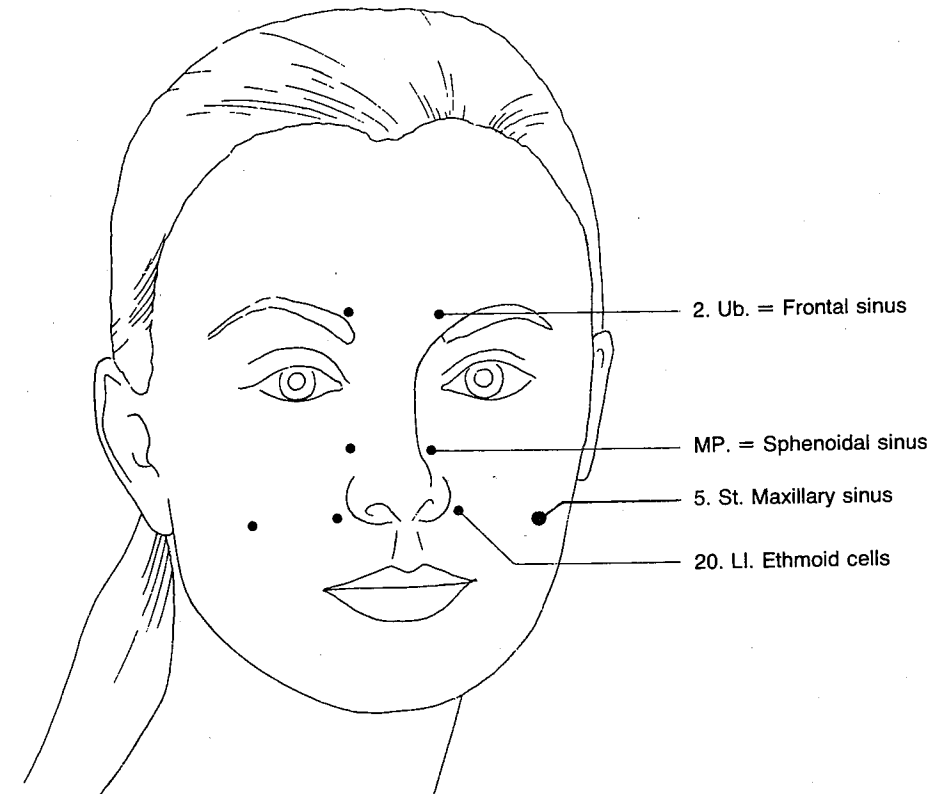


Fig. 17: MPs. of the paranasal sinuses. MP. Sphenoidal sinus on the secondary vessel from 20. Large intestine to the 1. Urinary bladder

a) The Frontal Sinuses

The base of the frontal sinus is, in most cases, separated from the orbita only by a thin bone sheet.

The measurement point for the frontal sinus corresponds to the 2nd urinary bladder meridian point, being situated above the muscle angle of the musculus pro-cerus (musculus depressor glabellae) and the lateral margin of the musculus orbicularis oculi, half a finger's breadth median off the foramen supraorbitale, about on the same level with it.

This point has secondary vessel connections to the 13th, but above all, to the 14. Lymph vessel point and can be influenced by it. The measurement points of the lymph vessel are not classical acupuncture points. They were newly discovered by *Voll* who introduced them into electroacupuncture.

b) The Maxillary Sinuses

As the largest pneumatic cavity of the facial skeleton, it has not only a particular meaning for the practitioner, but for the dentist as well, because the premolars and the first molars of the upper jaw reach, with their roots, near to it, or are even projecting into the maxillary sinus itself.

The measurement point for the maxillary sinus corresponds to the 5. Stomach meridian point. It is situated on the point where a vertical and a horizontal line are meeting: The horizontal one starts under the nose and the vertical at the lateral end of the eye.

A secondary vessel connection exists to the 14. Lymph vessel point. The maxillary sinus can be influenced by it.

The measurement point can be located by sliding with the active point electrode over the cheek in the cheek bone region, from the rear margin of the processus zygomaticus of the os maxillare laterally towards the sutura zygomatico-maxillaris. The point is located exactly above the suture. It can also be found by starting with the fossa canina going upwards from there with the active point electrode by about half a finger's breadth cranio-laterally (diagonally).

The fossa canina is situated distal to the bone elevation formed by the root of the canine tooth.

Also the measurement point for the maxillary sinus is situated one half to one finger's breadth lateral to the passage out of the nervus infraorbitalis, above it.

c) The Sphenoidal Sinuses

The lower situated sphenoidal sinuses are, by reason of their above mentioned position, in close connection with important organs, vessels and nerves.

The optic nerve, the internal carotid artery, the venous cavernous sinus are touching the sphenoidal sinuses and the sella turcica in which the pituitary gland is situated.

The measurement point of the sphenoidal sinus is situated at the end of the sutura naso-maxillaris on a secondary vessel connecting measurement point Li. 20 and the 1. Ub. point.

For finding the point, it is necessary to pass slightly over the skin surface with the stylus from medial to lateral along the lower margin of the os nasale to the terminal point of the sutura naso-maxillaris.

The sphenoidal sinus can be influenced, too, by treatment of the lymph vessel point 13.

d) The Ethmoid Cells

Because of their hidden location near to the orbita, the ethmoid cells are of particular interest in finding possible head foci.

In patients of advanced age, they are mostly chronically inflamed.

The measurement point of the ethmoid cells is the point 20. LI., situated at the muscle angle between the caput angulare of the musculus quadratus labii superioris (levator nasii et labii maxillaris lateralis) and the pars transversalis of the musculus nasalis.

This point can be located by starting laterally from the lower margin of the wing of the nose by about half a finger's breadth. Sometimes, the point is situated in the nasolabial fold, sometimes medial of it.

Like the sphenoidal sinuses the ethmoid cells can be influenced by the lymph vessel point 13.

Verification of Focal Processes and Proof of Irritations ("Strewing")

An acute disease of an organ, ascertained by an indicator drop, can simultaneously be worsened by an acute irritating ("strewing") focus, e. g. in certain heart affections, which are induced by an irritating focal process in the region of the 8th odonton and sustained by it. This additional burdening can be removed by the de-focalization.

Besides general informations on possible connections of an active irritating dental focus, as to be found in our table I, there exist the following three possibilities how to prove the relationship between a "strewing" focus and the burdened organ:

1. By aid of the so-called wave-swings with the positive direct current oscillation at lowest intensity (adjustment at the "Diatherapunteur" between 1 and 2, at the "Dermatron" between 0,1 and 0,2) it is possible to reduce the elevated readings to 50 at the jaw measurement point belonging to the suspected or detected focus and so to eliminate the indicator drop. For a short time, the indicator will now show the normal value of 50.

In consequence, the values of all the organs depending on the focus (and strained by it) will show lower values if one is right assuming a relation between the focus and the organ. The interrelation is proven when the value of the organ measurement point is lowered by at least ten partitions, or when the indicator drop disappears after the lowering of the energy potential of the jaw measurement point responsible for the strewing focus to 50.

2. Finally "irritation" can be proven by stronger palpation, massage etc. of the focus area, but also by application of a short alternating current impulse with the intensity of 20 at the "Diatherapunteur", 3 at the "Dermatron" with a 10 Hertz frequency.

As soon as this has been done, the indicator maximum value and drop of the same kind and extend as before will return at the focus and the organ influenced by it. In order to find out interrelations between a field of disturbance of a nasal sinus and a distant organ, or a part of the vertebra or a certain sector of the spinal cord, one cannot eliminate the increased values by a method analogous to the one applied at the jaw measurement points because this would demand too much time. Here a detour over the lymph vessel measurement points found by *Voll* has to be chosen.

Voll describes here the following possibilities: Frontal sinus and maxillary sinus can be influenced by the 14. Lymph vessel, the ethmoid cells and sphenoid sinuses by the 13. Lymph vessel-measurement point. After discharging the value of the corresponding lymph vessel point to 50, the measurement point of the sinus in question can easily be reduced to 50 too by positive direct current oscillation of the lowest intensity. Then, the organ measurement point probably irritated by a sinus focus immediately has to be tested. If there exists a real relation, also the value of the organ measurement point should improve at least by ten partitions, if not more, or by disappearance of the indicator drop.

Multiple Foci

To the beginner, it seems difficult to find and test a plurality of foci, particularly when they are not all situated in the head area.

In principle the examination should follow the scheme sketched below and in the sequence given there. Measurement results should be recorded in the table for that purpose or, in corresponding sequence, on a file card, without allowing any digression. Only after performing the entire examination and after having recorded all results, an evaluation should be made.

The foci, their hierarchy, the probable interrelations and the valence of individual measurement results are much clearer and less ambiguous, excluding a misinterpretation as is possible through single isolated measurement results. The following sequence of measuring is recommended in the diagnostics of the head foci and fields of disturbances — independent of their importance:

frontal sinus

sphenoidal sinus

ethmoid cells

maxillary sinus

mastoid process resp. tympanic cavity

teeth: reference point = 2. Lymph vessel point

tonsils: reference point for tonsillogenic burdening is the CMP 1.—2. Lymph vessel point of the 5 tonsils (see fig. 77)

palatine tonsil

tubal tonsil

lingual tonsil

pharyngeal tonsil

laryngeal tonsil

The Diagnostic of Primary or Secondary Foci

1. The determination, whether a tonsil represents a primary focus or only a secondary focus with an odontogenic burdening, is very important because of the therapeutic consequences. In any secondary focus of the tonsils, first of all the odontogenic focal processes have to be cleared. Following this clearing up often the secondary focal burdening of the tonsil disappears. A therapy of the tonsils performed prior to the focal therapy is in this case not successful, since instead of the eliminated tonsil another, still existing tonsil will take over the vicariating function, taking the place of the extirpated tonsil.
2. The problem: primary or secondary focus plays an important role in another situation of illness: that is the decision in a chronic sinusitis maxillaris; whether the inflammation is of rhinogenous or of odontogenic origin. The ENT-specialist decides this by rinsing the maxillary cavity. In the odontogenic sinusitis maxillaris

the irrigation liquid smells foetid. In the rhinogenous inflammation it is almost odourless. EAV-diagnostic here can quickly make the differential-diagnostic decision. If one decreases the measurement point of the lateral upper jaw in an odontogenic caused sinusitis maxillaris down to 50, the value of the measurement point maxillary sinus will be lowered decisively. If there is, however, a pure rhinogenous sinusitis maxillaris, the value isn't decreased by one single partition.

If the irritating focus — like a tooth — was found by equilibration of its measurement values and the consecutive normalization of the hypothalamic measurement values, the verification of this diagnosis can be achieved by a short surge of current with the aid of the apparatus, by which the irritating focus is activated again. Then, at the measurement point of the diseased organ and at the "irritating focus" (tooth) the phenomenon of the indicator drop appears again and the values of the hypothalamus of the same side are also increased again.

In healthy organs and teeth these alteration of the measurement values does not occur even after an irritation with a surge of current. High values (82—90) at teeth measurement points without indicator drop suggest a serous respectively allergic inflammation of the gingiva.

Dental materials can induce allergies, sometimes however also current production, as with parts of metal works, which then support a serous gingivitis and can be the cause of such high measurement values.

Strawing foci and disturbed or irritated areas in the body can cause many changes or illnesses of the organs. But not always and not only the teeth are responsible.

The tonsils, the middle ear cavity, a diverticulum of the intestine, the adnexe, the appendix, scars of the skin or peritoneal adhesions can be fields of disturbances too.

The Diagnostic of the Interrelation of Focal- and Organ Diseases

In case of an indicator drop at the measurement point for the tonsils and a high reading at that of the gallbladder, the question of a possible relation between the two organs should be answered:

First, the readings of the tonsils should be normalized. In the case that, thereby, the gallbladder readings are normalized, moving in direction towards 50 by at least 10 graduation marks or more, a direct relation between irritating focus (tonsils) and irritated organ (gallbladder) can be assumed.

The fact that the tonsils have been removed before, should not be misleading: Generally, tonsillectomy is accomplished after years of chronic "tonsillitis", "flue" or whatever the illness is called. Then, the tissue around the tonsils is already penetrated by many scars and pathogenic organisms that it is impossible to cut out the whole infected tissue.

The remaining old and new scars can become, by that way, a new field of disturbance, able to irritate and to cause the indicator drop.

The Technique of Finding and Measuring the Points

According to *Voll*, there exist three different techniques of locating, finding and measuring a point:

1. Vertical technique
2. tangential technique
3. stroking technique

ad 1

In the case of the vertical technique, the wettened active ball electrode is pressed on the acupuncture point vertically, or inclined in its position to the surface of the skin.

ad 2

The tangential technique is used when the hypothalamus measurement point, and the beginning respectively ending points of the meridians near to the corners of the finger nails are to be measured: at the hypothalamus to prevent a contact with the ear whose potent energetical charge can spoil the measurement result, at the fingers, to avoid a painful sliding down to the nails. By the tangential technique, the acupuncture points of the areas concerned can be found easier. At the toes, however, it cannot be used to prevent other toes to be touched.

ad 3

The stroke technique is used when the acupuncture point is situated in wrinkles, above the edge of a muscle or a bone or a sutura.

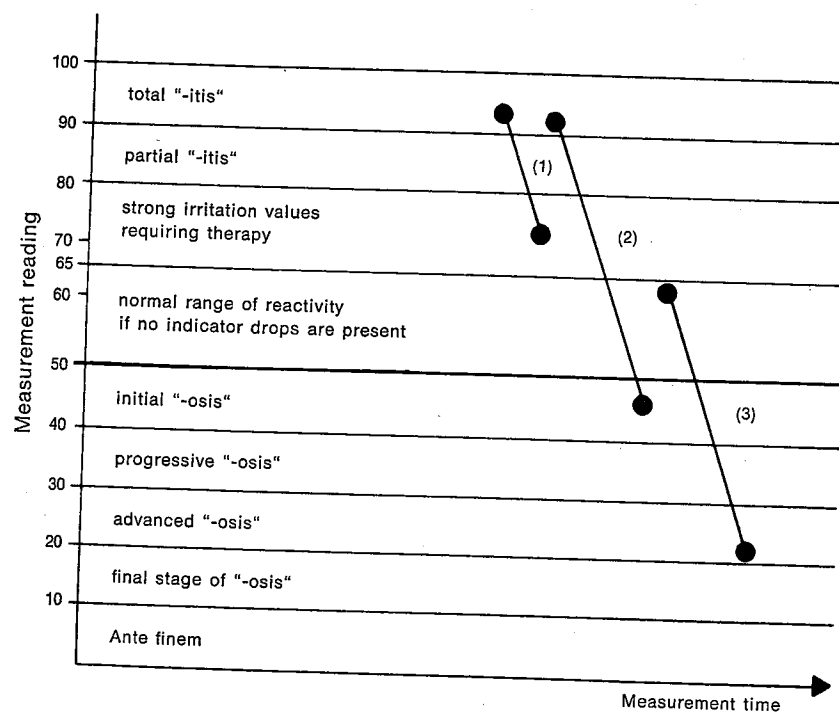
Here, the following measurement points are concerned:

1. jaw
2. maxillary sinuses
3. ethmoidal cells
4. sphenoidal cells
5. tongue tonsils
6. thalamus opticus
7. sublingual glands
8. laryngeal tonsil
9. pituitary gland
10. vagus nerve
11. points 13 and 14 of the lymph vessel
12. vertebra
13. bone system
14. diaphragm
15. adrenal gland
16. ilio-sacral joint
17. 36. point of the urinary bladder meridian and 1. point of the 2nd branch of the urinary bladder meridian
18. esophagus

19. nerves of the upper extremities
20. arteries of the same
21. posterior urethra
22. seminal hillock-parametric
23. seminal vesicle, resp. interstitial part of the uterus
24. spermatic cord — ampule of the tube
25. epididymis — abdominal opening of the tube
26. arteries and lymphatic vessels — lower extremities
27. pelvic diaphragm
28. urogenital diaphragm
29. lymph vessel of the lower extremities
30. talocrural joint

Tab. II: Summary and evaluation

Summary and evaluation



- (1) = "-itis" tractable by therapy
 (2) = "-osis" and superimposed "-itis" still tractable
 (3) = "-osis" in peril, when indicator drop subsides below thirty.

In case of repeated measurements at the same point, the pressure should be reduced. The contact with the acupuncture point was established already with the first measurement and therefore, too much pressure can cause a mechanical irritation, leading to false measurement results.

Reduced pressure is recommended, too, in the case of easily conducting, i.e. humid skin surface and that of small children. The following table shows the diagnostical possibilities of the electroacupuncture and the conclusions to be drawn from indicator oscillations, respectively the extent of indicator drops.

Basic Examination in Electroacupuncture

After fulfilling the above mentioned conditions concerning surroundings it is necessary for examiner and patient to follow a certain scheme to get a clear diagnosis.

For a practitioner already advanced in his experiences in electroacupuncture, there is no problem with changing the sequences of entries according to the record file cards recommended by the International Society of Electroacupuncture according to *VoII* which will be explained at the end of this volume.

In the following list, only the most important points of the EAV are given:

1. The serial number of the discussed point
2. The name of the referred organ
3. Right, left or single
4. number and name of the acupuncture, resp. electroacupuncture point

List of Symbols and Abbreviations:

- | | |
|------|--|
| Al. | — Allergy |
| ArD. | — Articular degeneration vessel |
| Cir. | — Circulation |
| Con. | — Conception vessel |
| FaD. | — Fatty degeneration vessel |
| FiD. | — Fibroid degeneration vessel |
| Gov. | — Governor vessel |
| Gbl. | — Gallbladder |
| He. | — Heart |
| Ki. | — Kidney |
| Li. | — Liver |
| Ll. | — Large intestine |
| Lu. | — Lung |
| Ly. | — Lymph vessel |
| NeD. | — Nerval degeneration vessel |
| Pa. | — Pancreas |
| PaD. | — Parenchymal and epithelial degeneration vessel |
| Sl. | — Small intestine |
| SK. | — Skin vessel |

- Sp. — Spleen
- St. — Stomach
- Ub. — Urinary bladder
- 3-W. — Triple warmer

The sequence of the individual measurement and the exact registration of the results in a schedule — without previous diagnosis — can be done in the following way:

A. Basic Derivations

1. hand-hand (HH) — right hand (plus pole)
left hand (minus pole)
2. hand-foot left (HFL) — left hand (plus pole)
left foot (minus pole)
3. hand-foot right (HFR) — right hand (plus pole)
right foot (minus pole)
4. foot-foot (FF) — right foot (plus pole)
left foot (minus pole)

B. Organs

No.	organ	side	measurement point	remark
5	hypothalamus	r + l	20. 3-W.	
6	thalamus	r + l	4. Gbl.	
7	diencephalon	r + l	16. Gbl.	
8	mesencephalon	r + l	9. Gbl.	
9	external auditory passage	r + l	19. Sl.	
10	middle ear-tympanic cavity	r + l	17. 3-W.	
11	internal ear	r + l	18. 3-W.	
12	meninges	r + l	19. 3-W.	
13	posterior pituitary lobe (neurohypophysis)	r + l	12. Gbl.	
14	mesencephalic center for the sleeping and waking rhythm	r + l	11. Gbl.	
15	pineal gland	r + l	8. Ub.	
16	pons	r + l	9. Ub.	
17	oblong bulb (medulla obl.)	r + l	10. Ub.	
18	corpora quadrigemina lamina tecti	—*	17. Gov.	
18a	cerebellum	—*	19. Gov.	
19	nasal cavity	—***	23a Gov.	EAV
20	frontal sinus	r + l	2. Ub.	

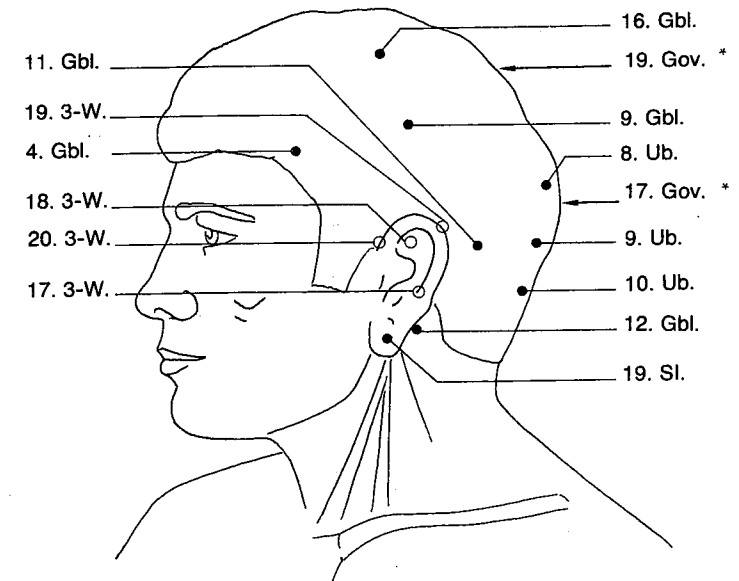


Fig. 18: MPs. of the head

* situated at the anterior middle line

b. Measurement Points in the Facial Area (see fig. 19 and page 78)

No.	organ	side	measurement point	remark
21	eye — anterior part	r + l	23. 3-W.	
22	eye — posterior part	r + l	1. Gbl.	
23	sphenoidal sinus (not a classical acupuncture point)	—**		EAV
24	ethmoidal cells	r + l	20. LI.	
25	maxillary sinus	r + l	5. St.	
26	nose cavity lateral portion with turbinates		19. LI.	
27	nasal cavity medial portion (not a classical acupuncture point)	r + L r + Lt—***		EAV
* situated on the posterior middle-line				
** situated on an secondary vessel				
* situated on the anterior middle-line				
28	medial upper jaw	4 + 1, 1 + 4	—3	25. Gov.
29	medial lower jaw	4 + 1, 1 + 4	—3	24. Con.

No.	organ	side	measurement point	remark
30	lateral upper jaw teeth 8 to 5 and 5 to 8	r + l	7. Gov. St.	
31	lateral lower jaw teeth 8 to 5 and 5 to 8	r + l	8. St.	
32	upper jaw joint	r + l	23. 3-W.	
33	lower jaw joint	r + l	2. St.	
34	tongue tonsil (not a classical acupuncture point)	r + l	3a. St.	EAV
35	submandibular gland (not a classical acupuncture point)	r + l	8a. St.	EAV

All points marked a, b or c are additional points found by the EAV.
 ** situated on a secondary vessel resp. posterior middle line (36f.)
 *** situated on the anterior middle line

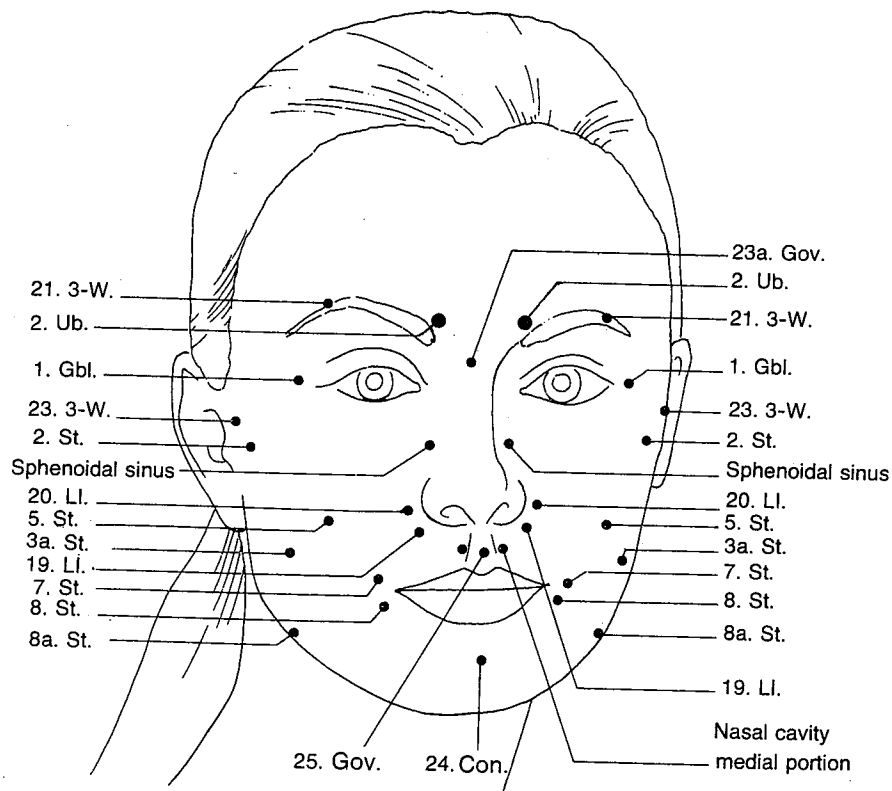


Fig. 19: MPs. facial area (see fig. 17, page 67.)

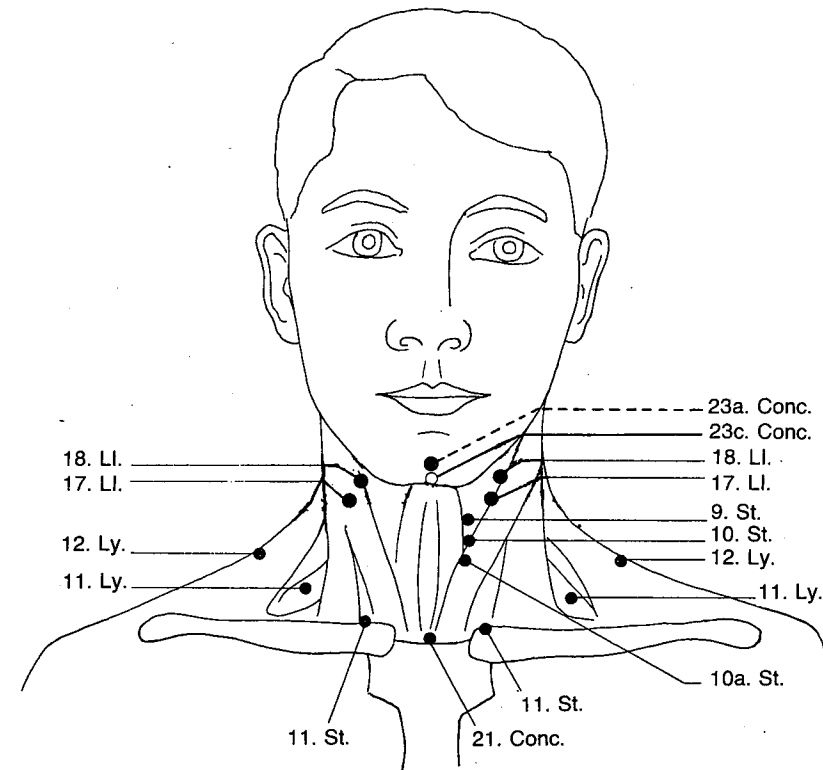


Fig. 20: MPs. of the anterior neck area

MP. Pharyngeal tonsil is covered by the chin and, therefore, dotted here (see also fig. 58, page 134.)

c) Measurement Points of the Neck and the Nape Area

No.	organ	side	measurement point	remark
36	pharyngeal tonsil	-***	23c.*	Con. EAV
37	sublingual gland	-***	23b.*	Con. EAV
38	tongue	-***	23a.*	Con. EAV
39	larynx	-	21.	Con.
40	palatine tonsil	r + l	8b.*	St. EAV
41	tubal tonsil (trigonum caroticum)	r + l	18.	Li.
42	laryngeal tonsil	r + l	17.	Li.
43	parotid gland	r + l	3.	St.

No.	organ	side	measurement point	remark	
44	parathyroid	r + l	9.	St.	
45	thyroid	r + l	10.	St.	
46	SMP vagus nerve	r + l	10a.	St.	EAV
47	thymus	r + l	11.	St.	
48	lymph vessel point 11 (found by <i>Voll</i>)	r + l	11.	Ly.	EAV
49	lymph vessel point 12	r + l	12.	Ly.	EAV
50	lymph vessel point 13.	r + l	13.	Ly.	EAV
51	lymph vessel point 14. (found by <i>Voll</i>)	r + l	14.	Ly.	EAV
52	anterior pituitary lobe	r + l	15.	Sl.	
			21.	Gbl.	
			16.	3-W.	
52a.	medial part of the pituitary gland	r + l	20a.	Gbl.	EAV
53	SMP spine marrow	- 3	13.	Gov.	
54	SMP sympathetic nerve	r + l	20.	Gbl.	

* The point is situated at the anterior middle line
 ** The point is situated at the posterior middle line

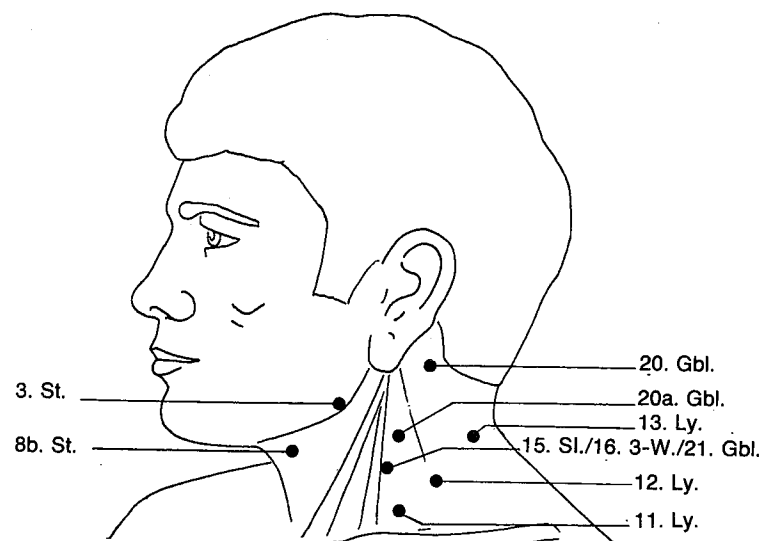


Fig. 20a: MPs. of the lateral neck region

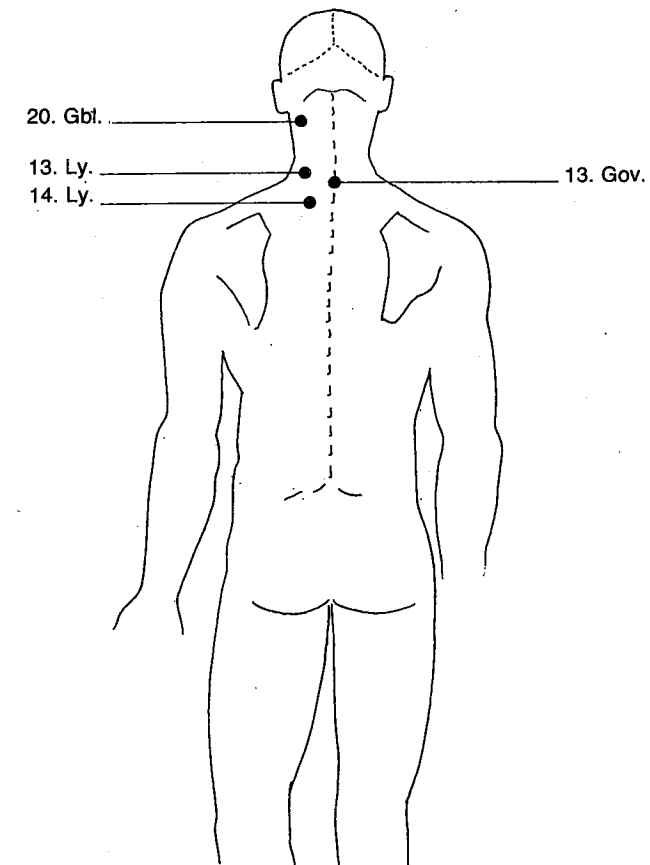


Fig. 20b: MPs. of the nape region

Remark

"Summation measurement point" (SMP, see Nrs. 53—54 of this table) means, according to *Voll*, a measurement point (MP.) situated on a meridian giving informations about the whole of the tissue system functions. The indicator drop (ID) at such a point shows a disturbance in a part of the tissue system. To SMPs belong several individual MPs for parts of the system as for the portions of the vertebra, the big joints and also parts of the arterial and venous system. Besides of the SMPs for partial functions of the endocrine system, every endocrine gland has its own measurement point, the pituitary gland even three (Nrs. 13, 52 and 52a of the table). By the SMPs of partial functions of the urogenital system, two, three or four organs with, different, individual measurement points, are summed up. These points were newly found by *Voll* and they are not known in classical acupuncture.

d) Measurement Points at the Hand, the Fore- and the Upperarm
(see fig. 21, 21a, 21b and 21c on page 83 and 84):

No.	organ	side	measurement point	remark
55	Lymph vessel measurement point (found by Vol)	r + l		EAV
a)	palatine tonsil — tonsilla palatina with the peri- and retrotonsillar tissue	r + l	1. Ly.	EAV
b)	tubal tonsil — tonsilla tubaria	r + l	1a. Ly.	EAV
c)	lymph drainage of the jaw as MP. for dental foci	r + l	2. Ly.	EAV
d)	lymph drainage of the nasal cavities as a reference point for functional disturbances (sinus frontalis, maxillaris, sphenoidalis et cellulæ ethmoidalis)	r + l	3. Ly.	EAV
e)	SMP for all lymph nodes of the lung	r + l	4. Ly.	EAV
f)	lymph drainage of the heart	r + l	5. Ly.	EAV
g)	lymph drainage of the arms	r + l	6. Ly.	EAV
56	Lung — pulmo	r + l	11 Lu.	EAV
a)	lung parenchyma — alveoles			
b)	lung bronchioles	r + l	10b. Lu.	
c)	lung — pleura	r + l	10a. Lu.	
d)	lung — bronchi	r + l	10. Lu.	
e)	lung — trachea	r + l	9. Lu.	
57	Large intestine (see fig. 81, page ■): right		1. LI.	
a)	colon transversum — pars dex- tra			
aa)	colon sigmoideum	left	1. LI.	
b)	colon — peritoneum	r + l	1a. LI.	
c)	colon — right flexure	right	2. LI.	
cc)	colon descendens	left	2. LI.	
d)	colon ascendens	right	3. LI.	
dd)	colon — left flexure	left	3. LI.	
e)	cecum	right	4. LI.	
ee)	colon transversum pars sinistra	left	4. LI.	

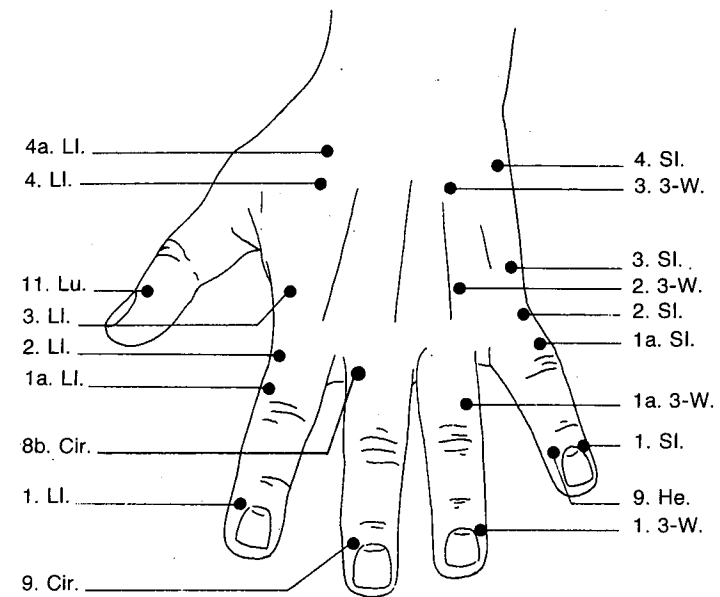


Fig. 21: MPs. at the left dorsal hand

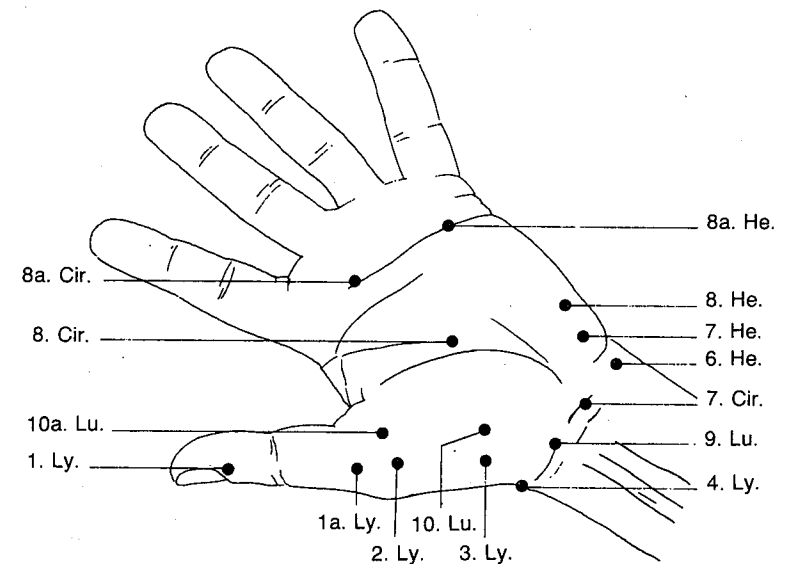


Fig. 21a: MPs. at the left volar hand

MP. 8a Cir. = Thoracic duct. The lymph vessel is situated on in the transition region from the dorsal to the volar hand at the radial side

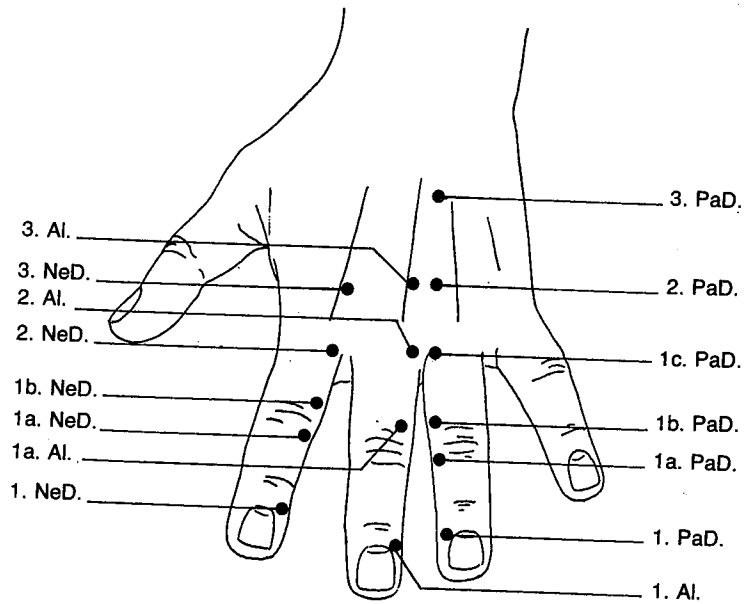


Fig. 21b: Degeneration measurement points on the left dorsal hand

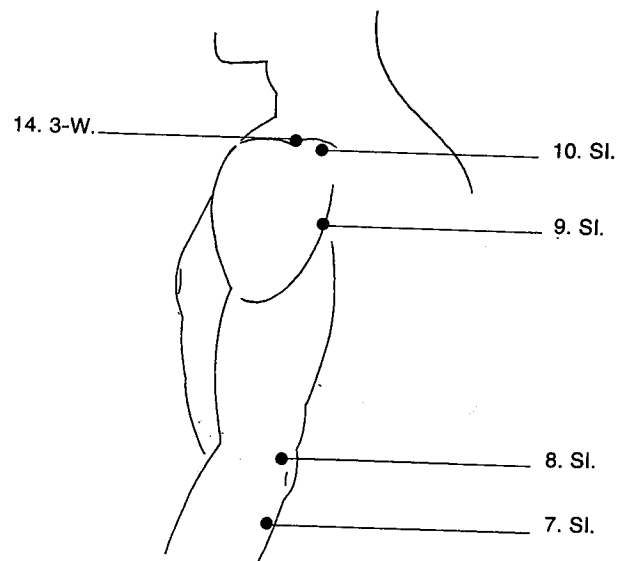


Fig. 21c: MPs. at the shoulder, upper arm and elbow joint

No.	organ	side	measurement point	remark
	f) appendix and nodi lymphatici ileo — cecales	right	4a. LI.	EAV
	g) lymphonoduli mesocolici	left	4a. LI.	EAV
58	Nerval degeneration	r + l	1. NeD.	EAV
	a) nerval degeneration for the lumbar and sacral marrow			
	b) CMP for the entire peripheral and central nervous system	r + l	1a. NeD.	EAV
	c) meninges and spinal meninges	r + l	1b. NeD.	EAV
	d) nerval degeneration for the cervical and thoracic spinal cord	r + l	2. NeD.	EAV
	e) nerval degeneration for the brain stem and cerebrum	r + l	3. NeD.	EAV
59	Circulation	r + l		
	a) SMP arteries	r + l	9. Cir.	
	b) chile cisterna	r + l	8b.* Cir.	EAV
	c) thoracic duct	left	8a.* Cir.	EAV
	accessory thoracic duct	right	8a. Cir.	EAV
	d) SMP veins	r + l	8. Cir.	
	e) coronary arteries	r + l	7. Cir.	
60	Allergy	r + l		EAV
	a) abdominal region, pelvis and lower extremities, e.g. skin allergenes, intestinal and urological allergenes	r + l	1. Al.	EAV
	b) SMP vascular sclerosis	r + l	1a. Al.	EAV
	c) thoracic region, nape, neck and upper extremity (dust-smoke-allergenes)	r + l	2. Al.	EAV
	d) head region, skull-, face-, skin- and hair-allergenes, oral and paranasal cavities-allergenes	r + l	3. Al.	EAV
61	Parenchymal and epithelial degeneration	r + l		EAV
	(not classical acupuncture points)			
	a) abdominal and pelvic organs	r + l	1. MP. PaD.	EAV
	b) CMP for the organ degeneration processes in general	r + l	1a. MP. PaD.	EAV
	c) degeneration processes of the peritoneum	r + l	1b. MP. PaD.	EAV

No.	organ	side	measurement point	remark
	d) degeneration processes of the pleura	r + l	1c. MP. PaD.	EAV
	e) degeneration processes of the organs in the chest and neck	r + l	2. MP. PaD.	EAV
	f) degeneration processes for organs in the head region	r + l	3. MP. PaD.	EAV
62	Triple warmer (endocrine system)	r + l		
	a) SMP for the gonads and adrenal gland	r + l	1. 3-W.	
	b) hormonal secretion of the pancreas	r + l	1a. 3-W.	EAV
	c) SMP for thyroid gland, parathyroid gland and thymus	r + l	2. 3-W.	
	d) SMP of the pituitary gland and pineal gland	r + l	3. 3-W.	
63	Heart	r + l		
	a) pulmonary valve	right	9. He.	
	aa) aortic valve	left	9. He.	
	b) pericard	r + l	8a. He.	EAV
	c) mitral valve	left	8. He.	
	cc) tricuspid valve	right	8. He.	
	d) conduction system	r + l	7. He.	
	e) myocardium (cardiac muscle)	r + l	6. He.	
64	Small intestine			
	a) ileum — terminal end	right	1. SI.	
	aa) ileum	left	1. SI.	
	b) peritoneum	r + l	1a. SI.	EAV (so-called P.-Point)
	c) duodenum — inferior horizontal portion	right	2. SI.	
	cc) jejunum	left	2. SI.	
	d) duodenum — descending portion with papilla duodeni	right	3. SI.	
	dd) bend between duodenum and jejunum	left	3. SI.	
	e) duodenum — upper horizontal portion	right	4. SI.	
	ee) duodenum — ascending portion	left	4. SI.	

No.	organ	side	measurement point	remark
65	Veins of the arm	r + l	7. Lu.	
66	Arteries of the arm	r + l	8. Lu.	
67	Nerves of the upper extremity	r + l	7. SI. (see fig. 21c)	
68	Elbow joint — articulatio cubiti	r + l	8. SI. (see fig. 21c)	
			11. LI.	
			3. Cir.	
69	Muscles of the arm	r + l	9. SI. (see fig. 21c)	
70	Shoulder joint-articulatio humeri	r + l	10. SI. (see fig. 21c)	
			15. LI.	
			2. Cir.	
71	articulatio acromioclavicularis	r + l	14. 3-W. (see fig. 21c)	

e) Measurement Points at the Foot, Lower Leg and Thigh (see fig. 22, 22a, 22b and 23):

72	Pancreas	right		
	a) pancreas protein production — protein metabolism, protease formation	right	1. Pa/Sp.	
	b) peritoneum — pancreas region	right	1a. Pa/Sp.	EAV
	c) nuclease — formation and nucleoprotein formation	right	2. Pa/Sp.	
	d) carbohydrate metabolism and carbohydrate enzyme production insulin — amylases and maltases	right	3. Pa/Sp.	
	e) fat-enzyme formation and fat metabolism — esterases and lipases	right	4. Pa/Sp.	
73	Spleen	left		
	a) spleen — white pulp, responsible for focal irritations and fields of disturbances in the head region	left	1. Pa/Sp.	

No.	organ	side	measurement point	remark
b)	spleen — peritoneum spleen region	left	1a. Pa/Sp.	EAV
c)	spleen — white pulp, responsible for focal irritations in the abdomen and small pelvis	left	2. Pa./Sp.	
d)	spleen — red pulp	left	3. Pa/Sp.	
e)	spleen — MP. for the activity of the reticulo-endothelial system	left	4. Pa/Sp.	
74	Liver	r + l		
a)	central vein system	r + l	1. Li.	
b)	peritoneum — liver region	r + l	1a. Li.	EAV
c)	liver lobuli system	r + l	2. Li.	
d)	ductuli interlobulares	r + l	2a. Li.	EAV
e)	perivascular and periportal system	r + l	3. Li.	

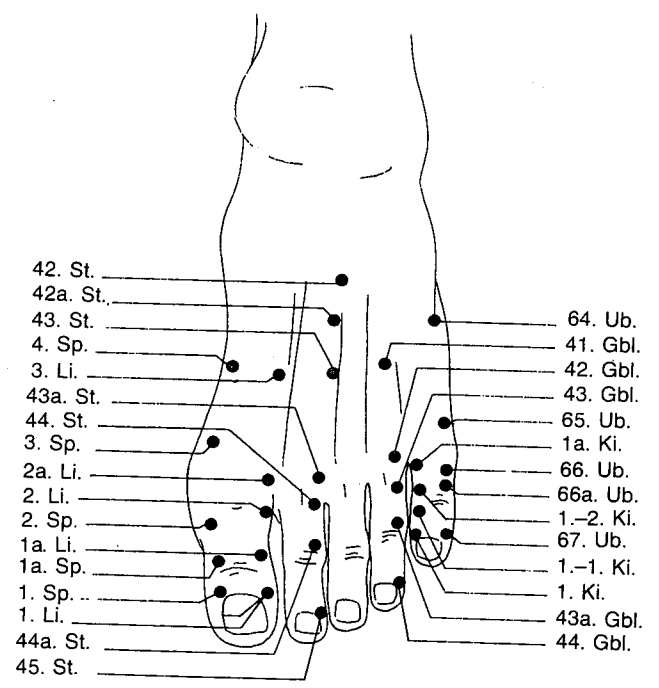


Fig. 22: Organ measurement points at the dorsum of the foot

No.	organ	side	measurement point	remark
75	Joints	r + l		
a)	degeneration of the joints of the lower extremities and pelvic girdle	r + l	1. JD	
b)	CMP for all joints, including the spine	r + l	1a. JD	EAV
c)	degeneration of the joints of the shoulder girdle and arm	r + l	ArD.	
d)	degeneration of the atlanto-axial joint and the temporo-mandibular joint (TMJ)	r + l	3. ArD.	
76	Stomach			
a)	pylorus	r	45. St.	
aa)	corpus ventriculi, left portion	l	45. St.	
b)	peritoneum, gastric portion	r + l	44a. St.	EAV

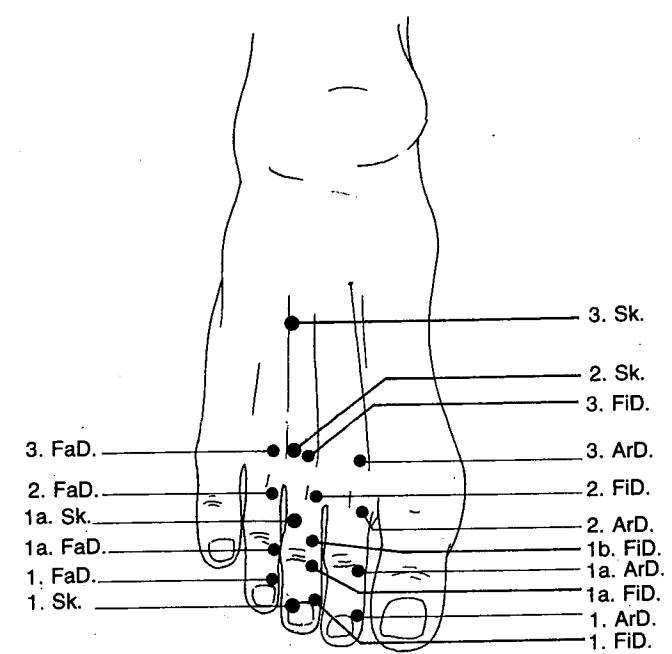


Fig. 22a: MPs. of the skin and degeneration measurement points — at the toes and the dorsum of the foot

No.	organ	side	measurement point	remark
c)	Antrum pylori	r	44. St.	
cc)	Fornix ventriculi	l	44. St.	
d)	Gastric canal, right and left portion	r + l	43a. St.	EAV
e)	Corpus ventriculi, right portion	r	43. St.	
ee)	Cardia	l	43. St.	
f)	Esophagus, lower portion	r + l	42a. St.	EAV
g)	Esophagus, upper portion	r + l	42. St.	
77	Fibroid degeneration			
a)	Fibroid degeneration of organs of the abdominal cavity and small pelvis			
b)	CMP Fibroid degeneration of the entire body	r + l	1a. FiD.	EAV
c)	CMP. Fibroid degeneration of the mucous membranes	r + l	1b. FiD.	EAV
d)	Fibroid degeneration of the organs of the chest and neck	r + l	2. FiD.	
e)	Fibroid degeneration of the organs of the head	r + l	3. FiD.	
78	Skin			
a)	skin of the lower part of the body, including the lower extremities	r + l	1. SK.	EAV
b)	scars of the skin	r + l	1a. SK.	EAV
c)	skin of the upper half of the body, including the upper extremities, neck and nape	r + l	2. SK.	EAV
d)	skin in the head region	r + l	3. SK.	EAV
79	Fatty degeneration			
a)	fatty degeneration of organs in the abdominal region (fat liver, lipoid nephrosis, lipomatosis of the pancreas)	r + l	1. FaD.	EAV
b)	CMP for fatty degeneration in the entire body	r + l	1a. FaD.	EAV
c)	fatty degeneration of organs and vessels in the chest region (myocardium, coronary arteries, other arteries)	r + l	2. FaD.	EAV

No.	organ	side	measurement point	remark
d)	fatty degeneration of the organs in the head region (cerebral sclerosis, encephalomalacia)	r + l	8. FaD.	EAV
80	Gallbladder	r + l		
a)	ductus choledochus	right	44. Gbl.	
aa)	ductus hepaticus communis	left	44. Gbl.	
b)	peritoneum in the gallbladder region	right	43a. Gbl.	EAV (so-called P.-point)

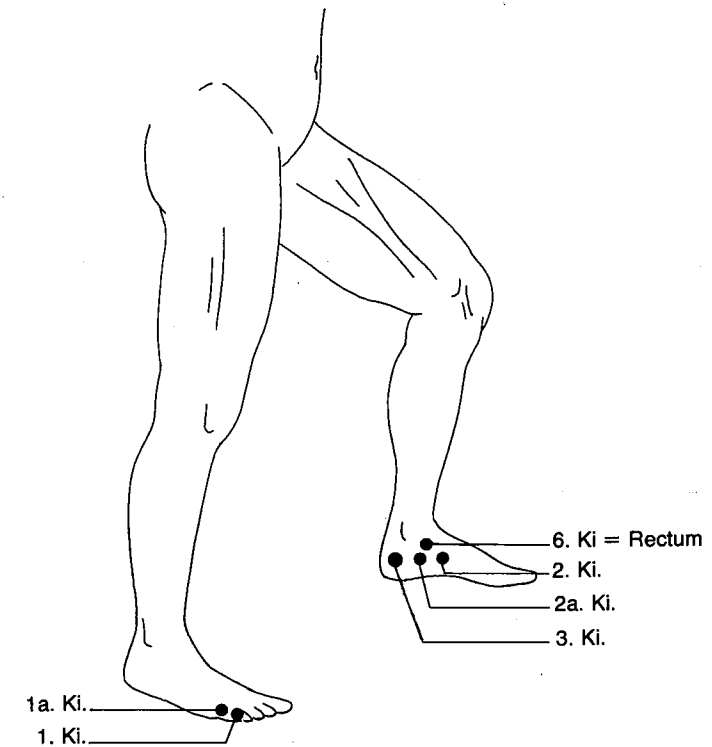


Fig. 22b: MPs. of the kidney meridian on the foot

No.	organ	side	measurement point	remark
c)	ductus cysticus	right	43. Gbl.	
cc)	ductus hepaticus dexter	left	43. Gbl.	
d)	gallbladder	right	42. Gbl.	
dd)	ductus hepaticus sinister	left	42. Gbl.	
e)	ductuli biliferi of the right liver lobe	right	41. Gbl.	
ee)	ductuli biliferi in the left liver lobe	left	41. Gbl.	
81	Kidney	r + l		
a)	renal pelvis	r + l	1. Ki.	EAV
b)	CMP kidney-ureter	r + l	1.1. Ki.	EAV
c)	peritoneum in the kidney region	r + l	1.2. Ki.	EAV (P.-point)
d)	ureter in the abdominal region	r + l	1a. Ki.	EAV
e)	pyelorenal medulla zone with calices	r + l	2. Ki.	
f)	renal medulla — tubuli recti	r + l	2a. Ki.	EAV
g)	glomeruli and tubuli contorti	r + l	3. Ki.	
82	Urinary bladder (see fig. 22)	r + l		
a)	Urinary bladder (body)	r + l	67. Ubl.	
b)	Peritoneum — — in the male the right portion covers the seminal vesicle — in the female the urinary bladder, uterus, ovaries, ligamentum ovarium proprium and the tuba uterina with the exception of the ostium abdominale tubae is covered by peritoneum, additionally the excavatio vesicouterinae and the excavatio rectouterinae	r + l	66a. Ubl.	EAV (so-called P.-point)
<i>ea) Lower leg</i>				
84	Bone marrow	r + l	39. Gbl.	
85	MP. blood	r + l	6. Pa/Sp. 5. Li. 8. Ki.	
86	Diaphragma pelvis	r + l	7. Pa/Sp	
87	Diaphragma urogenitale	r + l	8. Pa/Sp.	
88	Muscles — lower extremity	r + l	34. Gbl.	
89	Veins — lower extremity (fig. 23, page 93)	r + l	7. Li.	

No.	organ	side	measurement point	remark
<i>eb) Border lower leg — thigh</i>				
90	Knee joint	r + l	54. Ubl.	
<i>ec) Lower extremity — thigh front region</i>				
front:				
91	Veins of the pelvis	r + l	10. Pa/Sp.	
92	Abdominal veins	r + l	33. St.	
93	Arteries of the leg	r + l	32. St.	
94	Gonads (ovaries and testicles)	r + l	31. St. 11. Pa/Sp. 11. Li.	

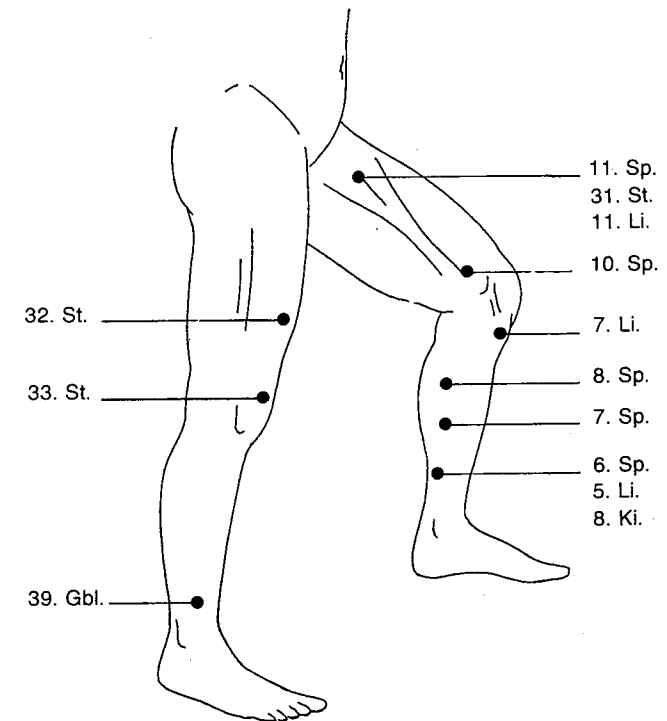


Fig. 23: MPs. at the lower leg and thigh

No.	organ	side	measurement point	remark
<i>ed) Thigh — posterior side</i>				
95	Urethra — anterior portion	r + l	52. Ubl.	
96	Urethra — posterior region	r + l	51a. Ubl.	EAV
97	Penis resp. vagina	r + l	51. Ubl.	(P.-point)
98	Cowper's gland resp. Bartholin's gland	r + l	50b. Ubl.	EAV
99	Seminal hillock resp. ligamentum latum with parametria	r + l	50a. Ubl.	EAV
100	Prostate gland resp. uterus	r + l	50. Ubl.	
101	Seminal vesicle resp. pars interstitialis uteri	r + l	49c. Ubl.	EAV
102	Spermatic cord resp. ampulla tubae	r + l	49b. Ubl.	EAV
103	Epididymis resp. ostium abdominale tubae	r + l	49a. Ubl.	EAV

f) Measurement Points on the Body (see fig. 24 and 24a):

ventral side:

104	Larynx	—*	21. Con.
105	Trachea (also see 9. Lu.)	—*	19. Con.
106	Bronchis (also see 10. Lu.)	—*	17. Con.
107	Lower esophagus (also see 42a. St.)	r + l	14. St.
108	Upper esophagus (also see 42. St.)	r + l	13. St.

dorsal side (see fig. 24a, page 97):

109	SMP spine	r + l	11. Ubl.
	cervical spine	r + l	6. Sl.
	thoracic spine	r + l	29. Ubl.
	lumbar spine with os sacrum	r + l	61. Ubl.
110	Osseous system	r + l	12. Ubl.
111	Diaphragma	r + l	17. Ubl.
112	Adrenal glands	r + l	22. Ubl.

*The point is situated in the ventral median line.

No.	organ	side	measurement point	remark
<i>g) Alarm points</i>				
113	Triple warmer	—*	5. Con.	
114	Lung	r + l	1. Lu.	
115	Circulation — Sex	r + l	1. Cir.	
116	Liver	r + l	14. Li.	
117	Heart	—*	14. Con.	
118	Stomach	—*	12. Con.	
119	Kidney	r + l	25. Gbl.	
120	Pancreas	right	13. Li.	
121	Spleen	left	13. Li.	
122	Large intestine	r + l	25. St.	
123	Small intestine	—*	4. Con.	
124	Urinary bladder	—*	3. Con.	

The acupuncture points located at the hands and feet, where the organ-meridians end or begin, have principally to be measured, i.e. the first respectively last four points of each meridian on each side. These points altogether not only give a much more definite information about the state of an organ, and allow a diagnosis, which goes much more into the details concerning the individual organ-portions or sections.

In the final evaluation of all measurement results and diagnosis based on that, first all indicator drops should be underlined or circled with a red pencil. Increased values should be underlined then with yellow or green pencils and lowered measurement results with a blue pencil. Hereby one gets a clear synopsis about the crucial points, effects and interrelations of a disease.

At the same time the possibility of a false or premature diagnosis is reduced.

The same guidelines have to be followed at the feet. Here one has to regard the fact that the measurement points for the pancreas are only located at the medial respectively tibial side of the nailfold of the right big toe, whereas the points at the left big toe correspond to the spleen.

A further peculiarity has to be observed; the first measurement point for the kidneys in classical acupuncture is not located at the nailfold of the fifth toe, but in the middle of the anterior third of the sole of the foot between the balls of the big and the small toe.

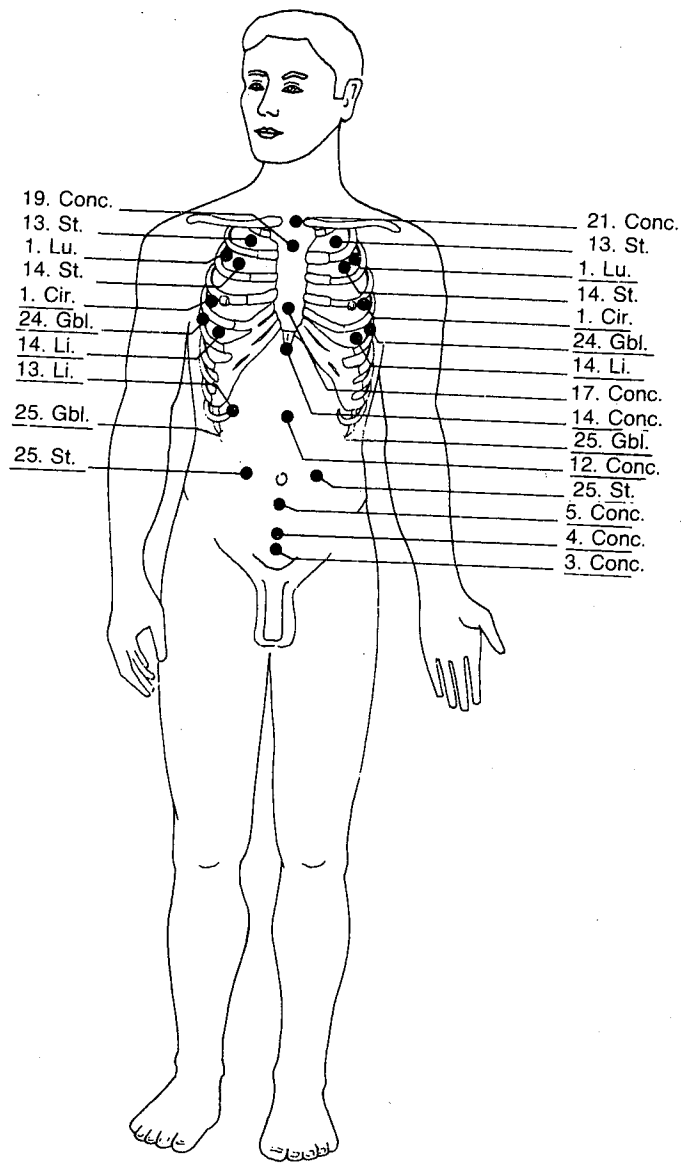
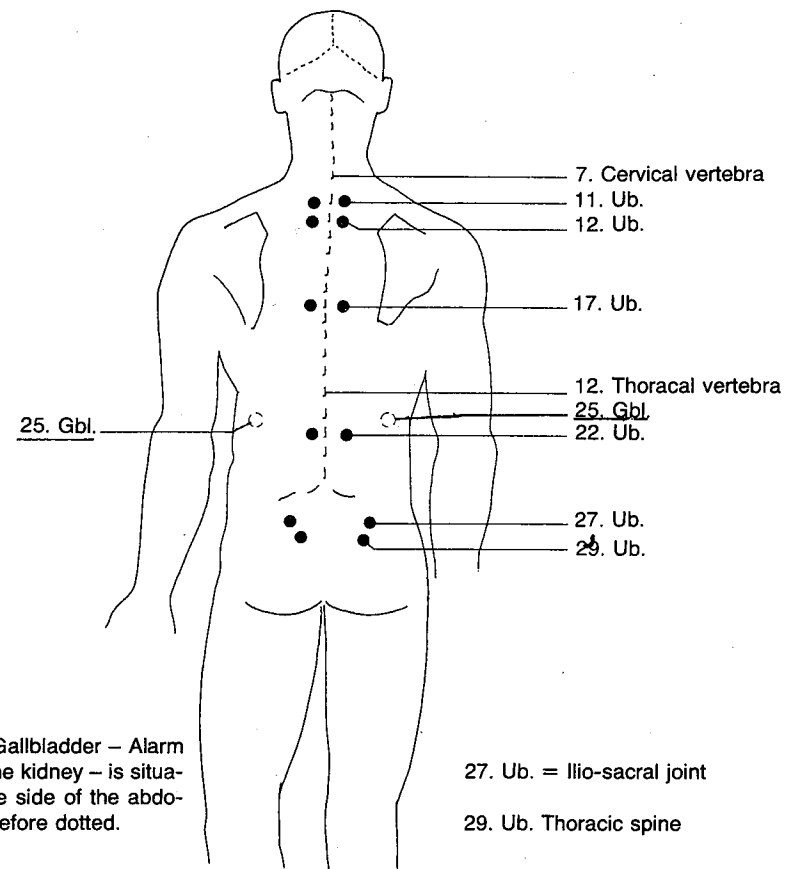


Fig. 24: MPs. on the front side of the body. Alarmpoints are underlined.
 Remark: The alarmpoint of the kidney = 25. Gallbladder is situated over the free end of the 12th rib



MP. 25. Gallbladder – Alarm point of the kidney – is situated on the side of the abdomen, therefore dotted.

27. Ub. = Ilio-sacral joint

29. Ub. Thoracic spine

Fig. 24a: MPs. on the back

In electroacupuncture diagnostics the 1. Kidney point is situated on the distal phalanx of the little toe at the tibial side of the nail fold.

Mastering and testing the mentioned measurement points serves a correct detailed and safe diagnosis and should be so familiar to every electroacupuncturist that he is capable of finding any of the mentioned measurement points at any time without difficulties in order to test them out.

In the following sections, for the sake of clarity and unity, the exact discussion of the individual points in the suggested sequence is carried out, even if we are running into the risk of repeating certain remarks.

Positions and Competence of the Individual Measurement Points

For all measurement values the already discussed basic evidence of the indicator position and indicator movement of the valveohmmeter of the K + F-Diathera-puncteur-apparatus or the Dermatron-appliance of *Pitterling* is valid. In principle the reading of "50" has to be regarded as an ideal norm-value in all point measurements.

A high reading above 80 indicates an inflammatory phase, low readings below 50 indicate a degenerative process, and indicator drop means a decay of organ cells. Basically only measurement results obtained of a patient who is in a sympathicotonic state are to be used. The presupposition is that the value in the basic derivation is at least 82 or higher. Measurement during the night, in late evening hours or with basic values of 79 or less, i. e. if the patient is in a vagotonic state, is not suitable for a safe diagnosis, since then not all indicator drops can be seen. In these cases first the patient has to be brought into a sympathikotonic state by "charging" until the basic values are above 80.

No. 1 *Basic derivation respectively guiding value measurement hand — hand (HH)*

The patient is taking into his right hand the positive inactive electrode plugged to the point stylus. Into the left he is given the negative electrode. The indicator deflection must reach here under normal circumstances a reading of 82 partitions or more and stay at this level to get usable results at the other measurement points. Increased values above 84 and lowered values under 80 or an indicator drop indicate a pathological process in the upper part of the body and the neck region.

No. 2 *Basic derivation respectively guiding value measurement hand — foot — left (HFL)*

The patient takes the bar electrode (which is plugged to the point stylus) into his left hand and stands with his left foot on the foot electrode (plate electrode). Values of 82—84 indicate here also normal values. Deviating indicator deflections or indicator drops indicate a pathological process in the left half of the body.

No. 3 *Basic derivation respectively guiding value measurement hand — foot — right (HFR)*

The patient is holding the bar electrode (which is plugged to the point stylus) in his right hand and stands with his right foot on the foot electrode (plate electrode) which is connected to the apparatus. Here also the values have to reach the reading of 80. Deviant indicator deflections or movements indicate a pathologic process in the right half of the body.

No. 4 *Basic derivation respectively guiding value measurement foot — foot (FF)*

The patient stands with both feet on the two foot electrodes (plate electrodes), which are connected at the right with the point stylus and at the left by plugging of the banana-plug into the sockets of the apparatus. Here also values of 82—84 are normal. A deviation of the indicator from this reading or indicator drop indicates a pathologic occurrence in the lower part of the body respectively the small pelvis or the two legs.

Naturally there can be combinations which may give further indications of the location of the disease process. Increased values for example in the derivations: hand — foot (right) and foot — foot can suggest a chronic appendicitis or a chronic adnexitis at the right.

In strongly increased guiding values of the derivations "left hand — left foot and foot — foot" there can exist a thrombophlebitis in both legs with a consecutive venous inflammation in the small pelvis and in the left lower abdominal region.

If the values should be lowered everywhere, this can be caused by particular dry or callous skin at the hands or feet, which impedes the contact. In this case the palms and soles are wetted with a moistened cloth or moistened cotton-wool swab, whereby the contact is achieved.

In the foot — foot derivation one should look for the position of the feet of the patient, who should not hold his feet too close together, a corresponding position of the foot electrodes. The thighs should not touch each other on the inner side to avoid a short-circuit derivation. That is why also hands and arms should not be attached close to the body during the measurements.

Preliminary remark

The three digit number, used in the following description of the measurement points, correspond to the classification numbers on the wall-chart for EAP-organometric according to *Voll*. They

- a) serve for a quick looking up of the point on the 6 anatomic tables, if one searches for an organ-measurement point in the alphabetic list of the table.
- b) for a quick detection of the designation of an organ with a known measurement point (see table-figures 1—6, page 272—283)

A. Measurement points on the head

No. 5

Hypothalamus

20. Triple warmer (20. 3-W.)

204

r + 1

One of the most important and fundamental measurement points in electroacupuncture. Here are situated the superior centers of the autonomous nervous systems controlling the regulation processes of the organism, as

temperature control
wake and sleep mechanism
fat- and water metabolism
genital functions
perspiration

All these basic regulations can be measured and influenced at this point.

The hypothalamus measurement point is situated behind the ear attachment and therefore is covered by the helix of the ear in the lateral aspect.

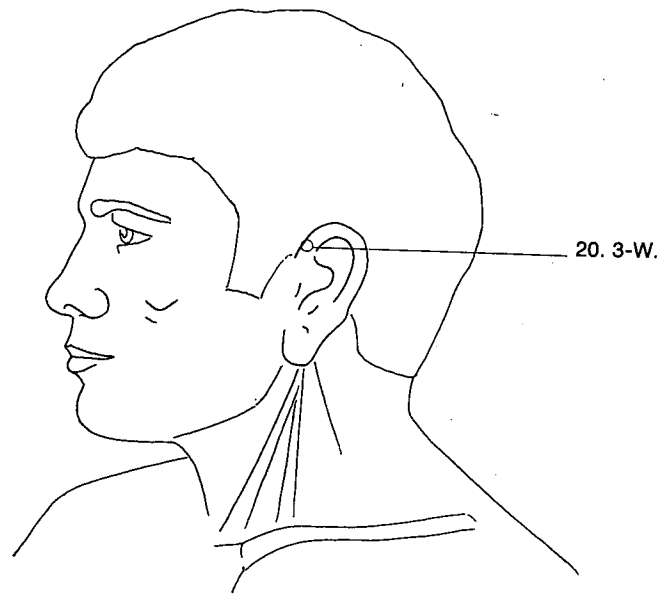


Fig. 25: MP. Hypothalamus = 20. Triple warmer

No. 6

Thalamus point

4. Gallbladder (4. Gbl.)

r + 1

The point is located above the beginning of the sutura coronaria and at the transition of the sutura sphenofrontalis into the sutura sphenoparietalis of the skull.

Here the gallbladder-meridian has the shape of a sharp acute-angled bend.

See also fig. 18, page 77 and Illustrated Volume I of the work "Topographic positions of the measurement points in electroacupuncture", Medizinisch Literarische Verlagsgesellschaft, fig. 31. On the following pages means Vol. I = Illustrated Volume I, Vol. II = Illustrated Volume II of the above-mentioned works. In these illustrated volumes the measurement points are marked in anatomic tables.

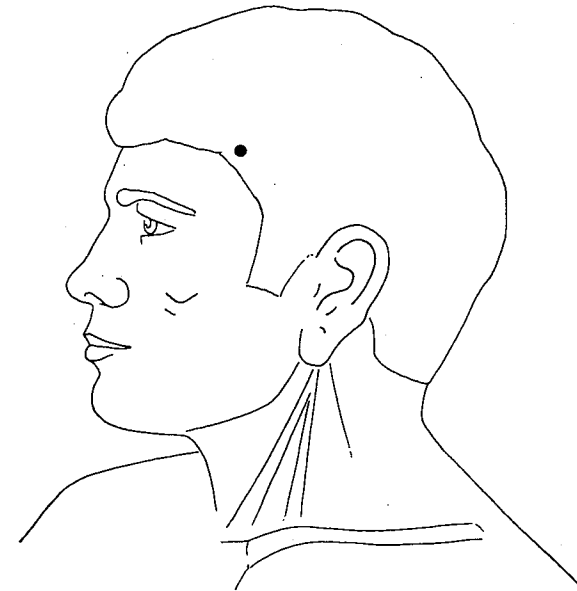


Fig. 26: MP. Thalamus = 4. Gallbladder

No. 7

Somnic center in the diencephalon
16. Gallbladder point (16. Gbl.)

r + l

The point is located at the end of the linea temporalis or facialis superior above the sutura coronaria or coronalis about 3½ finger breadth away from the median line of the skull.

The sleeping centre is responsible for the depth of the sleep. See also fig. 18 on page 77 and Vol. I, fig. 31.

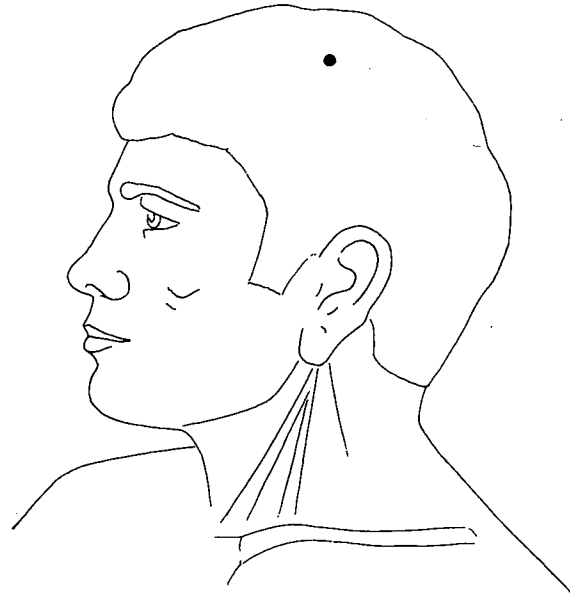


Fig. 27: MP. Sleeping centre for the depth of sleep in the diencephalon = 16. Gallbladder

No. 8

Mesencephalon = summation measurement point
9. Gallbladder point (9. Gbl.)

r + l

The point lies about 1 finger breadth above the sutura squamosa on the vertical line which starts off from the tip of the processus mastoideus.

At this point the gallbladder meridian makes an almost rectangular bend to extend towards the processus mastoideus.

See also fig. 18 on page 77 and Vol. I, fig. 31, and Vol. II, fig. 26.

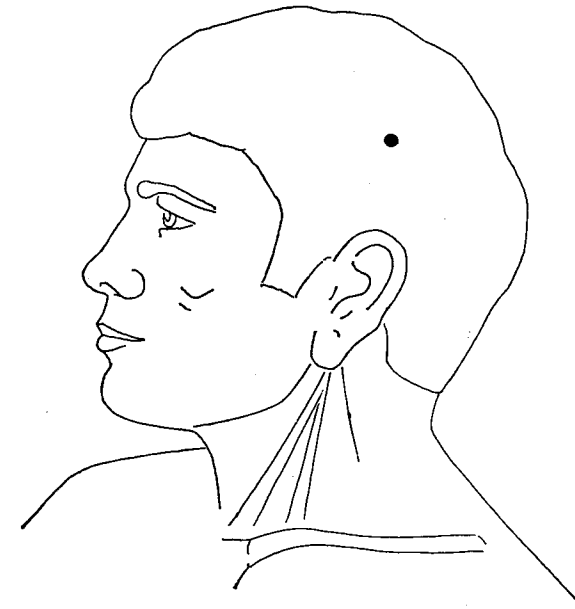


Fig. 28: Summation measurement point Mesencephalon = 9. Gallbladder

No. 9

External auditory passage — external ear — auris externa

19. Small intestine point (19. S. I.)

101

r + l

The point is located in the centre of the ear-lobe.
See Vol. I, illustration 12, page 101.

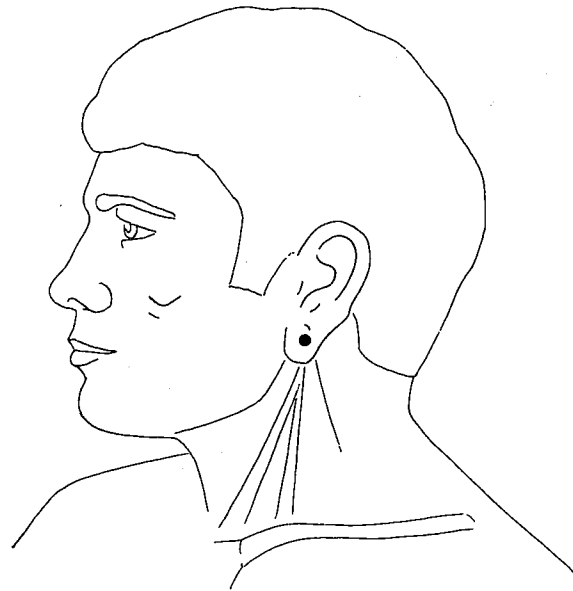


Fig. 29: MP. External auditory passage = 19. Small intestine

No. 10

Middle ear — tympanic cavity — auris media et cavum tympani

17. Triple warmer point (17. 3-W.)

303

r + l

Somewhat hidden by the ear-conch the point lies in a small fossa in the centre of the mastoid process, above the rest of a not always existing sutura squamomastoidea which runs in the middle of the mastoid process obliquely from caudal anterior towards cranial posterior. See Vol. I, fig. 4 and fig. 30.
Responsibility: middle ear — tympanic cavity.

From the lateral aspect the measurement point middle ear is covered up by the region of the anthelix of the ear. Therefore the point is dotted.

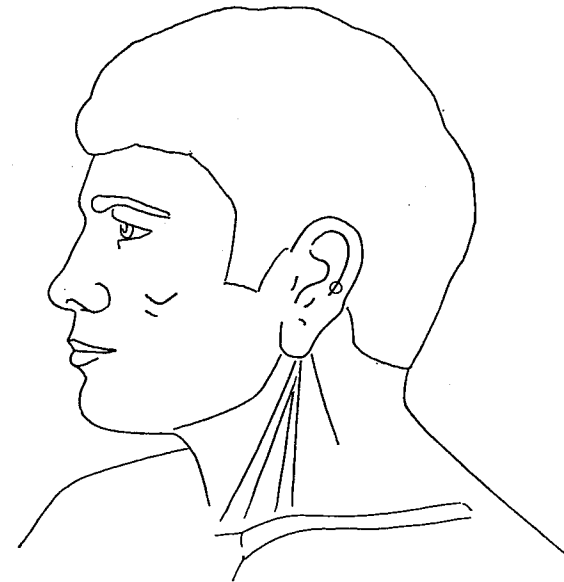


Fig. 30: MP. Middle ear = tympanic cavity = 17. Triple warmer

No. 11

Internal ear and petrous bone — *auris interna et pars petrosa ossis temporalis*

18. Triple warmer point (18. 3-W.)

(Endocrine system)

302

r + l

The point lies in an almost triangular pit of the petrous bone behind the upper distal curvature of the ear conch. This pit is anatomically limited by the *linea temporalis* horizontally which represents a ramification of the *processus zygomaticus* and vertically by the *spina suprameatum* which represents the lateral reinforcement of the wall of the *porus* and *meatus acusticus*.

Finally the third side is formed by the convex aspect of the *processus mastoideus*. (see chapter 58, page 162.) Here disturbances of equilibrium and *Menière's syndrome* can be diagnosed.

In lateral aspect the measurement point for the internal ear is covered by the region of the *fossa triangularis* of the ear conch. Therefore the point is dotted.

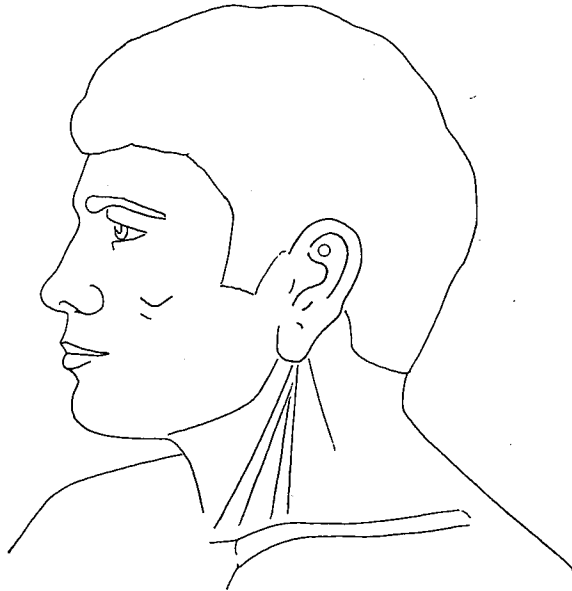


Fig. 31: MP. Internal ear - petrous bone = 18. Triple warmer

No. 12

Meninges

19. Triple warmer point (19. 3-W.)

(Endocrine system)

301

r + l

The point lies approximately 1 finger breadth distal from the measurement point of the hypothalamus, at equal level, still covered by the upper ear conch, on the *facies temporalis* of the *squama temporalis* above the *linea temporalis* in a perceptible osseous dent approximately $\frac{1}{2}$ finger breadth above the measurement point for the internal ear.

For detection of the point go from the fossa of the hypothalamus measurement point with the extension of the point-stylus along the *linea temporalis* distally. Here one can palpate a small osseous dent also with the finger-tip.

Alterations, irritations of the meninges up to distinct meningitis, but also later consequences like adhesions or scars can be diagnosed at this point. (See page 165, fig. 84.)

For the measurement of the meninges there is available also the common measurement point of the meninges and spinal cord sheath at the proximal limb of the 2. finger at the ulnar side above the distal angle between the shaft and the capitulum in the course of the nerval degeneration vessel. See Vol II, fig. 33.

From the lateral aspect the measurement point meninges is covered by the edge of the auricle. Therefore the point is dotted.

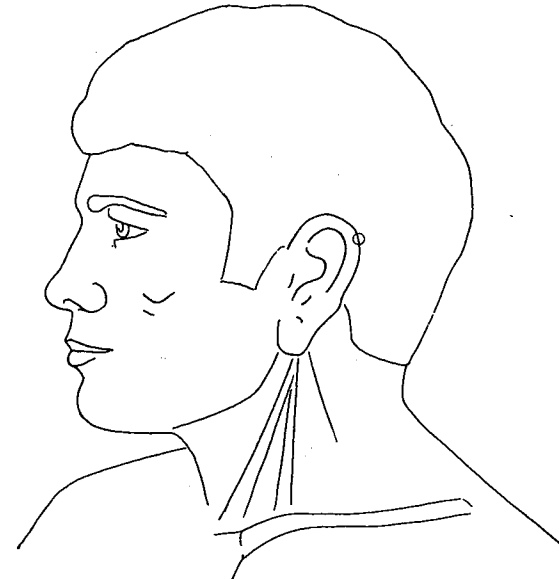


Fig. 32: MP. Meninges = 19. Triple warmer

No. 13

Posterior pituitary lobe — neurohypophysis

12. Gallbladder point (12. Gbl.)

r + l

The point is located above the inferior tip of the mastoid process of the os temporalis.

See Vol. I, fig. 31.

Measurement point for the anterior pituitary lobe see No. 52, page 149, for the intermediate pituitary lobe (chapter 52 a, page 150).

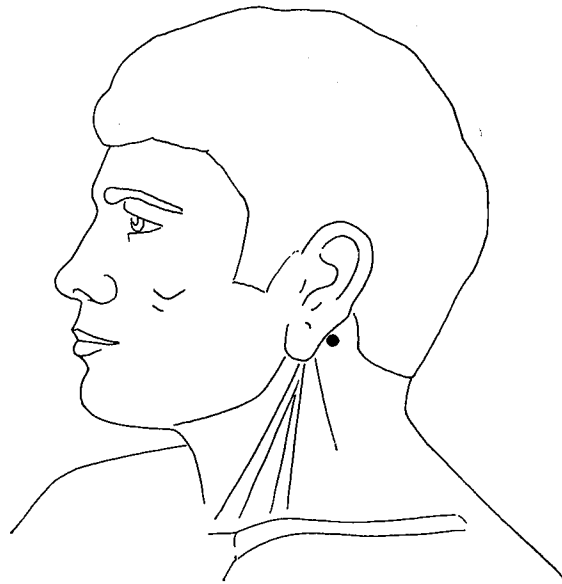


Fig. 33: MP. Posterior lobe of the pituitary = 12. Gallbladder

No. 14

Regulation Center for the somnic-rhythm in the mesencephalon

11. Gallbladder point (11. Gbl.)

r + l

The point lies at the transition zone from the sutura squamosa to the sutura parieto-mastoidea, approximately 2 finger breadth distal from the ear in the level of the upper ear-attachment. At the beginning of the sutura parietomastoidea, which ends here in a slight arch towards cranial-distal, one easily palpates the edge of this suture.

See also fig. 18 and Vol. I, fig. 31.

This point is responsible for falling asleep and awakening in time.

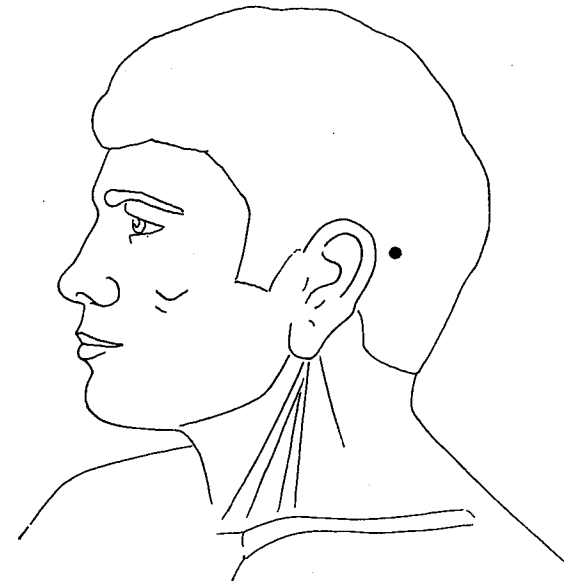


Fig. 34: MP. Centre for the sleep- and wake-rhythm in the mesencephalon = 11. Gallbladder

No. 15

Pineal gland

8. Urinary bladder point (8. Ub.)

319

r + l

The point lies above the lamda-suture at the occiput. From the point of union of the arrow-suture with the lamda-suture one follows this one approximately 2 or 3 finger breadth obliquely towards lateral-inferior. Another possibility to find the point exists by searching the 8. Urinary bladder point approximately 1 finger breadth towards lateral right or left.

More easily, however, this point is found, if one follows laterally the latter junction-point of the arrow the lambda-suture until one arrives at a large indentation. In the centre of this indentation the pineal gland measurement point is located, the 8. Urinary bladder point. See Vol I, fig. 19.

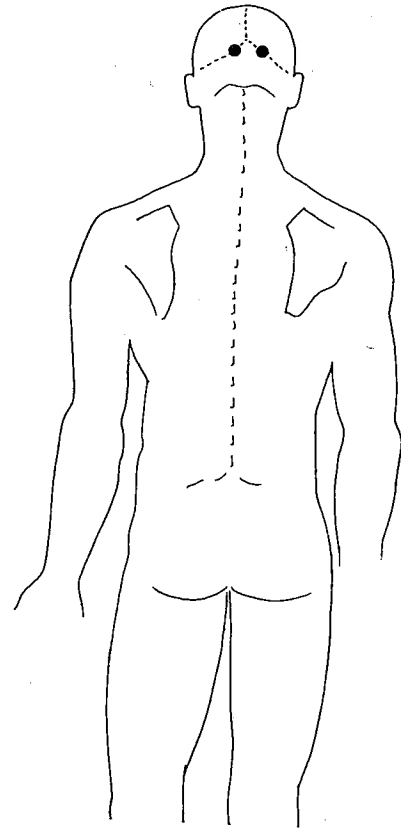


Fig. 35: MP. Pineal gland = 8. Urinary bladder

No. 16

Pons — pons Varoli

9. Urinary bladder point (9. Ub.)

321

r + l

Located on the planum occipitale posterior of the stronger convex, but more tender pronounced linea nuchae suprema (nuchalis supraterminalis) approximately 2 finger breadth lateral of the median line.

The point lies in a sickle-shaped cavity, which is encircled at the occiput by the linea nuchae superior (terminalis) and the linea nuchae suprema (nuchalis supraterminalis). (Point found and determined by Voll.) See Vol. I, fig. 5.

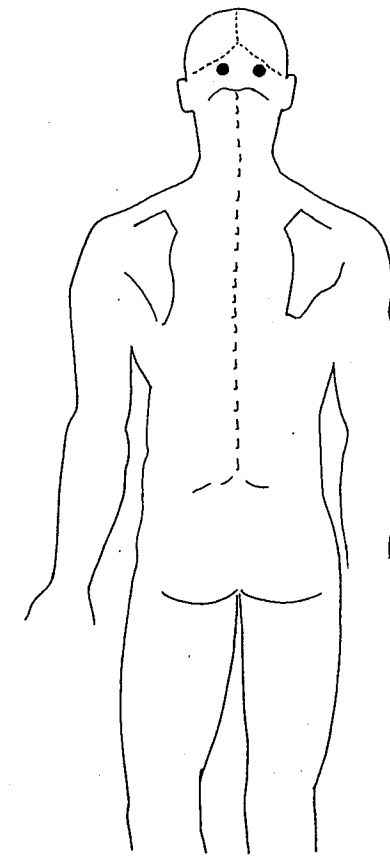


Fig. 36: MP. Pons — pons Varoli = 9. Urinary bladder

No. 17

Medulla oblongata

10. Urinary bladder point (10. Ub.)

323

r + l

The point is located in the muscular angle between the musculus trapezius and the musculus sternocleidomastoideus, approximately 2 finger breadth lateral of the nape median line inferior of the linea nuchae superior, where along this linea portion of the musculus sternocleidomastoideus is inserted. See Vol. I, fig. 5 and illustration 12.

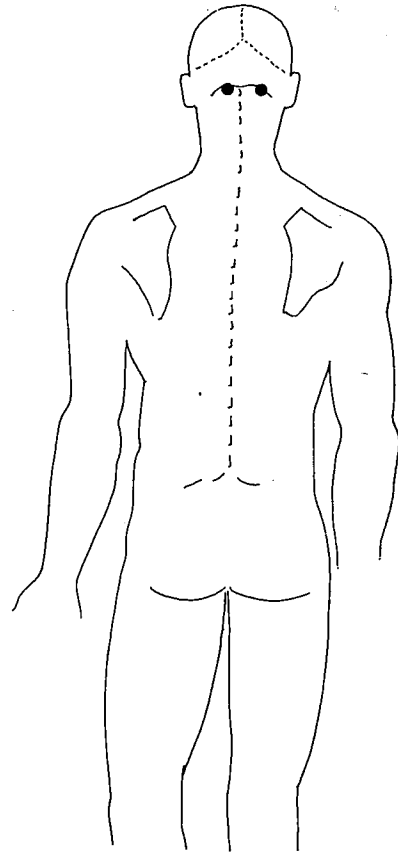


Fig. 37: MP. Medulla oblongata = 10. Urinary bladder

No. 18

Quadrigeminal plate — corpora quadrigemina (also called lamina tecti)

17. Governor vessel point (17. Gov.)

320

The lamina tecti or corpora quadrigemina are four small elevations on the dorsal plane of the midbrain colliculi superiores (rostrales) and colliculi inferiores (caudales).

They are the seat of the "thymo-psyche", the emotional constituent of our psyche.

Depression or melancholy can be diagnosed here.

The measurement point lies closely superior of the protuberantia of the os occipitale on the median line, which sometimes is formed by the linea nuchae suprema, in a palpable indentation. See Vol. I, fig. 5.

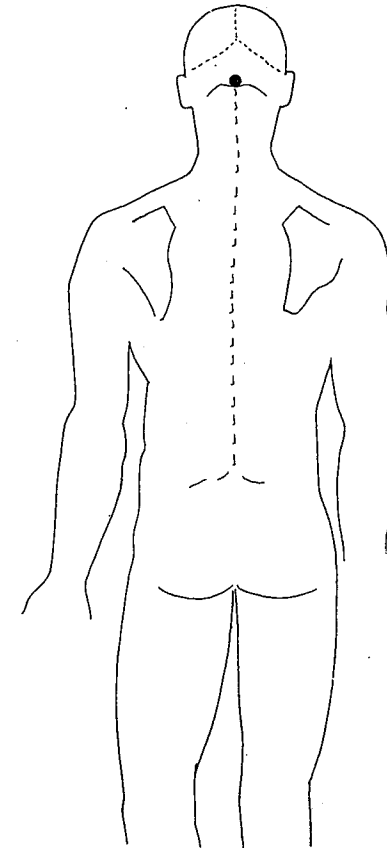


Fig. 38: MP. Corpora quadrigemina — quadrigeminal plate = 17. Governor vessel

No. 18a

Cerebellum

19. Governor vessel point (19. Gov.)
318

The measurement point for the small brain lies exactly above the point of union of the arrow — with the lamdoid suture on the median line at the occiput.
In searching for the measurement point it should be taken into consideration that the occipital bone can differ in size. See Vol. I, fig. 19 and fig. 28.

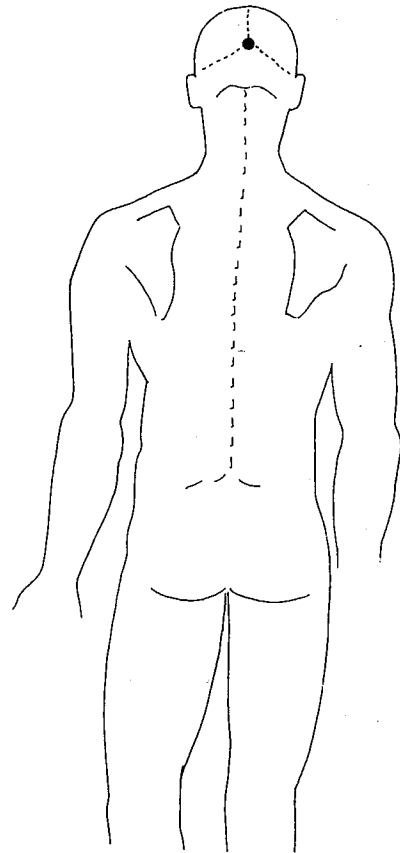


Fig. 39: MP. Little brain = 19. Governor

B. Measurement Points in the Facial Area

No. 19

Vault of the main nasal cavity with the lamina cribrosa ossis ethmoidalis including the fila olfactoria

23a. Governor vessel point (23a. Gov.)

212

The point lies on the meridian line between the 23. and 24. Governor vessel point. Hence it is no classical acupuncture point. It is located on the beginning of the nasal bone at the frontal bone above the line of intersection of the sutura nasofrontalis with the sutura internasalis. See Vol. I, fig. 6 and fig. 10.

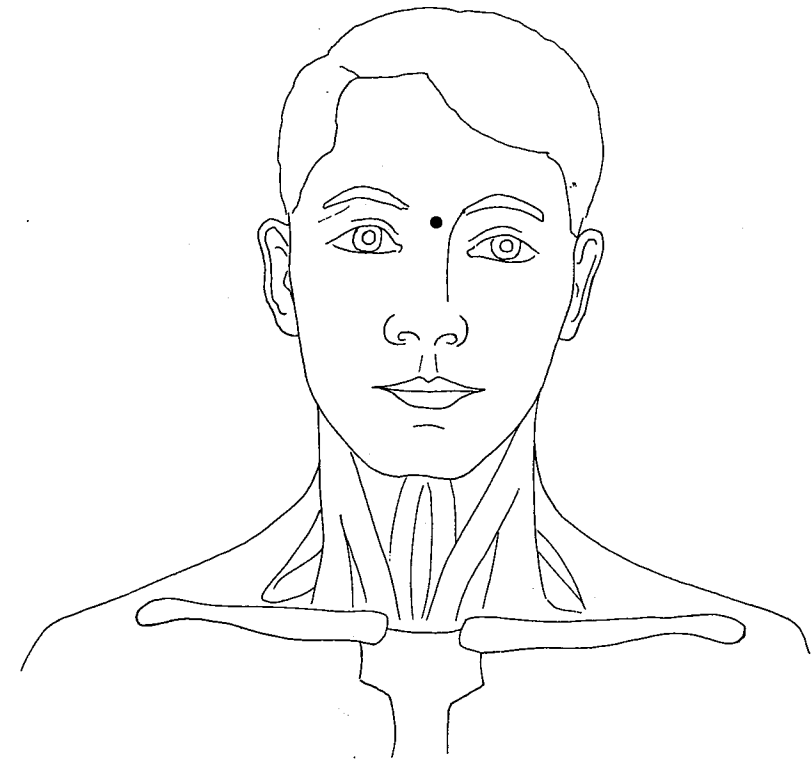


Fig. 40: MP. Vault of the main nasal cavity = 23a. Governor

No. 20

Frontal sinus — Sinus frontalis

2. Urinary bladder point (2. Ub.)

213

r + l

Usually the bottom of the frontal sinus is separated from the orbita only by a thin osseous septum.

The measurement point of the 2. Urinary bladder point lies above the muscular angle of the musculus procerus (musculus depressor glabellae) and the outer margin of the musculus orbicularis oculi, $\frac{1}{2}$ finger breadth medial from the foramen supraorbitale, approximately at the same level with this (see page 67). This point has secondary vessel connections to the 13. and 14. lymph vessel point (see page 90, textual volume of the work "Topographic positions of the measurement points in electroacupuncture", 3. edition) and can be influenced from here too.

Alterations in the frontal sinus are measured at this point

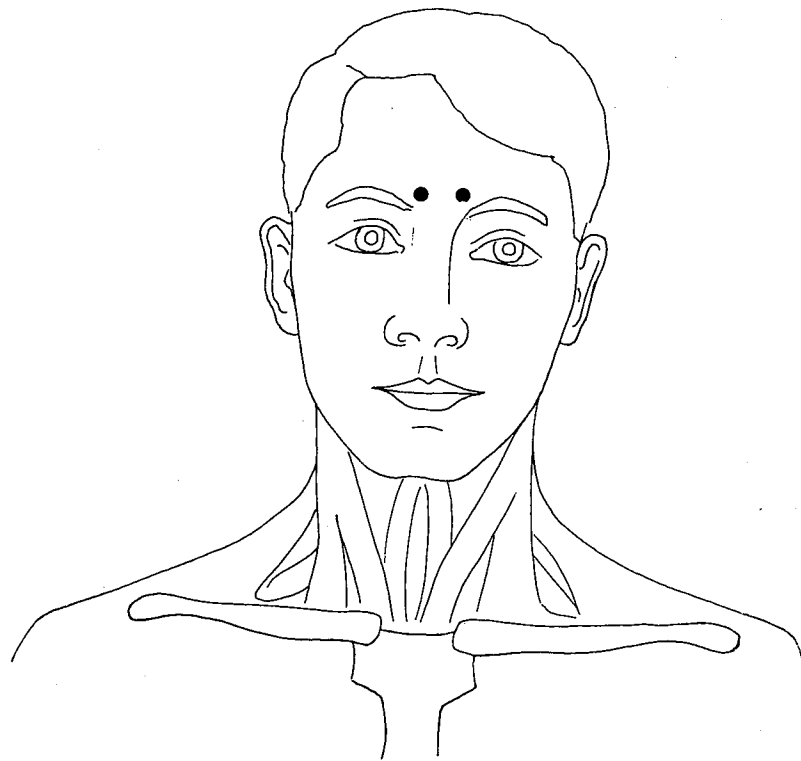


Fig. 41: MP. Frontal sinus = 2. Urinary bladder

No. 21

Eye — anterior region — oculus, pars anterior

21. Triple warmer point (21. 3-W.)

201

r + l

Located at the lateral edge of the orbita above the end of the sutura zygomatico-frontalis. This suture should always be palpated exactly since its position differs individually. See Vol. I, fig. 10 and fig. 30.

Here the function of conjunctiva, cornea, iris, lens and corpus vitreous can be measured.

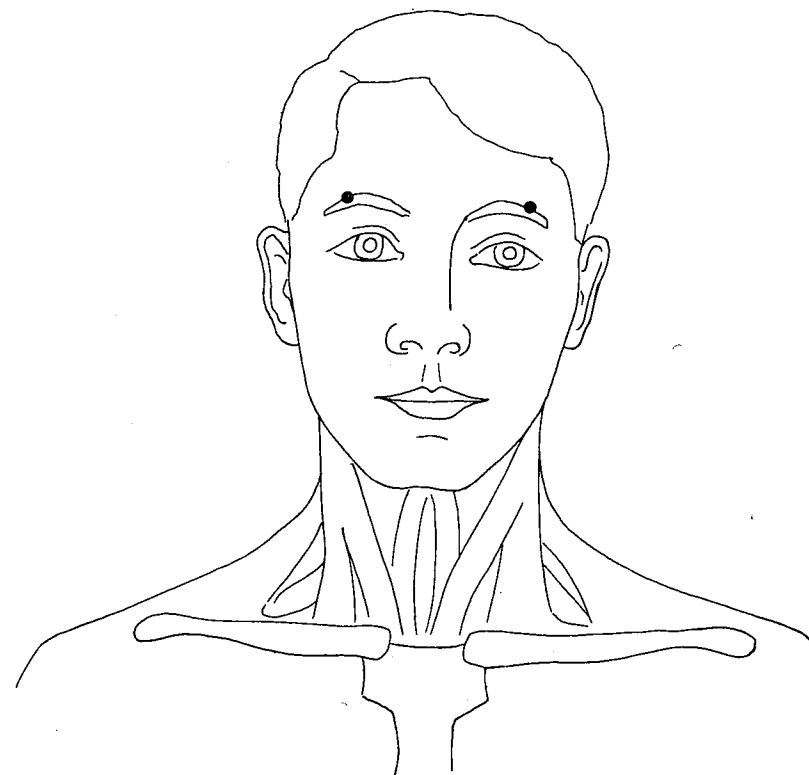


Fig. 42: MP. Eye — anterior region = 21. Triple warmer

No. 22

Eye — posterior region — oculus, pars posterior

1. Gallbladder point (1. Gbl.)

202

r + l

At the utmost lateral edge of the orbita above the lateral eye lid angle at the transition point of the vertical edge of the processus fronto-sphenoidalis, embedded into the roundish margo infraorbitalis of the os zygomaticus.

See Vol. I, fig. 10 and fig. 30.

Ranked with the posterior eye-region are the retina, chorioides, fundus and the entrance spot of the nervus opticus.

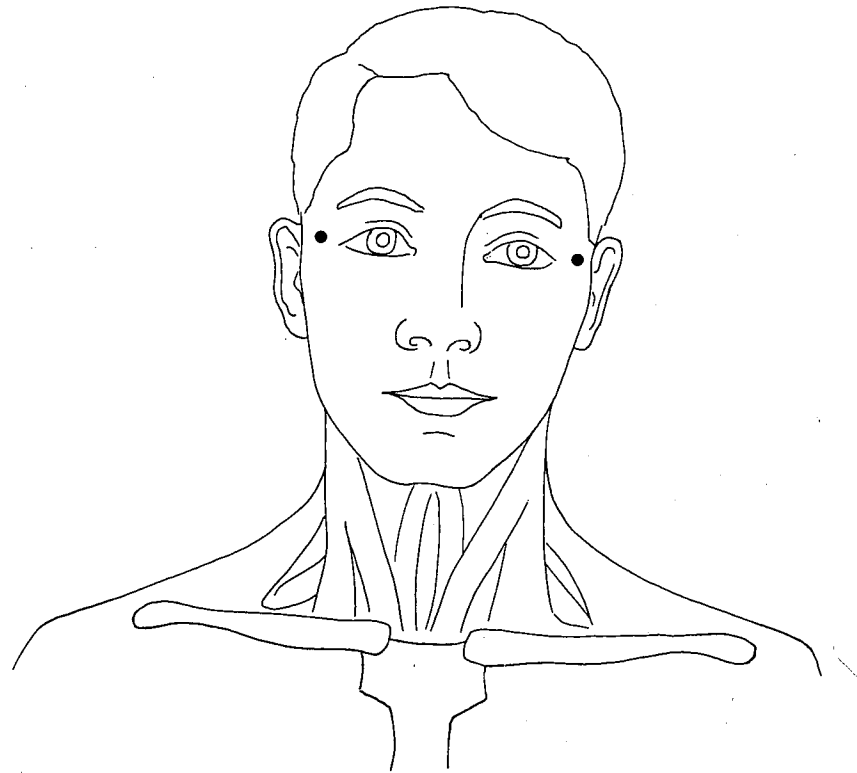


Fig. 43: MP. Eye — posterior regions = 1. Gallbladder

No. 23

Sphenoidal sinus — sinus sphenoidalis

No classical acupuncture point

214

r + l

By their location the lower situated sphenoidal sinuses have close relations to important organs, vessels and nerves: to the nervus opticus, to the arteria carotis interna, to the cavernosus sinus.

The measurement point of the sphenoidal sinus lies above the end of the sutura nasomaxillaris on a secondary vessel which connects the 20. Large intestine point with the first Urinary bladder point (see page 68). The point can be realized by passing along from the lower edge of the os nasale from medial to lateral to the end-point of the sutura nasomaxillaris.

The sphenoidal sinus can also be influenced by the 13. lymph vessel point (see page 90, Textual Volume, 3. edition). See Vol. I, fig. 10 and Vol. II, fig. 16.

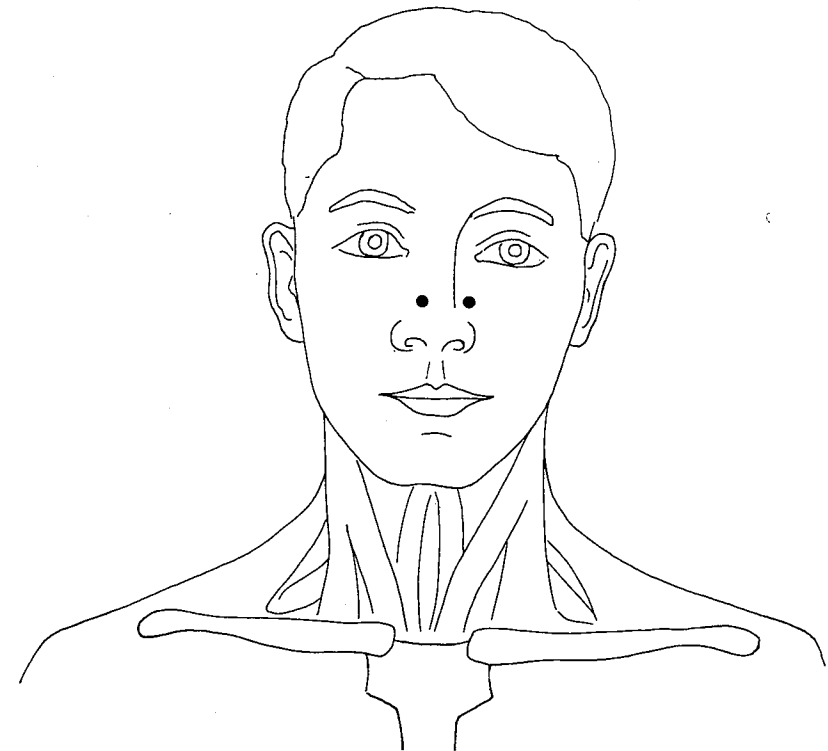


Fig. 44: MP. Sphenoidal sinus on the secondary vessel from the 20. Large intestine to 1. Urinary bladder point

No. 24

Ethmoid cells — cellulae ethmoidales

20. Large intestine point (20. LI.)

215

r + l

The ethmoid cells are of particular interest in testing foci and fields of disturbances of the head because of their hard accessible location and vicinity to the orbita. The measurement point for the ethmoid cells is the 20. Large intestine meridian point which is located at the muscular angle between the caput angulare of the musculus quadratus labii superioris (musculus levator nasi et labii maxillaris lateralis) and the pars transversalis of the musculus nasalis.

In searching this point one goes towards lateral from the inferior edge of the wing of the nose approximately $\frac{1}{2}$ to $\frac{1}{2}$ finger breadth. Sometimes the point lies in the nasolabial fold, occasionally however also medial from it. See Vol. I, fig. 6.

The sphenoidal sinus and the ethmoid cells can be influenced by the 13. lymph vessel point.

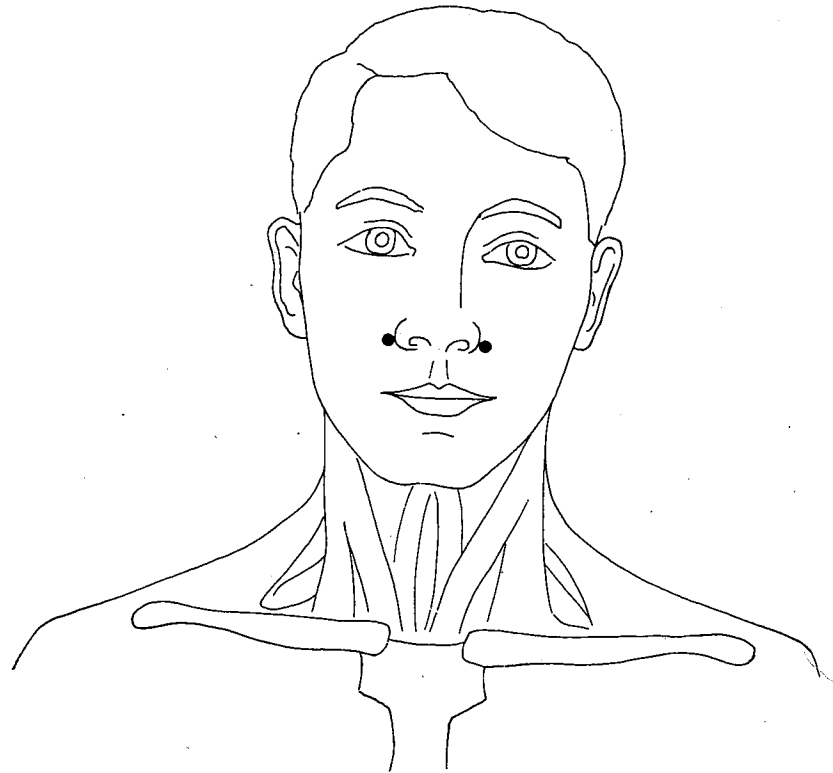


Fig. 45: MP. Ethmoid cells = 20. Large intestine

No. 25

Maxillary sinus — sinus maxillaris

5. Stomach point (5. St.)

203

r + l

As the largest pneumatic cavity of the face skull it has particular significance for the physician but also for the dentist, especially since the premolars and the first molars of the upper jaw project with their roots closely to or even into the maxillary sinus itself.

The measurement point for the maxillary sinus corresponds to the 5. Stomach meridian measurement point and lies $\frac{1}{2}$ finger breadth lateral and superior of the fossa canina at the lower edge of the processus zygomaticus of the maxilla.

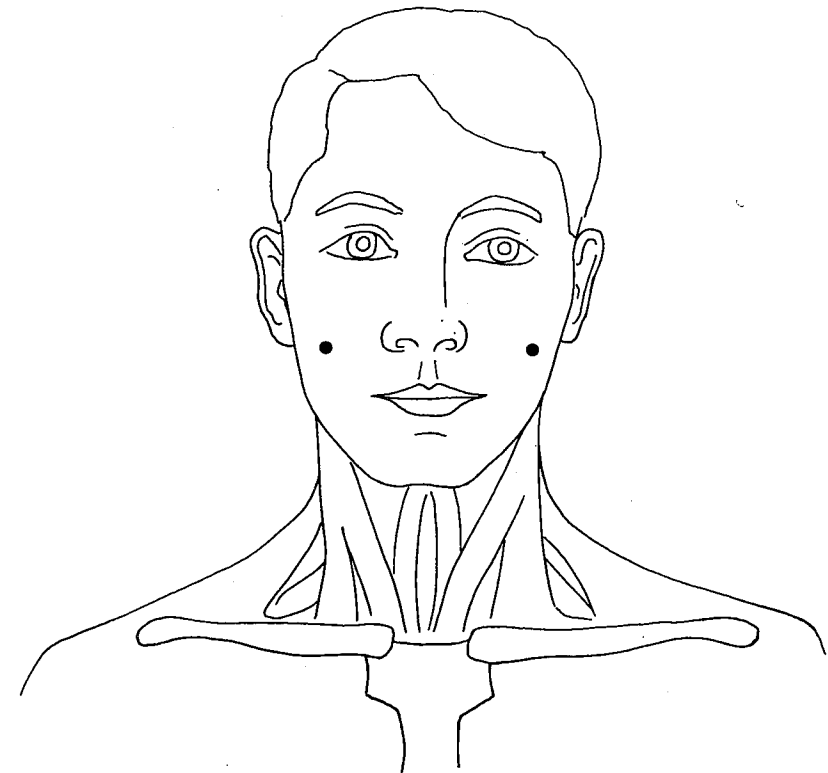


Fig. 46: MP. Maxillary sinus = 5. Stomach

One finds the point by stroking with the active electrode below the zygomatic arch from the inferior edge of the processus zygomaticus of the os maxillare laterally to the sutura zygomatico-maxillaris. The point is located exactly above the suture. But one can find the point also by starting off from the fossa canina and going from it $\frac{1}{2}$ finger breadth laterally-cranially (lateral-superior) with the active electrode.

The fossa canina is located distally from the osseous elevation which is formed by the root of the canine tooth. See Vol. I, fig. 6 and fig. 10.

Also the measurement point for the maxillary sinus is situated $\frac{1}{2}$ to 1 finger breadth lateral of the exit spot of the nervus infraorbitalis and superior to this one.

A secondary vessel connection exists to the 14. Lymph vessel point, from where the maxillary sinus can be influenced (see Textual Volume, page 90). Since as well the canine tooth as in particular the two premolars and the first molar can be in close relation to the maxillary sinus, these measurement points have an increased significance for the dentist. Roots projecting into the maxillary sinus, especially the premolars, can — in case of a dying-off of tooth-nerves or a purulent decay — irritate or even infect the maxillary cavity. By extractions of such teeth a disclosure of the maxillary sinus and thereby a direct communication with the mouth cavity can occur. In such a case there appears an indicator drop at the measurement point maxillary sinus which did not exist before. After such a communication is closed the indicator drop is disappearing again. Irregularities in the measurement results at the maxillary sinus measurement points therefore oblige to a thorough control of the teeth in the upper jaw.

In reverse the jaw measurement points have to be controlled also exactly in case of an indicator drop at the measurement point of the upper teeth (see page 71).

No. 26

Nasal cavity — lateral wall of the nasal cavity with the conchae of the nose.

19. Large intestine point (19. LI.)

— — — —
— — — —

r + l

See also No. 19 — vault of the main nasal cavity

At the lateral wall of the nasal cavity there are three main conchae besides minor conchae, from which the concha inferior is the largest. The measurement point 19. Large intestine lies at the intersection of the upper edge of the musculus orbicularis oris and the lateral margin of the musculus nasalis pars alaris on the level of the root of the 1. premolar. See Vol. II, fig. 16.

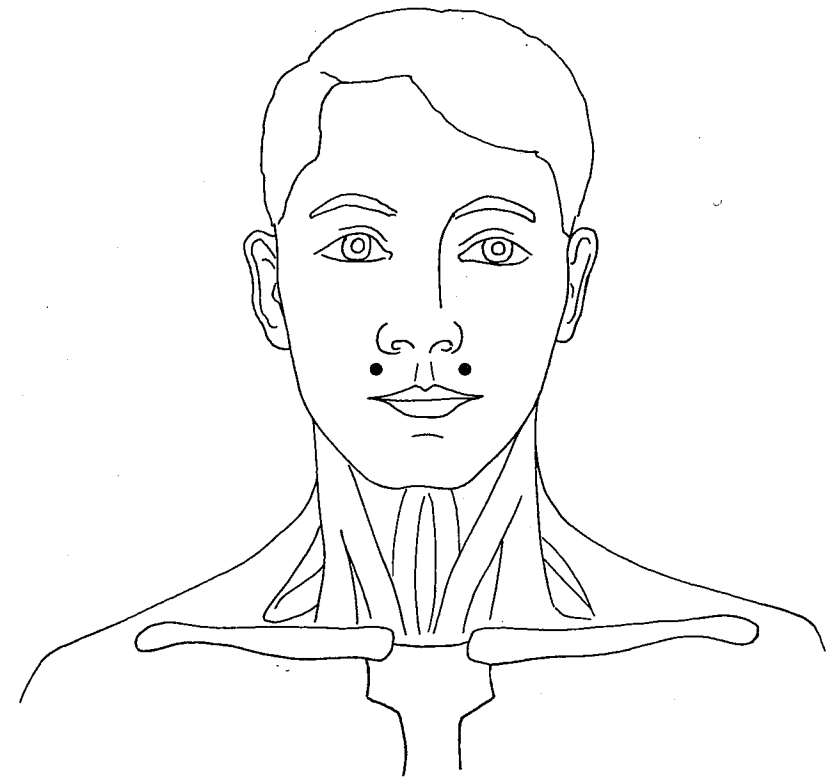


Fig. 47: Nasal cavity — lateral portion = 19. Large intestine

No. 27

Main nasal cavity — medial portion — nasal septum

No classical acupuncture point — EAV

— — — —

— — — —

r + l

The position of this point is on an intersection of secondary vessels. One secondary vessel runs from the 25. Governor point to the 19. Large intestine point and the other from the 27. Kidney point to the 1. Urinary bladder point. The point is located at the outer edge of the musculus depressor septi in the level of the upper third of the musculus orbicularis oris above the central incisor. See also No. 19 — vault of the main nasal cavity, page 115.

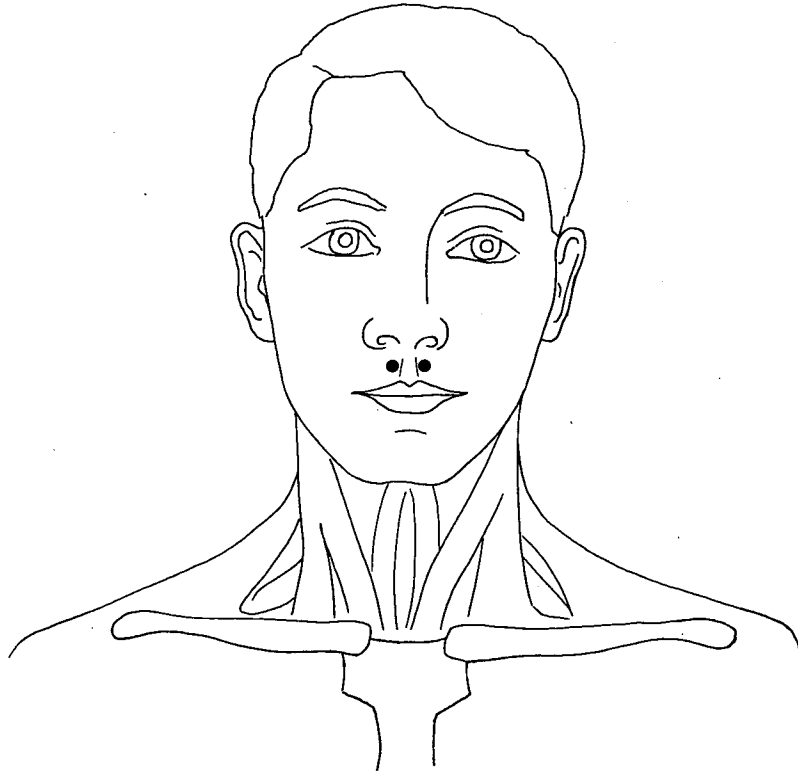


Fig. 48: Nasal cavity — medial portion on the secondary vessel from 25. Governor vessel to 19. Large intestine

Nr. 28

Medial upper jaw-maxilla pars medialis

25. Governor vessel point (25. Gov.)

51-2

207

This point comprehends the group of teeth 4 — 1 + and + 1 — 4 in the upper jaw. It is situated in the middle between nose and upper lip over the base of the radially extending muscle fibres, which come from the middle of the nose as a bundle. In the upper third they are diverging and communicating with the muscle circle around the mouth, the musculus orbicularis oris.

One finds the point with help of the stroke technique, by passing vertically down from the middle of the nose to the upper lip observing the highest indicator value. See Vol. I, fig. 6.

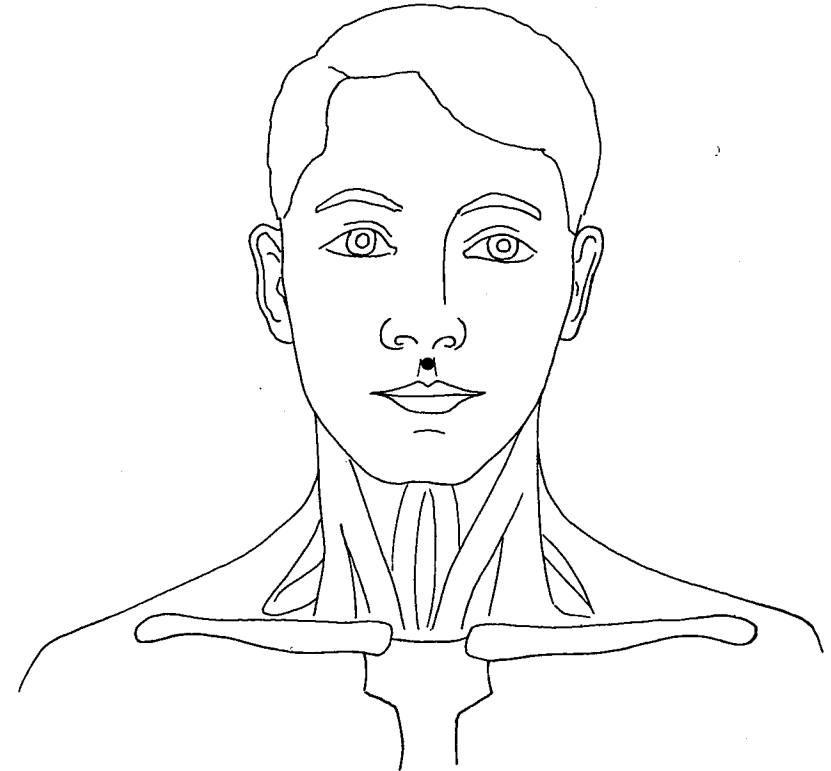


Fig. 49: Maxilla, pars medialis = 25. Governor vessel

No. 29

Medial lower jaw — mandibula, pars medialis

24. Conception vessel point (24. Con.)

218

— — — —

This point comprehends the group of teeth 4-1- and -1-4 in the lower jaw. It is located in the depression between lip and chin-point. At the measurement point meet the outer edge of the musculus orbicularis oris and the two medial margins or the musculus quadratus labii inferioris (mandibularis) in an angle. One finds the point with the help of the stroke technique by passing down from the middle of the lower lip perpendicularly to the chin, observing the point with the highest deflection of the indicator. See Vol. I, fig. 6.

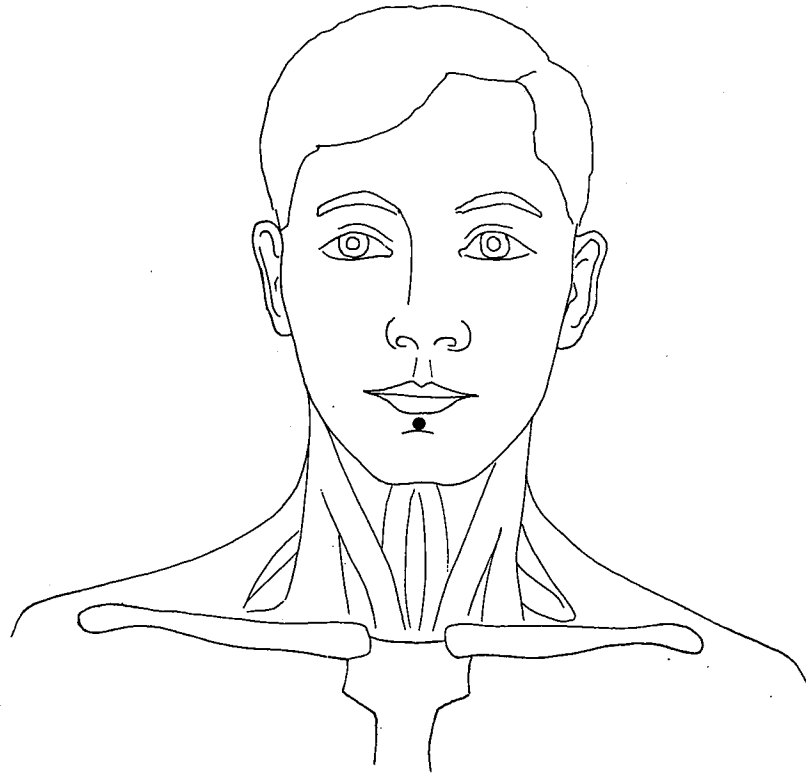


Fig. 50: MP. Mandibula, pars medialis = 24. Conception vessel

No. 30

Lateral upper jaw — maxilla, pars lateralis

7. Stomach point (7. St.)

208

r + l

Stomach 7, the measurement point of this group of teeth, comprehending the teeth +5 — 8 and 8—5+ (on the left or right) in the upper jaw, lies above the angle which is formed by the lateral edge of the musculus caninus (musculus levator angularis) and the medial margin of the musculus zygomaticus (major). Approximately $\frac{1}{2}$ to $\frac{3}{4}$ finger breadth from the labial angle on a line running from the labial angle in an angle of 135 degrees obliquely upward-laterally (cranial-lateral).

The distance from the labial angle depends on the size of the mouth. Localization of the point should be done by the stroke technique. See Vol. II, fig. 37.

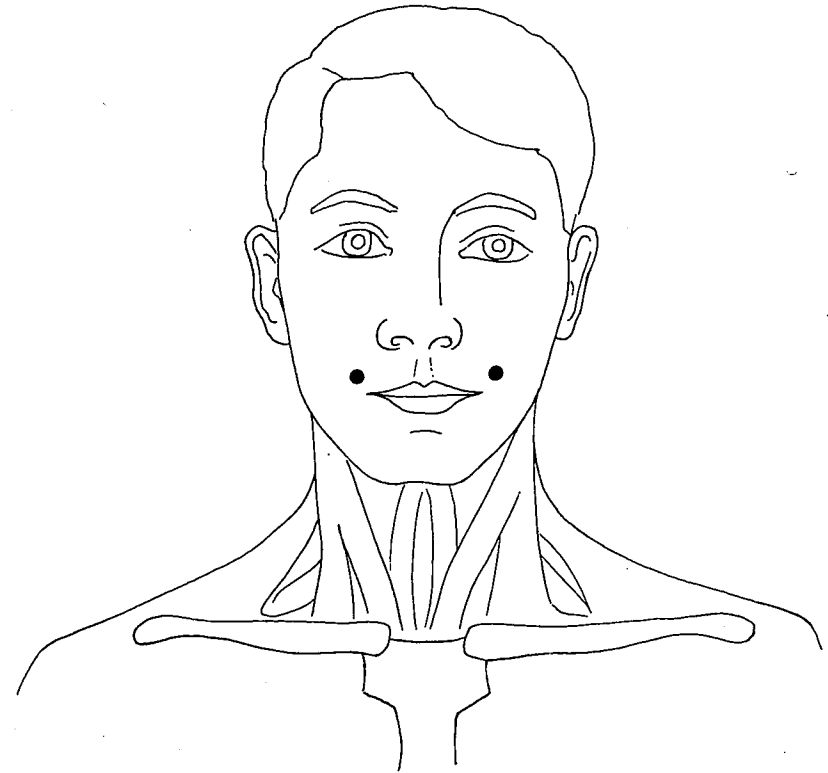


Fig. 51: MP. Maxilla, pars lateralis = 7. Stomach

No. 31

Lateral lower jaw — mandibula, pars lateralis

8. Stomach point (8. St.)

210

r + l

This point comprehends the group of teeth -8-5- in the lower jaw right or left side. But it also indicates alterations located in the retromolar region — in the section of the 9th odonton according to *Voll*.

The point is situated above the muscular angle between the musculus orbicularis oris and the medial edge of the musculus triangularis and also the posterior edge of the musculus zygomaticus (major). This point is found also with the help of the stroke technique by passing from the labial angle in an angle of 135 degrees obliquely downward and laterally finding the highest indicator deflection approximately $\frac{1}{2}$ finger breadth away from it below the labial angle. The point lies inferior to the measurement point of the lateral upper jaw, a little bit nearer to the labial angle. See Vol. II, fig. 37.

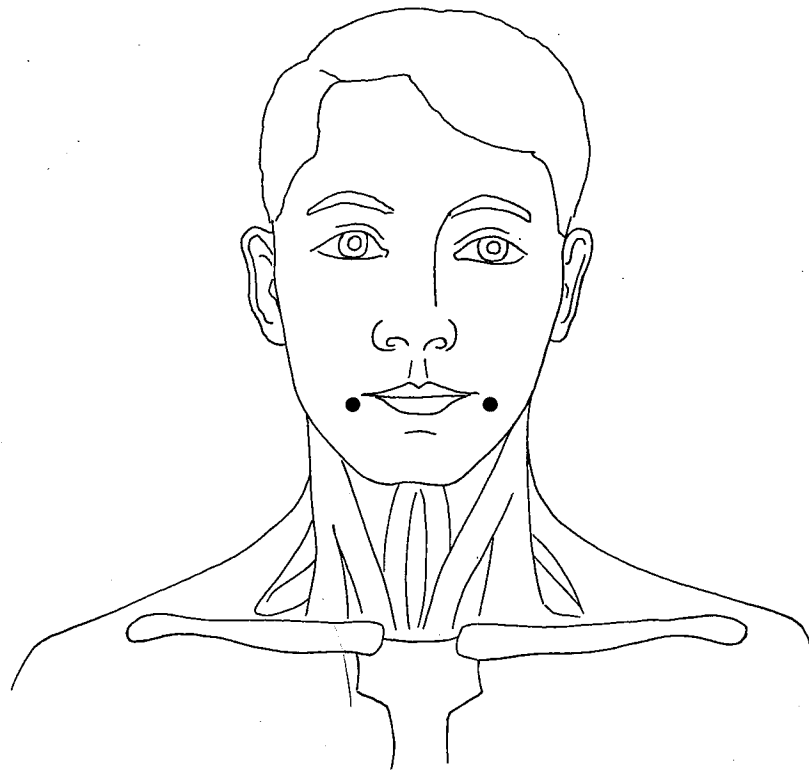


Fig. 52: MP. Mandibula, pars lateralis = 8. Stomach

No. 32

Jaw joint — upper portion

23. Triple warmer point (23. 3-W.)

205

r + l

The tempero-mandibular joint is separated by a cartilage-plate, the discus, into an upper and a lower part.

The point for the upper portion corresponds to the 23. Triple warmer point and is located anterior to the tragus in the level of auditory meatus, close to the inferior edge of the arcus zygomaticus. See Vol. I, fig. 8 and fig. 30.

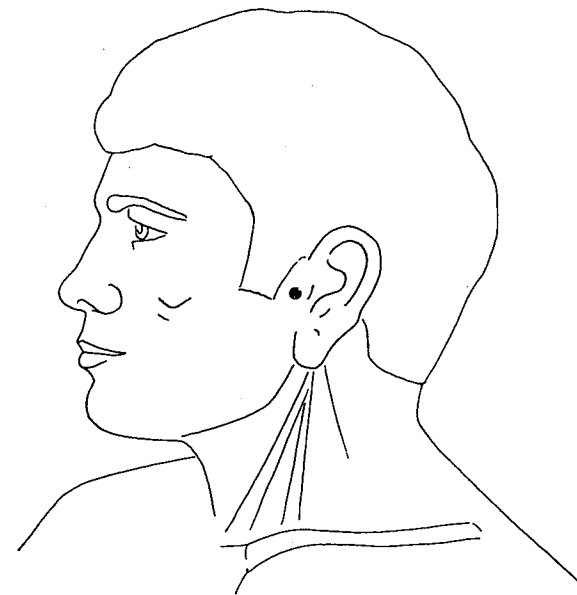


Fig. 53: MP. Jaw joint = 23. Triple warmer

No. 33

Jaw joint — lower portion

2. Stomach point (2. St.)

206

r + l

The point is located on the transition zone from the collum mandibulae to the capitulum, at the osseous angle between neck and capitulum of the articular process of the mandibula. See Vol. I, fig. 8 and fig. 32.

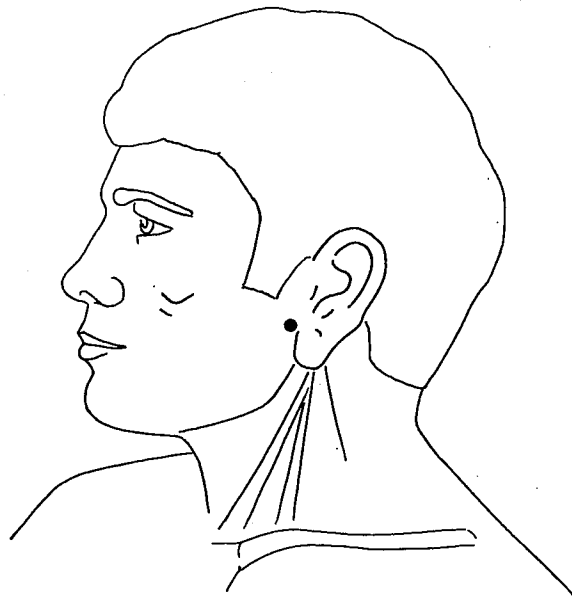


Fig. 54: MP. Jaw joint, upper portion — lower portion = 2. Stomach

No. 34

Lingual tonsil — tonsilla lingualis

No classical acupuncture point — 3a. Stomach

216

r + l

This measurement point lies at an additional point of the stomach meridian between the 3. and 4. Stomach point on the anterior edge of the musculus masseter, on its tendinous portion, at the level of the measurement point of the upper jaw pars medialis. One passes along the edge of the masseter with the point-electrode from above downward and observes the highest deflection of the indicator. Unilateral swelling of the tongue with impressions of the lower teeth at the edge of the tongue can be diagnosed here. Disorders of the lingual tonsils can be treated at this point. See VI. I, fig. 6.

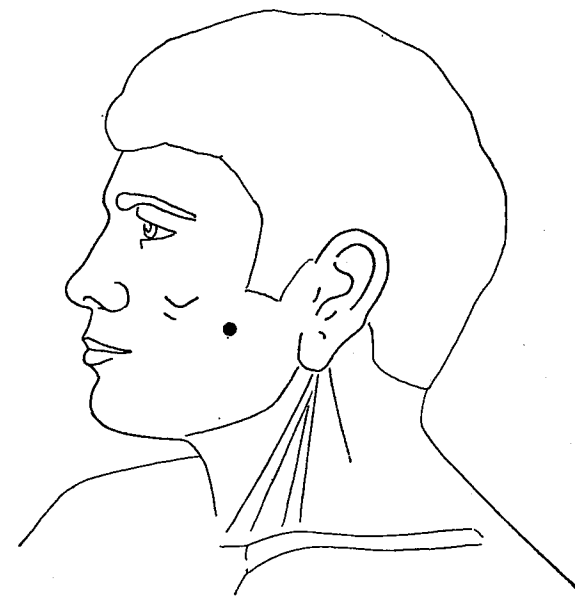


Fig. 55: MP. Lingual tonsil = 3a. Stomach

No. 35

Submandibular gland — glandula submandibularis

No classical acupuncture point — 8a. Stomach

209

r + l

The measurement point for the submandibular gland is situated between the 8. and 9. Stomach point above the edge of the mandible, approximately 1 finger breadth away from the anterior edge of the musculus masseter forwardly in the intermediate space between the anterior edge of the musculus masseter and the posterior margin of the musculus triangularis (musculus depressor anguli oris). See Vol. I, fig. 7. Production of saliva, salivation and also the existence of sialolithiasis can be diagnosed or treated at this point.

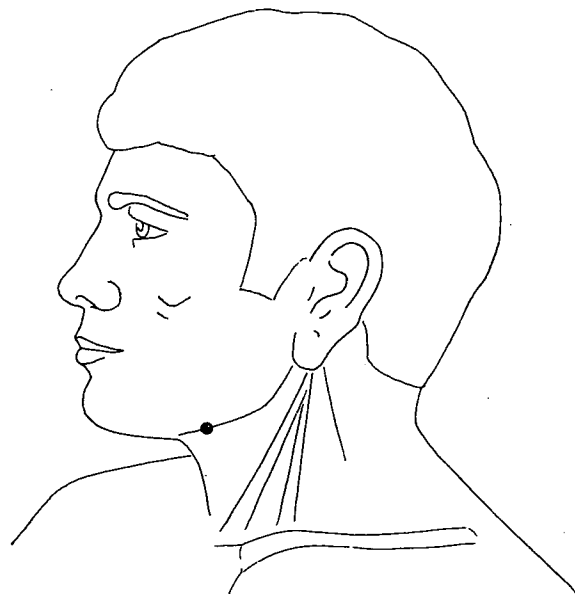


Fig. 56: MP. Submandibular gland = 8a. Stomach

C. Measurement Points of the Neck- and Naperegion

No. 36

Pharyngeal tonsil — tonsilla pharyngea

No classical acupuncture point

23c. Conception vessel point (23c. Con.)

219

The tonsilla pharyngea lies at the upper wall of the pharynx. With incomplete and incorrect extirpation of it or after severe chronic alteration of the pharyngeal tonsil there can be left over adenoid residues, which as "scar-residues" continue to strew and maintain a focal activity.

Adenoid residues remaining this way can, however, also block the ostium of the tuba auditiva and lead to as "dull" perceived hearing disturbances.

The measurement point is an additional acupuncture point, which lies on the conception vessel between the 23. and 24. Conception vessel point, exactly below the spina mentalis, between the origin of the anterior left and right venter of the musculus digastricus (also musculus biventer mandibulae). See Vol. I, fig. 7

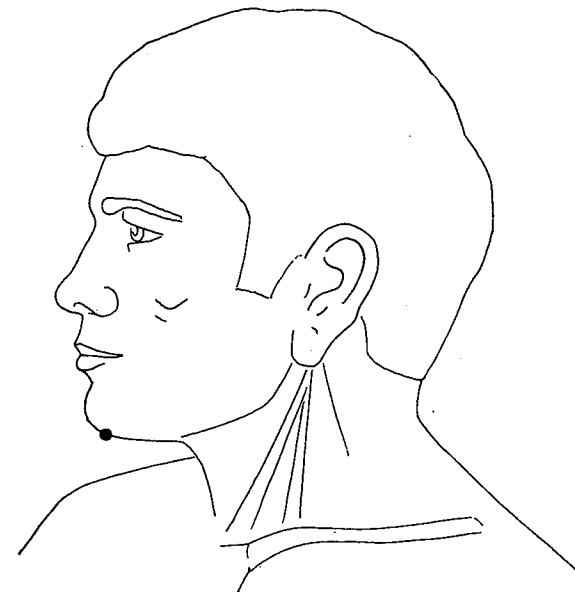


Fig. 57: MP. Pharyngeal tonsil = 23c. Conception vessel

No. 37

Sublingual gland — glandula sublingualis

No classical acupuncture point

23b. Conception vessel point (23b. Con.)

54-0

Situated between the 23. and 24. Conception vessel point (equal to the measurement point for the tongue), half way between the tongue measurement point and the lower edge of the chin-point above the raphe of the musculus myohyoideus (in the middle between hyoid bone and inner angle of the lower jaw bone).

Alterations of the roots of the lower teeth (mandibula) can disturb the salivary glands in the sublingual region which in return has an effect on the appropriate measurement points. See Vol. I, fig. 7.

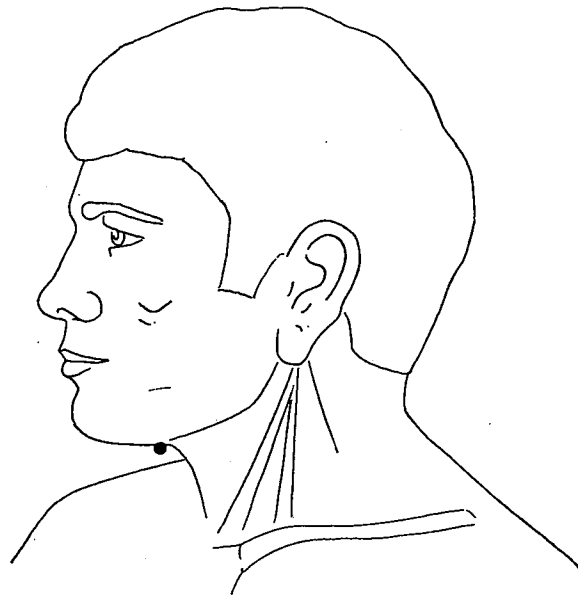


Fig. 58: MP. Sublingual gland = 23b. Conception vessel point

No. 38

Tongue — lingua

No classical acupuncture point

23a. Conception vessel point (23a. Con.)

211

The point is located on the conception vessel, between the 23. and 24. Conception vessel point on the center of the hyoid bone. See Vol. I, fig. 7. For the dentist a pathologically altered or lymphatically swollen tongue can raise significant difficulties to his measures.

Such alterations of the tongue can be diagnosed and therapeutically influenced at the indicated point.

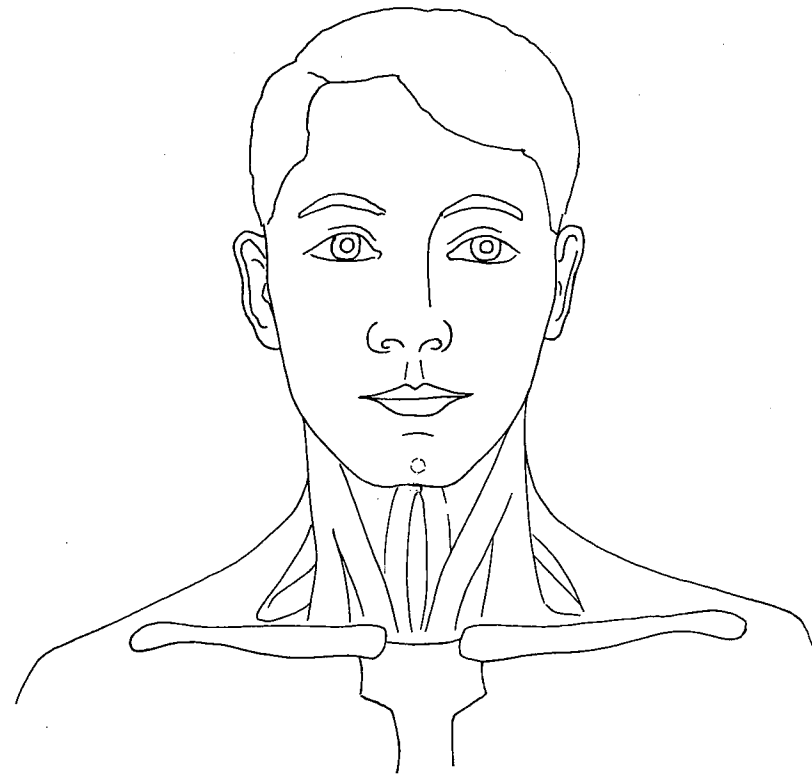


Fig. 59: MP. Tongue = 23a. Conception vessel

No. 39

Larynx

21. Conception vessel point (21. Con.)

The point is situated in the median line of the neck on the inferior free edge of the ligamentum interclaviculare superior of the incisura jugularis. See Vol. I, figure 13.

Voll found also for the measurement of the larynx the non-classical acupuncture point 8b. Lung meridian.

The point is located cranially of the wrist joint at the volar side of the radius in the angle, which lies proximal of the distal head of the radial bone and the cranially, radially passing osseous crest of it. Here it can be found easily. See Vol. II, fig. 17.

Measurement point for the laryngeal tonsil see No. 42, page 139.

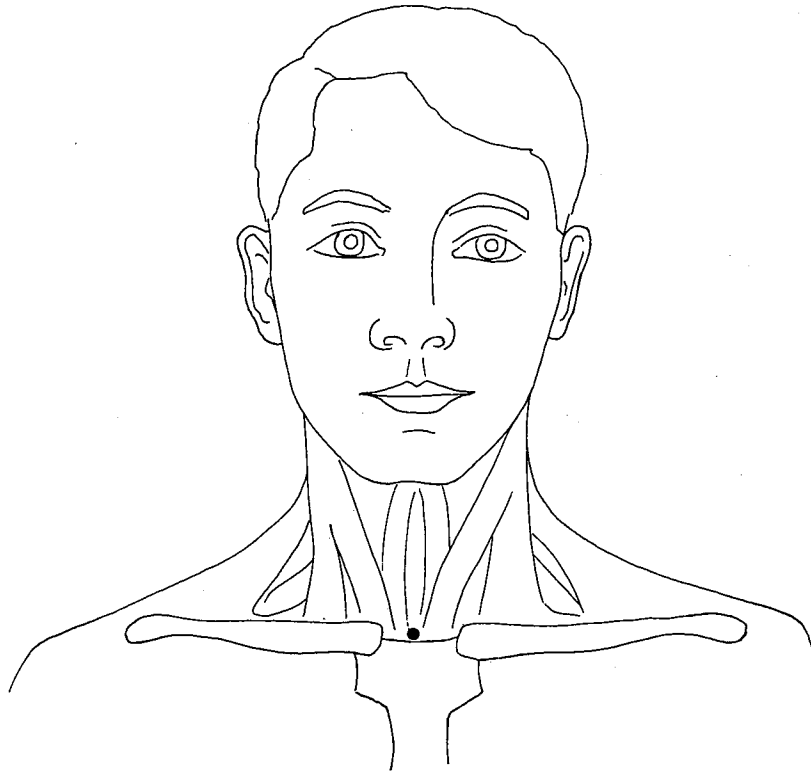


Fig. 60: MP. Larynx = 21. Conception vessel point

No. 40

Palatine tonsil — Tonsilla palatina

8b. Stomach point (8b. St.)

No classical acupuncture point

r + l

See also No. 55, page 153 — 1. MP. Lymph vessel.

The palatine tonsil is located in the isthmus faucium. Its proper measurement point is the 1. Lymph vessel point, see under No. 55. The palatine tonsil can be measured also by the not-classical acupuncture point on the stomach meridian — 8b. St.

This point lies at the outer edge of the musculus mylohyoideus in the middle between the corpus of the os hyoideum and the inner mandibular angle. See Vol. II, fig. A 24a. This measurement point of the palatine tonsil is important for thumb amputees.

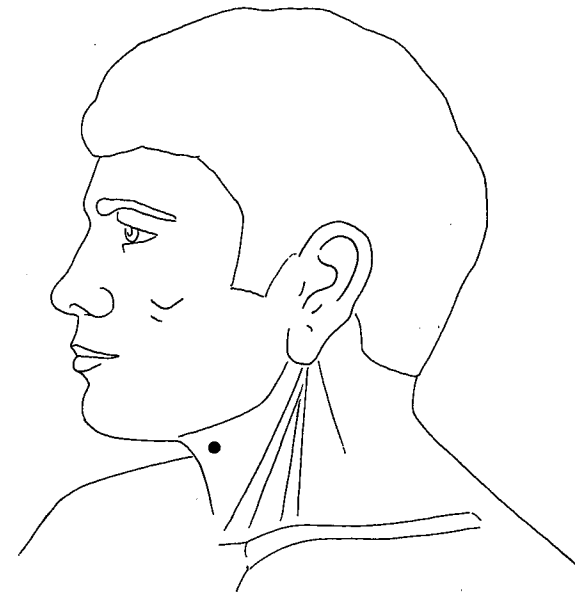


Fig. 61: MP. Palatine tonsil = 8b. Stomach

No. 41

Tubal tonsil — tonsilla tubaria

18. Large intestine (18. LI.)

608 and 220

r + l

The tubal tonsil is situated in the wall of the pharynx. Its measurement point: above the anterior edge of the musculus sternocleidomastoideus on the level of the hyoid bone.

Searching for the measurement points one strokes downward with the point-electrode from cranial anterior edge of the musculus sternocleidomastoideus and meets the highest measurement value on the level of the hyoid bone. See Vol. I, fig. 9. The tubal tonsil can also be measured at the lymph vessel point 1a. (see page 154).

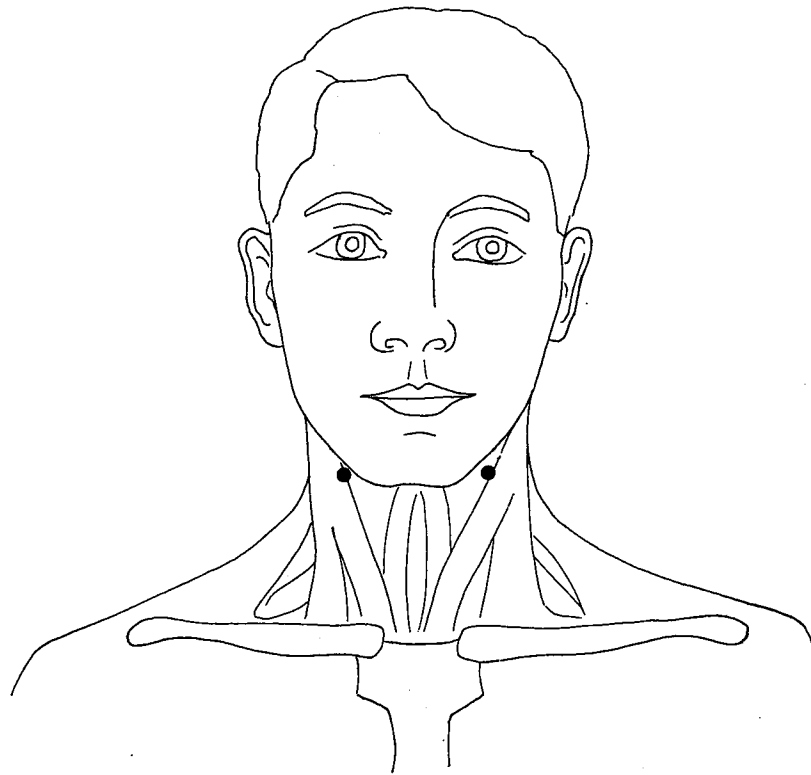


Fig. 62: MP. Tubal tonsil = 18. Large intestine

No. 42

Laryngeal tonsil — tonsilla laryngea

17. Large intestine point (17. LI.)

221

r + l

The laryngeal tonsil is situated in the ventriculus laryngis. It is a very small organ. The patient often complains about troubles of the cervical spine, if the laryngeal tonsils are irritating foci.

The appropriate measurement point is situated above the middle between the sternal and clavicular part of the musculus sternocleidomastoideus on the level of the upper edge of the thyroid cartilage, approximately $\frac{1}{2}$ finger breadth below the measurement point of the tubal tonsil. See volume I, fig. 9.

With the point electrode one travels downward in the sulcus between the two portions of the musculus sternocleidomastoideus until $\frac{1}{2}$ finger breadth below the measurement point for the tubal tonsil. The laryngeal tonsil has secondary vessel connections with the 12. Lymph vessel point and can be influenced from here. Larynx measurement point see No. 39, page 136.

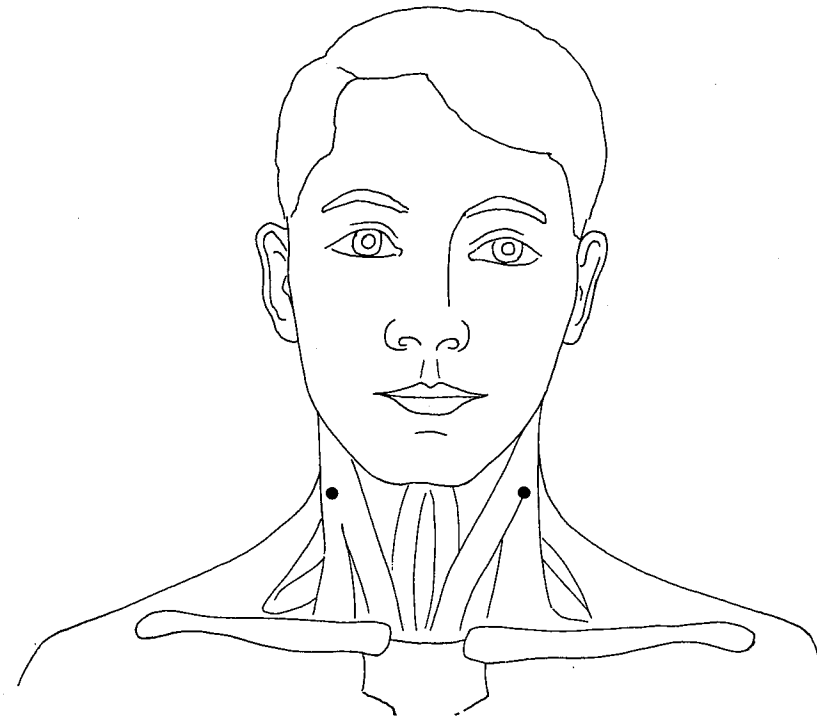


Fig. 63: MP. Laryngeal tonsil = 17. Large intestine

No. 43

Parotid gland — parotis
3. Stomach point (3. St.)
217
r + l

The point is located at the mandibular angle above the posterior edge of the musculus masseter. See Vol. I, fig. 18 and fig. 32.
Measurement point submandibular gland see No. 35 on page 132. Measurement point sublingua gland see No. 37 on page 134.

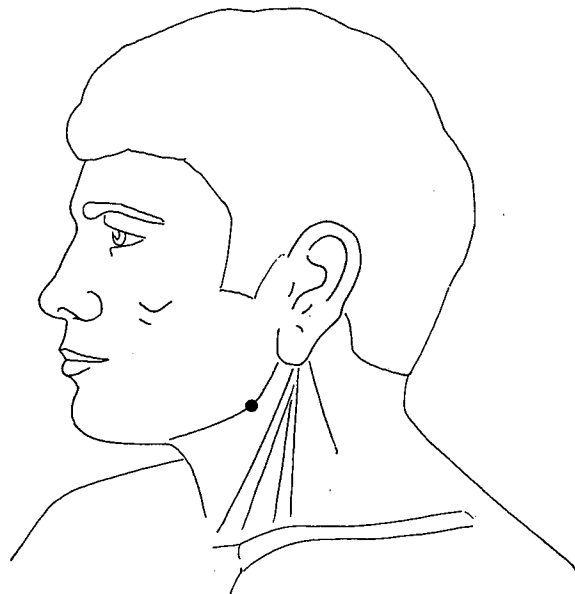


Fig. 64: MP. Parotid gland = 3. Stomach

No. 44

Parathyroid gland — glandula parathyreoidea
9. Stomach point (9. St.)
102
r + l

Located at the medial edge of the trigonum caroticum, on the level of the most prominent part of the thyroid cartilage, approximately $1\frac{1}{2}$ finger breadth off the median line at the anterior edge of the upper venter of the musculus omohyoideus and the lateral edge of the musculus sternohyoideus. See Vol. I, fig. 9.

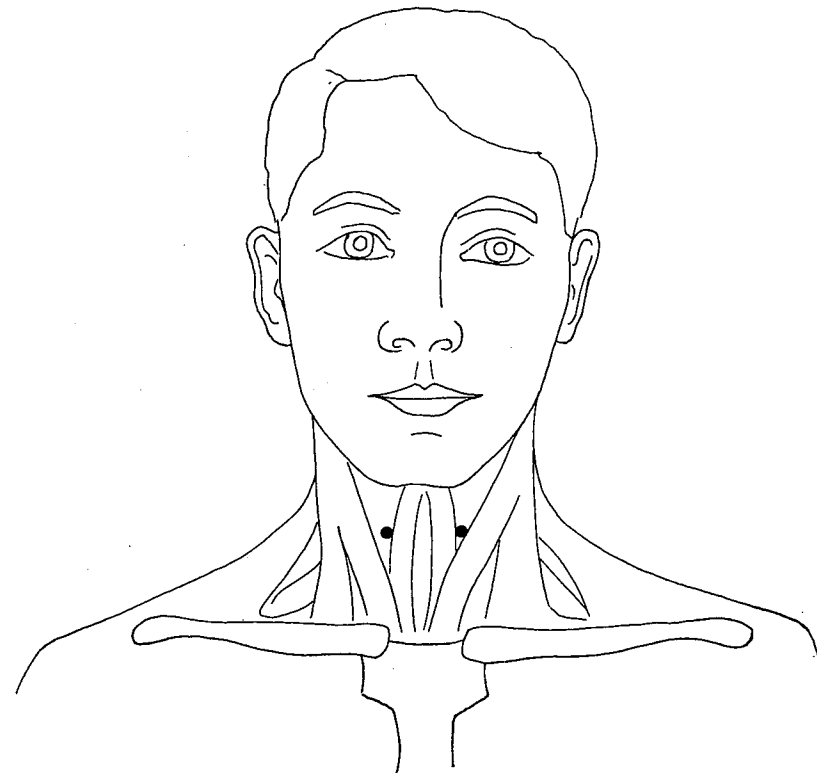


Fig. 65: MP. Parathyroid gland = 9. Stomach

No. 45

Thyroid gland — glandula thyreoidea

10. Stomach point (10. St.)

119

r + l

Situated on the inferior angle of the trigonum caroticum at the level of the upper edge of the cricoid cartilage in the muscular angle of the lateral edge of the upper venter of the musculus omohyoideus and the anterior edge of the musculus sternocleidomastoideus. The trigonum caroticum is the best visible and palpable, if the head is bent backwards and slightly to the opposite side. In testing the thyreoidea one has to be careful not to confuse this point with the measurement point for the vagus located slightly lower and chestward.

Changes of measurement values at these points are not only found in local disorders of the organ itself — which can be verified by a function test with isotopes — but also in disturbances of the hormone metabolism.

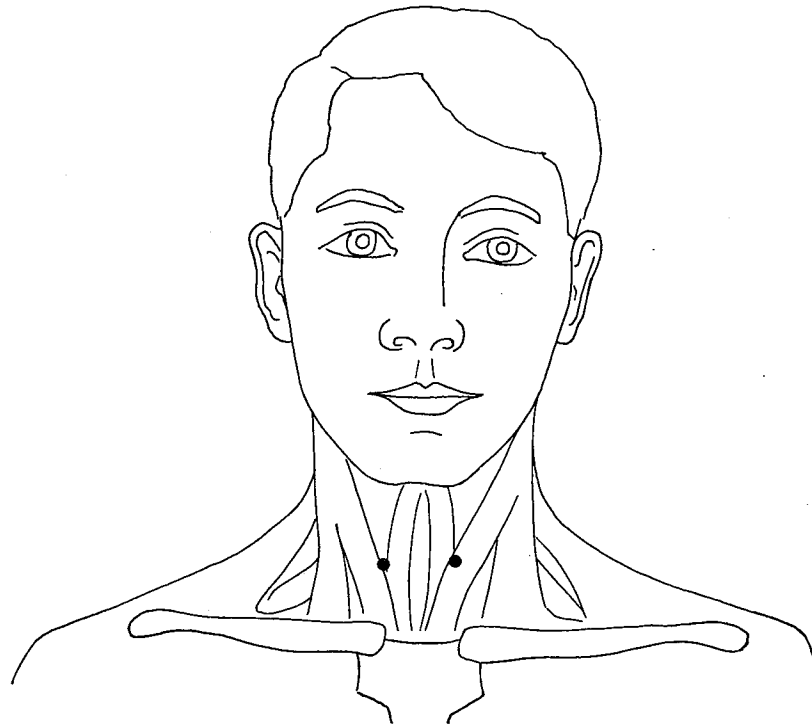


Fig. 66: MP. Thyroid gland = 10. Stomach

No. 46

Vagus nerve

No classical acupuncture point (10a. St.)

120

r + l

The measurement point for the vagus nerve is situated above the most inferior section of the muscular angle, which is formed by the anterior edge of the musculus sternocleidomastoideus and the lateral margin of the musculus sternohyoideus. See Vol. I, fig. 7.

With the point-electrode one travels at the anterior edge of the musculus sternocleidomastoideus from cranial downward until one meets the mentioned muscular angle on the level of the upper edge of the intermediate section of the cricoid cartilage. By comparison with the measurement values at the sympathetic nerve, conclusions can be drawn with regard to the predominating sympathicotonic or vagotonic conditions of both body-halves.

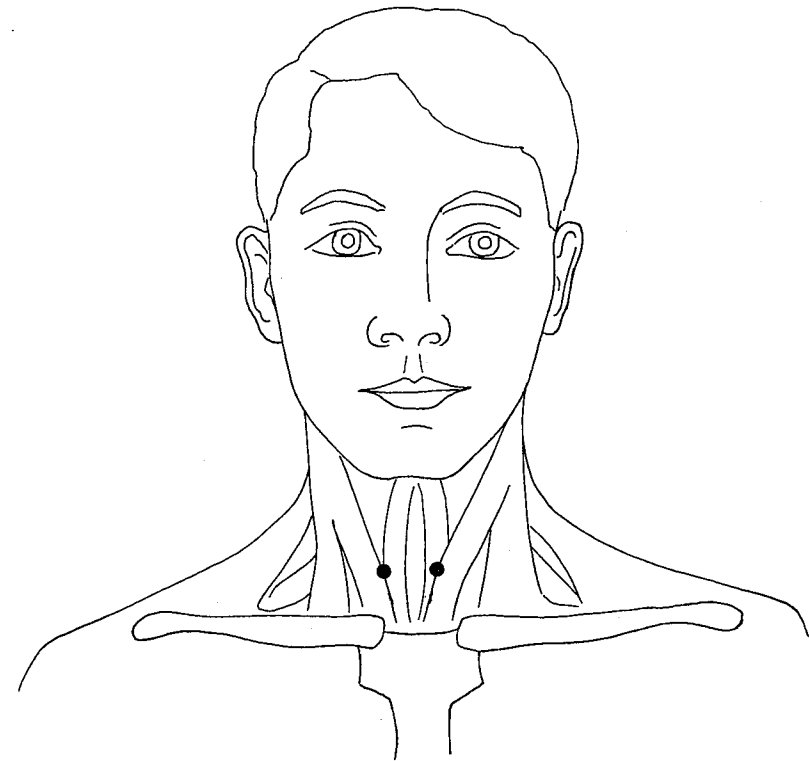


Fig. 67: MP. Vagus nerve = 10a. Stomach

No. 47

Thymus

11. Stomach point (11. St.)

104

r + l

Located at the medial end of the clavicle between the sternal and clavicular attachment of the musculus sternocleidomastoideus above the lower free edge of the ligamentum interclaviculare (see Vol. I, fig. 7). One finds an insufficiency value of the thymus measurement points among other things in weakness of the suspensory ligaments of organs, in ligament-insufficiency of spine- and joint-disorders and in chronic focal infections.

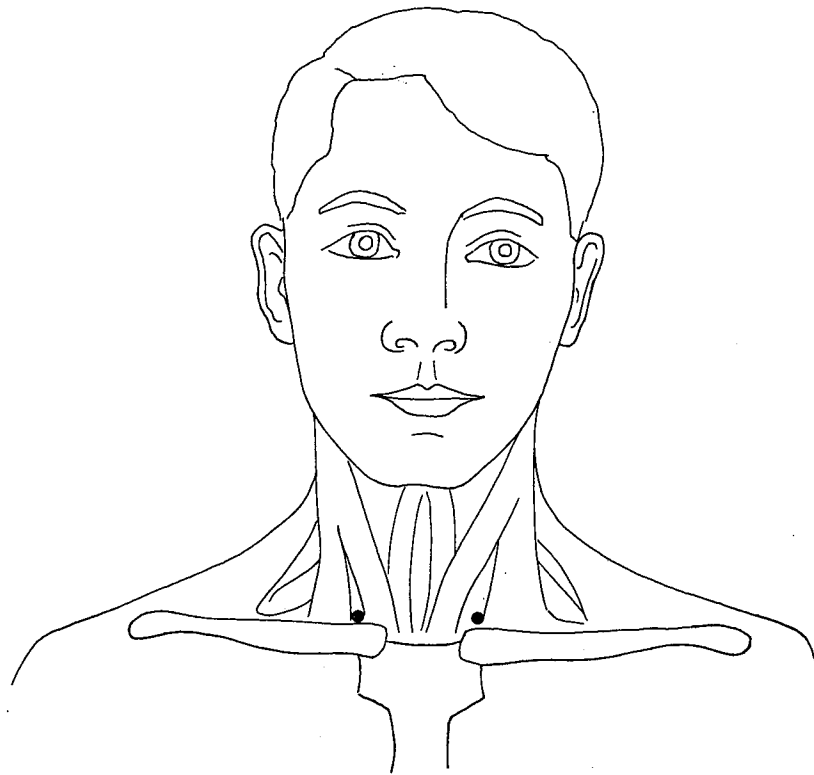


Fig. 68: MP. Thymus = 11. Stomach

No. 48

Lymph vessel point 11 — found by Voll

11. Lymph vessel point (11. Ly.)

r + l

The measurement point 11. Lymph vessel lies in the trigonum omoclaviculare 2 finger breadth cranial of the cranial edge of the clavicle and 1 finger breadth lateral of the posterior edge of the sternocleidomastoideus. See Vol. I, fig. 7.

It is responsible for the lymphatic processes:

1. in the autonomous nervous system
2. for the endocrine glands
 - a) pituitary gland
 - b) thymus
 - c) thyroid gland
 - d) parathyroid gland
3. for the liver
4. for the gallbladder
5. for the stomach
6. for the pancreas or for the spleen
7. for the kidneys

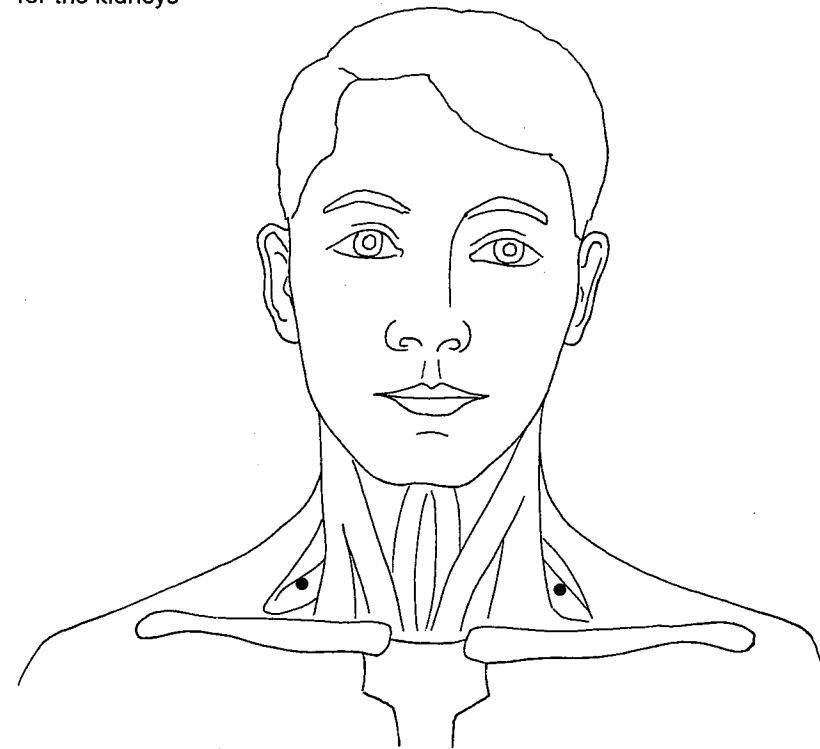


Fig. 69: 11. Lymph vessel point

No. 49

Lymph vessel point 12 — found by Voll

12. Lymph vessel point (12. Ly.)

r + l

The 12. Lymph vessel point is located cranial of the 11. Lymph vessel point in the regio colli lateralis, above the muscular angle between the medial edge of the musculus levator scapulae or the posterior edge of the musculus scalenus posterior (dorsalis) and the anterior edge of the musculus trapezius in the trigonum colli laterale cranial of the trigonum omoclaviculare, approximately 1 finger breadth cranial of the margo cranialis of the scapula at the ventral edge of the musculus trapezius. See Vol. I, fig. 7.

One finds the point if one travels along the upper edge of the clavícula to the anterior edge of the musculus trapezius (11. Ly.) and then from here along the muscle upward (cranially), until one palpates, in lifting and lowering the bent arms, the contracted medial edge of the musculus levator scapulae above the edge of the trapezius.

This 12. Lymph vessel point has direct relations to

1. the spine
2. the medulla oblongata
3. the kidney
4. the spleen
5. the pancreas
6. the stomach
7. the 5 tonsils

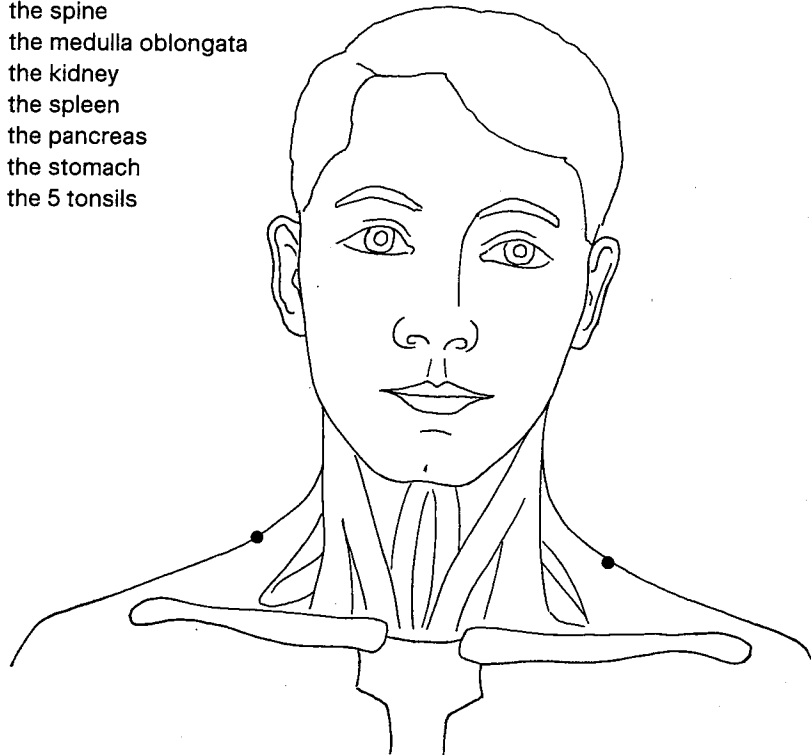


Fig. 70: 12. Lymph vessel point

No. 50

Lymph vessel point 13 — found by Voll

13. Lymph vessel point (13. Ly.)

r + l

The point lies above the crosswise passing bundles of the musculus trapezius in the level of the tip of the processus spinosus of the 6. cervical vertebra, approximately 4 finger breadth lateral of it. See Vol. I, illust. 30, page 137.

Here best of all the horizontal stroke technique is applied.

The point is responsible for the lymphatic processes

1. of the gallbladder and the extra-hepatic bile ducts
2. of the sympathetic nerve
3. of the spinal marrow
4. of the ethmoid cells
5. of the sphenoidal sinus
6. of the shoulder joint
7. of the upper extremity

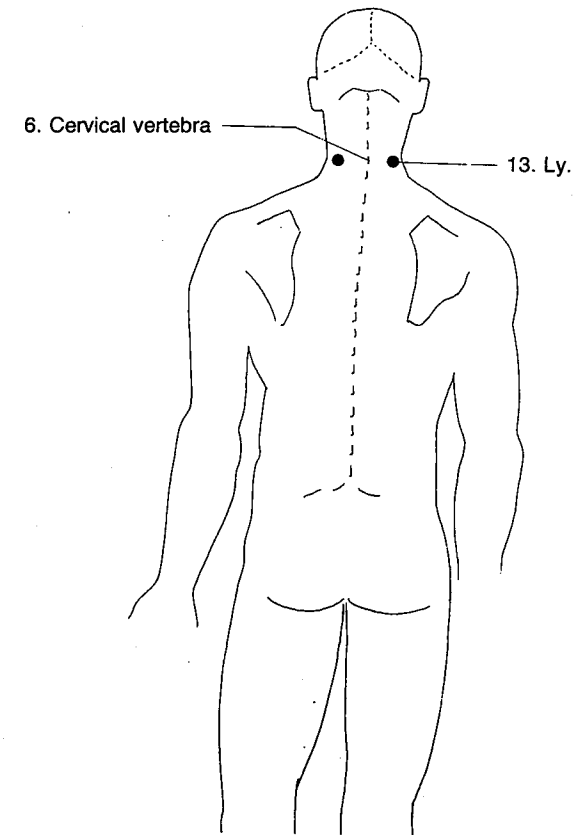


Fig. 71: 13. Lymph vessel point

No. 51

Lymph vessel point 14 — found by *Voll*

14. Lymph vessel point (14. Ly.)

r + l

The point is situated above the musculus trapezius at the upper edge of the musculus rhomboideus minor approximately 3 finger breadth horizontally — lateral of the tip of the processus spinosus of the 1. thoracic vertebra. See Vol. I, fig. 22 and illust. 30. Here too the stroke technique is best applied. One travels horizontally from the processus spinosus of the 1. thoracic vertebra laterally and palpates at this level the upper contracted edge of the musculus rhomboideus minor by the horizontally lifted arm backwards. From this point can be influenced:

1. the spine
2. the spinal marrow
3. the urogenital region
 - a) the urinary bladder
 - b) genito-urinary adnex-organs
4. the maxillary sinus
5. the frontal sinus
6. the pineal gland
7. the adrenal gland

The lymphatic vessel runs from here into the nearby paravertebral second branch of the urinary bladder meridian, into the 36. Urinary bladder point.

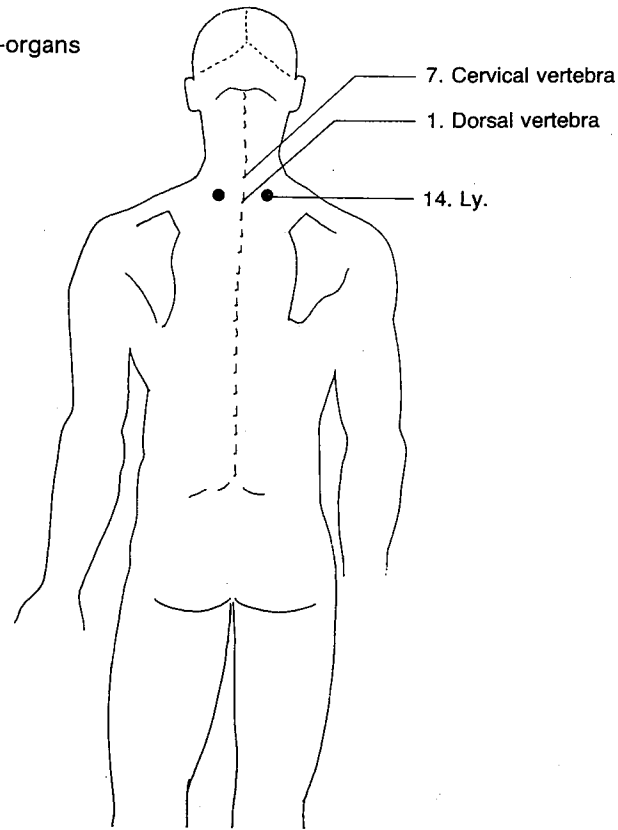


Fig. 72: 14. Lymph vessel point

No. 52

Pituitary gland — anterior lobe — adenohypophysis

15. Small intestine point (15. SI.)

16. Triple warmer point (16.3-W.)

21. Gallbladder point (21. Gbl.)

103

r + l

The point is formed by the meeting of the meridian points: 15. SI., 16.3-W. and 21. Gbl. at the trigonum colli laterale above the muscular angle between the posterior edge of the musculus sternocleidomastoideus and the ventral edge of the musculus scalenus posterior, approximately 4 finger breadth below the upper angle of this trigonum colli laterale at the posterior edge of the musculus sternocleidomastoideus. With the point-electrode one travels from the upper vertex of the trigonum at the posterior edge of the musculus sternocleidomastoideus downward, until one reaches after a distance of about 4 finger breadth the point with the highest indicator values. See Vol. I, fig. 18 (pituitary-gland, posterior lobe — neurohypophysis — 12. Gbl. see No. 13, page 108)

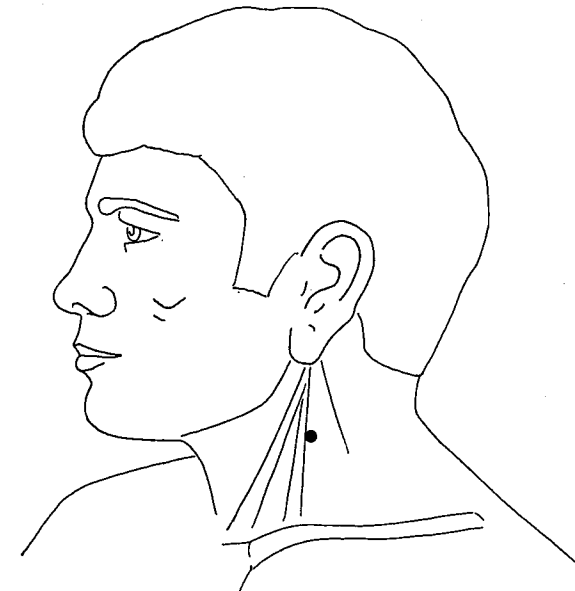


Fig. 73: MP. Adenohypophysis lobe = 15. Small intestine, 16. Triple warmer, 21. Gallbladder

No. 52a

Pituitary gland — intermediate lobe

20a. Gallbladder point — (20a. Gbl.)

No classical acupuncture point — it was found by *Voll*
r + l

The measurement point lies at the end of the second cranial third of the distance from the 20. to the 21. Gallbladder point in the lateral nape-region. Localization by stroke technique starting from the 20. Gallbladder point (measurement point sympathetic nerve) to the 21. Gallbladder point. According to *Voll* this measurement point is important in disturbances of the pigment metabolism.

See Vol. II, illust. A 20, page 143.

Pituitary gland, posterior lobe see Nr. 13, page 108.

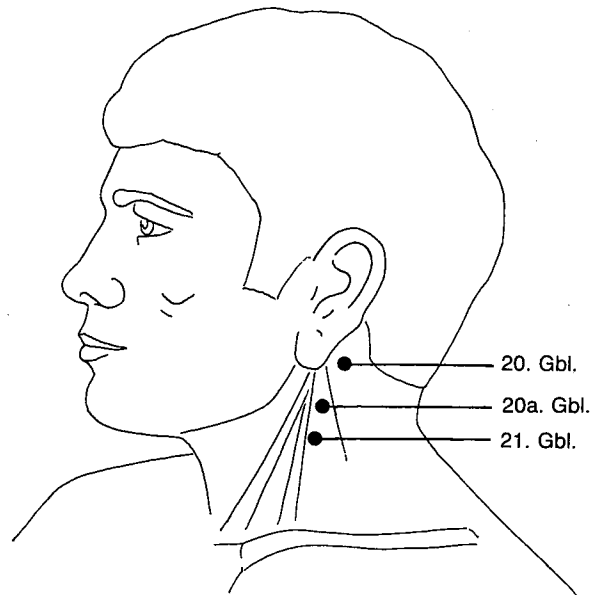


Fig. 74: MP. Pituitary gland, intermediate lobe = 20a. Gallbladder

No. 53

Spinal cord — medulla spinalis — summation measurement point

13. Governor vessel point (13. Gov.)

324

The measurement point is located exactly on the tip of the spinous process of the 7. cervical vertebra. It is a summation measurement point. See Vol. I, fig. 22.

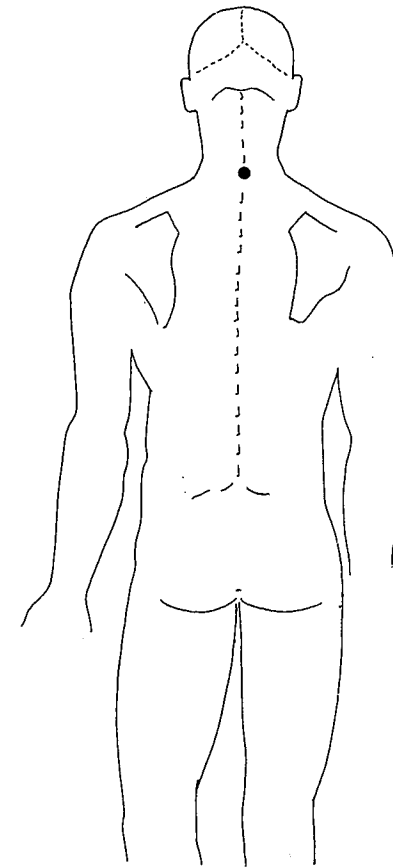


Fig. 75: Summation MP. Spinal cord = 13. Governor

No. 54

Sympathetic nerve — summation measurement point

20. Gallbladder point (20. Gbl.)

304

r + l

The sympathetic nerve measurement point is situated on the 20. Gallbladder point at the dorso-lateral side of the nape on the level of the tip of the processus mastoideus in a muscular angle, which is formed by the posterior edge of the musculus sternocleidomastoideus and the lateral margin of the musculus splenius capitis. See Vol. I, fig. 22.

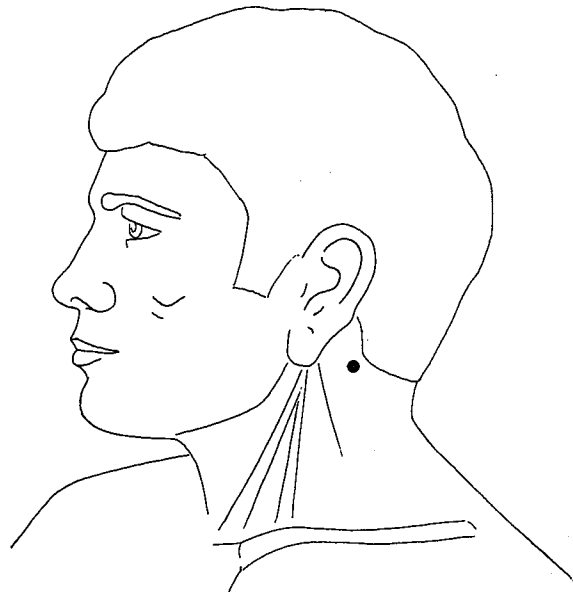


Fig. 76: Summation MP. Sympathetic nerve = 20. Gallbladder

D. Measurement Points on the Hand, the Forearm and Upperarm:

Preliminary Note:

In classical acupuncture there is known only one meridian on the thumb in contrast to the big toe at the foot: that is the one located at the ulnar side of the thumb, the lung meridian.

Voll has discovered and described the beginning of the lymph vessel at the opposite, radial side of the thumb. This vessel controls the lymphatic functions of the different organs and above all allows an exact measurement of the lymph drainage of the organs in the head- and neck-region.

The vessel runs from the thumb along the fore- and upperarm to the shoulder-nape region and has 14 established measurement points.

No. 55

Lymph vessel — found by Voll

1 + 1a + 2 + 3 + 4 + 5 + 6 Lymph vessel measurement points

610 608 607 605 604 602 601

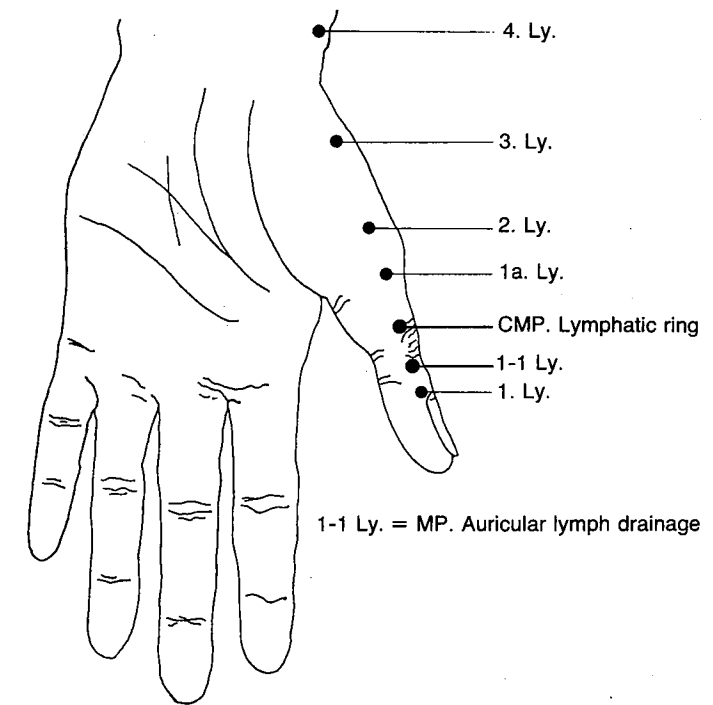


Fig. 77: MPs. of the lymph vessel 1—4

Here the still existing tonsils are less often the strewing foci, the remaining rests more often and above all the not completely clean scars after tonsillectomy. Is there a decision only after years of waiting to remove the recurrently inflamed tonsils by tonsillectomy, in most cases it will not be possible to clean the area completely. The scars emerging from recurrent disorders cannot be eliminated completely out of this region. Following the operation a field of disturbance persists which in spite of the eliminated tonsils can irritate continuously and frequently.

Consequently, eliminated tonsils are no guarantee that this region cannot function as an active irritating focus.

The measurement point for the tonsilla palatina is the first lymph vessel point of the lymph vessel discovered by *Voll*.

1. Lymph vessel point — measurement point for the palatine tonsil, including the peri- and retro-tonsillary area:

The point is located at the "distal phalanx of the thumb at the radial side above the tuberositas unguicularis — 2 mm proximal and lateral away from the outer angle of the thumb nail fold. It lies symmetrically to the ulnar-located 11. Lung meridian measurement point." See No. 1, fig. 2.

1.1 Lymph vessel point:

Measurement point for the lymph drainage of the ear. The point is situated on the distal limb of the thumb at the radial side of the proximal angle of the shaft towards the base.

In all affections of the ear, also of the three different portions of the ear, this measurement point exhibits an indicator drop. A persisting rest-inflammation following a mastoiditis may have an effect as a focal process. (See MP. 17. 3-W. middle ear, fig. 30, page 105.

1.2. Lymph vessel point:

CMP. for the 5 different tonsils of the lymphatic faucial ring (*Waldeyer*).

This point includes the palatine tonsil, tubal tonsil, pharyngeal tonsil, lingual tonsil and laryngeal tonsil.

With an indicator drop here, there have to be tested:

the palatine tonsil = 1. Lymph vessel (fig. 77) and 8b. St. (fig. 20a, page 80)

the tubal tonsil = 1a. Lymph vessel resp. 18. LI. (see fig. 20 page 79)

the pharyngeal tonsil = 23c. Con. (see fig. 57, page 133)

the lingual tonsil = 3a. St (see fig. 55, page 131) and

the laryngeal tonsil = 17. LI. (see fig. 20, page 79 and fig. 63 page 139)

- 1a. Lymph vessel point — measurement point for the tubal tonsil (see 18. LI., fig. 63, page 139); substitute point in thumb amputees.

The point lies at the radial side of the base phalanx of the thumb above the proximal osseous angle from the shaft to the basis of this thumb section. This point is responsible for the tonsilla tubaria.

2. Lymph vessel point

This measurement point is responsible for the lymph drainage of the jaw and is considered to be a reference point for a focal process in the tooth region of the same side. It indicates such a focus by the drop of the indicator, even if this, at the jaw measurement points at the first or second measurement is not yet visible and only appears at the third measurement, because increased conduct resistance of the facial skin caused by cosmetics (see page 37, 3: four stick electrode and jaw measurement points, and fig. 16, page 60)

To demonstrate indicator drops at the jaw measurement points, sometimes up to 3 consecutive measurements are necessary.

The 2. Lymph vessel point is located at the distal transition zone from the shaft to the capitulum, at the radial side of the first os metacarpale. See Vol. I, fig. 2.

3. Lymph vessel point

This measurement point is responsible for the lymph drainage of the paranasal sinuses and is considered as a reference point for a pathologic process in the paranasal cavities. It is located at the proximal transition zone from the shaft to the basis at the radial side of the os metacarpale. See Vol. I, fig. 2.

While the 1. Lymph vessel point represents a direct measurement point for the tonsilla palatina, the lymph vessel points 2 and 3 refer to inhibited lymph drainage of the jaw and paranasal sinuses due to partial or total "itis", in which partial "itis" has to be evaluated as focal irritation mostly (measurement points fig. 17, page 67).

Here is considered as rule of thumb — as with all points in electroacupuncture:

increased readings — above 80 — inflammatory phase,

decreased readings — below 50 — capacity-reduced by chronic, degenerative processes,

indicator drop — acute or chronic disorder with cell decay.

The normal ideal reading is here — as in all measurement points — 50 gradation marks.

Testing the head foci can encounter, however, sometimes some diagnostic difficulties if, for example,

- a) the acute tonsillitis pushes the indicator up to 90 to 100 gradation marks and shows no indicator drop, then there exists a serious inflammation;
- b) irritating tonsil-foci in contrast have an indicator drop at the 1. measurement point of the lymph vessel, beginning from 88 to 82. At the same time this phenomenon can also appear with already extirpated tonsils. The irritation effect then proceeds from the peritonsillar, subcapsular, retrotonsillar tissue respectively the lymph nodes located behind. The acute bacterial tonsillitis shows measurement values of 90 or slightly more with an indicator drop.
- c) measurement values at the palatine tonsil measurement points with an indicator drop below 40 are, according to *Voll*, an indication for extirpation. This phenomenon is registered mostly following tonsillary abscesses, since after that the tonsils represent a considerable field of disturbance because of residual abscesses.

In detail *Voll* states about the significance of the lymph vessel points:

1. The 1. Lymph vessel point gives information about the palatine tonsil with the peri- retro- and subcapsulary space as well as about the nodi lymphatici cervicales profundi craniales.
 - 1.1. The next lymph vessel point refers to the lymph drainage of the ear
 - 1.2. The following lymph vessel point refers to the lymph drainage of the faucial ring with its 5 tonsils.
- 1a. The next lymph vessel point refers to the lymph drainage of the tubal tonsil, (especially important after a tonsillectomy), and to a minor degree to the lymph drainage of the teeth region. In case of removed palatine tonsils the tubal tonsil is taking over functions (vicariation).
2. The 2. Lymph vessel point comprises the main lymph drainage of the odontons of the upper and lower jaw.
3. The 3. Lymph vessel point refers to the main lymph drainage of the three paranasal cavities and the ethmoid cells.
4. The 4. Lymph vessel point is situated above the radial inner side of the wrist between the processus styloideus radii and the os naviculare. Here can be measured the lymphatic processes in
 - a) the vasa lymphatica pulmonales
 - b) the nodi lymphatici pulmonales and of the pleura,
 - c) the nodi lymphatici tracheo-bronchio-pulmonales and finally
 - d) the nodi lymphatici mediastinales.

Disturbances of the lymphatic function in the lung and in the mediastinum can be influenced by this point.
5. The 5. Lymph vessel point is located at the volar-radial side of the forearm, approximately $\frac{1}{2}$ centimeter off the 8. Lung meridian measurement point radially on the same level with it, in the angle between the shaft and distal end of the radius-bone. See Vol. II, fig. 5.

Here the lymphatic processes in the region of the vasa lymphatici cordis et pericardii can be measured.

The point is in direct connection with the 5. Heart meridian measurement point and allows the control of the lymph-supply of the heart and pericardium.
6. The 6. Lymph vessel point lies at the radial inner side of the forearm in the acute angle, which is formed by the terminal tendon of the musculus brachioradialis and the musculus abductor pollicis longus, approximately $\frac{1}{2}$ cm radial of the 7. Lung meridian measurement point. See Vol. II, illust. A4.

To find this point *Voll* recommends:
One abducts the thumb, palpates the anterior edge of the tendon of the musculus abductor pollicis longus, then turns the forearm alternatively in pronating and

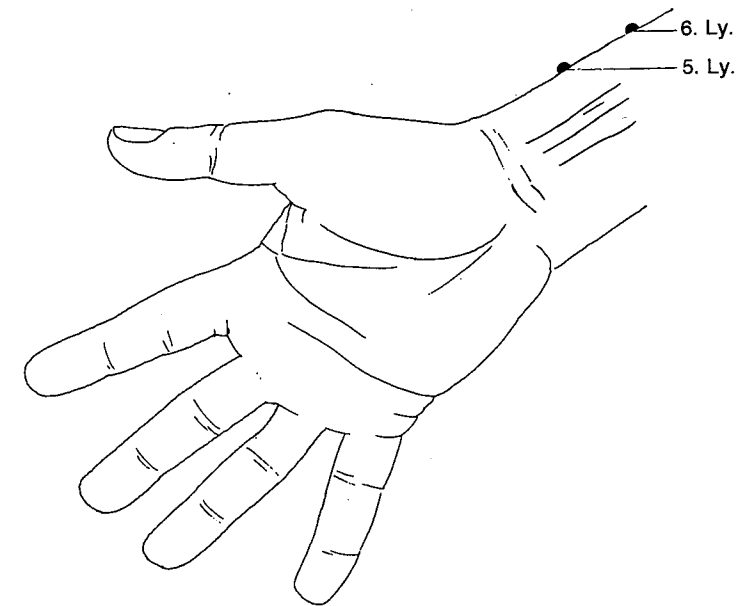


Fig. 78: Lymph vessel points 5 and 6

supinating direction, so that one can palpate the edge of the terminal tendon of the musculus brachioradialis and thereby also the acute angle, which is formed by these two tendons and in which the wanted 6. Lymph vessel measurement point is located.

Voll describes the position of the 6. Lymph vessel measurement point topographically as follows:

"Approximately $2\frac{1}{2}$ finger breadth away from the second wrist line or approximately 1 finger breadth proximal from the extension of the processus styloideus radii, about $\frac{1}{2}$ cm radial of the arteria radialis."

Here the processes in the lymph vessels of the upper extremities are measured.

11. Lymph vessel point see No. 48 (see page 145, fig. 69)
12. Lymph vessel point see No. 49 (see page 146, fig. 70)
13. Lymph vessel point see No. 50 (see page 147, fig. 71)
14. Lymph vessel point see No. 51 (see page 148, fig. 72)

No. 56

Lung — pulmo

11 + 10b + 10a + 10 + 9. Lung point — 11 + 10b + 10a + 10 + 9. Lu.

611 609 606 617

r + 1

a) 11. Lung point:

The point lies at the medial (ulnar) side of the thumb nail phalanx above the tuberositas unguicularis, 2 mm away cranial-medial (little finger side) from the inner nail-fold angle of the thumb.

See Vol. I, fig. 1.

It is responsible for the lung parenchyma of the same side, for the alveoles and the capillary net.

b) 10c. Lung — CMP lung:

The control measurement point of the lung is situated above the distal osseous angle between shaft and base at the ulnar side of the proximal phalanx of the thumb.

Indicator drop at this point means a reduction of function of the lung at the same side, which can be caused by different reasons like for example:

fresh inflammatory processes, scars following pleuritis, an old cured phthisis or a condition following a pulmonary infarction. A retardation of the indicator below the mark of 50 gives a hint to asthma, emphysema, strongly reduced vital capacity, dispnea etc.

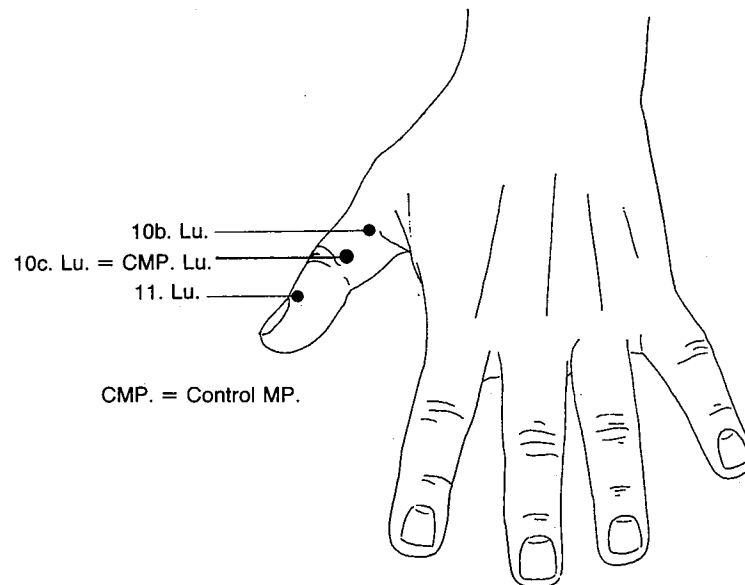


Fig. 79: Lung measurement points of the dorsal hand

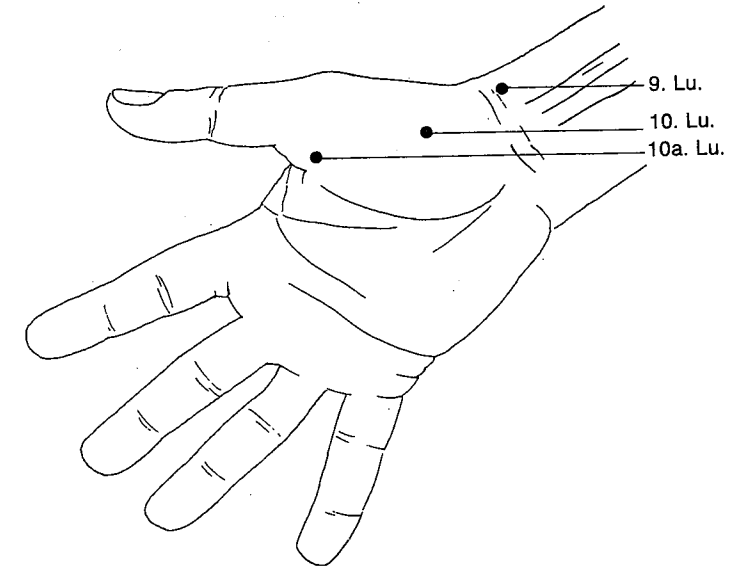


Fig. 80: MPs. of the lung meridian on the volar hand

- c) The 10b. Lung point is located above the proximal osseous angle between the shaft and the basis at the ulnar side of the thumb base phalanx. See Vol. II, fig. 17.
The point is responsible for the bronchioles.
An indicator drop at this point indicates an insufficiency of the bronchioles as a first sign of an emphysema.
- d) The 10a. Lung point is situated in the distal osseous angle between the shaft and the distal end of the metacarpal bone at the volar-ulnar side. It is responsible for the pleura of the corresponding side. See Vol. II, fig. 17.
- e) The 10. Lung point lies on the thenar eminence on the palm side above the metacarpale of the thumb at the transition zone from the shaft to the basis of the metacarpal bone at the proximal-cranial end. See Vol. I, fig. 2.
The point is responsible for the bronchi on same side.
- f) The 9. Lung point is located above the radio-carpal joint gap in the osseous angle of the obtuse prominence of the processus styloideus radii, at the volar side of the hand, above the arteria radialis in the level of the wrist-line. It is responsible for the trachea. See Vol. I, fig. 2.

No. 57

Large intestine — colon

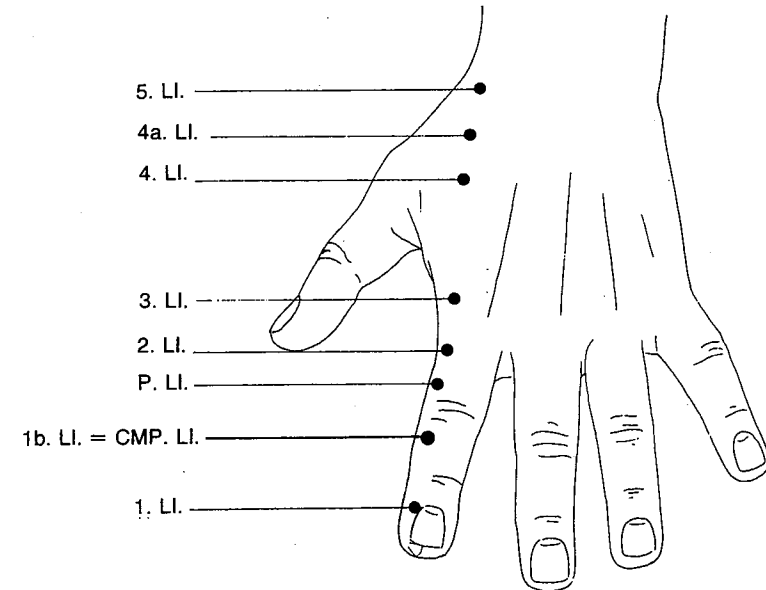
1 + 1a + 2 + 3 + 4 + 4a. Large intestine point — 1 + 1a + 2 + 3 + 4 + 4a LI

422 418 416 414 413

r + l

- a) 1. Large intestine point:
The point lies at the index-finger on the radial (lateral) side of the nailfold approximately 2 mm away from the radial corner.
See Vol. I, fig. 1.
This point is responsible at the *right* side for the right part of the colon transverse (see Vol. II, fig. 9);
and at the *left* side for the sigmoid flexure. See Vol. II, fig. 10.
- b) 1b. Large intestine — CMP:
By way of this control measurement point, not only the measurement points of the colon, but also the measurement point of the rectum anal canal and anus, which are points of the kidney meridian, are registered.
- c) P. Large intestine point:
This so-called P-point of each organ (peritoneum measurement point) was found by *Voll* and is located in the distal-radial angle between the shaft and the capitulum of the base-phalanx of the index-finger. See Vol. II, fig. 9. At this point the condition of the peritoneum can be diagnosed in the region of the large intestine. In chronic large intestine affections (colitis, diverticulitis) the covering peritoneum is always involved.
- d) 2. Large intestine point:
The point is located at the radial (lateral) side of the base-phalanx of the index-finger above the osseous angle of the transition zone from the shaft to the basis. See Vol. I, fig. 1. The point refers at the *right* side to the hepatic flexure (see Vol. II, fig. 9) and at the *left* side to the descending colon. See Vol. II, fig. 10a.
- e) 3. Large intestine point:
The point is located at the radial side of the metacarpale of the index-finger above the osseous angle of the transition zone from the shaft to the capitulum of this index-finger bone. See Vol. I, fig. 1.
This point is responsible on the *right* for the ascending colon (see Vol. II, fig. 9) and on the *left* for the splenic flexure; see Vol. II, fig. 10a. Indicator drops at the large intestine measurement points on both sides must be regularly evaluated in connection with the measurement results at the small intestine, for example in an entero-colitis.

Independently from this an indicator drop on both sides indicates in any case a disturbance of function with dysbacteria, e. g. in a chronic colitis.



P. = MP. Peritoneum

5. LI. = 1. Proximal hand joint for the radial joint region

Fig. 81: Large intestine measurement points

- f) 4. Large intestine point:
The point is situated at the cranial end of the metacarpal bone of the index-finger in the dorsal-radial angle between the shaft and the basis of this bone at the dorsum of the hand. See Vol. I, fig. 1. On the *right* is responsible the point for the cecum (see Vol. II, fig. 9) and on the *left* the 4. Large intestine measurement point is responsible for the left portion of the transverse colon.
- g) 4a. Large intestine point (found by *Voll*):
The point is situated at the dorsal side of the hand in the radial part of the carpal region between the distal end of the radius and the carpal bones in the extension of the metacarpal bone of the thumb.
At *right* the point is responsible for the appendix and the right ileocecal lymphnodes and
at the *left* hand side for the lymphonoduli mesocolici. See Vol. II, fig. 10a.
- l) 5. Large intestine point:
The point is located above the radiocarpal joint gap proximal of the snuff box. See Vol. I, fig. 1. It is the 1. MP. for the proximal hand joint.

Nerval degeneration

1 + 1a + 1b + 2 + 3 Nerval degeneration measurement point — 1 + 1a + 1b + 2 + 3
r + l

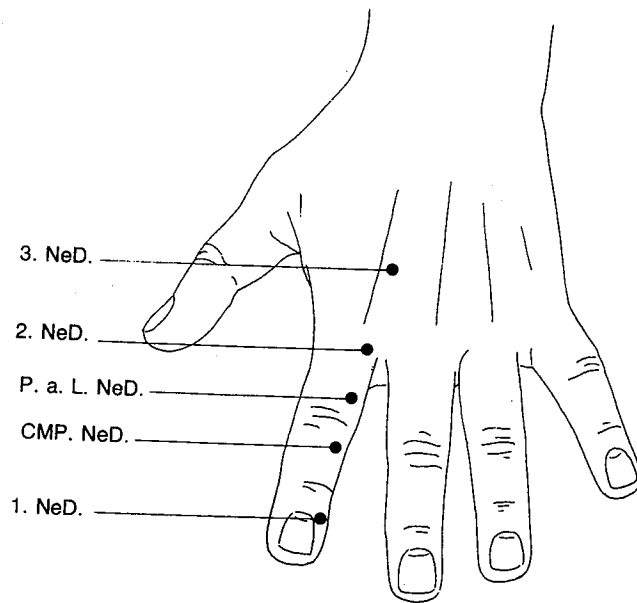
The points of the nerval degeneration vessels are not known in classical acupuncture and were found by *Voll*.

a) 1. Nerval degeneration point:

The point lies above the tuberositas unguicularis of the index-finger, at the ulnar side, approximately 2 mm away from the ulnar end or corner of the nailfold of the index-finger. See Vol. I, fig. 26.

This point corresponds to the lumbal and sacral marrow with the according nerves of the lower extremity. With an indicator drop the MP. 61. Ub. for the nerves of the lower extremity has to be measured (see page 233, fig. 122 and page 240).

b) The control measurement point lies in the proximal angle between the shaft and the basis of the second limb-bone of the index-finger at the ulnar side. See Vol. II, fig. 33.



CMP. = Control MP.

P. a. L. = MP. Pachy- and leptomeninges

Fig. 82: Nerval degeneration = MPs. NeD.

The point is considered as control measurement point for the entire peripheral and central nervous system.

c) P-Nerval degeneration point:

This point corresponds to the P-point of the organs and lies above the distal angle between the shaft and the distal capitulum of the base phalanx of the index-finger at the ulnar side. See Vol. II, fig. 33.

The point is responsible for the brain- and spinal marrow surroundings, the pachy- and leptomeninges. With an indicator drop the measurement point 19. 3-W. for the meninges has to be measured (see page 107, fig. 32).

d) 2. Nerval degeneration point:

The point lies at the ulnar side of the base phalanx of the index-finger above the osseous angle of the shaft and the basis. The point corresponds to the cervical- and thoracal marrow with the peripheral nerves. With an indicator drop the MP. 6. SI. for the nerves of the upper extremities has to be measured (see page 175, fig. 90).

e) 3. Nerval degeneration point:

The point is situated on the ulnar side of the metacarpale of the index-finger above the osseous angle at the transition of the shaft to the capitulum. See Vol. II, fig. 33.

This point refers to the encephalon and the brain stem.

The retardation of the indicator below the norm-value of 50 points to a pronounced degeneration phase in the corresponding regions.

Voll has given a list of degeneration forms of the central nervous system in the 1. supplementary volume of his work "Topographic positions of the measurement points in electroacupuncture" 1969, Medizinisch Literarische Verlagsgesellschaft (German edition).

1. grey degeneration
tabes dorsalis
funicular myelosis
2. nerval sclerosis
sclerosis
3. gliosis
syringobulbia
4. systematic atrophy
heredodegenerative disorder
5. white malacia
encephalomyelomalacia
6. red malacia
consequence of a cerebral infarction by thrombosis or embolism
7. brain tissue softening through bacteria = brain abscess
8. brain tissue destruction through bleeding
apoplexy or apoplectic cyst

No. 59

Circulation

9 + 8b + 8a + 8 + 7 Circulation point - 9 + 8b + 8a + 8 + 7 Cir.

423 620 616

r + l

- a) 9. Circulation point = summation measurement point for the arteries:
The point lies at the radial (medial) side of the middle finger above the tuberositas unguicularis approximately 2 mm away from the radial corner of the nailfold of the middle finger. See Vol. I, fig. 1.
It is responsible for the arteries of the same side.
With an indicator drop the MP. 7. Lu. for the arteries of the arms (see fig. 92, page 178) and the MP. 32. St. for the arteries of the legs (see fig. 122, page 223) have to be measured, to know the location of the arterial irritation. The MP. 1a. Al. referring to a vascular sclerosis (see page 167, fig. 85) should be measured additionally.
- b) 8b. Circulation point (found by *VoII*):
The point is located in the proximal angle between the shaft and the basis of the base-phalanx of the middle finger bone at the dorso-radial side.
It is responsible for the cisterna chyli. See Vol. II, fig. 6.
- c) 8a. Circulation point (found by *VoII*):
This point is situated above the distal angle between the shaft and the capitulum of the metacarpale of the middle finger at the radial- palmar side. The point is responsible at the left side for the thoracic duct, at the right side for a possibly existing accessory thoracic duct, resp. the right lymphatic trunk.
- d) 8. Circulation point = summation measurement point for the veins:
The point lies at the metacarpale of the middle finger above the osseous angle from the shaft to the basis, approximately in the middle of the longest handline in the palm (palmar side).
See Vol. I, fig. 2.
This point refers to the ipsilateral veins.
With an indicator drop here the measurement points for the veins of the arms (8. Lu., see page 177, fig. 91), of the legs (7. Li., see page 218, fig. 118), of the small pelvis (10. Spl./pa, see page 221, fig. 120) and of the abdomen (33. St., see page 222, fig. 121) have to be tested, to locate the thrombophlebitis.
- e) 7. Circulation point:
The point is located at the volar side of the wrist, in the middle of the wrist crease (between the 9. Lung meridian measurement point and the 6. He. meridian measurement point). See Vol. I, fig. 2.
The point refers to the ipsilateral arteria coronary vessels on same side.

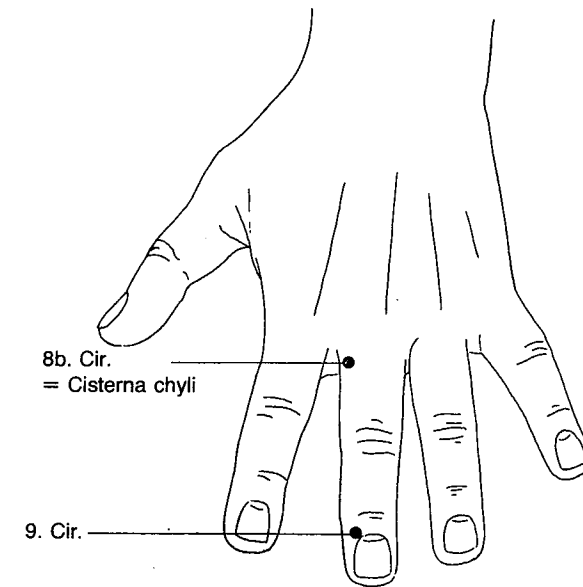


Fig. 83: MPs. Circulation on the back of the hand

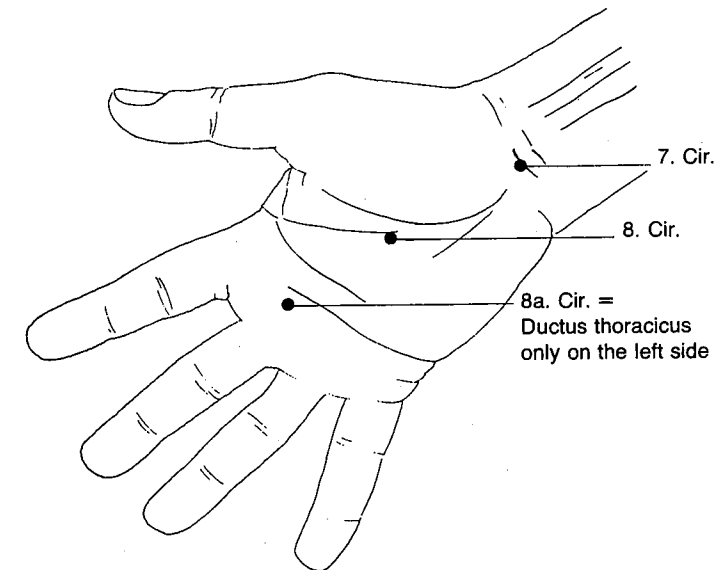


Fig. 84: Circulation measurement points on the palm

The other vascular-system specific measurement points are discussed extensively in the work of *Voll*: "The topographic position of the measurement points in electroacupuncture, textual volume", 3. ed. (German edition), page 54 and 55. In respect to the correspondence of the measurement point there is stated:

7. Lung point is responsible for the arteries of the upper extremities. 32. Stomach point is responsible for the arteries of the lower extremities

No. 60

Allergy

1 + 2 + 3 + Allergy measurement point — 1 + 2 + 3 Al. (found by *Mann*)

15-0 15-4 15-5

421 417 415

r + l

additional 1a. Vascular sclerosis measurement point (summation measurement point)

a) 1. Allergy point:

The measurement point is located above the tuberositas unguicularis at the ulnar side of the nail limb of the middle finger approximately 2 mm off the ulnar nail fold corner — opposite to the circulation meridian measurement point. See Vol. I, fig. 26.

Here all allergic irritations of organs in the abdomen and the minor pelvis of the skin of the lower portion of the back, its vessels and the lower extremities can be diagnosed, in detail:

allergic gastropathy

allergy of the intestinal tract

allergy of the skin of the lower body portion and the lower extremity

allergy in the region of the urinary tract and the genital organs

They can be caused by

1. nutritive allergenes of not chemically treated food and luxuries: strawberries, pineapples, tomatoes, nuts, meat and fish, fats like lard, etc., milk and eggs;
2. food and luxuries, which because of their chemical burdening can have an allergising effect; preserving agents of all kinds in foodstuff can occasionally cause allergies, among others chemically treated carbohydrates like grain, rice, potatoes, vegetables, fruitjuices, fruits, especially citrus fruits, which can cause allergic inflammations of the urinary bladder muscosa, whereby the insecticides and herbicides, incorporated with the vegetables and fruits, play a causative role.

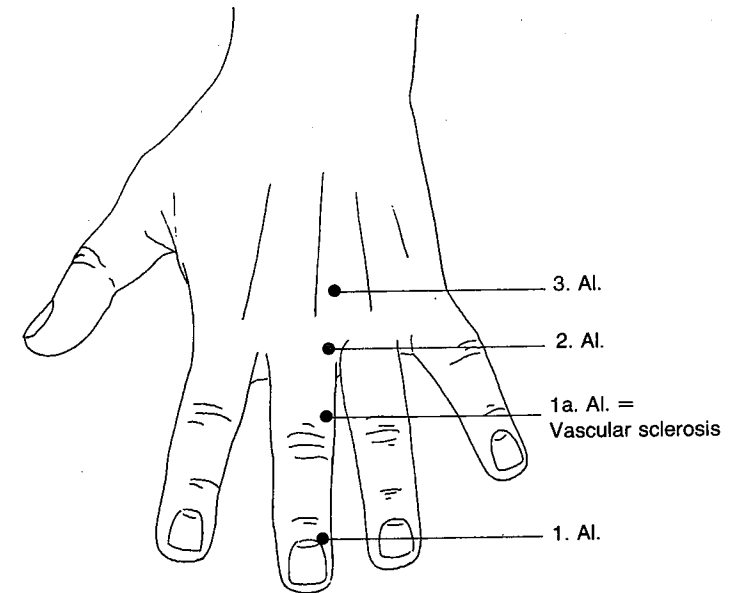


Fig. 85: MPs. Allergy = MPs. Al.

Orally incorporated, especially, however, injected medicaments (drugs, pharma etc.) show often an indicator drop at all 3 allergy measurement points.

b) 1b. Allergy vessel — CMP:

This point is located at the dorso-ulnar side of the intermediate phalanx of the middle finger at the proximal angle of the shaft and the capitulum.

c) 1a. Allergy point = vascular sclerosis measurement point (summation measurement point)

The vascular degeneration is the terminal product of many latent micro-irritations, whereby in all arterial disorders a stronger allergic component has to be taken into consideration.

This point, found by *Voll*, is located at the distal angle of the shaft and the capitulum of the base-phalanx at the ulnar side of the middle finger. The disposition or existing vascular sclerosis can be tested here. See Vol. II, fig. 2.

d) 2. Allergy point:

This point is situated on the dorsal-ulnar side of the base-phalanx of the middle finger above the osseous angle at the transition zone from the shaft to the basis. See Vol. I, fig. 26. The point is responsible for all allergic reactions of the organs in the chest and the neck as well as the skin of the chest, the upper portion of the back, the neck and upper extremities.

Here can be diagnosed in detail:

allergy of the respiratory organs
allergic myocarditis

allergy of the skin of the upper body, the neck and nape and the upper extremities.

Here above all, air-allergens which are inhaled have to be regarded, like:

animal hairs and feathers

plant hairs and pollen

mold, particularly in moist habitations

gaseous substances like terpentine and insecticides

wood impregnation media (xylamon)etc.

e) 3. Allergy point:

The point is located at the dorsal-ulnar side of the metacarpal bone of the middle finger at the transition zone of the shaft to the capitulum in the corresponding osseous angle. See Vol. I, fig. 26. This measurement point comprises all allergic irritations of the organs of the head as well as the skin of the face and skull including the hair.

Here can be diagnosed: In particular:

rhinitis allergica — hayfever

allergic migraine

allergic disorders of the eyes

allergic disorders of the oral cavity

allergy of the face- and head-skin

Above all at this allergy measurement point has to be thought of the so-called head allergenes, like:

cosmetics

hair-dyes and shampoos

hair-lotion and -spray

crayons

mascara

face-creme

nail-varnish

after-(pre-)shave-lotion etc.

dental materials like:

fillings, amalgam

acrylate, plastics, which are produced in the low-temperature-way; polyester etc. in prothesis.

Allergic situations in the oral cavity can be caused by dental materials. The testing of the raw material, used in the dental works, concerning the compatibility should be performed at the 3. allergy measurement point.

Medicaments, given intravenous or intramuscular, show — if causing allergic reactions — corresponding deviations at all three allergy points. Inflammatory phases in the oral region, which for example can result from close contact between allergizing dental materials and the oral mucosa, not only cause abnormal reactions at the

3. Allergy point but also high indicator readings up to 90 or 92 at the corresponding tooth measurement point, without an indicator drop at the jaw measurement points.

Allergizing cosmetics or hair-stuff used at the head show a corresponding high indicator reading or even an indicator drop at the proximal allergy measurement point Nr. 3.

The most frequently found allergies are:

1. pig meat allergy
2. egg allergy
3. fish allergy
4. meat extract allergy
5. insecticide-, washingpowder- and detergent-allergy
6. milk allergy
7. fertilizer allergy in the rural population
8. pollen- and dust-allergy (asthma).

Acquired allergies are most of the time preceded by impairment of the liver. Therefore testing and co-treatment of the liver in case of an allergy is very important (see page 192—194, chapter 74).

No. 61

Parenchymal and epithelial degeneration vessel (discovered by *Voll*)

This are not classical acupuncture points but electroacupuncture points, found by *Voll*.

1 + 1a + 1b + 1c + 2 + 3 Parenchymal and epithelial degeneration MP.

1 + 1a + 1b + 1c + 2 + 3 MP. PaD.

— — — —

— — — —

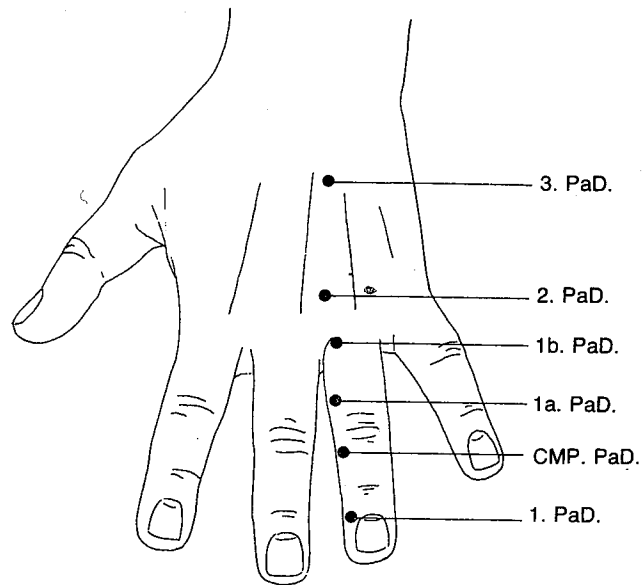
r + l

a) 1. Measurement point — parenchymal-epithelial degeneration (1. PaD.): This point lies at the radial nailfold edge of the ring finger, exactly opposite of the first measurement point of the triple warmer meridian. See Vol. II, fig. 31.

It is responsible for the parenchymal degenerative alterations of all organs in the abdomen and pelvis.

b) Control measurement point of the parenchymal-epithelial degeneration vessel (CMP): This point is located in the proximal angle between the shaft and basis of the ring finger medial limb at the radial side. The point is discovered to be the control measurement point for the entire organ-degeneration-processes in the corresponding half of the body.

With an indicator drop at this point one is obliged to search for the parenchymal-epithelial degeneration at the measurement points of the concerned organs, respectively the corresponding body-cavities.



CMP. PaD. = Control MP. for the parenchymal and epithelial degeneration

Fig. 86: Parenchymal and epithelial degeneration = MPs. PaD.

- c) 1a. Measurement point parenchymal-epithelial degeneration: This point is situated in the distal angle between the osseous shaft and the capitulum of the base phalanx of the ring finger at dorsal-radial side. It is responsible for the degeneration processes of the entire peritoneum.
- d) 1b. Measurement point parenchymal-epithelial degeneration: This point lies in the proximal angle between the shaft and basis of the proximal limb of the ring finger at its dorso-radial side. It is responsible for the degeneration processes of the pleura region.
- e) 2. Measurement point — parenchymal-epithelial degeneration: This point is located above the distal angle between the osseous shaft and capitulum of the metacarpale 4 at the dorso-radial edge. It is responsible for the organs in the chest and the neck.
- f) 3. Measurement point — parenchymal-epithelial degeneration: This point lies above the proximal angle of the metacarpal bone of the ring finger and its cranial capitulum at the dorso-radial side and is responsible for the parenchymal-epithelial degeneration processes in the head region.

No. 62

Triple warmer points — endocrine system

According to *Vo//* the triple warmer meridian is called "endocrine meridian" in electroacupuncture.

1 + 1a + 2 + 3 Triple warmer point - 1 + 1a + 2 + 3 - 3-W.

411 — 405 403

r + l

- a) 1. Triple warmer point (summation measurement point):
The point is located above the tuberositas unguicularis of the ulnar side of the ring finger nail-fold, approximately 2 mm off the ulnar nail fold angle. See Vol. I, figure 1.
This point concerns the gonad (testicle or ovary) and adrenal gland on same side.
- b) 1b. Triple warmer — CMP (control measurement point of the triple warmer):
The point is located at the ulnar side of the middle limb of the ringfinger, at the proximal angle of the shaft to the capitulum. An indicator drop at this point obliges to locate the alteration through the measurement of the individual points of the 3-W.
- c) 1a. Triple warmer point:
The point is situated in the distal angle between the osseous shaft and capitulum of the proximal phalanx bone (4. finger) at the dorso-ulnar side.

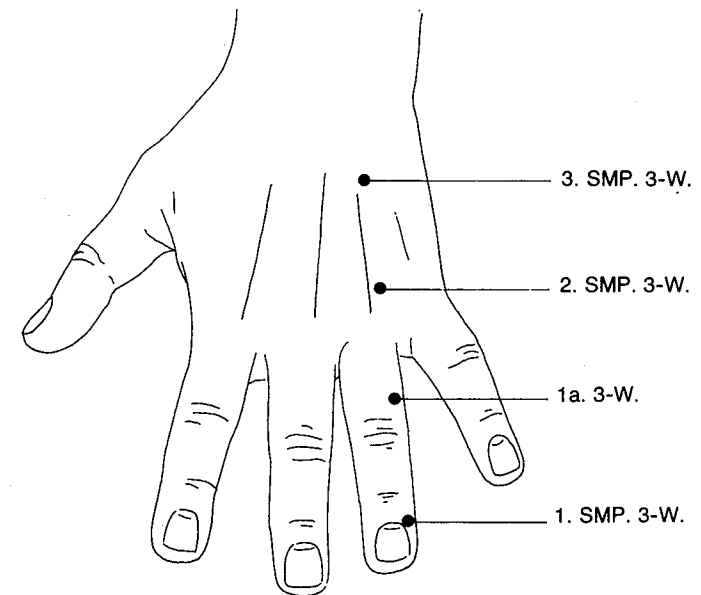


Fig. 87: Triple warmer — endocrine system (3-W. or endocrine meridian), summation measurement points (SMP) 1,2,3

On the right side it is responsible for the endocrine function of pancreatic head and body and on the left side for the pancreatic tail. See Vol. II, figure 23.
These points were found by *Palfner*

- d) 2. Triple warmer point (summation measurement point):
This point lies at the ulnar side of the ring finger metacarpale above the osseous angle of the transition zone from the shaft to the capitulum of the bone at the dorsum of the hand. See Vol. II, fig. 23.
The point is responsible for the thyroid gland, the parathyroid gland and the thymus.
- e) 3. Triple warmer point (summation measurement point)
The point is located at the dorsal hand at the ulnar side of the ring finger metacarpale above the osseous angle of the transition zone from the shaft to the basis of this bone. See Voll. II, fig. 23.
Here the function of the hypophysis (pituitary gland) and of the pineal gland can be tested and examined.

No. 63

Heart — cor

9 + 8a + 8 + 7 + 6 Heart point — 9 + 8a + 8 + 7 + 6 He.

622 621 419 418 415

or

410

r + l

- a) 1. Heart measurement point = 9. Heart point: pulmonary resp. aortic valve. The measurement point is situated above the tuberositas unguicularis of the nail limb of the little finger, 2 mm off the radial nail fold angle. See Vol. II, fig. 1.
At the little finger of the right hand the function of the endocard of the right ventricle with the pulmonary valve can be measured.
At the little finger of the left hand the function of the endocard of the left ventricle with the valves of the aortic valve is measured.
- b) 2. Heart measurement point = 8a. Heart point: pericardium
This point, only known in electroacupuncture (stated by *Voll*), is situated at the volar side, of the hand on the distal hand line, above the distal angle, between the shaft and the distal capitulum of the metacarpal bone of the little finger, at the radial side. See Vol. II, fig. 1a and 1b.
At this point the conditions of the pericardium can be measured.
- c) 3. Heart measurement point = 8. Heart point: tricuspid- resp. mitral-valve
The point lies at the metacarpale of the little finger above the osseous angle of the transition zone from the shaft to the basis in the superior groove of the palm. See Vol. I, fig. 2.

At the right hand here the function of the endocard of the right atrium the valva tricuspidalis with the muscoli papillares and the chorda tendineae is measured, whereas the measurement point in the left palm gives information about the condition of the endocard in the left auricle, the mitral valve with the muscoli papillares and the chorda tendineae.

- d) 4. Heart measurement point = 7. Heart point: conduction system
The point is situated at the volar side of the wrist above the metacarpal bones, approximately $\frac{1}{2}$ breadth away from the ulnar edge, shortly behind the distal skin fold which passes the wrist transversely.
Voll indicates the position as follows:
Above the articulatio intercarpea, proximal or below the hamulus ossis hamati in the center of the eminentia carpi ulnaris, which is formed by the os pisiforme and the hamulus ossi hamati. See Vol. I, fig. 2. The point is responsible for the homo lateral conduction system of the heart, same side.
- e) 5. Heart measurement point = 6. Heart point: cardiac muscle.
The point is located on the distal skin fold above the wrist on the volar and ulnar side of it. See Vol. I, fig. 2.
It is responsible on the right for the right myocardium and on the left for the left heart muscle.
The coronary vessel supply is measured at the 7. Circulation meridian measurement point (see fig. 86, page 170), that is on the right the right coronary artery and on the left the left one.

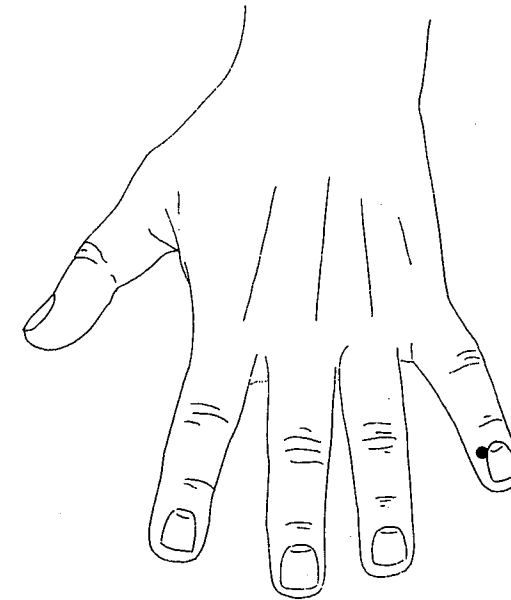


Fig. 88: Heart meridian point on the back of the hand = MP. Pulmonary valve

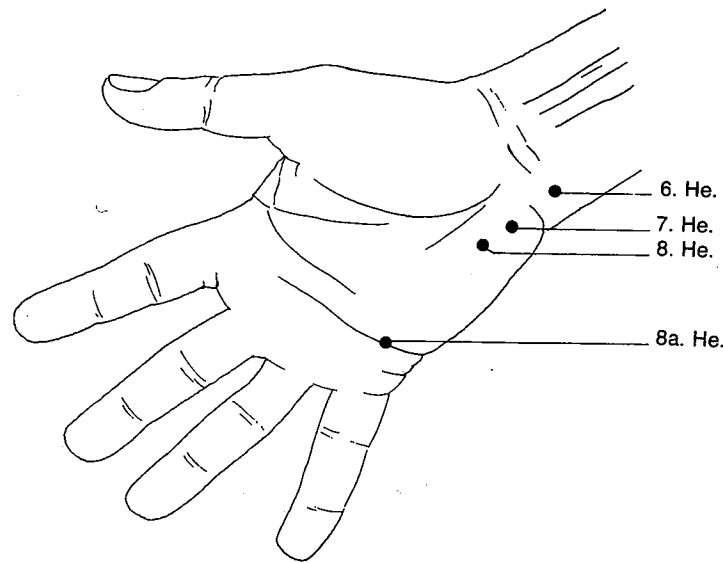


Fig. 89: Heart meridian points on the volar hand

The lymph vessel supply of the epicardium, the myocardium and beneath the endocardium is tested at the 5. Lymph vessel point on the right and left. Lymph congestions at the heart which also cause cardiac pain are measured there.

The 5. Lymph vessel point is located in the angle between the shaft and the distal part of the radius 1 finger breadth upward of the level of the 2. wrist line (proximal) (see page 156).

Conclusions about the heart load left or right can be drawn by comparison of the extent of the indicator drop at the three heart measurement points on the left and right.

Indicator drops on both sides of the myocardium measurement points, beginning with maximum values between 70 and 80 and ending below 50, indicate a development towards a myocardosis.

An indicator drop at the right heart and the liver hint towards a liver congestion. By comparing all heart measurement values with one another one can easily determine the exact localization of the maximum disorder in the heart region.

No. 64

Small intestine — intestinum

1 + 1a + 2 + 3 + 4 Small intestine points — 1 + 1a + 2 + 3 + 4 Sl. (r)

409 408 407 401

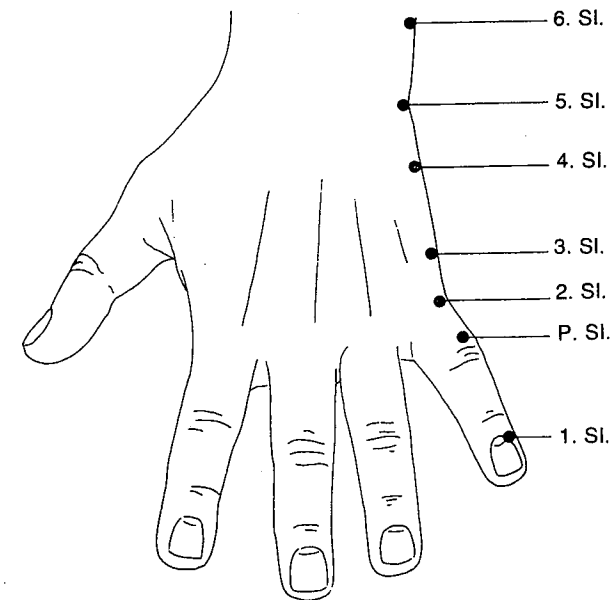
r-19-6 + 29-6-1

404

r + l

174

- a) 1. Small intestine measurement point:
The point lies above the tuberositas unguicularis of the nail limb of the little finger, 2 mm off the ulnar corner of the nail fold of this finger. See Vol. I, fig. 1.
At the measurement point of the left hand the ileum region, at the right side the terminal ileum portion including the ileocecal valve can be tested.
- b) CMP Small intestine:
The point is located above the proximal angle of the shaft and the capitulum on the middle limb of the small finger on the ulnar side.
Here irritations of the duodenum and small intestine can be measured.
- c) P. Small intestine measurement point:
The point is located above the distal angle between the osseous shaft and the capitulum of the base phalanx of the little finger bone at the dorso-ulnar side. See Vol. II, figure 14 a. The point is responsible for the peritoneum in the region of the small intestine.
- d) 2. Small intestine measurement point:
The point is located at the ulnar edge of the little finger base phalanx above the osseous angle of the transition zone from the shaft to the basis on the dorsal side.



- P. = MP. Peritoneum
5. Sl. = 2. MP. proximal hand joint for the discus articularis portion
6. Sl. = MP. Cervical spine

Fig. 90: MPs. of the small intestine meridian

175

This point is responsible on the left for the jejunum and on the right for the lower horizontal portion of the duodenum, which is located below respectively behind the pancreatic head.

e) 3. Small intestine measurement point:

This point is situated at the metacarpale of the little finger on the dorso-ulnar side (back of the hand) above the osseous angle of the caudal (distal) transition zone from the shaft to the capitulum. Here is measured on the left side the duodenal flexure and on the right side the descending portion of the duodenum with the duodenal papilla and the lower duodenal flexure inferior.

f) 4. Small intestine measurement point:

This point lies at the dorso-ulnar side of the little finger metacarpale above the osseous angle of the transition zone from the shaft to the basis of the dorsal hand.

Here the left measurement point represents the ascending portion and the right the superior horizontal portion, including the medial, in front of the gallbladder lying duodenal flexure superior.

The diagnosis "appendicitis" was earlier found by testing the 1. MP. SI right side (terminal end of the ileum) and the 4. Large intestine meridian measurement point right (coecum).

In chronic appendicitis there is furthermore found an indicator drop at the fourth right large intestine measurement point. Today EAV measures "appendicitis" at the 4a. Large intestine measurement point on the right (see No. 57f, page 161).

g) 5. Small intestine measurement point:

Located below the pit of the processus styloideus ulnae and the os triquetrum. It is the 2. MP. for the proximal hand joint for the ulnar joint section.

h) 6. Small intestine measurement point:

Situated above the extension of the processus styloideus ulnae at the osseous angle between the shaft and processus. It is the measurement point for the cervical spine.

In classical acupuncture the interrelations between the small intestine and nervous system are known. Functional disturbances in the sub-region of the duodenum and the small intestine therefore affect also the central nervous system.

Indicator drops at the right-sided measurement points concern the duodenum in its three upper sections and the right ileum. If these results are connected with high values or indicator drops at the right stomach meridian measurement point, then this indicates a duodenal ulcer, related with a gastro-duodenitis. After the cure of several duodenal ulcers the duodenal bulb can be deformed by scars, which is demonstrable in a X-ray examination.

In a generalized severe dysfermentia or dysbacteria indicator drops are found on both sides of the small and large intestine meridian measurement points, as well as at the pancreas (only right).

With an indicator drop at the right small and large intestine there has to be thought of:

a) chronic appendicitis (control by the 4a LI. point right = MP. Appendix)

If the large intestine shows the stronger indicator drop one has to think of:

b) a disorder of the ileo-cecal lymph nodes

c) scar adhesions following operations, after an appendectomy; these can be diagnosed at the MP. Peritoneum of the small and large intestine.

d) indicator drop only at the MP. Ileum left mostly indicates the existence of a *Meckel's* diverticulum, which can cause functional disturbances. Especially in nervous diseases high values or indicator drops at the small intestine or duodenum can be found and have additionally to be treated.

Pain in the right shoulder can be induced by functional disturbances of the duodenum or small intestine (see page 186).

No. 65

Veins of the upper extremity — veins of the arm

8. Lung point (8. Lu.)

613 and 109

r + l

This measurement point is situated on the volar side of the forearm above the arteria radialis in the angle between the shaft and the distal part of the radius at the transition zone from the shaft to the distal wide and thick end of the processus styloideus radii, 1 finger breadth cranial (proximal) of the 2. wrist line. See Vol. I, fig. 2 and 11.

Lymph congestion of the arm can be recognized by measuring the 6. lymph vessel point (see page 157, fig. 78). This can be important after a mamma amputation.

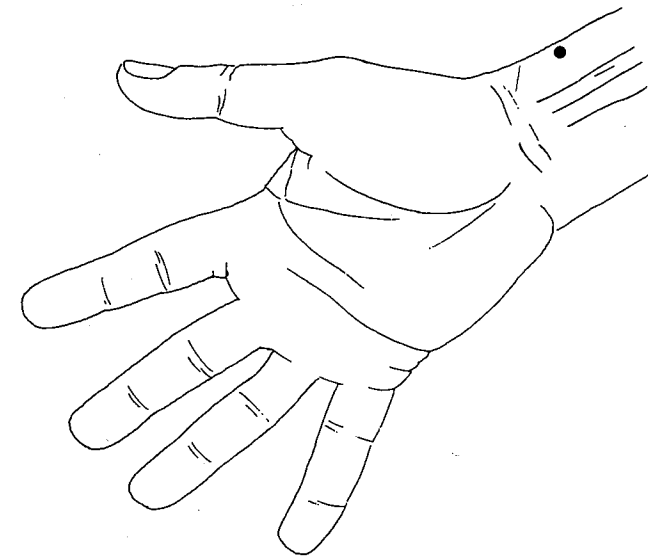
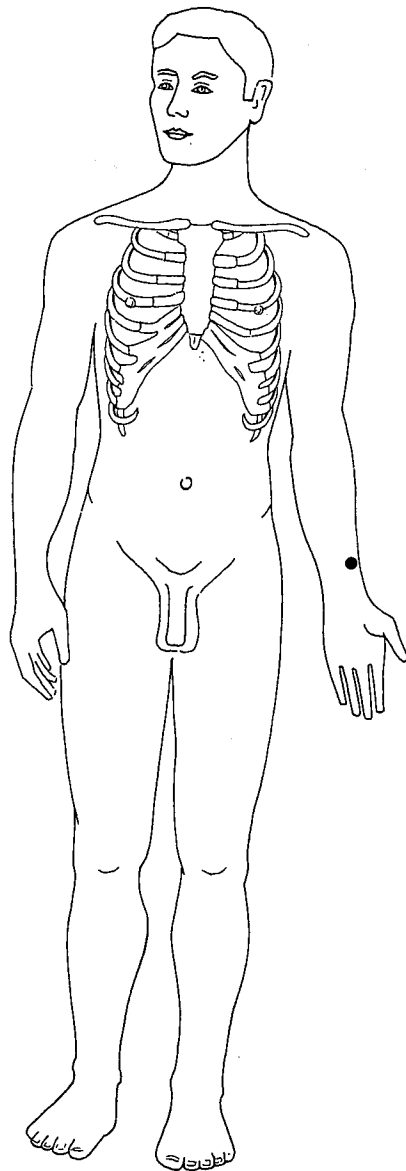


Fig. 91: Veins upper extremity = 8. Lung

No. 66

Arteries of the upper extremity — arteries of the arm
7. Lung point (7. Lu.)
108
r + l



The point is situated on the volar side of the forearm, above the arteria radialis in the angle between the terminal tendon of the musculus brachioradialis and the radial muscular edge of the musculus flexor digitorum sublimis superficialis, approximately 2 finger breadth cranial (proximal) off the 2. wrist line. See Vol. I, fig. 11.

Fig. 92: Arteries of the upper extremity
= 7. Lung

No. 67

Nerves of the upper extremity
7. Small intestine point (7. Si.)
309
r + l

The measurement point lies in the level of the end of the upper third at the forearm complete laterally above the muscular angle of the musculus extensor carpi ulnaris and the insertion of the musculus anconaeus, appr. 3 finger breadth below the processus coronoideus.

To find the point *Voll* recommends: you look up the strongly bulging processus coronoideus ulnae at the lower part of the strongly cavitated joint plane of the incisura semilunaris, then you pass down the connection line processus coronoideus and processus styloideus ulnae 3 fingers breadth. See Vol. I, fig. 25.

Here the nervous function of the upper extremity can be investigated. In deciding differential-diagnostically, whether an irritation in the region of the arm is caused by an ossal, muscular or nerval process, the points 7. Small intestine for nerves, 9. Small intestine for the musculature and tendons and 11. Urinary bladder for the osseous system are measured.

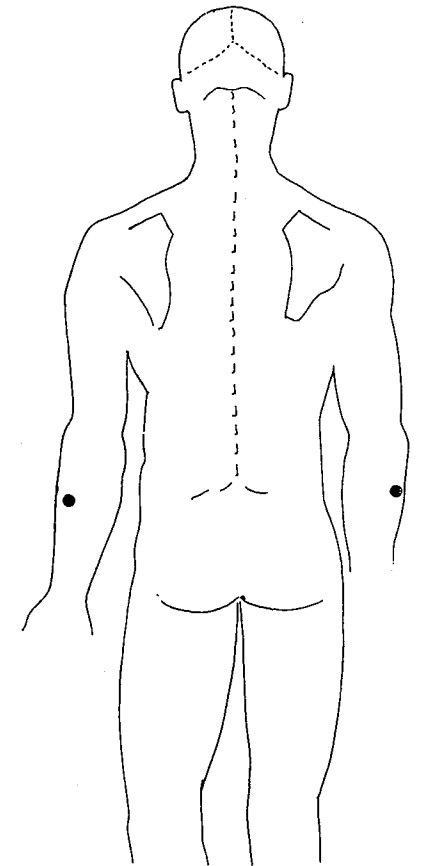


Fig. 93: Nerves of the upper
extremity = 7. Small intestine

No. 68

Elbow Joint — articulatio cubiti

8. Small intestine point (8. SI.)

3. Circulation point (3. Cir.)

11. Large intestine point (11. LI.)

308 107 106

r + l

Preliminary note:

The elbow joint is combined out of 3 joints, which are sheltered in a common surrounding capsule. That is why there is one specific measurement point for each component of this point.

The separate joint sections are:

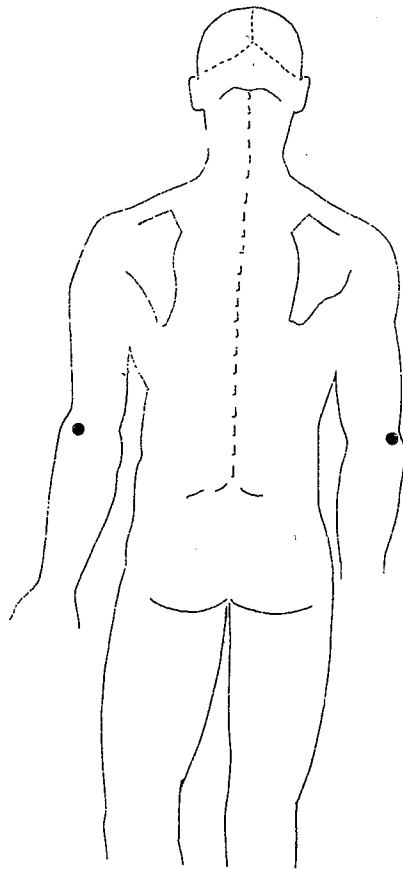


Fig. 94: 1. MP. Elbow joint = 8. Small intestine

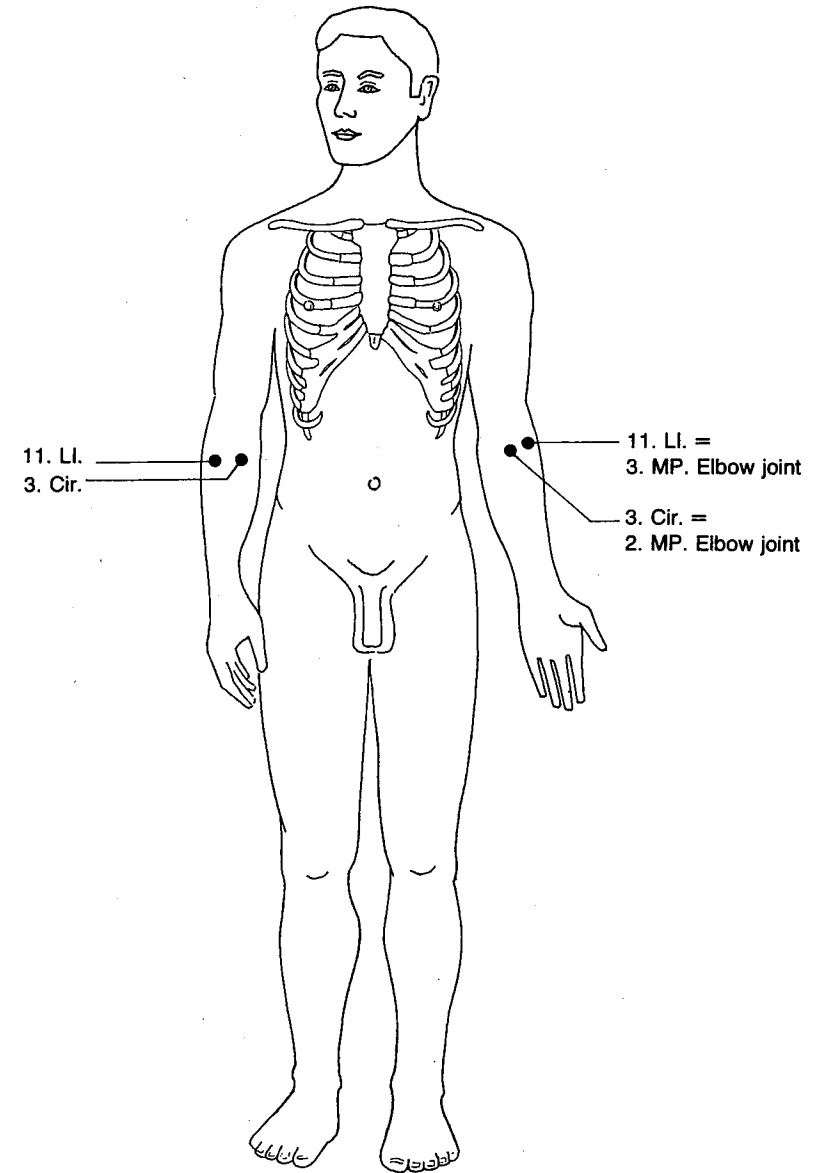


Fig. 95: Elbow joint 2. MP. = 3. Circulation, 3. MP = 11. Large intestine

1. Articulatio humero-ulnaris
2. Articulatio radio-ulnaris proximalis and
3. Articulatio humero-radialis

1. Articulatio humero-ulnaris — 8. SI. — r + l

The 8. Small intestine point is located in the regio cubiti dorsalis (posterior) above the osseous angle of the epicondylus medialis (ulnaris) and the olecranon or above the medial edge of the tendon of the musculus triceps in a groove medial of the nervus ulnaris above the constriction of the exterior plane of the incisura semilunaris of the olecranon. See Vol. I, fig. 25. Strains of the elbow joint as they are known from the so-called tennis elbow can be diagnosed and influenced above this point.

2. Articulatio radio-ulnaris proximalis — 3. Cir. — r + l

The measurement point for this joint portion is the 3. Circulation point, which is situated in the regio cubiti volaris (anterior), in the skin-fold of the elbow bend, above the inner edge of the tendon of the musculus biceps brachii. See Vol. I, fig. 11. In the so-called tennis elbow this joint section is also a factor.

3. Articulatio humero-radialis — 11. LI. — r + l

The 11. Large intestine measurement point is located in the regio cubiti volaris at the extreme outer end of the bending skinfold of the elbow. See Vol. I, fig. 11. This point plays the main role in the disease of the so-called tennis elbow.

No. 69

Muscles of the upper extremity — arm muscles

9. Small intestine (9. SI.) (summation measurement point)

307

r + l

This point is situated on the dorsal side of the upperarm above the posterior margin of the musculus deltoideus at the point of intersection with the muscle-margin of the caput laterale radiale of the musculus triceps brachii.

This angle can easily be palpated if the rectangularly deflected arm is raised horizontally and you go along the rear margin of the musculus deltoideus with the point electrode until you strike the muscle-angle which is formed by the caput laterale of the triceps and the musculus deltoideus.

Since this summation point is not only co-responsible for the muscles and tendons of the upper- but also for those of the forearm and hand, it comes to abnormal values with indicator drop, with a tendomyositis or tendovaginitis of the forearm.

182

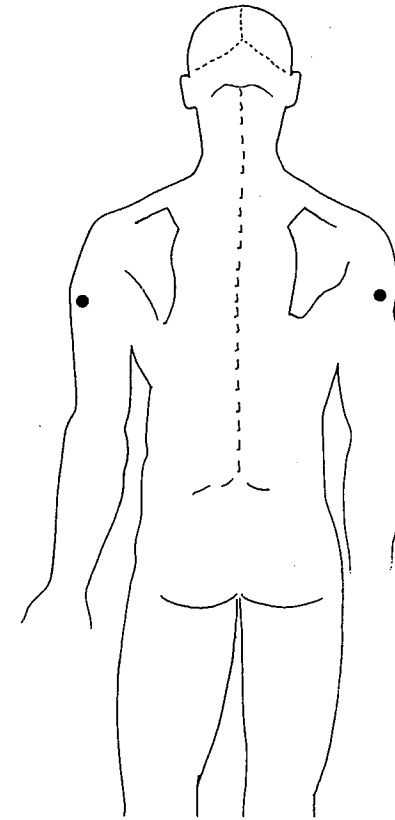


Fig. 96: Musculature of the upper extremity = 9. Small intestine

No. 70

Shoulder joint — articulatio humeri

15. Large intestine (15. LI.)

2. Circulation point (2. Ci.)

10. Small intestine (10. SI.)

105 118 306

r + l

Preliminary note:

This big joint can be measured in three portions from three different measurement points and its function be examined.

183

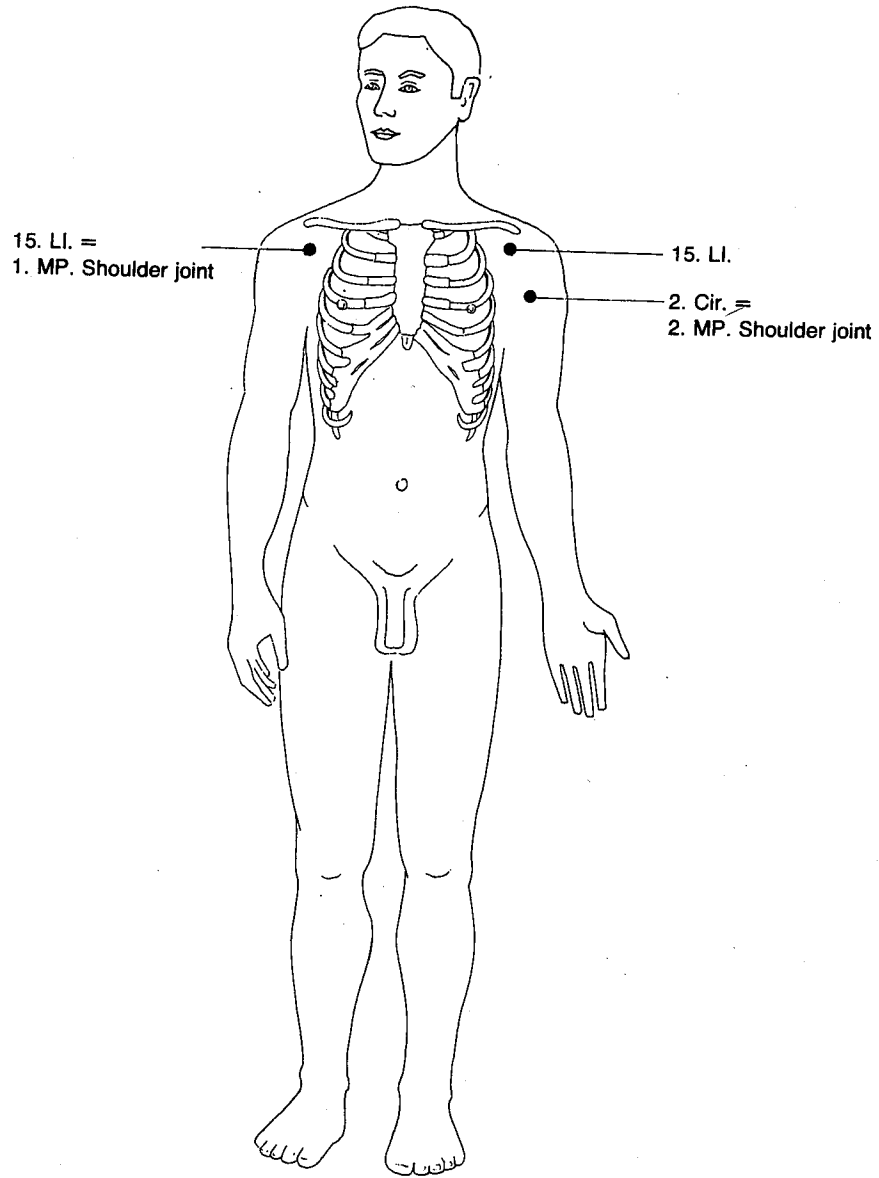


Fig. 97: 1. MP. Shoulder joint = 15. Large intestine, 2. MP. Shoulder joint = 2. Circulation

1. Anterior portion of the shoulder joint — 15. LI.:
 The 15. Large intestine joint measurement point lies in the regio infraclavicularis above the rounded end of the rectangularly, towards the lateral and forwardly bent processus coracoideus. To find the point *Voll* recommends the following technique: "You search the patient standing with horizontally raised arm for the small fossa below the clavicle which lies before the processus coracoideus. It is located in the trigonum deltoideo-pectorale which is presented by raising the arm and is also called 'Mohrenheim's fossa'. According to *Bachmann* this is an additional point of agreement for the shoulder."
 See Vol. I, fig. 7 and 18.
 It is responsible for the anterior portion of the shoulder joint.

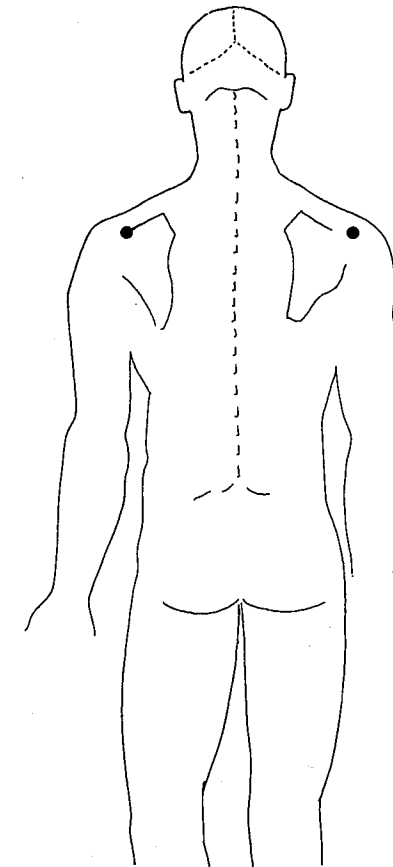


Fig. 98: Shoulder joint 3. MP. = 10. Small intestine

2. Inner region of the shoulder joint — 2. Cir:

The 2. circulation point is situated on the inner side of the upperarm above the muscle-angle which is formed by the medial margin of the musculus biceps brachii and the lateral margin of the musculus coracobrachialis.

As searching technique *VoII* recommends: "About two finger breadth below the front fold of the axilla with horizontally raised, rectangularly bent arm." See Vol. I, illustration 15a.

This point refers to the inner portions of the shoulder joint or the labrum glenoidale and the cavitas glenoidalis scapulae.

3. Posterior portion of the shoulder joint — 10. SI.:

The 10. small intestine point is situated in the regio scapularis of the shoulder at the beginning of the acromion above the lower margin of the spina scapulae in an osseous angle which is located at the end of the lower margin of the spina scapulae and the onset of the acromion. See Vol. I, fig. 21 and 22.

According to *Bachmann* this is an additional point of agreement of the arms and the shoulder joint.

This point is responsible for the posterior region of the shoulder joint.

In many cases the localisation of pain in the shoulder joints can point to the etiology of the complaints. In case of pain of the anterior portion of the shoulder joint (compare large intestine meridian course) there is a disturbance of a partial section of the large intestine. For example, in case of pain only at the right shoulder joint there can be a chronic appendicitis. Pain in the back of the shoulder can result from a disturbed function of the duodenum or the small intestine. Particularly in case of pain in the back of the left shoulder one must think of a previously undetected *Meckel's* diverticulum. In all cases of pain in the shoulder joint resistant to therapy one should think of this kind of possible disturbances.

No. 71

Shoulder-clavicle joint — articulatio acromioclavicularis

14. Triple warmer point — (Endocrine system) (14. 3—W.)

305

r + l

The 14. Triple warmer point — endocrine system lies above the middle of the articulatio acromioclavicularis in the regio deltoideo at the shoulder joint.

The acromion of the clavicle here lies close under the skin and is easily recognized as a shallow spot. See Vol. I, fig. 18. According to *VoII* you find the point by palpating the end of the clavicle and the acromioclavicular joint.

By means of the stroking technique you go along the joint gap and find the measurement point at the place of the highest indicator position. This point gives information about the state of the shoulder-clavicle joint.

186

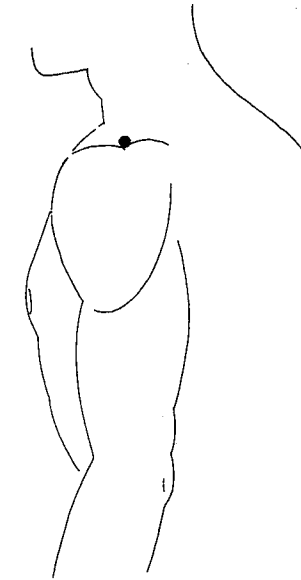


Fig. 99: Shoulder-clavicle-joint = 14. Triple warmer

E. Measurement Points at the Foot, the Lower Leg and the Thigh:

No. 72

Pancreas — pancreas

1 + 1a + 2 + 3 + 4 pancreas point = 1 + 1a + 2 + 3 + 4 spleen-pancreas-meridian

1 + 1a + 2 + 3 + 4 Sp/Pa.

530 — 527 524 522

only right

a) 1. Pancreas measurement point = 1. Spleen-pancreas-point:

The point is located above the tuberositas unguicularis of the nail limb of the right big toe, 2 mm distant dorso-lateral of the nailfold.

See Vol. I, fig. 3.

This measurement point gives information about the protease formation of the pancreas and the protein metabolism; these are trypsin, chymotrypsin and pancreas-erepsin and the proteases.

b) P. Pancreas measurement point:

(only right — no classical acupuncture point — was discovered by *VoII*) The P. pancreas-measurement point lies on the dorso-medial side of the proximal phalanx of the right toe in the distal angle between corpus and capitulum. See Vol. II, fig. 14b.

It is responsible for the peritoneal segment of the pancreas region.

187

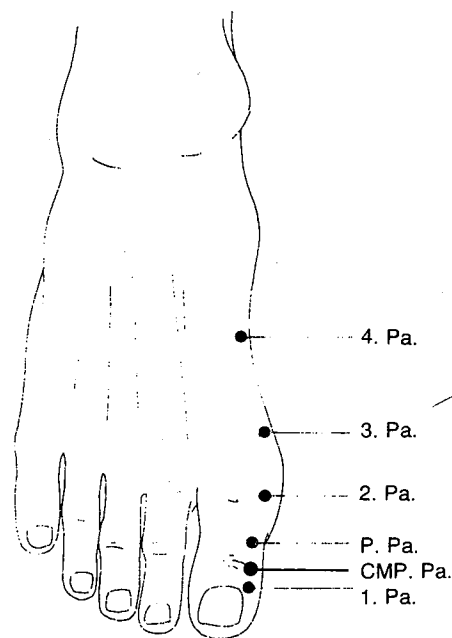


Fig. 100: MPs. Pancreas only right

- c) 2. Pancreas measurement point = 2. Spleen — pancreas point (right):
Situating above the proximal phalanx of the right big toe in the dorso-medial osseous angle between shaft and base. It is responsible for the nuclease production and the nucleo-protein metabolism.
- d) 3. Pancreas measurement point = 3. Spleen-pancreas point (right):
Situating at the distal end of the metatarsus of the right big toe in the dorso-medial angle of the corpus and capitulum.
Here the production of enzymes, amylases and maltases for the dissimulation of carbohydrates and the function of the islet-apparatus can be measured. The islet-apparatus is composed out of 80% B-cells, producing insulin, and 20% A-cells, producing glucagon.
- e) 4. Pancreas measurement point = 4. Spleen-pancreas point: Situating at the proximal end of the metatarsus of the right big toe at the dorso-medial angle of corpus and base.
Here above all the production of enzymes for the fat metabolism (esterases and lipases) is tested. As steapsin resp. lipase are activated by the bile the measurement points of the gallbladder system and the liver should be controlled too. In case of the diagnosis of a liver-gallbladder illness the pancreas should be tested.

Slow indicator drop at the measurement points of the pancreas meridian suggests a weakness of enzyme production.

Faster and more drastic indicator drop down to 40 at the 3. pancreas measurement point means suspicion of an acute diabetes, until 44—46 of a latent diabetes, requiring an oral glucose tolerance test.

See also page 171, Nr. 62b, measurement point for the inner secretion of the pancreas, which is present as well right as left.

No. 73

Spleen

1 + 1a + 2 + 3 + 4 Spleen point = Spleen-pancreas meridian

1 + 1a + 2 + 3 + 4 Sp/Pa.

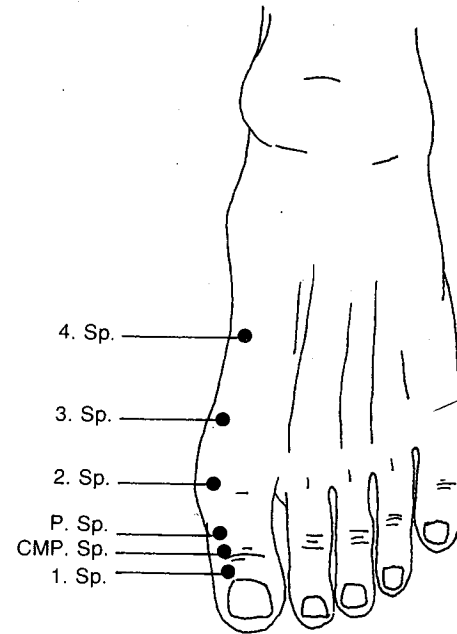
530 — 527 524 522

only left

In the same way as on both hands the described measurement points for the feet are valid for the corresponding points of the right and left side. An exception from this are the measurement points of the spleen-pancreas meridian which have to be measured only on one side for each organ. Accordingly the function of the spleen is measured only at the left, the function of the pancreas only at the right foot.

- a) 1. Spleen measurement point = 1. Spleen-pancreas point (left):
The point lies above the tuberositas unguicularis of the nail limb, 2 mm lateral of the nailfold of the big toe at the left side. See Vol. II, fig. 4. This measurement point concerns the white pulp of the spleen, the spleen-nodules or lymph follicle, consisting of germinal- and reactive centers which have defence-functions by producing lymphocytes and antibodies. Therefore this point (see *Voll.* 1. Supplement, pages 25—27) is important for the diagnosis of:
- a) a necrosis of the spleen-nodules in diphtheria
 - b) an atrophy of the spleen-nodules and their change into fibrous bodies as result of X-ray irradiation
 - c) a fibrous change of the follicles with fibroadenia of the spleen which is associated with an increase of not-efficient reticular lattice fiber and is found with *Morbus Banti*, and
 - d) a deposition of amyloid in the follicles and partly also in the reticulum-cells.

Beyond this the diseases of one or both tonsils and of the lymphatic ring of the pharynx are influencing the 1. measurement point of the spleen (white pulp).



CMP. = Control MP.

P. = MP. Peritoneum

Fig. 101: MPs. Spleen only left

- b) P. Spleen measurement point: (focal infections of the head)
 This measurement point — found by *Voll* — is located on the dorso medial side of the base-phalanx of the left big toe in the distal angle between shaft and capitulum of this bone. It is responsible for the peritoneum of the spleen-segment. See Vol. II, fig. 4.
 Disorders of the ligamentum phrenicolienale and the ligamentum gastrolienale extending from the large curvature of the stomach can be tested there.
- c) 2. Spleen measurement point = 2. Spleen-pancreas point:
 It is located above the base-phalanx of the left big toe on the dorso-medial side at the cranial angle of the bone at the transition zone from the shaft to the basis. Encumbrance of the white pulp arising by irritations in the lower portion of the body (abdomen and minor pelvis) can be measured here.

- d) 3. Spleen measurement point = 3. Spleen-pancreas point
 The point lies above the metatarsus of the left big toe on the dorso-medial side in the angle of the bone from the shaft to the capitulum.
 Here the function of the red pulp is measured together with the corresponding end-arteria, the venous sinus and the pulp veins which are responsible for the bloodcell-moulting, the quality-control of the erythrocytes. In detail can be diagnosed here the following:

- a) Hypertrophy of the spleen as found in a) infectious diseases and b) in organic heart defects, causing a congestive spleen.
- c) block of a branch of the spleen artery, anaemic spleen infarct;
- d) block of spleen veins in portal vein thrombosis;
- e) polycythaemia, *Werthoff's disease*.

In addition odontogenic foci have a disturbing effect on the white as well as the red pulp of the spleen expressed also in the measurement values of the 1. and 3. spleen measurement points.

- e) 4. Spleen measurement point = 4. Spleen-pancreas point:
 It lies on the metatarsal bone of the left big toe on the dorso-lateral side in the caudal osseous angle at the transition zone from the shaft to the base.
 It is responsible for the spleen reticulum, this cell sponge of the reticular connective tissue which represents the ground substance, the elementary tissue of the spleen.
 This tissue has the task to pick up and neutralize abnormal metabolic products, rests of fat and protein as well as bacterias etc. In this tissue also monocytes and macrophages are formed. This point, according to *Voll*, allows the determination:

- 1. Infectious diseases which, caused by bacteria, lead to a spleen swelling;
- 2. Accumulation of abnormal metabolic products like fat-protein drops as in
 - a) Hemosiderosis with an excessive supply of iron which is produced in a heavier lysis of erythrocytes;
 - b) Deposits of amyloid-protein with fat substances
- c) Cerebroside-storage diseases (M. *Gaucher*)
- d) Sphingomyelinosis (M. *Niemann-Pick*)

Basically therefore this point gives information about the reticuloendothelial defense capacity of the organism.

According to the movement of the indicator of the valve-voltmeter, an indicator drop from values of 88 on down at the spleen measurement points means a field of disturbance- or focal-irritation in the organism.

With an indicator drop from 90 and more an infectious irritation besides an occurrence of a field of disturbance has to be considered.

Liver — hepar

1 + 1a + 2 + 2a + 3 liver point — 1 + 1a + 2 + 2a + 3 Li.

529 — 526 — 521

r + l

a) 1. Liver measurement point = 1. Liver point

It is located above the tuberositas unguicularis of the nail limb of the big toe, 2 mm from the nail fold on the dorso-medial side, opposite of the spleen-pancreas point. See Vol. II, fig. 12.

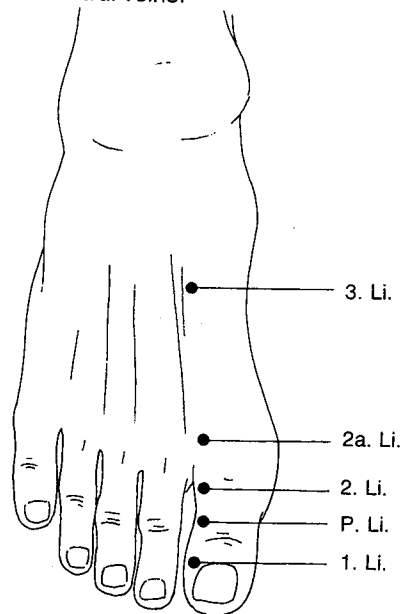
The point gives information about the central venous system of the liver, about the venae centrales with the collecting veins as the efferent veins into the vena hepatica. Also congestions into the central veins can here be determined as they are found in cardiac defects and congestion of the pulmonary circulation.

The consequences of such congestions are eventually:

1. a slow destruction of the liver-cells
2. an increase of the connective tissue in the walls of the central and collecting veins.

The terminal stage of this development is a congestive induration, a congestive atrophy or the so-called "nutmeg-liver". With strongly pathological measurement results at the liver points, particular attention should be directed also to the heart measurement values.

The retardation of an indicator drop is caused by the pressure of the intermediate tissue and by the increase of the connective tissue in the walls of the central veins.



P. = MP. Peritoneum

Fig. 102: MPs. Liver

A connective tissue degeneration of the liver shows at the first measurement point of the liver meridian no striking peculiar features but indeed at the third liver measurement point.

Hence the first measurement point of the liver meridian in principle is concerned only with the central venous system of the liver which above all can be harmed by:

1. alterations in the liver itself;
2. insufficiency of the heart — especially the right heart;
3. intoxications effecting the central venous system of the liver;
4. pathological alterations in the vascular system itself.

b) P. Liver measurement point — found by *Voll*:

This measurement point is located at the dorso-lateral side of the proximal phalanx of the big toe in the distal angle between shaft and capitulum of this bone.

The point gives information about the state of the peritoneum in the liver region and the suspensory-apparatus of the liver.

c) 2. Liver measurement point = 2. Liver point:

This point is situated above the proximal phalanx of the big toe on the dorso-medial side in the osseous angle at the transition zone from the shaft to the base.

It is responsible for the liver-lobuli-system, the lobuli hepatis. Here, all viral and bacterio-toxic burdenings of the liver cell can be diagnosed.

d) 2a. Liver measurement point = 2a. Liver point:

This measurement point, found by *Voll*, is located at the dorso-lateral side of the metacarpale of the big toe in the distal angle between the shaft and the capitulum of this bone. It is responsible for the initial segment of the biliary capillaries at the liver cells, the ductuli interlobulares.

e) 3. Liver measurement point = 3. Liver point:

The point is located above the cranial angle of the metacarpale between metacarpale 1 and 2 on the dorsal side of the foot.

Here the state of the periportal and the perivascular system can be measured.

Chronic liver diseases with changed measurement values at four liver points can be:

1. Liver cirrhosis with the most extensive indicator drop at the 3. measurement point of the liver meridian. Here is the matter an inflammation of the intermediate tissue with partial loss of the liver acinus. A regeneration of still preserved portions of the organ by forming of pseudo-acini with inflamed and infiltrated connective tissue is possible. Consequences of the process of liver cirrhosis are congestions and circulation derangements in the portal vein system (esophageal varicosis).

2. Biliary cirrhosis:

Here in question is a proliferation of connective tissue with a liver cell damage which starts off from the efferent bile ducts:

- a) By a chronic congestion which leads to a cholestatic cirrhosis or
 - b) by a chronic inflammation which ultimately is also associated with a congestion and characterized as cholangitic cirrhosis which is manifesting itself by a distinct indicator drop at the measurement points for the bile ducts.
3. With abnormal measurement results at the liver points therefore the following possibilities have to be considered:
- 1. Damage of the liver by chemical noxes, like insecticides absorbed by food-stuff and beverages, pesticides, herbicides, preservatives, softening agents (plasticizers), absorbed by the way of the skin, in cleaning- and solving agents (trichlorethylene, carbon tetrachloride, isopropyl-alcohol, xylene, toluene, acetone, etc.), additives in cosmetics and hair lotions, cresol as hair-dye, especially also solving agents for plastics (dimethylteraphthalate, adipin acid), colors for cloth printing (anilins, bencanthren), bleaching agents for white laundry, absorbed by inhalation resp. skin contact, exhaust and waste gases (ethene epoxide, benzine, benzol, benzpyrin, cadmium, lead, asbestos-dust); these are measured at the MP. Li. 3, bilaterally.
 - 2. Infectious diseases, viral or bacterial-toxic burdening, measured at the MP. Li. 2.
 - 3. Vascular diseases of the liver, measured at the MP. Li. 1.
 - 4. Bile congestion, measured at the MP. Li. 3 and the gallbladder measurement points.
- a) The indicator staying far below 50 at some or all points of one or both sides indicates a partial or — according to the measurement results — more or less progressive liver cirrhosis.
 - b) Fast indicator drop or indicator drop with low readings at the 3. measurement point indicates an inflammation of the intermediate tissue or the portal tissue respectively which has to be evaluated as a pre-stage of a liver cirrhosis.
 - c) Slow indicator drop at the 2. measurement point justifies the diagnosis of an alimentary fat-liver. For a more accurate interpretation of this phenomena also the measurement points of the vessel for the fatty degeneration should be regarded where an indicator drop at the 1. measurement point should be found too.
 - d) Unilateral indicator drop at the 2. measurement point with normal values at the opposite side is often found with defect recovery of the liver after inflammations which also can be an expression of a participation of the liver in severe general infectious diseases like severe childhood diseases.
 - e) An indicator drop on both sides of the 3. liver meridian measurement point together with one at the spleen or the anal canal suggest a beginning liver cirrhosis.
4. An indicator drop at the 1. measurement point of the liver meridian and the rectum at one or several points are indicating hemorrhoids caused by congestion in the portal vein (see also page 224 and page 212, fig. 112) region.

No. 75

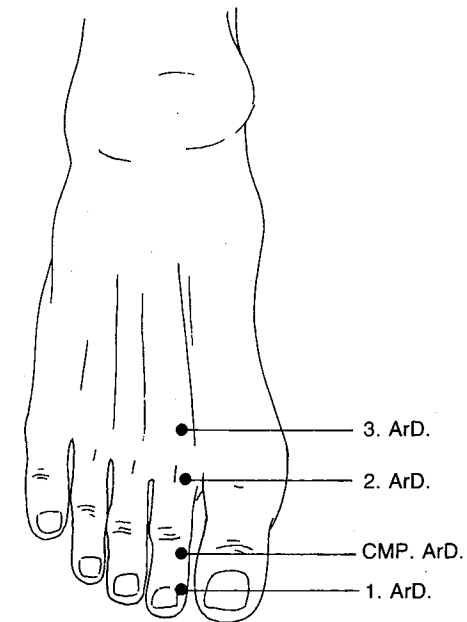
Articular degeneration vessel

1 + 1a + 2 + 3 Articular degeneration measurement points — 1 + 1a + 2 + 3 ArD.

The vessel of articular degeneration was achieved by the work of Voll.

— — — —
 — — — —
 r + l

- a) 1. Measurement point = 1. articular degeneration point:
 It is located on the tuberositas unguicularis of the nail limb of the second toe, 2 mm from the nail fold on the dorsal side, on the side of the big toe. See Vol. II, fig. 32.
 This point is responsible for the joints of the corresponding lower extremity, for the sacro-iliac and the lumbal vertebral joints.
- b) Control measurement point — articular degeneration:
 This point is situated on the dorso-medial proximal side of the medium limb of the second toe at the angle of the shaft and the base. See Vol. II, fig. 32.
 Here a degenerative process, concerning all joints (including the spine) can be controlled.



CPM. = Control MP.

Fig. 103: MPs. of the articular degeneration = MPs. ArD.

- c) 2. Measurement point = 2. Articular degeneration point:
It is situated above the proximal end of phalanx of the second toe on the dorso-tibial side in the osseous angle between the shaft and the base. It refers to the lower cervical and thoracic vertebral joint, the joints of the shoulder and the upper extremity.
- d) 3. Measurement point = 3. Articular degeneration point:
It is situated above the distal end of the metatarsus of the second toe at the dorso-tibial margin in the osseous angle between shaft and capitulum. This measurement point includes from the upper cervical vertebral joints the atlanto-occipital, the atlanto-axialis and the jaw joint.

No. 76

Stomach — ventriculus

45 + 45a + 44 + 43a + 43 + 42 stomach point — 45 + 45a + 44 + 43a + 43 + 42 St.

515 — 525 528 523 520

r + l

- a) 1. Stomach measurement point = 45. stomach point:
This point is located above the tuberositas unguicularis of the nail limb of the 2. toe, 2 mm away from the nail fold on the dorso-fibular (little toe)-side. See Vol. II, fig. 8.
It gives information about the pyloric canal at the right and about the corpus ventriculi at the left.
- b) P. Measurement point of the stomach — found by *Voll*:
The P.-point lies on the dorso-lateral side of the proximal phalanx of the second toe in the distal angle between shaft and capitulum of this bone. See Vol. II, fig. 8.
It is responsible for the peritoneum in the stomach region and also the ligaments extending from the stomach including the omentum minus.
- c) 2. Stomach measurement point = 44. stomach point:
It is located above the proximal end of the proximal phalanx of the second toe at the dorso-fibular angle of the bone between corpus and base.
At the right side this measurement point gives information about the antrum pyloricum and at the left side about the fundus ventriculi.
- d) 43a. Stomach measurement point — found by *Voll*:
It is located above the proximal osseous angle of the metatarsus II on the dorso-fibular side. This measurement point corresponds on the right to the cardiac portion of the stomach.
It is "responsible" for the right resp. left portion of the gastric pathway in the ascending section.

- e) 3. Stomach measurement point = 43. Stomach point
The point is situated above the metatarsal angle between the metatarsus II and III on the dorso-fibular side at the transition zone from the shaft to the basis. This measurement point corresponds at the right with the corpus ventriculi in the ascending portion and at the left with the pyloric portion of the stomach.

Indicator drop at the right measurement points can indicate:

- a) a gastric ulcer
If there is a deep, penetrating ulcer, there is simultaneously an indicator drop at the pancreas. In a gastro-duodenitis there exists at the same time an indicator drop at the 4. St. measurement point at the right (MP. for the duodenum, pars horizontalis superior)

An indicator drop at the left 43. St. measurement point can signify

- a) cardiac portion at the entrance of the stomach; in local alterations resp. functional disturbances in this region has to be thought of (see page 242, fig. 140):
1. a diaphragmatic hernia (MP. Diaphragma has to be measured too = 17. Ub.)
2. beginning degenerative alterations in this region; here the indicator drop starts with irritations values of 65—80.

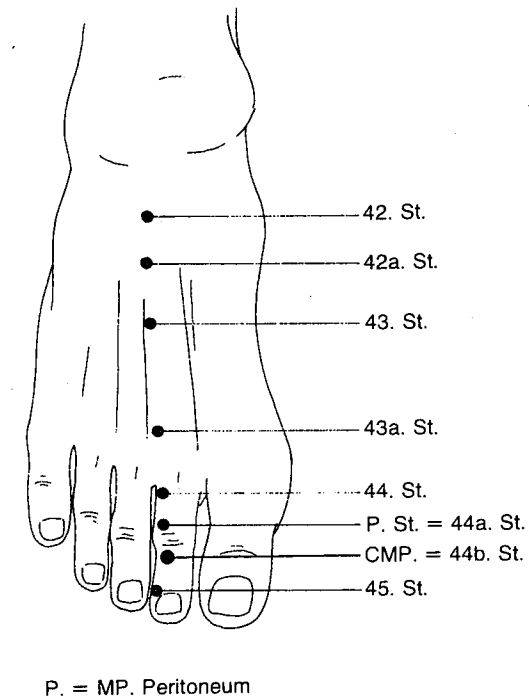


Fig. 104: Measurement points of the right portions of the stomach and esophagus

3. diverticulum in the cardiac region; indicator drops in inflammatory states of the diverticulum 82—88.
4. reflux-esophagitis

b) body of the stomach, right portion, 43. St. right 43a. St. right
The often occurring esophagus spasms can be eliminated quickly by low frequent current impulses. They can be diagnosed by measurement values of the esophagus points which differ strongly, i. e. differences of more than 10, often up to 20 and 30 appear. The equilibration of these differences by point-discharging down to 50 brings about the relaxation.

f) 4. Stomach measurement point = 42a. Stomach point:
It is situated in the extension of the 43. stomach measurement point above the tarsus bones, about 1 finger breadth cranial of this one, at the distal margin of the os cuneiforme II. See Vol. II, fig. 8. It is responsible for the lower portion of the esophagus on the left respectively right side (see also no. 107).

g) 5. Stomach measurement point = 42. Stomach point:
It is located at the dorsum of the foot in the extension from 43. to the 42a. Stomach measurement point, about 1 finger breadth cranial of the latter between the os naviculare and the os cuneiforme II and II. See Vol. II, fig. 8.
It is responsible for the upper portion of the esophagus (see also no. 108).

No. 77

Fibroid degeneration

1 + 1a + 1b + 2 + 3 fibroid degeneration — 1 + 1a + 1b + 2 + 3 FiD.

No classical meridian. The measurement points for the fibroid degeneration vessel have been worked out by *Voll*.

r + l

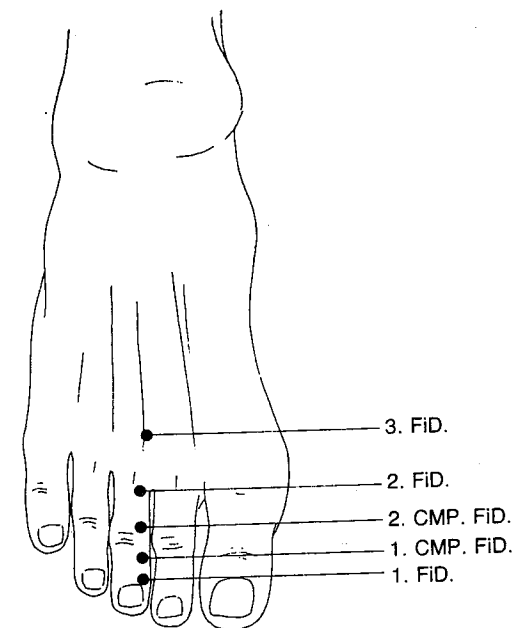
In detail the following pathological processes can be comprehended under the collective term "fibroid degeneration" (see *Voll*. 1. supplementary volume, page 51):

fibrosis,
cirrhosis,
stenosis produced by chronic inflammations without compressions;
strictures,
benign tumors of the connective- and interstitial-tissues,

fibromas of the skin and the mucous membranes like polyps or papillomas, and pathological changes of individual organs becoming manifest as organ-fibrosis. The individual measurement points for this complex of disorders are:

a) 1. Measurement point — fibroid degeneration:
Located above the tuberositas unguicularis of the nail limb of the third toe — 2 mm away from the nail fold at the dorso-tibial side. See Vol. II, fig. 28. The measurement of this point covers the organs in the abdomen, in the small pelvis, the external urogenital organs and also the veins of the lower extremities. In detail the following possibilities of diagnosis should be considered:

1. Fibroma of the liver
 - a) Following a carbonmonoxide intoxication and
 - b) Following an acute, severe anemia
 - c) As a result of an acute insufficiency of the right ventricle.
2. Fibrosis of the pancreas
3. Nephro-cirrhosis
4. Fibroadenia of the spleen
5. Stenosis of the pylorus, bile duct or ureter by scar-tissue.



1. CMP. FiD. = 1. Control MP. for the fibroid degeneration of the organs
2. CMP. FiD. = 2. Control MP. for the fibroid degeneration of the mucous membranes.

Fig. 105: MPs. of the fibroid degeneration vessel = MPs. FiD.

6. Stricture of the urethra
 7. Polyposis of the intestine
 8. Papillomas of the urinary-tract
 9. Cysts of the ovars, the kidneys or the liver
 10. Phlebo-fibrosis
- b) Control measurement point — fibroid degeneration, $r + l$. The control measurement point is situated at the back of the foot at the tibial side of the middle limb of the third toe at the proximal angle of the shaft and capitulum.
- c) 1. Control measurement point — $r + l$:
The control measurement is situated on the dorso-medial side at the proximal angle of the shaft and the base of the middle limb of the third toe.
Here the fibroid degeneration of the organs of the respective halves of the body can be controlled.
- d) 2. Control measurement point — $r + l$ (mucosae):
This measurement point is located on the dorso-medial side of the proximal phalanx of the third toe in the distal angle between shaft and capitulum.
It permits the control of the process of fibroid degeneration in the whole region of the mucous membranes of the respective body halves.
This measurement point corresponds in its position to the measurement points of the peritoneum.
- e) 2. Measurement point — fibroid degeneration:
It is located above the proximal phalanx of the third toe at the dorso-tibial angle of the bone between corpus and base.
This point is responsible for the organs of the chest, the neck and the mammae.
With an indicator drop at this point you can get a hint whether the following disorders are present:
1. Stenosis of the esophagus
 2. Stenosis of the heart valves
 3. Fibroadenoma or cysts of the mamma
 4. Cysts of the thyroid gland
- e) 3. Measurement point — fibroid degeneration:
It is located above the distal end of the metatarsus of the third toe at the dorso-tibial angle between corpus and capitulum. Its "responsibility" includes the mucous membranes in the region of the mouth, the nose, the middle-ear and the throat and also the bones of the face and the skull.
With abnormal measurement results at this 3. measurement point of fibroid degeneration the following diagnoses have to be considered:
1. Osteofibrosis at the jaw-bones
 2. Fibromas of the nasal-pharyngeal-region
 3. Polyposis nasi
 4. Polyps of the ear
 5. Papillomas of the mouth

No. 78

Skin

1 + 1a + 2 + 3 skin measurement point — 1 + 1a + 2 + 3 SK.

No classical meridian — found by *Voll*.

35—0 35—3 35—4 35—6

514 — 510 504

 $r + l$

- a) 1. Measurement point — skin:
It is located above the tuberositas unguicularis of the nail limb of the third toe, 2 mm away from the dorso-fibular edge of the nail fold. See Vol. II, fig. 20.
This measurement point is responsible for the skin of the abdomen, the lower back, the seat and the lower extremities.
- b) 1a. measurement point — skin: scar measurement point:
This point is located on the dorso-fibular side of the proximal phalanx of the third toe in the distal angle of the corpus to the capitulum. See Vol. II, fig. 20. It is responsible for all scars of the skin.
In his instruction courses *Voll* points out that an active field of disturbance by a scar is present if the indicator drops from values of 88 to 82. By measuring the three skin points one can determine at once in which region of the body the

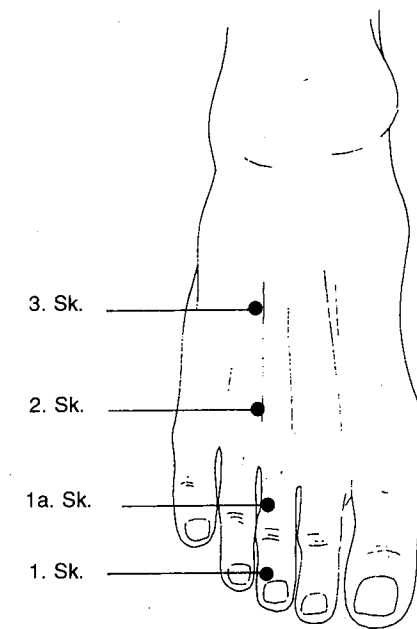


Fig. 106: MPs. of the skin

disturbing scar is located. The indicator drop at the corresponding skin measurement point gives the hint. Exists an indicator drop at the 1. skin measurement point the field of disturbance by the scar has to be searched for in the lower part of the body and the lower extremities.

The exact extension of the field of disturbance can be determined by stroking the moistened scars with the measurement stylus since only in the field of disturbance the values lie above 80. Only in this region should be injected. After sufficient injections into the field of disturbance the indicator drop at the measurement point skin-scar disappears at once and the value at the measurement point skin-scar is adjusted to 50 — if there isn't yet another field of disturbance of the skin.

This unerring procedure saves much time to the neural therapist and a great deal of otherwise applied injections to the patient.

c) 2. Measurement point — skin:

This point lies above the distal angle of the metatarsus III in the dorso-fibular angle of the bone between corpus and capitulum.

Here the skin of the chest, the upper back, the neck, the nape and the upper extremities can be tested.

d) 3. Measurement point — skin:

The point lies above the proximal end of the metatarsus III on the dorsal side of the foot.

It is responsible for the skin of the face and the skull including the hair.

To make sure the diagnosis of these measurement points, also the allergy-points should be measured (see no. 60, page 166). In reverse it can be decided by this combination of measurement points whether an existing allergy is caused by a skin-effective allergen or by incorporated factors of disturbances.

To secure the tested measurement values, also the allergy points have to be measured (see page 167, fig. 85). In reverse, by this measurement point combination, it can be clarified whether an existing allergy is caused by allergens inside of the body or by contact-allergens from outside.

No. 79

Fat metabolism — fatty degeneration

1+1a+2+3 point for fatty degeneration — 1+1a+2+3 FaD.

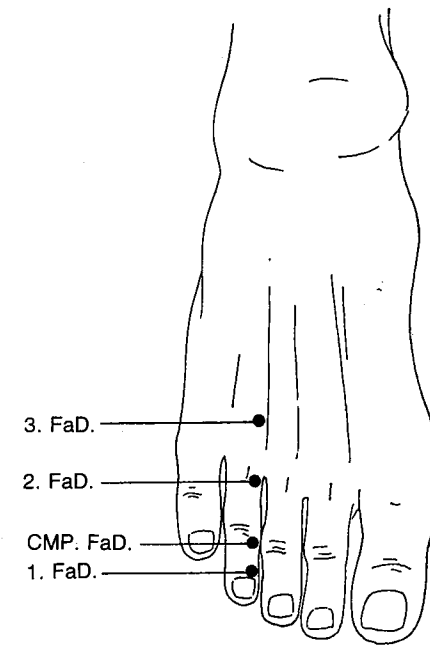
No classical meridian. The measurement points for fatty degeneration have been worked out by *Voll*.

— — — —
r + l

Preliminary remark

According to *Voll* basically the following pathological changes can exist in a fatty degeneration:

1. Small drop fatty degeneration of the cardiac muscle as caused by phosphoric or arsenic intoxication, in autointoxication, in diphtheria, anemic infarcts or by occlusion of the coronary arteries (small drop fatty degeneration);



CMP. = Control MP.

Fig. 107: MPs. for the fatty degeneration

2. Large drop fatty degeneration in the acinus-peripheral liver cells as a result of intestine tuberculosis, of phosphoric or acute mushroom poisoning
3. Small drop fatty degeneration in the centre of the liver lobuli as found in chronic anemia;
4. Fine drop fatty degeneration in the renal epithelia in hypoxemia, in a chronic anemia or a toxic damage of the epithelia.

As special terms here the expressions "lipomatosis" and "hyalinosis" are used. Hereby one understands:

Lipomatosis: an organ-related adiposity which is characterized by fat-streaked structure of the parenchymatous tissue as it is found for example in general obesity. For arteriosclerosis the existence of a hyalinosis, a lipoidosis and a calcinosis is considered as characteristic. Lipoidosis means a disorder in the metabolism of the neutral fats and lipids with deposits in the intima.

Hyalinosis means the transformation of tissue into vitreous, homogeneous masses with colloidal degeneration and necrosis.

- a) 1. Measurement point — fatty degeneration:
The point lies above the tuberositas unguicularis of the nail limb of the fourth toe, 2 mm away from the nail fold on the dorso-tibial side. See Vol. II, fig. 29. It includes the organs and vessels of the abdomen, the small pelvis and the lower extremities.
Here can be diagnosed fatty liver, lipoid-nephrosis, lipomatosis of the pancreas etc.
- b) Control measurement point — fatty degeneration:
The point lies on the dorso-tibial side of the fourth toe, at the proximal angle of the shaft to the base of the middle toe-limb. It constitutes the control measurement point for the fatty degeneration in the whole body. It at once gives a hint-diagnosis.
- c) 2. Measurement point — fatty degeneration:
The point lies above the proximal phalanx of the fourth toe in the proximal angle of the corpus to the capitulum. It is responsible for the organs and vessels of the chest and the upper extremities and indicates abnormal values for example in a fatty degeneration of the cardiac muscle, the coronary arteries or the aorta etc.
- d) 3. Measurement point — fatty degeneration:
The point lies above the distal angle of the bone, the metatarsus of the fourth toe between the corpus and the capitulum.
Here the degenerative manifestations of the jaw-bone and the brain-vessels can be measured.

No. 80

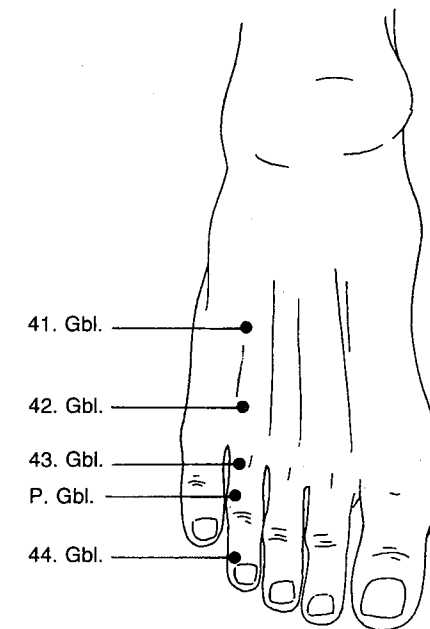
Gallbladder — vesica fellae

44 + 44a + 43 + 42 + 41 gallbladder point — 44 + 44a + 43 + 42 + 41 Gbl.

513 — 509 506 503

r + l

- a) 1. Gallbladder measurement point = 44. gallbladder point
It is located above the tuberositas unguicularis of the nail limb of the fourth toe, 2 mm away from the nail fold on the dorso-fibular side of it. See Vol. II, fig. 13. At this point is measured: on the right side the common bile duct and on the left side the common hepatic duct.
- b) P.-point = 44a. Gallbladder point — only on the right — found by *Voll*:
This special point lies at the dorso-fibular side of the proximal phalanx of the fourth toe in the distal angle between the shaft and the capitulum of the bone. See Vol. II, fig. 13a.
It is the measurement point for the peritoneum in the region of the gallbladder. The posterior wall and the fundus of the gallbladder are covered with peritoneum.



P. = MP. Peritoneum

Fig. 108: MPs. Gallbladder and biliary ducts

- c) 2. Gallbladder measurement point = 43. Gallbladder point:
The point lies above the proximal end of the proximal phalanx of the fourth toe at the dorso-fibular angle of the corpus to the capitulum.
Here is measured: at the right side the cystic duct and at the left side the right hepatic duct.
- d) 3. Gallbladder measurement point = 42. Gallbladder point:
This point lies above the distal end of the metatarsus of the fourth toe in the dorso-fibular angle of the corpus to the capitulum.
It is responsible for the gallbladder at the right side and for the left hepatic duct. Indicator drop at the gallbladder on the right with a simultaneous indicator drop at the small intestine on the right indicates an affection of gallbladder and bile duct with an irritation of Vater's papilla. Indicator drops with high values on the right as well as on the left side indicate a cholangitis. If the illness is persisting also an indicator drop at the liver on the right and left side can be observed. Indicator drops with low values at the gallbladder and the liver measurement points on both sides and also at the spleen suggest a beginning biliary cirrhosis. Insufficiency-position of the indicator at the gallbladder as well as at the liver indicate a pronounced biliary cirrhosis.
- e) 41. Gallbladder point:
This measurement point lies on the dorso-fibular side of the metatarsal bone of the fourth toe in the cranial angle between the shaft and the base of the bone. On the right it is responsible for the ductuli biliferi in the right liver-lobe and on the left for the ductuli biliferi in the left liver-lobe. In addition attention may be paid to the measurement point 2a. Liver (see 74d, page 193) for the ductuli interlobulares.

No. 81

Kidney-ren

r1 + 1.1 + 1.2 + 1a + 2 + 2a + 3 kidney point-L 1 + 1.1 + 1,2.2 + 1a + 2 + 2a + 3 Ki.
512 — — 507 519 — 516
r + l

- a) 1. Kidney measurement point:
No classical acupuncture point: it was achieved by the work of Voll.
The point lies on the tuberositas unguicularis of the nail limb of the little toe, 2 mm away from the nail fold at the dorso-tibial side. See Vol. I, fig. 3.
It is responsible for the energetic situation in the renal pelvis.

- b) 1.-1 Kidney measurement point:
No classical acupuncture point: it was achieved by the work of Voll.
This point lies at the proximal angle between the shaft and the base of the middle limb of the little toe on the dorso-tibial side.
It serves as control measurement point for the energetic processes in the region of the kidneys and the ureter, upper portion.
- c) P. Kidney measurement point: = 1.-2 Kidney:
No classical acupuncture point — was found by Voll.
This measurement point lies still on the dorso-tibial side of the basal joint of the little toe in the distal angle between the shaft and the capitulum. See Vol. II, fig. 14. It is responsible for the peritoneum which covers the kidney. The peritoneum covers the region of the kidney only in the lateral and upper portion of the kidney. The left kidney possesses lesser portions of the peritoneum than the right.
- d) 1a. Kidney:
No classical acupuncture point — it was worked out by Voll. The point is located between the fourth and the little toe at the tibial side in the proximal angle between the shaft and the base of the proximal phalanx of the little toe. See Vol. II,

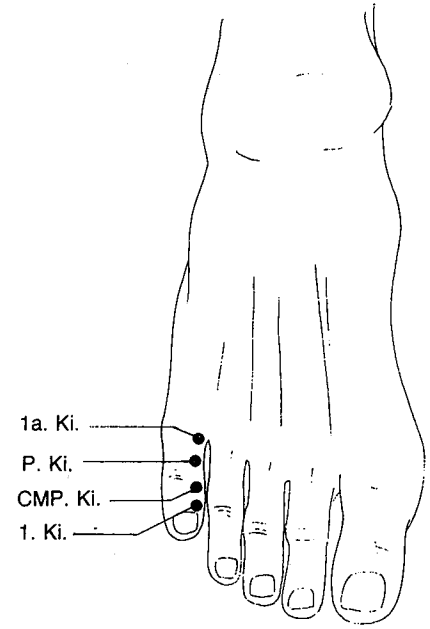


Fig. 109: MPs. of the kidney at the inner side of the little toe

fig. 18. Here the energetic state of the ureter, abdominal portion, can be controlled. At this point the kidney-meridian leaves the dorsal side of the foot and passes diagonal under the sole of the foot to the inner side of the foot.

- e) 2. Kidney measurement point = classical 2. Kidney point
It is situated on the inner side of the foot below the tuberositas of the os naviculare. See Vol. I, fig. 14 and 29.
It gives information about the pyelorenal region which comprises the renal medulla adjoining the papillary region, the rounded spices of the renal pyramids, the papillas with the collecting tubes, the main and accessory renal calices.
With an indicator drop only at the 2. Kidney point has to be thought of a stone or renal gravel.
- f) 2a. Kidney measurement point — no classical acupuncture point, found by *Voll*:
The point is located about $1\frac{1}{2}$ finger breadth below the point of the malleolus medialis. See Vol. II, fig. 18.
This point is "responsible" for the renal medulla, for the straight canaliculi and collecting tubules. Indicator drops at the kidney measurement points on one side permit to think of a field of disturbance or a focal toxicosis which comes

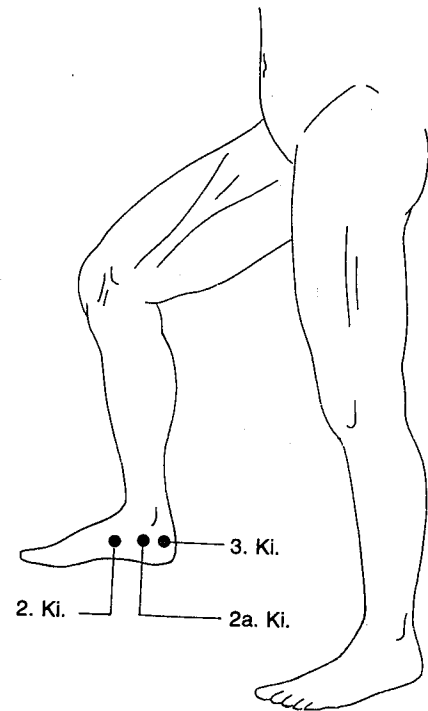


Fig. 110: MPs. of the kidney at the inner side of the foot 2. and 3. Kidney point are classical acupuncture points

from the tonsils of the same side and encumbers the kidney. Indicator drop on both sides with high values means an acute inflammatory process in the concerned region with disturbance of the function or restriction. Values between 60 to 70 with indicator drop can mean an excretion-disturbance after a chronic disease. Insufficiency-position of the indicator is a sign of a degenerative process or a nephrocirrhosis.

- g) 3. Kidney measurement point = classical 3. Kidney point
The point is situated on the inner side of the calcaneus in the middle above the fossa calcanea. See Vol. I, fig. 14.
It is responsible for the renal parenchyma, i. e. the glomerula and the tubuli contorti.

No. 82

Urinary bladder — vesica urinaria

67 + 67a + 66 + 65 + 64 urinary bladder point — 67 + 67a + 66 + 65 + 64 Ub.

511 — 508 505 502

r + l

- a) 1. Urinary bladder measurement point = 67. Urinary bladder point:
The point lies above the tuberositas unguicularis of the nail limb of the little toe, 2 mm away from the nail fold on the dorso-fibular side. See Vol. I, fig. 3.
This point is responsible for the corpus of the urine bladder.
- b) P.-urinary bladder measurement point:
Not a classical acupuncture point — it was found by *Voll*.
This P.-point lies on the dorso-fibular side in the distal angle between the shaft and the capitulum of the proximal phalanx of the little toe. See Vol. II, fig. 14.
It is responsible for the peritoneum in the region of the urinary bladder.
In males the right portion of the peritoneum also covers the seminal vesicle.
In females the urinary bladder, uterus, ovary, ligamentum ovarium proprium and the tuba uterina with the exception of the ostium abdominale tubae is covered by peritoneum; furthermore also the excavatio vesicouterina and the excavatio rectouterina.
- c) 2. Urinary bladder measurement point = 66. Urinary bladder point:
It is located above the proximal phalanx of the little toe in the dorso-fibular angle of the bone between the shaft and the base. See Vol. I, fig. 3.
This point is responsible for the trigonum vesicae with the enterings of the ureter and the beginning of the urethra.

- d) 3. Urinary bladder measurement point = 65. Urinary bladder point:
It is situated above the metatarsus of the little toe in the dorso-fibular angle of the bone at the transition zone from the shaft to the capitulum.

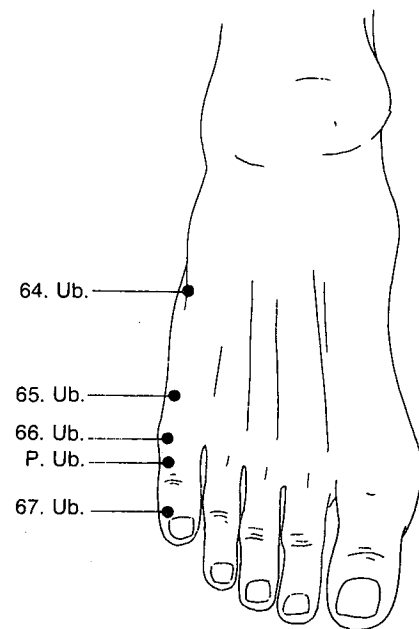
The point is responsible:

1. in females
for the urethra, the vagina, the *Bartholin's* gland, the uterus, the pars interstitialis tubae uterinae and the parametrium;
2. in males
for urethra, penis, *Cowper's* glands, the colliculus seminalis, the prostate and the vesiculae seminalis.

- e) 4. Urinary bladder measurement point = 64. Urinary bladder point:
This point is located above the metatarsus of the little toe in the dorso-fibular angle of the bone at the transition zone from the shaft to the base. See Vol. I, fig. 3.

His measurement values correspond

1. in females
to the ampulla tubae, the ostium abdominale tubae uterinae;



P. = MP. Peritoneum

Fig. 111: MPs. of the urinary bladder and the urogenital organs

2. in males

to the deferent canal and the epididymis.

For differential diagnostics there are to be tested out 8 differentiated measurement points quoted further below, from which the electroacupuncture has worked out alone 6 additional points (see no. 95, 96, 97, 98, 99, 100, 101, 102 and 103).

The urinary bladder meridian represents with its 67 acupuncture measurement points the longest meridian of the human body which starts in the inner eye angle and takes its course along the head and nape, to both sides of the spine, then at the backside of the leg to end at last at the outer side of the little toe.

Since this meridian in its extended course possesses numerous secondary vessels it is comprehensible that the possibilities of diagnosis at the 4 end measurement points comprise a wide field.

Indicator drop with high values on both sides of the 66. and 67. Urinary bladder point indicate an acute cystitis.

A slow indicator drop beginning with values below 80 at all 3 measurement points on both sides gives reason to believe that there has been an operation of the prostate respectively of the urinary bladder.

Indicator drop on one side shows an irritation of the urinary bladder which has been transmitted from the surrounding to the bladder. In males the starting-point can be the prostate, the seminal vesicle or also the deferent canal.

Indicator drop on one side at the urinary bladder measurement point in females indicates an acute inflammation process in the region of the uterus, the adnexe or the parametrium.

Here the testing of potentiated organ preparations of the uterus, tuba uterina and parametrium are able to explain the situation. Indicator drops at the urinary bladder and the rectum on both sides can suggest the diagnosis "prolaps of the uterus".

Decreased indicator deflection on one side at the 3. Urinary bladder measurement point beginning below 80 indicate a hypertrophy of the prostate on one side.

For the rest, the insufficiency-position of the indicator at the urinary bladder measurement points incurs the suspicion of:

1. sphincter sclerosis
2. reduced capacity-performance of the bladder like with a shrinkage- or beam-bladder
3. diverticle-bladder with residual urine
4. papilloma of the urinary bladder
5. carcinoma of the urinary bladder with values below 30.

Ea) Lower Leg

No. 83

Rectum and canal of the anus

Measurement point rectum = 6. Kidney point

Measurement point anal-canal = 5. Kidney point

517

r + l

The 6. Kidney point is located at the medial side of the foot below the lower angle of the facies malleolaris medialis and the trochlea tali above the ligamentum deltoideum, pars tibeocalcanearis; $\frac{1}{2}$ finger breadth below and $\frac{1}{2}$ finger breadth to the side of the tip of the malleolus medialis in a small fossa. In a constipation of the rectum in most cases this region is lymphatically swollen and painful to pressure. See Vol. I, fig. 14, 15 and 29.

The measurement point for the canal of the anus is located one finger breadth vertical below the tip of the malleolus tibialis. It is the 5. Kidney measurement point. Increased values or indicator drops can indicate hemorrhoids, inflammatory irritation of the anal-canal, fissures or an eczema.

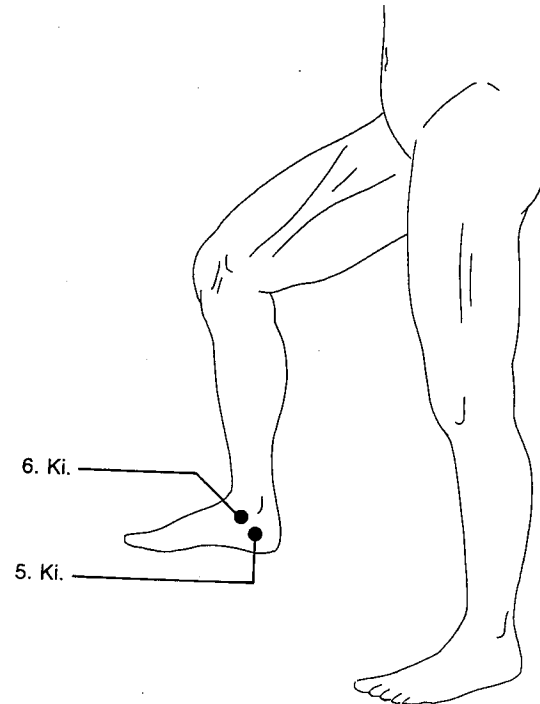


Fig. 112: MP. Rectum = 6. Kidney
MP. Anal canal = 5. Kidney

No. 84

Bone marrow measurement point = 39. Gallbladder point (39. Gbl.)

r + l

The 39. Gallbladder point is situated on the lateral fibular side of the lower leg, 3 finger breadth cranial from the beginning of the malleolus lateralis fibulae in the muscle angle of the musculus peroneus fibularis brevis and the musculus extensor digitorum longus. See Vol. I, fig. 23.

This point always should be brought into connection with the measurement values of spleen and liver.

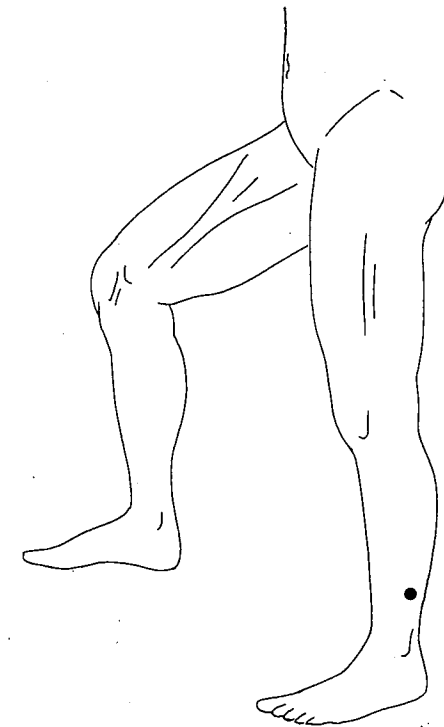


Fig. 113: MP. Bone marrow = 39. Gallbladder

No.85

Blood — sanguis

129

r + l

The measurement point Blood is situated on the point of tangential contact of the three meridians: liver, spleen-pancreas and kidney, namely of the 5. liver-, the 6. spleen-pancreas- and the 8. kidney-meridian measurement point at the inner side of the lower leg 4 finger breadth above the end of the malleolus medialis-tibialis on the posterior edge of the tibia.

Voll points out that this measurement point can show a dimension of up to 10 mm breadth and 30 mm length.

The significance of this point is that an indicator drop there proves a mikroskopisic or makroskopisic bleeding on the same side of the body. Details see text-volume I, 2. and 3. edition, page 66 of the work "Topographic positions of the measurement points in electroacupuncture".

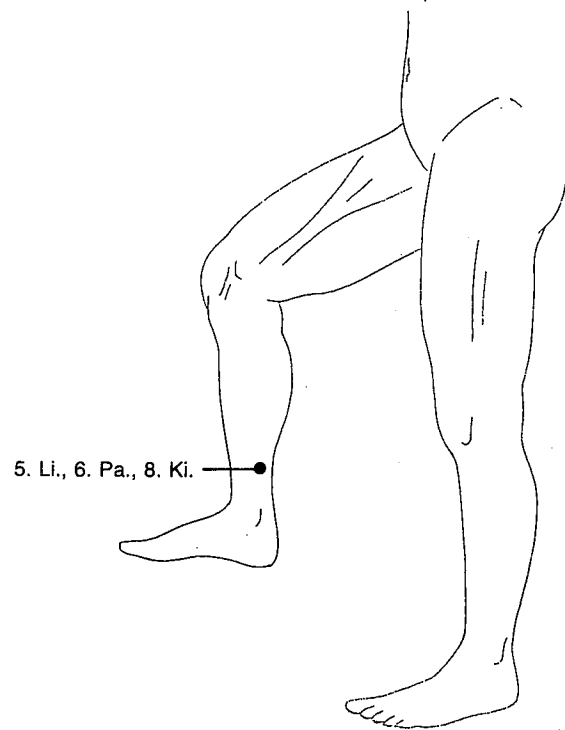


Fig. 114: MP. Blood = 5. Liver, 6. Spleen, 8. Kidney

No. 86

Diaphragma pelvis

7. spleen-pancreas point — 7. Pa/Sp.

115

r + l

This point is situated at the tibial side of the lower leg on the posterior edge of the tibia 2 hand's breadth above the highest elevation of the malleolus medialis tibiae. It is best measured with the help of the stroking technique. Changes at this point indicate an uterus-prolapse and a weakness of the fibroid tissue of the small pelvis. See Vol. I, fig. 17.

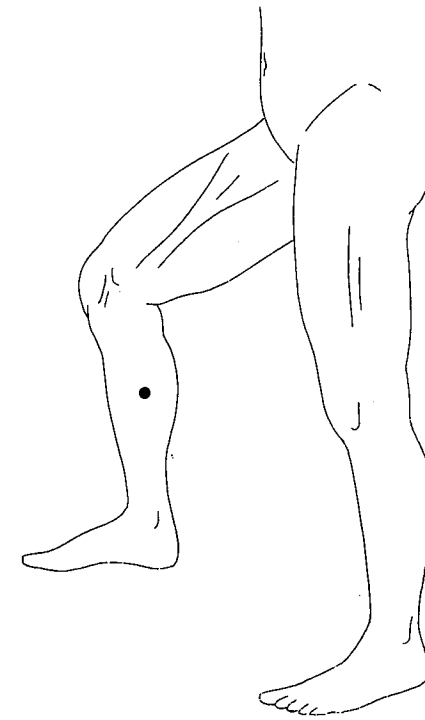


Fig. 115: MP. Diaphragma pelvis = 7. Spleen-pancreas

No. 87

Diaphragma urogenitale — anterior segment of the plate of the pelvic outlet
8. Spleen-pancreas point — 8. Sp./Pa.

114

r + l

The point is located on the tibial side of the lower leg 3 hand's breadth — the whole length of the tibia comes to $4\frac{1}{2}$ hand's breadth — above the highest elevation of the malleolus medialis tibiae at the posterior edge of the tibia. It is found most safely by the help of the stroking technique. See Vol. I, fig. 17.

In females this fibroid tissue-plate of the small pelvis is weakened through the passage of urethra and vagina. Accordingly in the female sinking- and prolapsus-tendencies can be diagnosed already early at this point.

Furthermore, also the musculus sphincter urethrae externus lies in this region. In sphincter-weaknesses of the female urinary bladder additional therapy can be applied by way of the 8. Sp/Pa.-point.

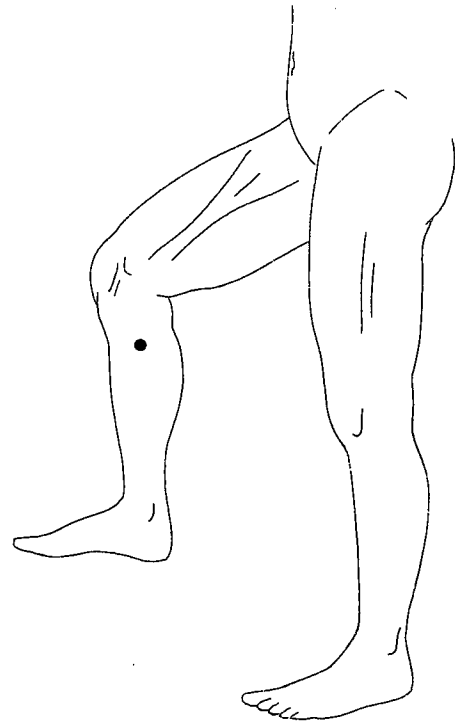


Fig. 116: MP. Diaphragma urogenital = 8. Spleen-pancreas

No. 88

Muscles of the lower extremity

Muscles measurement point = 34. Gallbladder point (34. Gbl.)

112

r + l

The 34. Gallbladder point is located on the lateral side of the lower leg vertical below the capitulum fibulae in the side-line of the lower extremities at the onset of the musculus peroneus longus. See Vol. I, fig. 23

An indicator drop can be registered here in a rupture of a muscle, myositis and a myasthenia gravis.

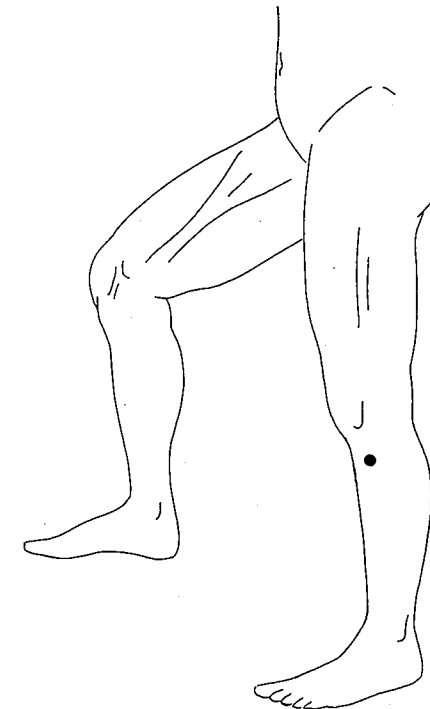


Fig. 117: MP. Muscles of the lower extremity = 34. Gallbladder

No. 89

Veins of the lower extremity

Vein measurement point = 7. Liver point — 7. Li.

127

r + l

The 7. Liver point lies on the inner side of the tibial head above the tuberositas tibiae at the upper, medial angle between the almost horizontally and vertically dropping off attachment of the tuberositas, 1 finger breadth lateral of the 9. Spleen-pancreas point for the lymphatic vessels of the lower extremities. See Vol. I, fig. 17.

This measurement point corresponds to the veins of the leg. An indicator drop can be a hint towards a beginning or existing thrombosis.

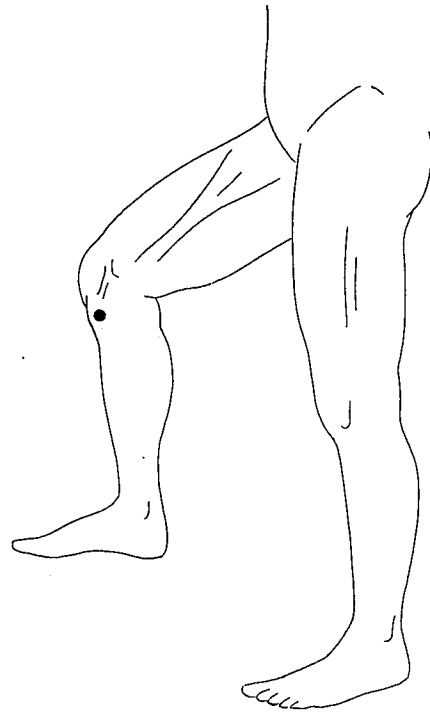


Fig. 118: MP. Veins of the lower extremity = 7. Liver

Eb) Transition Zone: Lower Leg — Thigh

No. 90

Knee joint

a) 54. Urinary bladder point — 54. Ub.

b) 35. Stomach point — 35. St.

c) 8. Liver point — 8. Li.

315 111 128

r + l

By testing the measurement values at all three points a statement can be made which portion of the knee joint is diseased the most. The height of the measurement values gives us the information whether the disease represents an arthrosis or an arthritis.

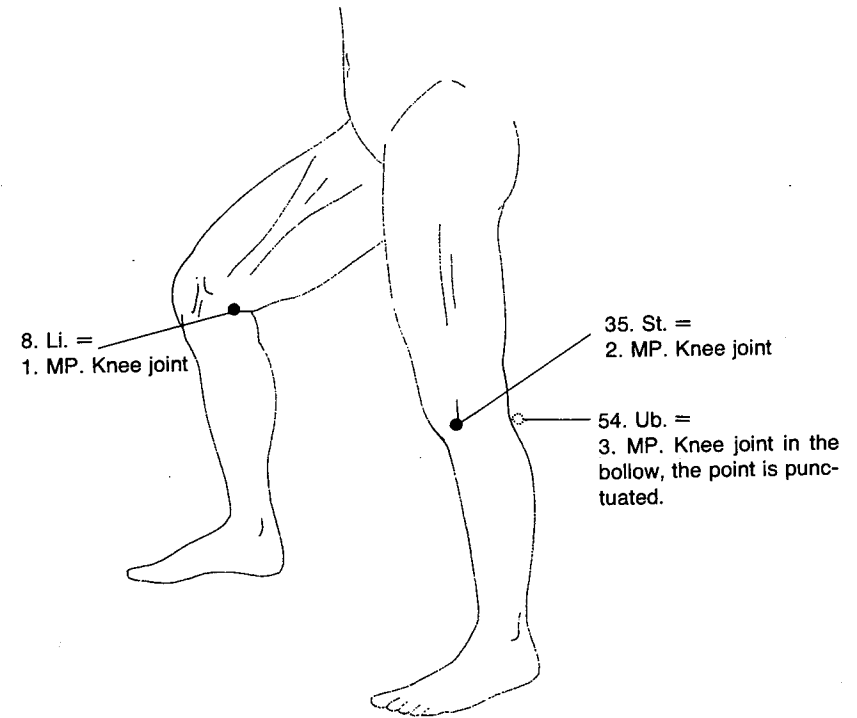


Fig. 119: The three MPs. of the knee joint = 8. Liver, 35. Stomach, 54. Urinary bladder

As a big joint the knee-joint possesses 3 measurement points by which the separate portions can be tested out exactly. Two of the 3 measurement points, namely MP. 1 = 8. Li. and MP. 2 = 35. St., are located on the front side of the leg and only the measurement point three, the 54. Urinary bladder measurement point, lies at the posterior side of the leg in the bend of the knee.

a) Knee joint — MP. 1 = 8. Li.

The point is situated at the front side of the knee joint at the margin of the tendon of the musculus sartorius in alignment with the medial gap of the knee joint, rather far behind. The tendon margin of the musculus sartorius passes approximately $\frac{1}{2}$ finger breadth off the end of the joint gap and approximately $\frac{1}{2}$ finger breadth off the end of the medial fold of the skin of the knee joint — which can be demonstrated well if the knee is deflected.

See Vol. I, illustration 7.

b) Knee joint — MP. 2 = 35. St.

This point is located at the front side of the knee joint in alignment with the lateral gap of the knee joint, approximately $\frac{2}{3}$ finger breadth off the side edge of the ligamentum patellae forward of the anterior margin of the retinaculum patellae laterale. See Vol. I, fig. 23.

It is responsible for the lateral region of the knee joint.

c) Knee joint — MP. 3 = 54. Ub.

The point lies at the posterior side of the leg in the middle of the poplitea above the cord of vessels and nerves which pass here.

See Vol. I, fig. 16.

It is responsible for the knee joint's posterior region.

Eb) Lower Extremity — Thigh Front Side

No. 91

Veins of the pelvis — pelvic veins

Pelvic veins measurement point = 10. Spleen-pancreas point — 10. Sp/Pa.

126

r + l

The 10. Spleen-pancreas point is situated on the medial inner side of the lower segment of the thigh above the muscle-angle between the outer edge of the musculus sartorius and the medial margin of the musculus vastus medialis, 1 finger breadth above and 3 finger breadth lateral off the medial edge of the patella with deflected knee. See Vol. I, fig. 12.

An indicator drop here can indicate a beginning or existing thrombosis in the small pelvis, often in connection with the thrombosis of the leg veins, which only appears clinically at the lower leg.

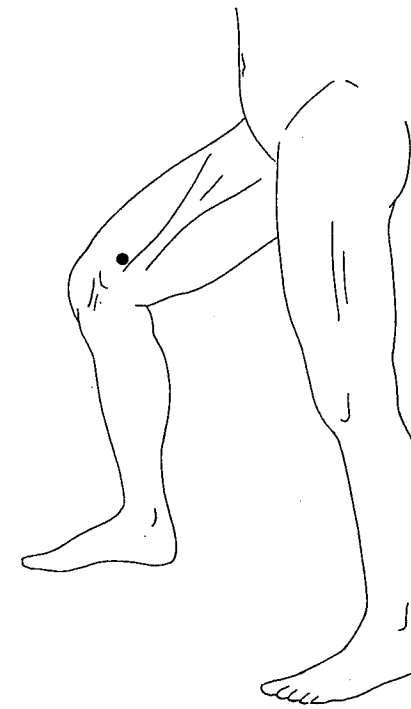


Fig. 120: MP. Pelvic veins = 10. Spleen-pancreas

No. 92

Veins of the abdomen — abdominal veins

Veins of the abdomen measurement point = 33. Stomach point — 33. St.

125

r + l

The 33. Stomach point lies on the front side of the thigh at the lateral edge of the end-tendon of the musculus rectus femoris and above the musculus vastus lateralis fibularis between the end of the muscle fibers and the beginning of the end-tendon of the musculus vastus lateralis, 2 finger breadth above the cranial edge of the patella in the extension of the side-margin of the patella. This distance approximately amounts to 3 finger breadth with stretched knee. See Vol. I, fig. 12.

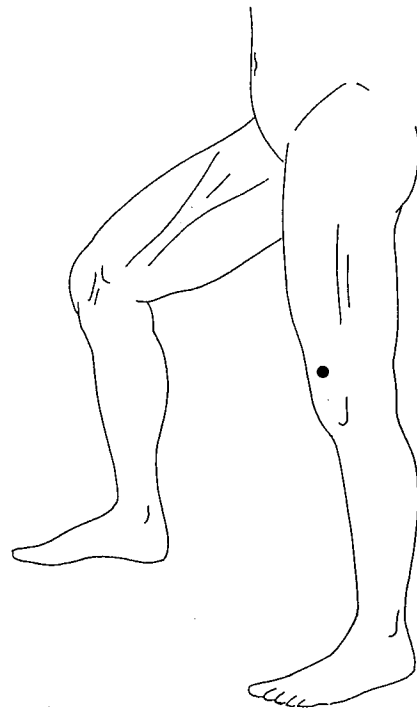


Fig. 121: MP. Veins of the abdomen = 33. Stomach

No. 93

Arteries of the lower extremity — arteries of the leg

Arteries measurement point = 32. Stomach point — 32. St.

72-4

124

r + l

The arteries measurement point of the lower extremities is the 32. Stomach point. It lies in the middle of the front side of the thigh in the muscle-groove between the musculus vastus lateralis and the musculus rectus femoris.

With stretched knee 7 finger breadth, with deflected knee 8 finger breadth above the cranial edge of the patella in the middle of the front of the thigh. See Vol. I, fig. 12.

This measurement point is important in the so-called smoker's leg, which shows in a pure vascular stenosis values below 50. The more decreased the measurement value is, the more extreme is the stenosis. If there exists an additional indicator drop, then the cause is an inflammatory or chemical irritation.

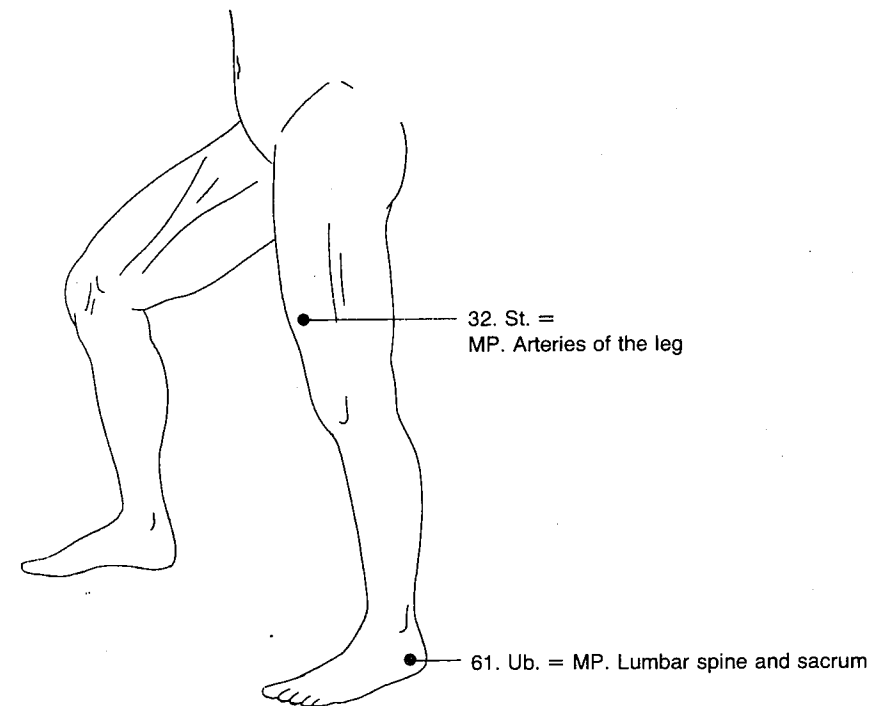


Fig. 122: MP. Arteries of the leg = 32 Stomach, MP. Lumbar spine and os sacrum = 61. Urinary bladder

No. 94

Gonads — ovaries — testicles

Gonad measurement point = point of intersection of the 3 meridians spleen/pancreas, liver and stomach, namely

11. Spleen-pancreas point — 11. Sp/Pa.

12. Liver point — 12. Li.

31. Stomach point — 31. St.

123

r + l

The gonadal measurement point is located on the inner side of the thigh in the lower angle of *Scarpa's* triangle which is circumscribed laterally by the musculus sartorius, medially by the musculus adductor longus and cranially by the ligamentum inguinale. See Vol. I, fig. 12. *Scarpa's* triangle can easily be demonstrated by abduction and outward rotation of the leg by which the skin above *Scarpa's* triangle mould-like slightly subsides.

(The separate measurement points of the individual regions of the urogenital system can be looked up in *Voll's* "Topographic positions of the measurement points in electroacupuncture" — Textual Volume I, pages 66—68).

The measurement point gonad is to be measured, if the SMP. 3-W.1 shows an indicator drop and one consequently has to differentiate between adrenal gland and ovary.

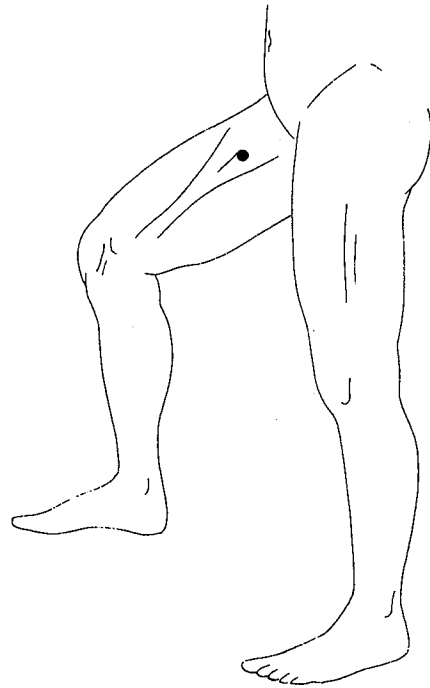


Fig. 123: MP. Gonad = 11. Spleen-pancreas, 12. Liver, 31. Stomach

Ed) Lower Extremity — Thigh Back Side

No. 95

Urethra, anterior portion

52. Urinary bladder point — 52. Ub.

333

r + l

The 52. Urinary bladder point lies above the muscle-angle between the medial margin of the caput longum of the musculus biceps femoris and the lateral edge of the musculus semimembranaceus. See Vol. I, fig. 16.

It is responsible for the anterior region of the urethra and can be used particularly with alterations of the orifice of the urethra in the female, e. g. with an ectropium of the mucosa or an urethra-polypus, both in diagnostics as well as in therapy.

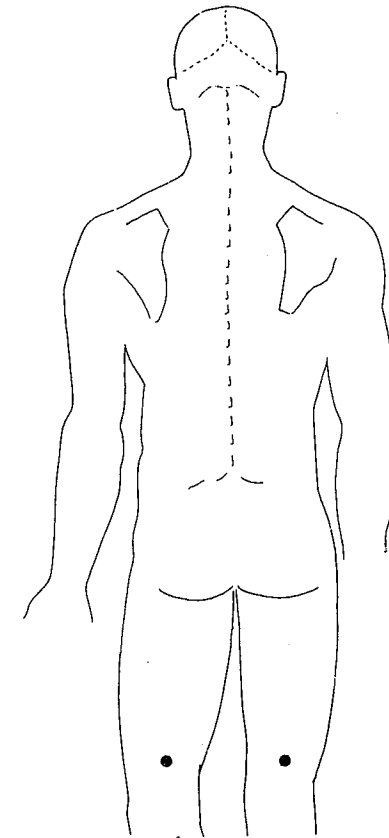


Fig. 124: MP. Urethra anterior region = 52. Urinary bladder

No. 96

Urethra, posterior region

51a. Urinary bladder point — 51a. Ub.

No classical acupuncture point — found by *Voll*.

332

r + l

The measurement point is situated between the 51. and 52. Urinary bladder point approximately 1 finger breadth above the 52. Urinary bladder point, responsible for the anterior portion of the urethra and described already under no. 95. See Vol. I, fig. 16. In this segment of the urethra it passes the diaphragma urogenitale.

At this point a cystitis of the trigonum will manifest itself besides at the 66. Urinary bladder point.

A "trigonumcystitis" is measurable at this point, when the 66. Ub. measurement point like e. g. in an amputee is not existing.

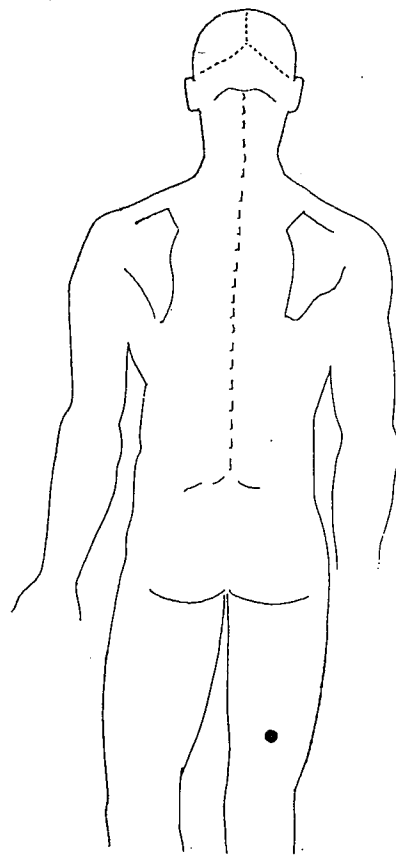


Fig. 125: MP. Urethra posterior portion = 51a. Urinary bladder

No. 97

Penis respectively vagina

51. Urinary bladder point — 51. Ub.

314

r + l

The point is located on the posterior side of the thigh above the muscle-angle formed by the lateral margin of the musculus semitendinosus and the medial edge of the caput longum of the musculus biceps femoris. See Vol. I, fig. 16.

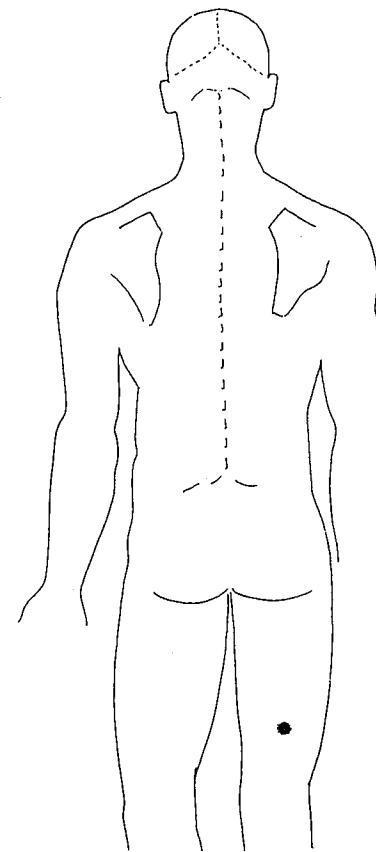


Fig. 126: MP. Penis-Vagina = 51. Urinary bladder

No. 98

Cowper's or Bartholin's gland

50b. Urinary bladder point — 50b. Ub.

No classical acupuncture point, it was found by *Voll*.

— — — —

— — — —

r + l

The 50b. Urinary bladder point which was worked out by electroacupuncture for the above-mentioned glands is situated on the back side of the thigh, approximately in its middle above the medial edge of the caput longum of the musculus biceps femoris, about 6 finger breadth below the 50. Urinary bladder point. The point lies between the 50. and 51. Urinary bladder point approximately in the middle. See Vol. II, fig. 19. The stroking technique is recommended for the detection of the point.

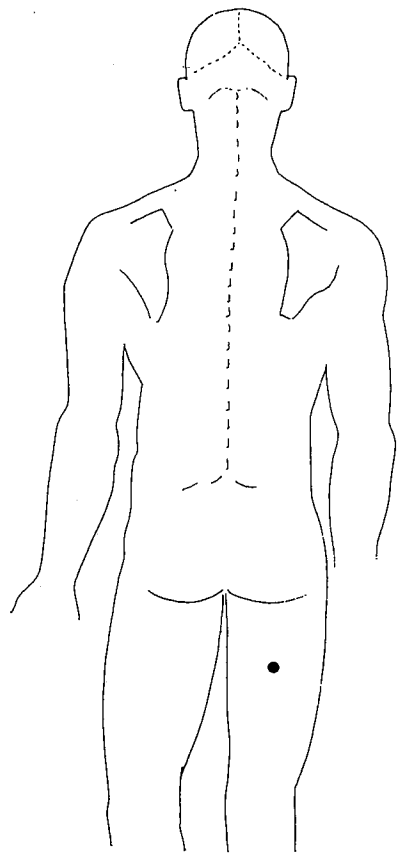


Fig. 127: MP. Cowper's or Bartholini's glands = 50b. Urinary bladder

No. 99

Seminal hillock or ligamentum latum with parametria

50a. Urinary bladder point — 50a. Ub.

No classical acupuncture point — it was found by *Voll*.

331

r + l

The point is located approximately 3 finger breadth below the 50. Urinary bladder point above the lateral margin of the musculus semitendinosus. Here too the stroking technique is recommended for the detection along the lateral edge of the musculus semitendinosus. See Vol. II, fig. 19.

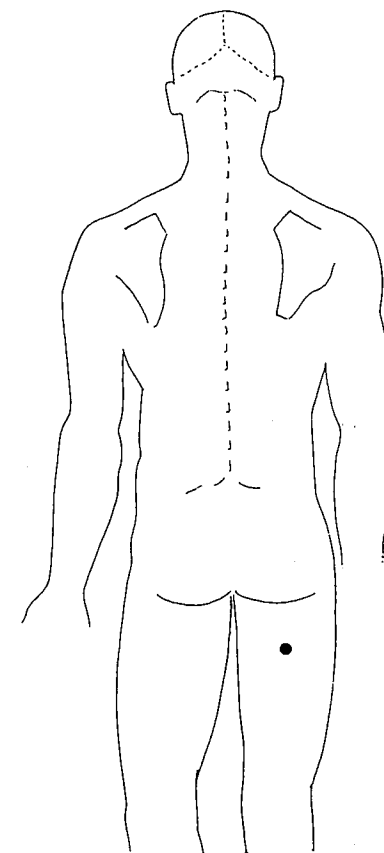


Fig. 128: MP. Seminal hillock — ligamentum latum with parametria = 50a. Urinary bladder

No. 100

Prostate gland or uterus

50. Urinary bladder point — 50. Ub.

313

r + l

The point is located approximately 3 finger breadth below the 50. Urinary bladder point above the angle which is formed by the inferior edge of the musculus gluteus maximus and the lateral margin of the musculus semitendinosus. See Vol. I, fig. 16. Alterations in the region of the prostate gland or the uterus like hypertrophy of the prostate gland or uterus myomatosus can be diagnosed here and influenced.

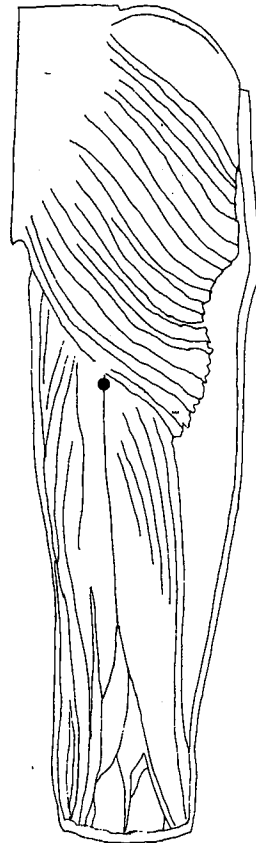


Fig. 129: MP. Prostate gland — Uterus = 50. Urinary bladder

No. 101

Seminal vesicle-vesicula seminalis resp. pars interstitialis uteri of the ampulla tubae.

49c. Urinary bladder point — 49c. Ub.

No classical acupuncture point — it was found by *Voll*.

312

r + l

The point is located above the superior edge of the lower third of the musculus gluteus maximus, which inserts at the tuberositas glutea, between the 49. and 50. Ub. point. The position corresponds to the level of the lower end of the bulge of the trochanter (see Vol. II, ill. 19). To find the point stroking technique is recommended.

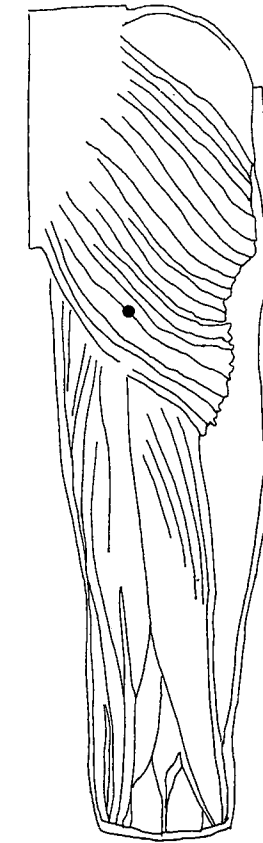


Fig. 130: MP. Seminal vesicle — pars interstitialis uteri = 49c. Urinary bladder

No. 102

Spermatic cord — deferent canal or ampulla tubae uterinae
49b. Urinary bladder point — 49b. Ub.
No classical acupuncture point — it was found by *Voll*.
311
r + l

The point is located approximately in the middle of the musculus gluteus maximus, 3 finger breadth superior of the point 49c. for the seminal vesicle between this one and the measurement point 49a., exactly in the centre of the distance between the classical point of acupuncture 49. and the 50. Urinary bladder point (see Vol. II, fig. 19).

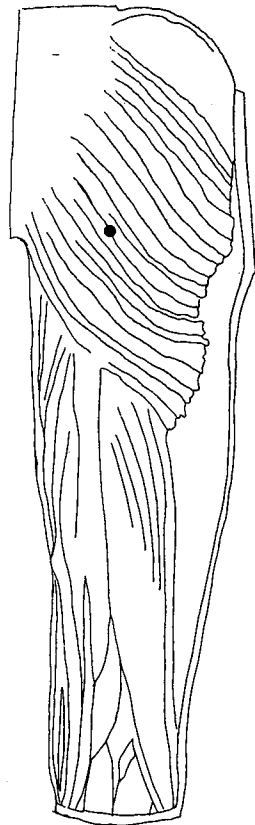


Fig. 131: MP. Spermatic cord — Ampulla tubae = 49b. Urinary bladder

No. 103

Epididymis or ostium abdominale tubae
49a. Urinary bladder point — 49a. Ub.
No classical acupuncture point — it was found by *Voll*.
310
r + l

This point is situated between the classical acupuncture point 49. and 50. Urinary bladder at the end (inferior margin) of the superior third of the musculus gluteus maximus approximately 4 finger breadth below the 49. Urinary bladder point, measured from the upper edge of the musculus gluteus maximus (see Vol. II, fig. 19).

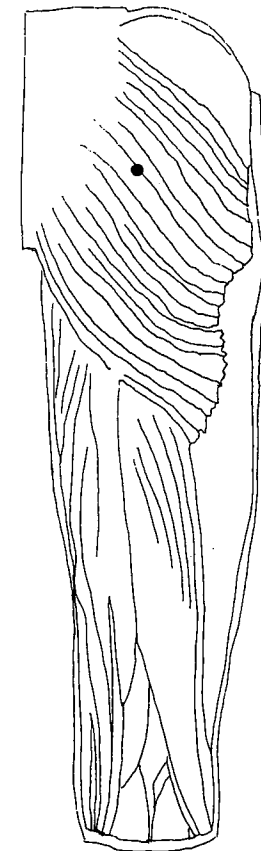


Fig. 132: MP. Epididymis — ostium abdominale tubae = 49a. Urinary bladder

F) Measurement Points of the Trunk — Anterior Side

No. 104

Larynx

21. Conception vessel point — 21. Con.
211

The point is located in the front middle-line below the inferior free margin of the ligamentum interclaviculare superior of the incisura jugularis (see Vol. I, fig. 13).

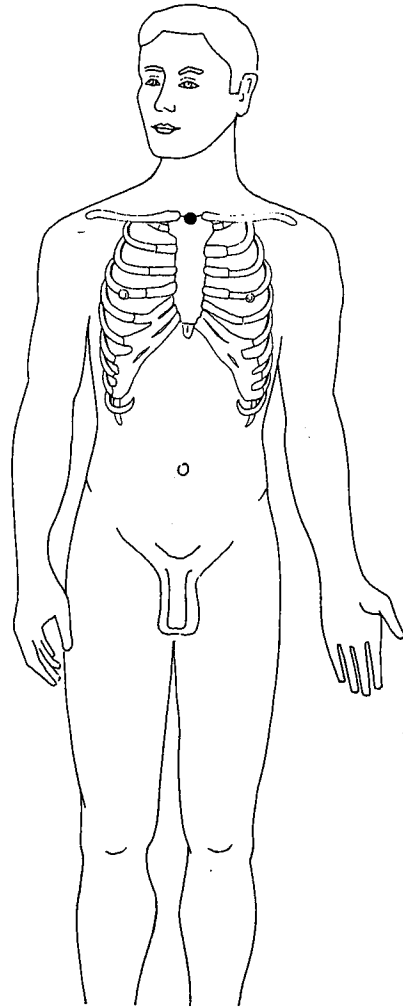


Fig. 133: MP. Larynx = 21. Conception vessel

No. 105

Trachea

19. Conception vessel point — 19. Con.

— — — —
— — — —

The point is located in the centre of the angulus sternalis at the transition from the manubrium to the corpus sterni (see Vol. I, fig. 13).

This measurement point has to be chosen if a diagnosis of a tracheal disorder through the 9. Lung point is not possible because of an absence of the hand or arm.

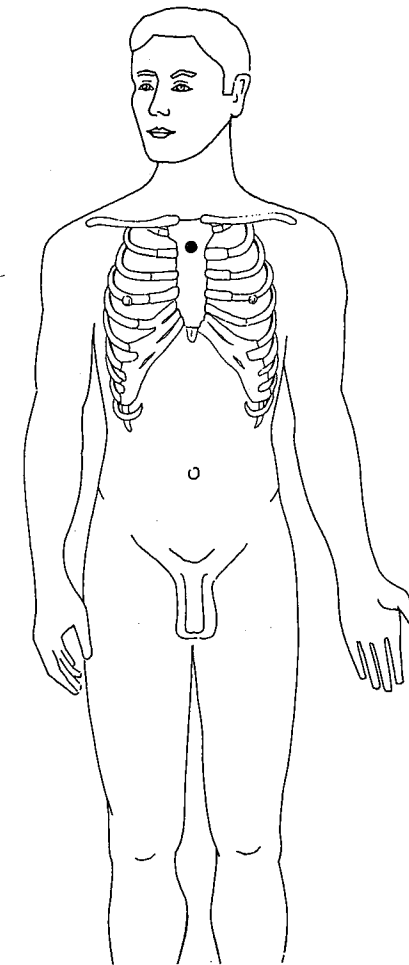


Fig. 134: Trachea = 19. Conception vessel

No. 106

Bronchi

17. Conception vessel point — 17. Con.

The measurement point is located on the sternum in alignment with of the second transverse ridge of the corpus sterni which sets out from the middle of the 4. incisura costalis. It is the second transverse ridge, counting from the cranial end of the sternum (see Vol. I, fig. 13).

This measurement point can be measured as an alternative point with amputation of thumb, hand or forearm when the 10. Lung point cannot be measured.

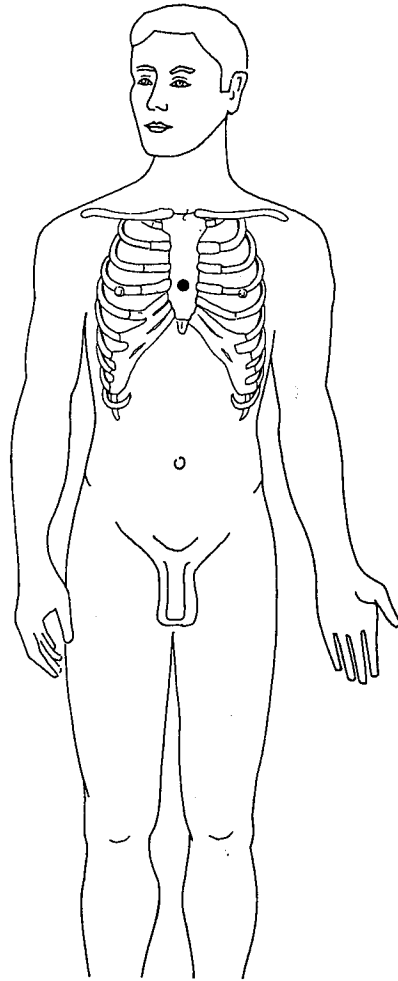


Fig. 135: MP. Bronchi = 17. Conception vessel

No. 107

Gullet — esophagus — lower portion

14. Stomach point — 14. St.

— — — —
— — — —

r + l

The point is located in the 2. intercostal space in line with of the lateral insertion-point of the musculus sternocleidomastoideus to the mamilla, before the front margin of the musculus intercostalis externus of the 2. intercostal space.

For the detection of the point the stroking technique is recommended (see Vol. I, fig. 13).

Abnormal measurement values at this point permit a conclusion about an insufficiency of the cardiac-orifice and a consecutive reflux-esophagitis.

This point is to be taken in leg-amputees. Otherwise measurement point lower portion esophagus 42a. Stomach see under 76f.

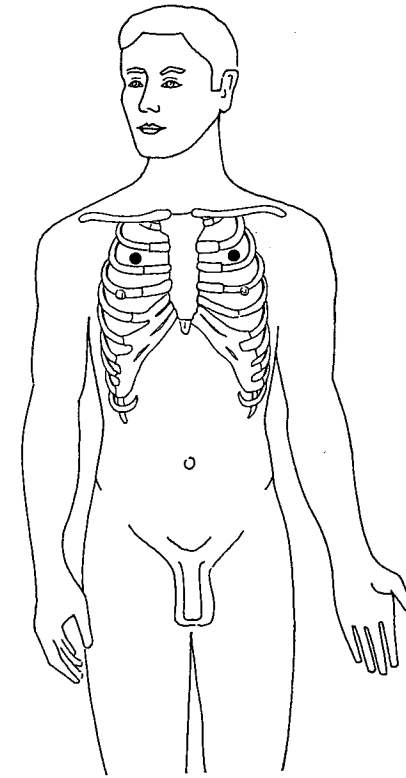


Fig. 136: MP. Gullet (esophagus) — lower portion = 14. Stomach

No. 108

Gullet — esophagus — upper portion

13. Stomach point — 13. St.

r + l

The point is situated in the 1. intercostal space in line with of the lateral insertion of the musculus sternocleidomastoideus to the mamilla. Anatomically it is located at the front margin of the medial-caudally running musculus intercostalis externus of the 1. intercostal space (see Vol. I, fig. 13).

Stroking technique is recommended for the detection of the point. Disorders in the peristaltic transport of food (achalasia) can be diagnosed from the measurement results of all 4 gullet-measurement points — upper and lower portion right and left — and favourably influenced by electroacupuncture.

In leg amputated patients where an exact measurement of stomach values is impossible the esophagus points attain a higher significance. Other measurement point upper portion of the gullet 42. Stomach, see under no. 76g.

The esophagus measurement points at the chest are important in leg-amputated patients. Additional measurement point for the upper portion of the esophagus = 42. St., see page 197, fig. 104.

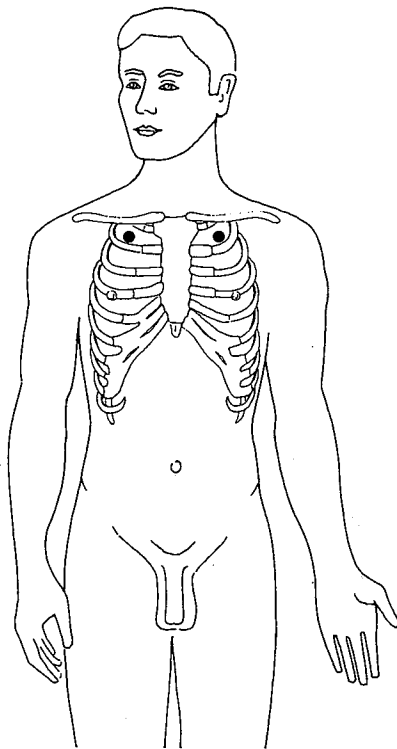


Fig. 137: MP. Gullet (esophagus) — upper portion = 13. Stomach

Fa) Measurement Points at the Back Side

No. 109

Spine — columna vertebralis = summation measurement point

11. Urinary bladder point — 11. Ub.

325

r + l

The point is located on the inferior edge of the processus transversus of the 1. thoracic vertebra, approximately 1½ finger breadth lateral, right and left of the middle line. For the detection of the point you go from the processus spinosus I either horizontally or slightly oblique-upwardly and look for the maximum reading on the skin sec-

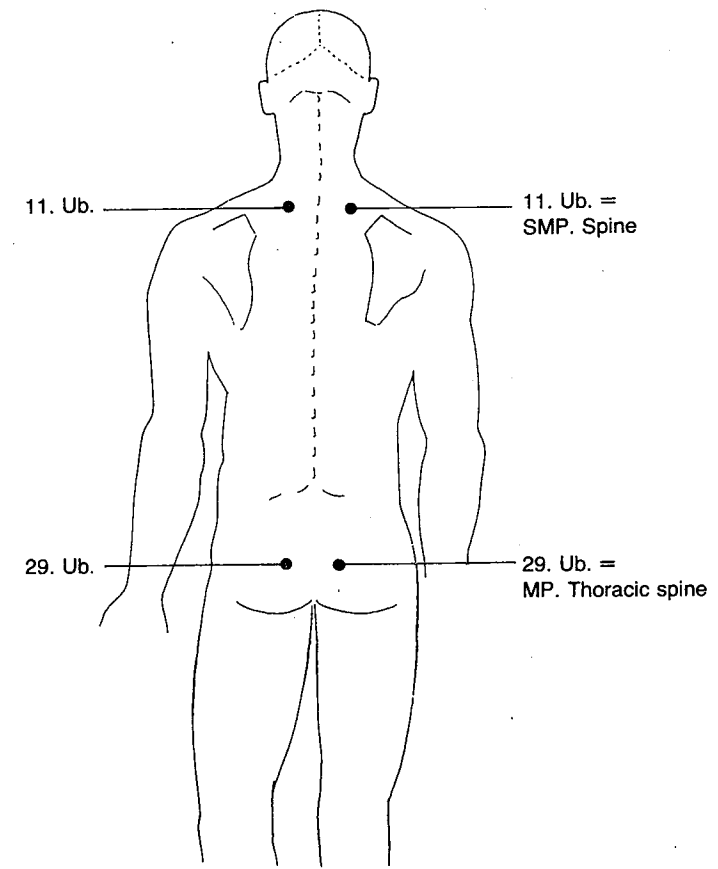


Fig. 138: SMP. Spine = 11. Urinary bladder.
MP. Thoracic spine = 29. Urinary bladder

tor approximately 1 ½ finger breadth away from the middle-line by means of the stroking technique (see Volume I, fig. 20).

Beyond that the lymph vessels of the spine can also be diagnosed and influenced by the 12. Lymph vessel point.

The described measurement point is a so-called summation point at which the energetic situation of the entire spine can be measured. To be able to test out exactly the position of a disorder as such *Voll* has developed the following procedure:

First two wheel-electrodes are attached to the electroacupuncture-apparatus (Diatherapeuter or Dermatron). "By passing down left and right of the spine with a wheel-electrode simultaneously, after wetting previously the skin, disorders are realed by increased measurement values, namely increasing from the beginning of the diseased spot to the maximum of the disease to highest and then again decreasing values".

Nevertheless, with this wheel-electrode measurement you'll find still slightly increased readings, besides at the diseased spot as such, at points of the spine which are normally heavily strained, like for example in the region of the 6. to 7. cervical vertebra, 1., 4. to 5. and 12. thoracic vertebra and also the 1. and the 4. to 5. lumbal vertebra.

Differentiated measurement point of the spine:

1. Measurement point cervical spine is the 6. Small intestine point which lies above the base of the processus styloideus ulnae in the angle of the shaft of the ulna to the processus styloideus. Shown in fig. 90, see page 175.
2. Measurement point thoracic spine is the 29. Urinary bladder point which lies on the level of the 3. foramen sacrale, approximately ½ finger breadth below the inferior end of the articulatio sacroiliaca at the outer edge of the os sacrum (see Volume I, fig. 16).
3. Measurement point lumbar spine and os sacrum is the 61. Urinary bladder point. Its position is at the lateral side of the foot above the lateral protuberance of the tuber calcanei. By means of the stroking technique passing along the lower edge of the os calcaneus from the metatarsus of the protuberance of the calcaneus you get caught in this osseous angle. Shown in fig. 121, page 222, see page 97 fig. 24a.

No. 110

Osseous system

12. Urinary bladder point — 12. Ub.

326

r + l

The 12. Urinary bladder point is located above the inferior edge of the processus transversus of the 2. thoracic vertebra, approximately 1 ½ finger breadth lateral of the middle-line on the right and left.

For the localization of the point *Voll* recommends the stroking technique, going obliquely upward from the processus spinosus until approximately 1 ½ finger breadth lateral of the middle-line the maximum measure value is reached (see Volume I, fig. 20).

In the text-volume of "Topographic positions of the measurement points in electroacupuncture" *Voll* writes in this chapter:

"In differential diagnosis this measurement point is important in deciding the question whether there exists additionally an osseous fissure with a contusion or distortion. If this is the case the measurement point of the osseous system shows an indicator drop on the side of the traumatic incident as an expression of the osseous cells ruined by the fracture. An exception is only the greenstick-fracture of small children setting no indicator drop."

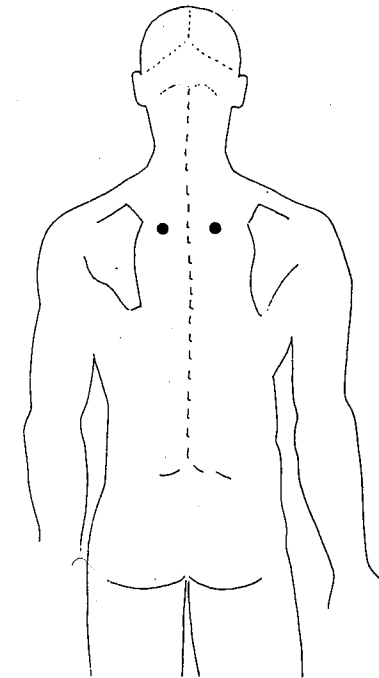


Fig. 139: MP. Osseous system = 12. Urinary bladder

No. 111

diaphragma — midriff

17. Urinary bladder point — 17. Ub.

327

r + l

This point is situated above the inferior edge of the processus transversus of the 7. thoracic vertebra, namely approximately $1\frac{1}{2}$ finger breadth lateral of the middle-line on the right or left above the osseous angle of the extension of the spinal processus. To localize the point *Voll* indicates in his work "Topographic positions of the measurement points in electroacupuncture" — I. part — textual volume — page 57: "Since the spinal processes of the middle thoracic vertebra are very long and for example the end of the 7. spinal process is stretched over the 8. thoracic vertebra you should orientate yourself along the 7. intercostal space in the search for the 17. Urinary bladder point, and go towards the middle in a $1\frac{1}{2}$ finger breadth distance from the middle-line — or you seek for the 6. spinal processus, go obliquely upward and reach the point in a distance of $1\frac{1}{2}$ finger breadth lateral of the middle-line." Finally you can start also from the angulus inferior (caudalis) of the scapula which lies in the level of the 7. rib. From here you pass by stroking technique horizontally to the middle-line of the back and hit the point approximately $1\frac{1}{2}$ finger breadth in front of it (see Volume I, fig. 20).

With diaphragmatic hernia an indicator drop is shown only at the left diaphragmatic measurement point.

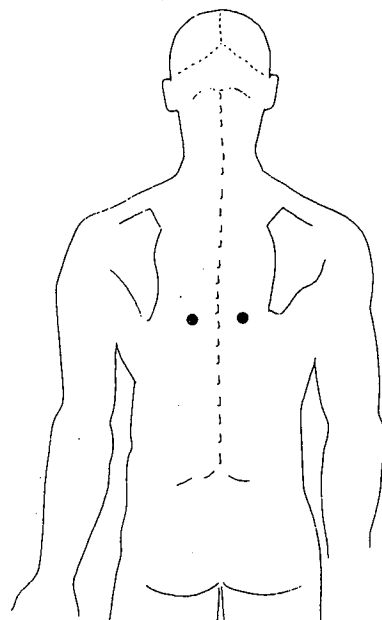


Fig. 140: MP. Diaphragm = 17. Urinary bladder

No. 112

Adrenal gland — glandula suprarenalis

22. Urinary bladder point — 22. Ub.

328

r + l

The adrenal gland measurement point is located $1\frac{1}{2}$ finger breadth lateral of the back middle-line above the inferior edge of the process transverse of the 2. lumbal vertebra.

For his localization one goes from the inferior edge of the mighty spinal process of the 1. lumbal vertebra in a horizontal line laterally until one meets the point with the maximum measurement values in a distance of approximately $1\frac{1}{2}$ finger breadth (see Volume I, fig. 20).

This point is specially used if the ring finger is missing or in the case of an indicator drop at the 1. SMP. of the 3-W., to be able to differentiate between adrenal or gonad irritation.

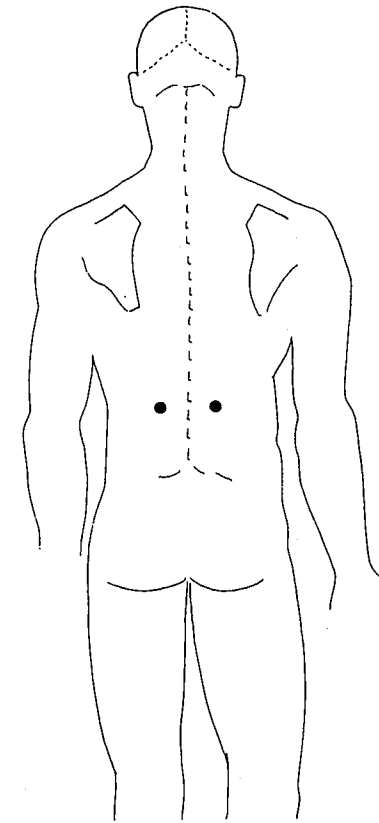


Fig. 141: MP. Adrenal gland = 22. Urinary bladder

G. Alarm Points

Preliminary remark

At the front- and back-side of the body are located numerous so-called alarm points, known in classical acupuncture.

In EAV-diagnostics these points play an important role in arm- and leg-amputees, since one can determine organic insufficiencies through indicator drops at the alarm points. A diagnostical differentiation, however, at the peripheral measurement points, is not possible.

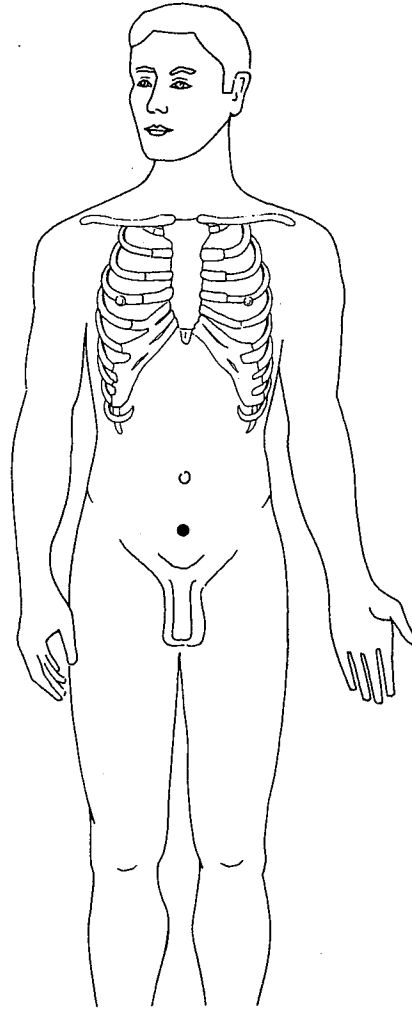


Fig. 142: Alarm point triple warmer = 5. Conception vessel

No. 113

Triple warmer — endocrine meridian

Alarm point = 5. Conception vessel point — 5. Con.

The measurement point for the alarm point of the triple warmer corresponds to the 5. Conception vessel point and is situated on the inferior border of the superior third of the connection line between symphysis and navel.

With an indicator drop at this point in hand amputees the specific measurement points of the endocrine glands have to be measured:

MP. Adrenal cortex	= 22. Ub. (see page 243, fig. 141)
MP. Gonad	= 11. Sp./Pa., 12. Li., 31. St. (see page 224, fig. 123)
MP. Thyreoidea	= 10. St. (see page 142, fig. 66)
MP. Parathyreoidea	= 9. St. (see page 141, fig. 65)
MP. Thymus	= 11. St. (see page 144, fig. 68)
MP. Adenohypophysis	= 15. Sl., 16. 3-W., 31. Gbl. (see page 149, fig. 73)
MP. Pituitary gland, post. lobe	= 12. Gbl. (see page 108, fig. 33)
MP. Pineal gland	= 8. Ub. (see page 110, fig. 35)

No. 114

Lung

Alarm point = 1. Lung point — 1. Lu.

— — — —
— — — —

r + l

The alarm point for the lung is the 1. Lung point and is located $1\frac{1}{2}$ finger breadth lateral of the linea medio-clavicularis in the 2. intercostal space approximately 6 finger breadth lateral of the body middle-line above the inferior edge of the 2. rib (see Volume II, fig. A18).

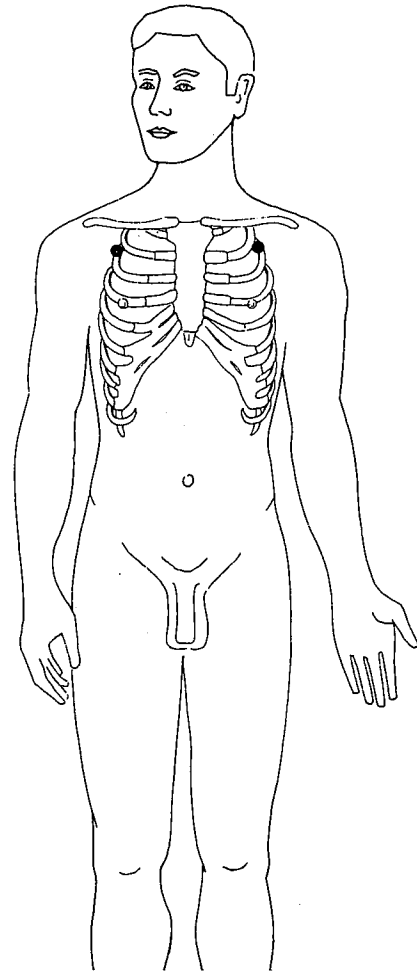


Fig. 143: Alarm point lung = 1. Lung

No. 115

Circulation

Alarm point = 1. Circulation point — 1. Cir.

— — — —
— — — —

r + l

The alarm point for circulation is the 1. Circulation point and is located above the 4. intercostal space in the paramamillary line which runs in the middle between the mamillary line and the paraaxillary line approximately 7 finger breadth lateral of the body middle-line (see Volume II, fig. A18).

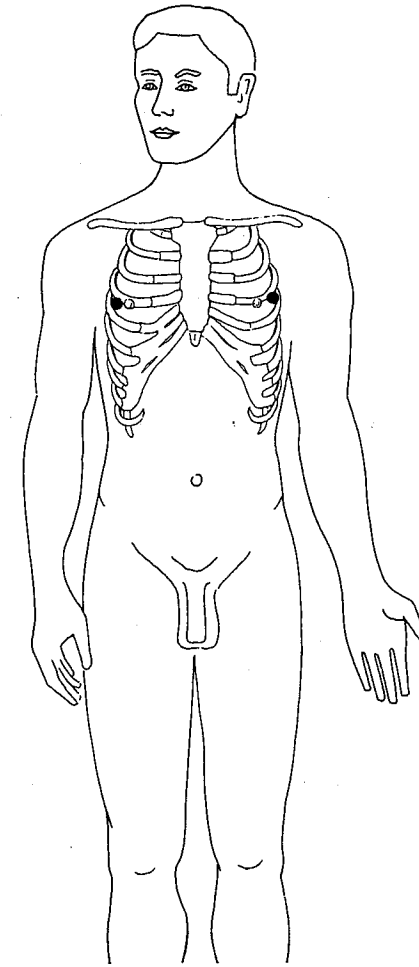


Fig. 144: Alarm point circulation = 1. Circulation

No. 116

Liver

Alarm point = 14. Liver point — 14. Li.

r + l

The alarm point for the liver is the 14. Liver point and is situated at the terminal point of the liver meridian in the 5. intercostal space 1 finger breadth lateral of the mamillary line (see Volume II, fig. A18).

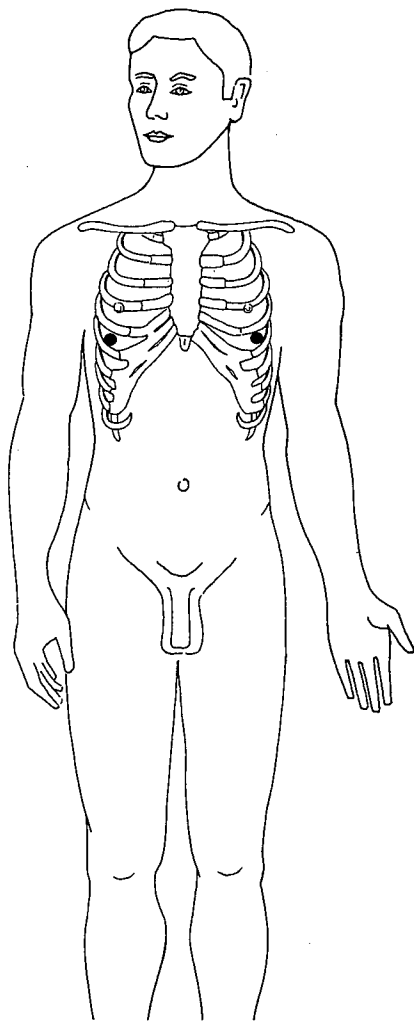


Fig. 145: Alarm point liver = 14. Liver

No. 117

Heart

Alarm point = 14. Conception point — 14. Con.

The alarm point of the heart is the 14. Conception vessel point and is located in the middle-line of the front-side of the body 1 finger breadth inferior the tip of the xiphoid (see Volume II, fig. A18).

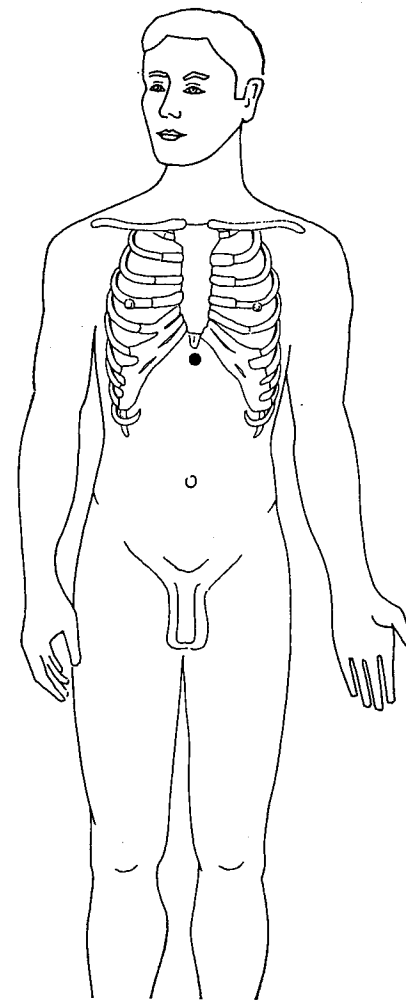


Fig. 146: Alarm point heart = 14. Conception vessel

No. 118

Stomach

Alarm point = 12. Conception point — 12. Con.

The alarm point for the stomach is the 12. Conception vessel point and is located on the anterior middle-line of the body in the middle of the line between the navel and the inferior end of the xiphoid (see Vol. II, fig. A18).

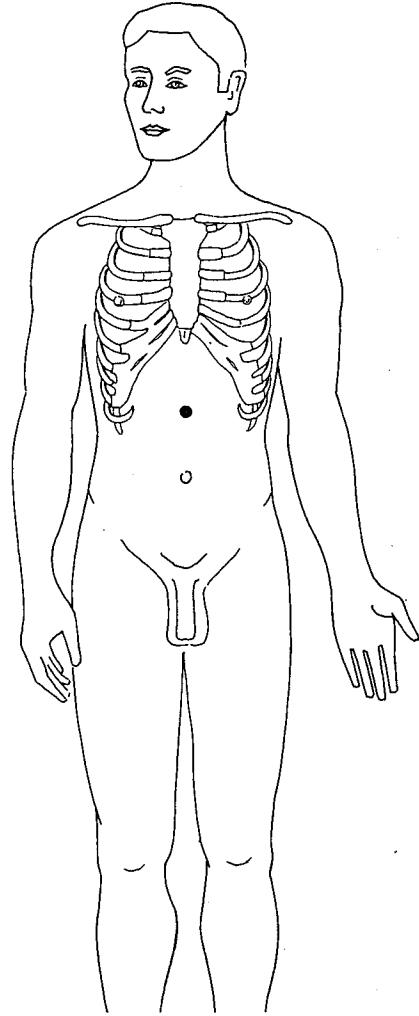


Fig. 147: Alarm point stomach = 12. Conception vessel

No. 119

Kidney

Alarm point = 25. Gallbladder — 25. Gbl.

r + l

The alarm point of the kidney is the 25. Gallbladder point and is located above the free end of the 12. rib on the right and left.

The end of the 12. rib has to be palpated since it is very variable in size (see Volume I, fig. 20 and illust. 17).

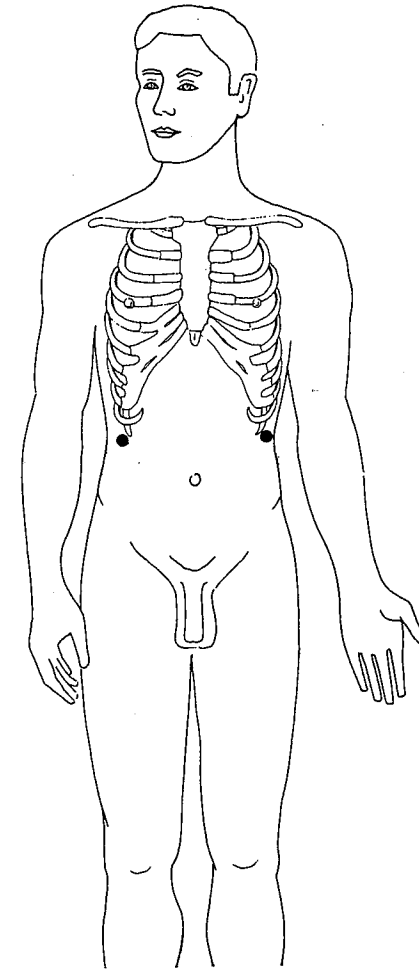


Fig. 148: Alarm point kidney = 25. Gallbladder

No. 120

Pancreas

Alarm point = 13. Liver point — 13. Li.

only on the right side

The alarm point for the pancreas is the 13. Liver point at the right half of the body and is situated above the free end of the 11. rib on the right anterior side of the body.

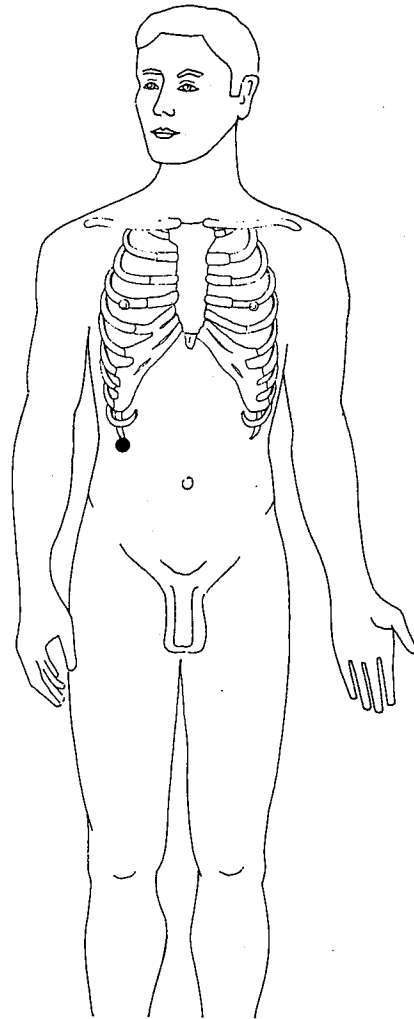


Fig. 149: Alarm point pancreas = 13. Liver on the right side

No. 121

Spleen

Alarm point = 13. Liver point — 13. Li.

only on the left side

The alarm point for the spleen is the 13. Liver point on the left side and is situated above the free end of the 11. rib, which has to be palpated. Often this point can be found at the transition from the lateral to the posterior region of the chest.

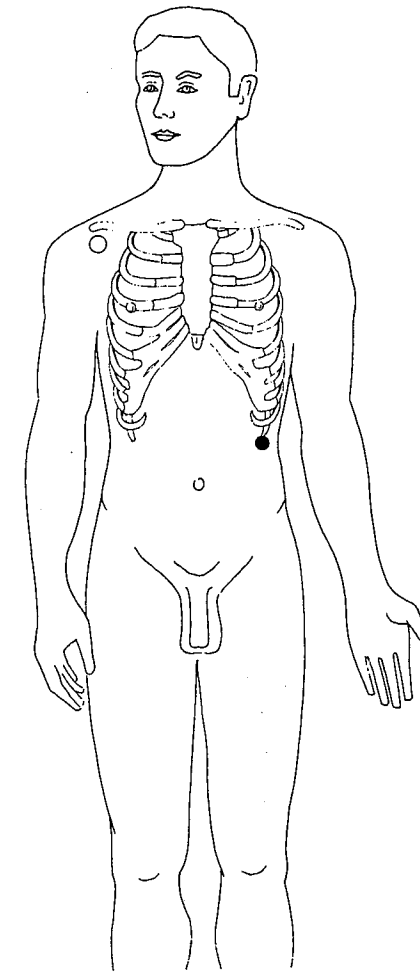


Fig. 150: Alarm point spleen = 13. Liver on the left side

No. 122

Large intestine

Alarm point = 25. Stomach point — 25. St.

r + l

The alarm point for the large intestine is the 25. Stomach point and is located at the lateral border-groove of the musculus rectus abdominalis in alignment with the navel, two finger breadth lateral of it, if the belly is flat.

In EAV this point is used for the diagnosis of an appendicitis in right-sided hand-amputated persons. The proper measurement point for the appendix is the 4a. Large intestine (see page 161, fig. 81).

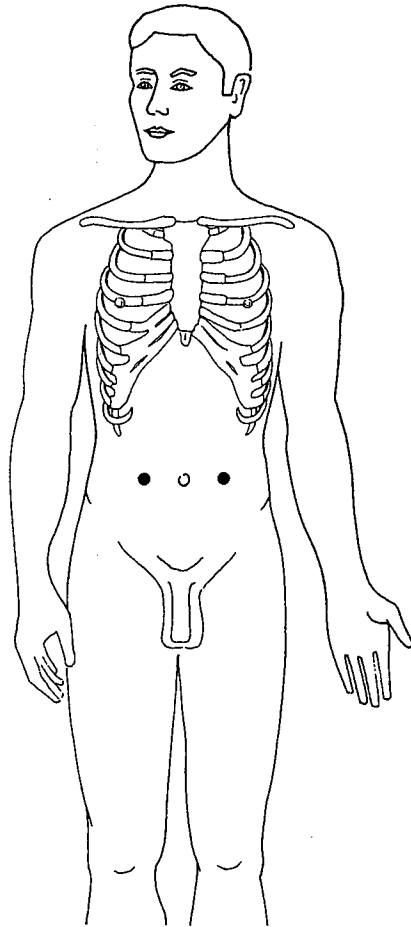


Fig. 151: Alarm point large intestine = 25. Stomach

No. 123

Small intestine

Alarm point = 4. Conception vessel point — 4. Con.

The alarm point for the small intestine is the 4. Conception vessel point and is situated on the middle-line of the abdomen at the superior border of the lower third of the line between symphysis and navel.

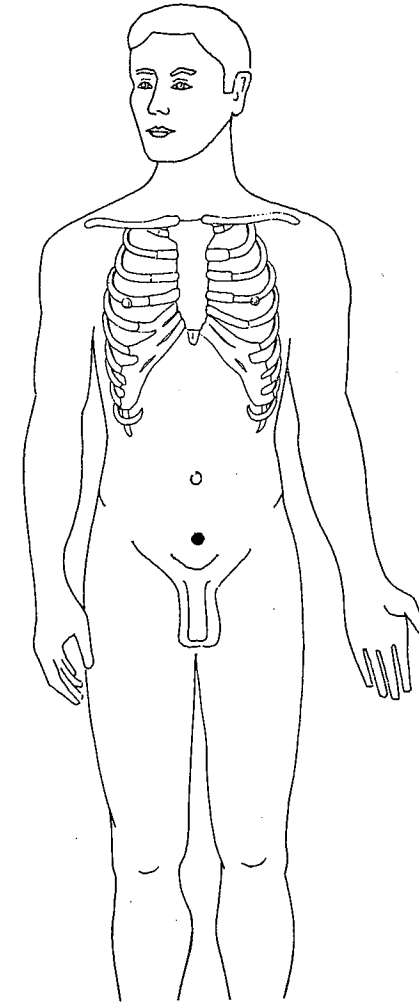


Fig. 152: Alarm point small intestine = 4. Conception vessel

No. 124

Urinary bladder

Alarm point = 3. Conception vessel point — 3. Con.

The alarm point for the urinary bladder is the 3. Conception vessel point and is located on the middle-line of the abdomen approximately 2 fingers' breadth above the symphysis.

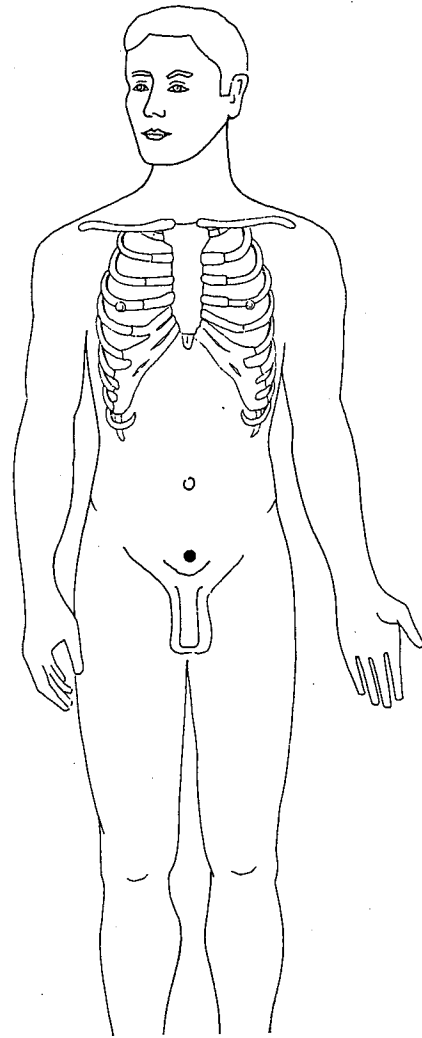


Fig. 153: Alarm point urinary bladder = 3. Conception vessel

Alphabetic list of the electroacupuncture points discussed in this volume with the indication of

discussion number (DN)

meridian measurement points (MP)

organometric number according to *VoII* (OgN)

notes: classical acupuncture point (cl. AP)

electroacupuncture point (EAV)

right = D

left = S

Measurement point	DN	MP	OgN	Note
adrenal gland	62	1.3-W.	411	cl. AP
	112	22.Ub.	328	c. AP
allergy — inferior part of the body	60	1.Ai.	421	EAV
allergy — head	60	3.Ai.	415	EAV
allergy — superior part of the body	60	2.Ai.	417	EAV
alveoles	56	11.Lu.	419	cl. AP
ampulla tubae uterinae	102	49b.Ub.	311	EAV
	82	64.Ub.	502	cl. AP
amylases (pancreas)	72	3.Pa.	524	cl. AP
antrum pyloricum	76	44.St.	525	right
anus	83	6.Ki.	131	cl. AP
aortic valve	63	9.He.	622	left
appendix	57	4a.Li.	413	EAV
				right
arm musculature	69	9.Si.	307	cl. AP
arteries of the arm	66	7.Lu.	108	cl. AP
arteria extremitatis inferioris	92	32.St.	124	cl. AP
arteria extremitatis superioris	66	7.Lu.	108	cl. AP
arteries — total circulation (left or right side of the body)	59	9.Cir.	612	cl. AP
articular degeneration arm — upper extremity	75	2.ArD.		EAV
articular degeneration atlas, jaw joint	75	3.ArD.		EAV
articular degeneration control measurement point	75	1a.ArD.		EAV
articular degeneration lower extremities and pelvis	75	1.ArD.		EAV
articulatio acromio-clavicularis	71	14.3-W.	305	cl. AP

Measurement point	DN	MP	OgN	Note
articulatio coxae (hip joint)		30.St.	121	
1. MP.				
2. MP.		11a.Sp/Pa.	122	
3. MP.		29.Gbl.	329	
articulatio cubiti (elbow joint)		8.Sl.	308	
1. MP.	68			
2. MP.		3.Cir.	107	
3. MP.		11.Ll.	106	cl. AP
articulatio genus (knee joint)		8.Li.	128	
1. MP.	90			
2. MP.	90	35.St.	111	
3. MP.	90	54.Ub.	315	
articulatio humeri (shoulder joint)		15.Ll.	105	cl. AP
1. MP.	70			
2. MP.	70	2.Cir.	118	cl. AP
3. MP.	70	10.Sl.	306	cl. AP
articulatio intercarpae (hand joint)				
distal hand joint		4.3-W.	402	cl. AP
proximal hand joint	64	5.Sl.	401	cl. AP
proximal hand joint	57	5.Ll.	412	cl. AP
articulatio mandibulae inferioris (temporo mandibular joint, lower part)	33	2.St.	206	cl. AP
articulatio mandibulae superioris (temporo-mandibular joint, upper part)	32	3.3-W.	205	cl. AP
articulatio talo-calcaneo (ankle joint)				
1. MP. Medial region		5.Sp/Pa.	133	cl. AP
2. MP. Posterior region		62.Ub.		
		11.St.	117	cl. AP
3. MP. Lateral region		39a.Gbl.	501	EAV
articulatio talo-calcaneo navicular		4.Ll.		
articulatio talo-cruralis anterior lateral region		41.St.	116	cl. AP
auditory passage	9	19.St.		EAV
Bartholin's gland	98	50b.Ub.		EAV

Measurement point	DN	MP	OgN	Note
blood (crossing point of 3 meridians)	85	Pa/ 6.Sp. 5.Li. 8.Ki.		129 cl. AP
bone marrow	84	39.Gbl.	316	cl. AP
bone system	110	12.Ub.	326	cl. AP
bronchi	56	10.Lu.	606	cl. AP
bronchi (alarm point)	113	17.Con.		cl. AP
cardia ventriculi	76	43.St.	523	left
cavum nasi tegmentum	19	23a.Gov.	212	cl. AP
cavum nasi — pars medialis	27			EAV
cavum nasi — pars lateralis	26	19.Ll.		cl. AP
cecum	57	4.Ll.	414	cl. AP
cellulae ethmoidalis	24	20.Ll.	215	cl. AP
cerebral-sclerosis	79	3.FaD.		EAV
cervical spine	109	6.Sl.		cl. AP
circulation, alarm point	115	1.Cir.		cl. AP
cisterna chyli	59	8b.Cir.		EAV
cerebellum	18	19.Gov.	318	cl. AP
colliculus seminalis	99	50a.Ub.	331	EAV
colon = large intestine (alarm point)	122	25.St.		cl. AP
colon ascendens	57	3.Ll.	416	right
colon descendens	57	2.Ll.	418	left
colon — flexura coli dextra	57	2.Ll.	418	right
colon — flexura coli sinistra	57	3.Ll.	416	left
colon — peritoneum	57	1a.Ll.	420	EAV
colon sigmoideum	57	1.Ll.	422	left
colon transversum — pars dextra	57	1.Ll.	422	right
colon transversum — pars sinistra	57	4.Ll.	414	cl. AP
columna vertebralis	109	11.Ub.	325	cl. AP
conduction system — heart	63	7.He. D	618	cl. AP
cor (alarm point heart)	117	14.Con.		cl. AP
cor — fasciculus atrio-ventricularis	63	7.He. D	618	cl. AP
cor — myocardium	63	6.He. D	615	cl. AP

Measurement point	DN	MP	OgN	Note
coronary arteries	59	7.Cir.	616	cl. AP
cor — pericardium	63	8a.He. D	612	right
			621	left
corpora quadrigemina	18	17.Gov.	320	cl. AP
Cowper's gland (bulbo urethral gland)	98	50b.Ub.		EAV
	82	65.Ub.	505	cl. AP
cutis — abdomen extremitatis inferioris	78	1.SK.	514	EAV
cutis — chest, neck, extremitatis superior	78	3.SK.	504	EAV
cutis — facies, caput	78	2.SK.	510	EAV
degeneration — parenchymal, abdomen, pelvis	61	1.PaD.		EAV
degeneration — parenchymal, neck, chest-region	61	2.PaD.		EAV
degeneration — parenchymal, head region	61	3.PaD.		EAV
degeneration — peritoneal region	61	1b.PaD.		EAV
degeneration — pleura region	61	1a.PaD.		EAV
dental focus — indication point	55	2.Ly.	607	EAV
dentes inferiores medial	29	24.Con.	218	cl. AP
dentes inferiores, pars dextra	31	8.St.	210	right
dentes inferiores, pars sinistra	31	8.St.	210	left
dentes superiores medial	28	25.Con.	207	cl. AF
dentes superiores, pars dextra	30	7.St.	208	right
dentes superiores, pars sinistra	30	7.St.	208	left
diaphragma	111	17.Ub.	327	cl. AP
diaphragma pelvis	86	7.Sp/Pa.	115	cl. AP
diaphragma uro-genitale	87	8.Sp/Pa.	114	cl. AP
diencephalon		7.Gbl.		cl. AP
ductuli biliferi dextra	80	41.Gbl.	503	right
ductuli biliferi sinistra	80	41.Gbl.	503	left

Measurement point	DN	MP	OgN	Note	
ductus choledochus	80	44.Gbl.	513	right	
ductus cysticus	80	43.Gbl.	509	right	
ductus deferens	82	64.Ub.	502	cl. AP	
ductus deferens	102	49b.Ub.	311	EAV	
ductus hepaticus communis	80	44.Gbl.	513	left	
ductus hepaticus dexter	80	43.Gbl.	509	left	
ductuli hepatici dexter	80	41.Gbl.	503	right	
ductus hepaticus sinistra	80	42.Gbl.	506	left	
ductus thoracicus	59	8a.Cir.		EAV	
duodenum — pars ascendens	64	4.Sl.	404	left	
duodenum — pars descendens	64	3.Sl.	406	right	
duodenum — pars horizontalis inferior	64	2.Sl.	407	right	
duodenum — flexura duodeno-jejunalis	64	3.Sl.	406	left	
ear, external (auris externa)	101	19.Sl.			
ear, internal	11	18.3-W.			
ear, middle (tympanic cavity)	10	17.3-W.		cl. AP	
elbow joint	1. MP.	68	8.Sl.	308	cl. AP
	2. MP.		3.Cir.	107	cl. AP
	3. MP.		11.Ll.	106	cl. AP
endocrine system	62	1.3-W.			
		3.3-W.			
epididymis	82	65.Gbl.	505	cl. AP	
	103	49a.Ub.	310	EAV	
epithelial degeneration	61	1.PaD.		EAV	
		3.PaD.		EAV	
esophagus, pars inferior	107	14.St.		cl. AP	
		42a.St.		EAV	
esophagus, pars superior	108	13.St.		cl. AP	
		42.St.	520	cl. AP	
esterases (pancreas)	72	4.Pa.	522	cl. AP	
ethmoid cells	24	20.Ll.	215	cl. AP	
extremities, lower, lymph supply		9.Sp/Pa.	113	cl. AP	
extremities, upper, lymph supply	55	6.Ly.	601	EAV	
eye, anterior region	21	21.3-W.	201	EAV	
eye, posterior region	22	1.Gbl.	202	cl. AP	

Measurement point	DN	MP	OgN	Note
fatty degeneration, control measurement point	79	1a.FaD.		EAV
fatty degeneration, head region	79	3.FaD.		EAV
fatty degeneration, lower body region	79	2.FaD.		EAV
fatty degeneration, upper body region	79	1.FaD		EAV
fibroid degeneration, abdomen and small pelvis	77	1.FiD.		EAV
fibroid degeneration, chest — neck	77	2.FiD.		EAV
fibroid degeneration, control MP	77	1a.FiD.		EAV
fibroid degeneration, head region	77	3.FiD.		EAV
fibroid degeneration, mucous membranes	77	1b.FiD.		EAV
flexura duodeno-jejunalis	64	3.Si.	406	left
frontal sinus	20	2.Ub.	213	cl. AP
gallbladder	80	42.Gbl.	506	right
gallbladder — ductuli biliferi, right liver lobe	80	41.Gbl.	503	right
gallbladder — ductuli biliferi, left liver lobe	80	41.Gbl.	503	left
gallbladder — ductus choledochus	80	44.Gbl.	513	cl. AP
gallbladder — ductus cysticus	80	43.Gbl.	509	right
gallbladder — ductus hepaticus dexter	80	43.Gbl.	509	left
gallbladder — ductus hepaticus sinister	80	42.Gbl.	506	left
glandula sublingualis	37	23b.Conc.		EAV
glandula submandibularis	35	8a.St.	209	cl. AP
glandula suprarenalis	112	22.Ub.	328	cl. AP
glomeruli — kidney	80	3.Ki.	130	cl. AP
gonads	94	31.St.		
		11.Sp/Pa		
		11.Li.	123	cl. AP

Measurement point	DN	MP	OgN	Note
gullet				
lower portion	107	14.St.		cl. AP
lower portion	76	42a.St.		EAV
gullet				
upper section	108	13.St.		cl. AP
upper section	76	42.St.	520	cl. AP
heart — alarm point	117	14.Con.		cl. AP
heart — conduction system	63	7.He.	618	cl. AP
heart — lymphatic drainage	63	5.He.		cl. AP
heart — mitral valve	63	8.He.	619	left, cl. AP
heart — myocardium	63	6.He.		cl. AP
heart — pericardium	63	8a.He.	612	right, EAV
			621	left
heart — pulmonary valve	63	9.He.	410	right, cl. AP
heart — tricuspid valve	63	8.He.	619	right, cl. AP
hypophysis	52	15.Si.		cl. AP.
		21.Gbl.		cl. AP.
		16.3-W.	103	cl. AP
hypothalamus	5	20.3-W.	204	cl. AP
internal ear	11	28.3-W.		cl. AP
intestinum — ileum	64	1.Si.	409	left
intestinum — terminal ileum	64	1.Si.	409	right
intestinum — peritoneum	64	1a.Si.		EAV
jaw joint, lower portion	33	2.St.	206	cl. AP
jaw joint, upper portion	32	23.3-W.	205	cl. AP
jejunum	64	2.Si.		left
joint degeneration, arm — upper extremities	75	2.ArD.		EAV
joint degeneration, atlas — jaw joint	75	3.ArD.		EAV
joint degeneration, control measurement point	75	1a.ArD.		EAV
joint degeneration, lower extremity and pelvis	75	1.ArD.		EAV

Measurement point	DN	MP	OgN	Note	
kidney, alarm point	119	25.Gbl.		cl. AP	
kidney — calices and papillae (pelvirenal region)	81	2.Ki.	519	cl. AP	
kidney — glomeruli and tubuli (renal parenchyma)	81	3.Ki.	516	cl. AP	
kidney — pelvis	81	1.Ki.	512	EAV	
kidney — peritoneum	81	1.—2Ki.		EAV	
kidney — ureter and control measurement point	81	1.—1Ki.		cl. AP	
kidney — ureter intra abdominalis	81	1a.Ki.	507	EAV	
knee joint	1. MP.	90	8.Li.	128	cl. AP
	2. MP.		35.St.	11	cl. AP
	3. MP.		54.Ub.	315	cl. AP
lamina quadrigemina	18	17.Gov.	320	cl. AP	
large intestine — alarm point	122	25.St.		cl. AP	
large intestine — ascending portion	57	3.Li.	416	right, cl. AP	
large intestine — cecum	57	4.Li.	414	right, cl. AP	
large intestine — descending portion	57	2.Li.	418	left	
large intestine — flexura dextra	57	2.Li.	418	right	
large intestine — flexura sinistra	57	3.Li.	416	left	
large intestine — sigmoid	57	1.Li.	422	left	
large intestine — peritoneum	57	1a.Li.	420	EAV	
large intestine — transversum left	57	4.Li.	414	left	
large intestine — transversum right	57	1.Li.	422	right	
laryngeal tonsil	42	17.Li.	221	cl. AP	
larynx	39				
	104	21.Con.		cl. AP	
leg arteries	93	32.St.	124	cl. AP	
lien — alarm point	121	13.Li.		left	
lien — pulpa alba, lower body region	73	2.Sp.	527	left	

Measurement point	DN	MP	OgN	Note
lien — pulpa alba, upper body region	73	1.Sp.	530	left
lien — pulpa rubra	73	3.Sp.	524	left
lien — reticulum (RES)	73	4.Sp.	522	left
ligamentum latum	99	50a.Ub.	331	EAV
lingua	38	23a.Con.	211	EAV
lingual tonsil	34	3a.St.	216	EAV
lipase — pancreas	72	4.Pa.	522	right
little brain	18	17.Con.	320	cl. AP
liver — alarm point	116	14.Li.		cl. AP
liver — ductuli interlobulares	74	2a.Li.		EAV
liver — lobuli (cells)	74	2.Li.	526	cl. AP
liver — peritoneum	74	1a.Li.		EAV
liver — perivascular and periportal system	74	3.Li.	521	cl. AP
liver — venae centrales	74	1.Li.	529	cl. AP
lumbal spine	109	61.Ub.		cl. AP
lung — alarm point	114	1.Lu.		cl. AP
lung — bronchia	56	10.Lu.	606	cl. AP
lung — parenchyma	56	11.Lu.	419	cl. AP
lung — pleura	56	10a.Lu.	609	EAV
lung trachea	56	9.Lu.	617	cl. AP
lung — lymphatic drainage	55	4.Ly.	604	EAV
lymphatic drainage of the tonsilla palatina	55	1.Ly.	610	EAV
lymphatic drainage of the ear	55	1.—1Ly.		EAV
lymphatic drainage CMP of the 5 tonsils	55	1.—2Ly.		EAV
lymphatic drainage of the tonsilla tubaria	55	1a.Ly.	608	EAV
lymphatic drainage of the jaws	55	2.Ly.	607	EAV
lymphatic drainage of the paranasal sinuses		3.Ly.	605	EAV
lymphatic drainage of the lung and the mediastinum	55	4.Ly.	604	EAV
lymphatic drainage of the heart	55	5.Ly.	602	EAV
lymphatic drainage of the upper extremities	55	6.Ly.	601	EAV

Measurement point	DN	MP	OgN	Note
lymphonoduli cervicalis prof.				
lymphonoduli mesocolici	57	4a.Ll., left	413	EAV
maltase — pancreas	72	3.Pa.	524	right
maxillary sinus	25			
	55	5.St.	203	cl. AP
mediastinum lymph nodes	55	4.Ly.	604	EAV
medulla oblongata	17	10.Ub.	323	cl. AP
medulla ossium	84	39.Gbl.	316	cl. AP
meninges	12	19.3-W.		cl. AP
mesencephalon	8	9.Gbl.		cl. AP
middle ear (tympanic cavity)	10	17.3-W.		cl. AP
muscles — upper extremity	69	9.Sl.	307	cl. AP
muscles — lower extremity	88	34.Gbl.	112	cl. AP
myocardium	63	6.He.	615	right left
			615	
nasal concha	26	19.Ll.		cl. AP
nasal main cavity — lateral portion	26	19.Ll.		cl. AP
nasal main cavity — medial portion	27			EAV
nasal main cavity — vault	19	23a.Gov.	212	cl. AP
nerval degeneration — brain-, spinal marrow surroundings	59	1b.NeD.		EAV
nerval degeneration — cervical and thoracal marrow	58	2.NeD.	309	EAV
nerval degeneration — lumbal- sacral marrow	58	1.NeD.		EAV
nerval degeneration — brain stem and cerebrum	58	3.NeD.		EAV
nerves — upper extremity	67	7.Sl.		EAV
nervous system (nerval degene- ration CMP)	58	1a.NeD.		EAV
nervus vagus	46	10a.St.	120	cl. AP
neuro — hypophysis	13	12.Gbl.		cl. AP
nodi lymphatici cerv. prof. for the lymphdrainage of the teeth	55	2.Ly.	607	EAV
nodi lymphatici cerv. prof. for				

Measurement point	DN	MP	OgN	Note
lymph drainage for nasal cavi- ties	55	3.Ly.	604	EAV
nodi lymphatici broncho-pulmo- nales, tracheobronchales et mediastinales dorsales	55	4.Ly.	605	EAV
nucleases — pancreas	72	2.Pa.	527	right
oculus — pars anterior	21	21.3-W.	201	cl. AP
oculus — pars posterior	22	1.Gbl.	202	cl. AP
oesophagus — pars inf.	107	14.St.		cl. AP
oesophagus — pars superior	108	13.St.		cl. AP
oesophagus — pars superior	76	42.St.	520	cl. AP
oesophagus — pars inf.		42a.St.		EAV
organ degeneration — control measurement point epithelial parenchymatous degenera- tion	61	1.—3PaD.		EAV
ostium abdominale tubae	103	49a.Ub.	310	EAV
ovarium	93	31.St.		
		11.Sp/Pa.		
		11.Li.	123	cl. AP
	62	1.3-W.	411	cl. AP
palatine tonsil	40	8b.St.		EAV
palatine tonsil	55	1.Ly.	610	EAV
pancreas — alarm point	120	13.Li.		right
pancreas — carbohydrate meta- bolism	72	3.Pa.	524	cl. AP
pancreas — esterase and lipase formation	72	4.Pa.	522	cl. AP
pancreas — nuclease forma- tion	72	2.Pa.	527	cl. AP
pancreas — peritoneum	72	P.Pa.		EAV
pancreas — protease forma- tion	72	1.Pa.	530	cl. AP
parametrium	99	50a.Ub.	331	EAV
parotis — parotid gland	43	3.St.	217	cl. AP
parathyroid gland	62	1.3-W.	411	cl. AP
	44	9.St.		cl. AP

Measurement point	DN	MP	OgN	Note
pelvis renalis	81	1.Ki.	512	EAV
penis	82	66.Ub.	508	cl. AP
	97	51.Ub.	314	cl. AP
pericard	63	8a.He.		EAV
peritoneum — gallbladder region	80	44a.Gbl.		right
peritoneum — kidney region	81	1.—2Ki.		EAV
peritoneum — large intestine region	57	1a.Li.		EAV
peritoneum — liver region	74	1a.Li.		EAV
peritoneum — pancreas region	72	1a.Pa.		right
peritoneum — spleen region	73	1a.Sp.		left
peritoneum — small intestine region	63	1a.Si.		EAV
peritoneum — stomach region	76	44a.St.		EAV
peritoneum — urinary bladder region	82	66a.Ubl. 67a.Ubl.		EAV EAV
pineal gland	103	49a.Ubl.	310	EAV
pituitary gland				
1. anterior lobe	52	15.Si. 16.3-W. 21.Gbl.		cl. AP cl. AP cl. AP
2. medial lobe	52a	20a.Gbl.		EAV
3. posterior lobe	35	12.Gbl.		cl. AP
pharyngeal tonsil	36	23.Con.	219	cl. AP
pons	16	9.Ub.	321	cl. AP
pleura	56	10a.Lu.		EAV
prostate gland	82	65.Ub.	502	cl. AP
	100	50.Ub.	313	cl. AP
pulmo	114	1.Lu.		cl. AP
pylorus	76	54.St.	515	right
pylorus — stomach	76	44.St.	525	right
rectum	83	6.Ki.	131	cl. AP
ren — alarm point	119	25.Gbl.		cl. AP
renal pelvis	81	1.Ki.	512	EAV
ren — glomeruli et tubuli	81	3.Ki.	130	cl. AP
ren — regio pyelorenalis	81	2.Ki.	132	cl. AP

Measurement point	DN	MP	OgN	Note
seminal vesicle	101	49a.Ub.	312	EAV
seminal collicle	99	50.Ub.	331	EAV
sanguis	85	6.Pa/Sp. 8.Ki. 5.Li.		
			129	cl. AP
shoulder joint — 1. MP.	70	15.Li.	105	cl. AP
2. MP.		2.Cir.	118	cl. AP
3. MP.		10.Si.	306	cl. AP
sinus frontalis	20	2.Ub.	213	cl. AP
sinus maxillaris	25	5.St.	203	cl. AP
sinus sphenoidalis	23		214	EAV
skin — head region	78	3.SK.	504	EAV
skin — lower body region	78	1.SK.	514	EAV
skin — scars	78	1a.SK.		EAV
skin — upper body region	78	2.SK.	510	cl. AP
small intestine — alarm point	123	4.Con.		cl. AP
small intestine — left, ileum	64	1.Si.	409	left
small intestine — terminal end of ileum	64	1.Si.	409	right
small intestine — jejunum region	64	2.Si.	407	left
spermatoc cord	102	49b.Ub.	311	EAV
sphenoid cavity	23		214	EAV
spina columna	109	11.Ub.	325	cl. AP
spinal marrow	53	13.Gov.	324	cl. AP
sleep center — depth of the sleep	7	16.Gbl.		cl. AP
sleep center — sleep and wake rhythm	14	11.Gbl.		cl. AP
spleen — alarm point	121	13.Li.	530	left
spleen — red pulp	73	2.Sp.	522	left
spleen — reticulum	73	1.Sp.		left
spleen — white pulp	73	3.Sp.	524	left
spleen — white pulp	73	4.Sp.	527	left
stomach — alarm point	118	12.Con.		cl. AP
stomach — antrum	76	44.St.	525	right
stomach — cardia, left	76	43.St.	523	left
stomach — corpus, left	76	45.St.	515	left
stomach — corpus, right	76	43.St.	523	right
stomach — esophagus	76	42a.St.		EAV
stomach — fundus, left	76	44.St.	525	left

Measurement point	DN	MP	OgN	Note
stomach — passage, right left				
portion	76	43a.St.		EAV
stomach — pylorus	76	54.St.	515	right
submandibular gland	35	8a.St.	209	EAV
sympathetic nerve	54	20.Gbl.	304	cl. AP
teeth — lower, lateral	31	8.St.	210	right
			210	left
teeth — lower, middle	29	24.Con.	218	cl. AP
teeth — upper, lateral	30	7.St.	208	right
			208	left
teeth — upper, middle	28	25.Gov.	207	cl. AP
testis	93	31.St.		
		11.Sp/ Pa.		
		11.Li.	123	cl. AP
thalamus	6	4.Gbl.		cl. AP
thymus	47	11.St.		cl. AP
thyreoidea	45	10.St.	119	cl. AP
tongue	38	23a.Con.	211	EAV
tonsilla laryngis	42	17.Li.	221	cl. AP
tonsilla lingualis	34	3a.St.	216	EAV
tonsilla palatina	55	1.Ly.	610	EAV
tonsilla pharyngea	36	23a.Con.	219	cl. AP
tonsilla tubaria	55	1a.Ly.	608	EAV
tonsilla tubaria	41	18.Li.	220	cl. AP
trachea	105	19.Con.		cl. AP
trachea	56	9.Lu.	617	cl. AP
tricuspid valve	63	8.He.	619	right
trigonum vesicae	82	66.Ub.	508	cl. AP
tuba uterina	82	64.Ub.	502	cl. AP
tuba uterina — pars interstitialis	82	65.Ub.	505	cl. AP
tubal tonsil	41	18.Li.	220	cl. AP
tubuli — kidney	80	3.Ki.	130	cl. AP
ureter — pars abdominalis	81	1a.Ki.	507	EAV
ureter — kidney-control-measurement point	80	1.-2Ki.		EAV
urethra — pars anterior	95	52.Ub.	333	cl. AP
urethra — pars posterior	96	51a.Ub.	332	EAV

Measurement point	DN	MP	OgN	Note
urinary bladder — corpus	82	67Ub.	511	cl. AP
uterus	100	50.Ub.	313	cl. AP
vagina	97	51.Ub.	314	cl. AP
vascular sclerosis	60	1a.Ai.		cl. AP
veins — abdomen	92	33.St.	125	cl. AP
veins of the arm	65	8.Lu.	109	cl. AP
veins — small pelvis	91	10.Sp/ Pa.	126	cl. AP
ventriculus — alarm point	118	12.Con.		cl. AP
vermiform process	57	4a.Li.	413	right
vesica urinaria — alarm point	124	3.Con.		cl. AP
vesicula seminalis	101	49c.Ub.	312	EAV

Supplement to the table: EAP-Organometry According to Voll
Classified in Serial Numbers


Table 1

101	19. Sl.	Auris externa
102	9. St.	Parathyreoidea
103*	15. Sl.	Hypophysis
	16. 3-W.	
	21. Gbl.	
104	11. St.	Thymus
105	15. Li.	Articulatio humeri MP 1
106	11. Li.	Articulatio cubiti MP 3
107	3. Cir.	Articulatio cubiti MP 2
108	7. Lu.	Venae extremitatis superioris
+ 613		
110	33. Gbl.	Articulationes extremitatis inferioris
111	35. St.	Articulatio genus MP 2
112	34. Gbl.	Musculi extremitatis inferioris
113	9. Sp/Pa.	Vasa lymphat. extr. inferioris
114	8. Sp/Pa.	Diaphragma urogenitale
115	7. Sp/Pa.	Diaphragma pelvis
116	41. St.	Articulatio talocrualis MP 2
117	62. Ub.	Articulatio talocalcanea posterior
118	2. Cir.	Articulatio humeri MP 2
119	10. St.	Glandula thyreoidea
120	10a. St.	Nervus vagus
121	30. St.	Articulatio coxae MP 1
122	11a. Sp/Pa.	Articulatio coxae MP 2
123*	11. Li.	Ovarium
	11. Sp/Pa.	Testis
	31. St.	
124	32. St.	Arteriae extremitatis inferioris
125	33. St.	Venae abdominales
126	10. Sp/Pa.	Venae pelvis
127	7. Li.	Venae extremitatis inferioris
128	8. Li.	Articulatio genus MP 1
129*	8. Ki.	Sanguis
	6. Sp/Pa.	Haemorrhagia
	5. Li.	
130	3. Ki.	Renal Regio pyelo-renalis
+ 516		
131	6. Ki.	Rectum
+ 517		
132	2. Ki.	Renal parenchyma
+ 519		
133	5. Sp/Pa.	Articulatio talocrualis MP 1

* = crossing point of three meridians
MP = measurement point. The large joints have three measurement points

Anterior Aspect of the Body

Measurement points in Electro-acupuncture according to Voll



101	19. Sl.	118	2. Cir.
102	9. St.	119	10. St.
103*	+	120	10a. St.
104	11. St.	121	30. St.
105	15. Li.	122	11a. St.
106	11. Li.	123*	+
107	3. Cir.	124	32. St.
108	7. Lu.	125	33. St.
109	8. Lu.	126	10. Sp. Pa.
110	33. Gbl.	127	7. Li.
111	35. St.	128	8. Li.
112	34. Gbl.	129*	+
113	9. Sp. Pa.	130	3. Ki.
114	8. Sp. Pa.	131	6. Ki.
115	7. Sp. Pa.	132	2. Ki.
116	41. St.	133	5. Sp. Pa.
117	62. Ub.		

1

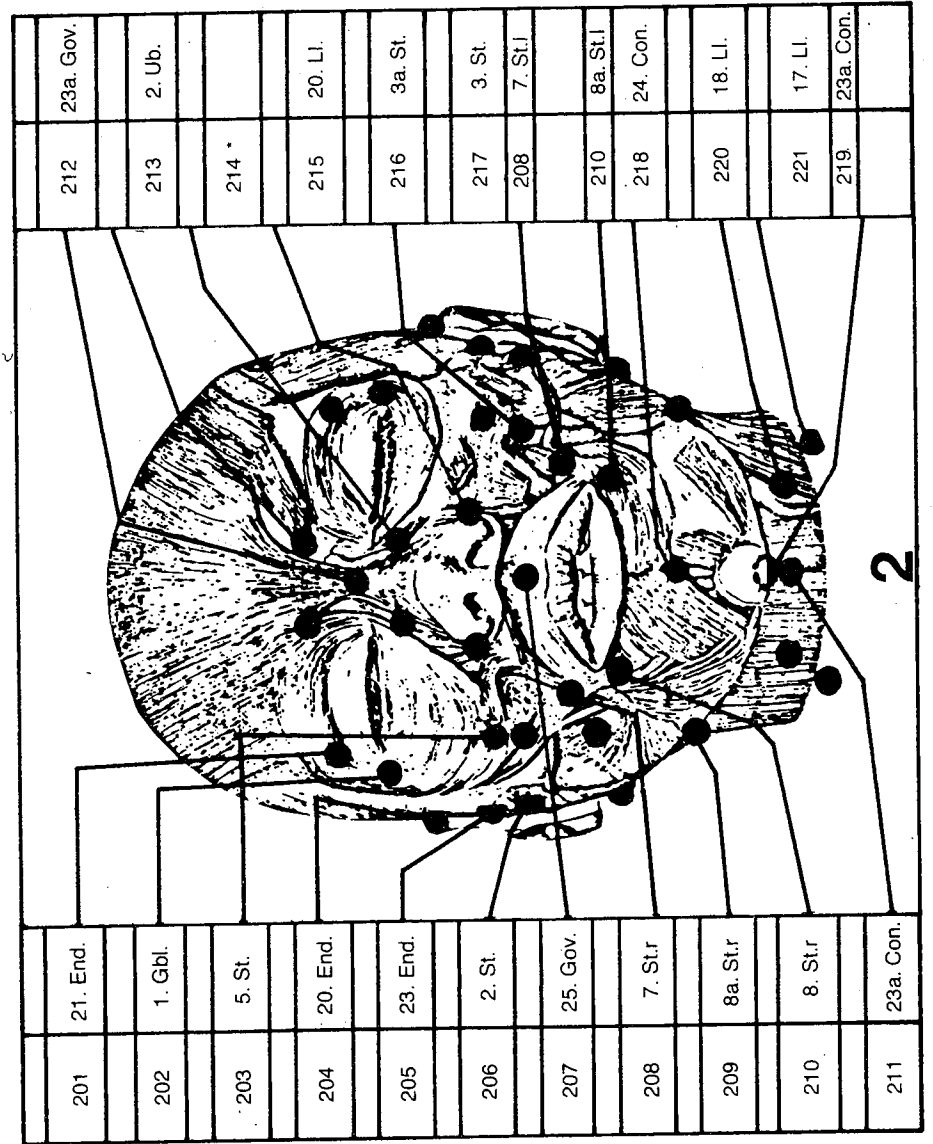
* points of intersections of three meridians

** 10a. Stomach

Table 2

201	21. 3-W.	Oculus pars anterior
202	1. Gbl.	Oculus pars posterior
203	5. St.	Sinus maxillaris
204	20. 3-W.	Hypothalamus
205	23. 3-W.	Articulatio mandibulae superioris
206	2. St.	Articulatio mandibulae inferioris
207	25. Gov.	Dentes superioris 5—8, 9—12
208	7. St.D	Dentes superiores 1—4
208	7. St.S	Dentes superiores 13—16
209	8a.St.	Glandula submandibularis
210	8. St.D	Dentes inferiores 29—32
210	8. St.S	Dentes inferiores 17—20
211	23a.Con.	Lingua
212	23a.Gov.	Tegmentum cavi nasi
213	2. Ub.	Sinus frontalis
214	*	Sinus sphenoidalis
215	20. LI.	Cellulae ethmoidales
216	3a.St.	Tonsilla lingualis
217	3. St.	Parotis
218	24. Con.	Dentes superiores 21—28
219	23a.Con.	Tonsilla pharyngea
220	18. LI.	Tonsilla tubaria
+ 608		
221	17. LI.	Tonsilla laryngis

Anterior Aspect of the Head and Neck
Measurement Points in Electro-acupuncture according to Voll



* located on the secondary vessel from the 20. LI to the 1. Ub.

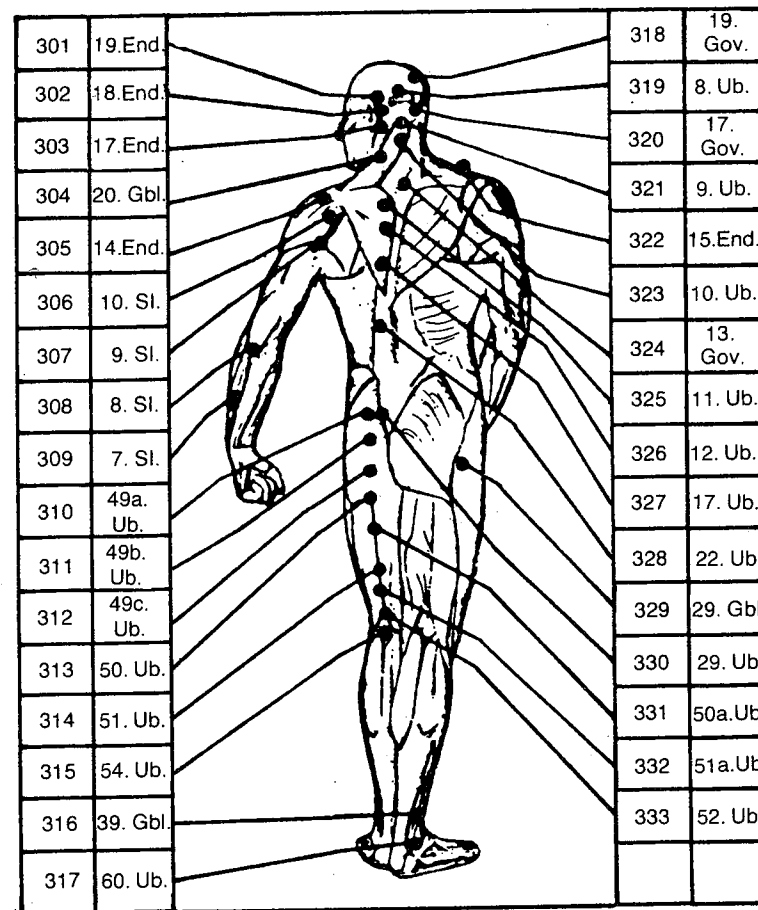
* situated on the secondary vessel between 20. LI. to 1. Ub.

Table 3

301	19. 3-W.	Meninges
302	18. 3-W.	Auris interna
303	17. 3-W.	Auris media
304	20. Gbl.	Sympathicus
305	14. 3-W.	Articulatio acromioclavicularis
306	10. Sl.	Articulatio humeri MP 3
307	9. Sl.	Musculi extremitatis superioris
308	8. Sl.	Articulatio cubiti MP 1
309	7. Sl.	Nervi extremitatis superioris
310	49a.Ub.	Epididymis — Ostium abdominale tubae
311	49b.Ub.	Ductus deferens — Ampulla tubae uterinae
312	49c.Ub.	Vesicula seminalis — Uterus pars interstitial. tubae uterinae
313	50. Ub.	Prostata
		Uterus
314	51. Ub.	Penis
		Vagina
315	54. Ub.	Articulatio genus MP 3
316	39.	Medulla ossium
317	60. Ub.	Nervi extremitatis inferioris
318	19. Gov.	Cerebellum
319	8. Ub.	Epiphysis
320	17. Gov.	Lamina tecti s. quadrigemina
321	9. Ub.	Pons Varoli
322	15. 3-W	Articulationes extremitatis superioris
323	10. Ub.	Medulla oblongata
324	13. Gov.	Medulla spinalis
325	11. Ub.	Columna vertebralis
326	12. Ub.	Systema ossium
327	17. Ub.	Diaphragma
328	22. Ub.	Glandula suprarenalis
329	29. Gov.	Articulatio coxae MP 3
330	29. Ub.	Articulatio sacroiliaca
331	50a.Ub.	Colliculus seminalis
		Parametrium
332	51a.Ub.	Urethra pars posterior
333	52. Ub.	Urethra pars anterior

Posterior Aspect of the Body

Measurement Points in Electro-acupuncture according to Voll.



3

Table 4

401	5. SI.	Articulatio radiocarpea MP 2
402	4. 3-W.	Articulatio intercarpea
403	3. 3-W.	Endocrinum (Hypophyse, Epiphyse)
404	4. SI. (D)	Duodenum pars horizontalis superior
404	4. SI. (S)	Duodenum pars ascendens
405	2. 3-W.	Endocrinum (Thyreocidea, Thymus, Parathyr.)
406	3. SI. (D)	Duodenum pars descendens
406	3. SI. (S)	Flexura duodeno-jejunalis
407	2. SI. (D)	Duodenum pars horizontalis inferior
407	2. SI. (S)	Jejunum
408	1a.SI. (D)	Peritoneum duodeni et illi terminalis
408	1a.SI. (S)	Peritoneum duodeni et duodeni pars ascendens
409	1. SI. (D)	Ileum terminalis
409	1. SI. (S)	Ileum
410	9. He. (S)	Cor Endocardium ventriculi dextri
	+ 622	Valva trunci pulmonalis
410	9. He. (S)	Cor Endocardium ventriculi sinistri
	+ 622	Valva aortae
411	1. 3-W.	Endocrinium (Testis, Ovarium, Glandula suprarenalis)
412	5. LI.	Articulatio radiocarpea MP 1
413	4a.LI. (D)	Appendix + Nodi lymphatici ileo-cecales
413	4a.LI. (S)	Nodi lymphatici mesocolici
414	4. LI. (D)	Cecum
414	4. LI. (S)	Colon transversum pars sinistra
415	3. AI.	Allergia MP 3 (Caput, Facies)
416	3. LI. (D)	Colon ascendens
416	3. LI. (S)	Colon Flexura coli sinistra
417	2. AI.	Allergia MP 2 (Extremitatis superior, Thorax)
418	2. LI. (D)	Colon Flexura coli dextra
418	2. LI. (S)	Colon descendens
419	11. Lu.	Pulmo Parenchyma et Alveoli
	+ 611	
420	1a.LI.	Colon Peritoneum
421	1. AI.	Allergia MP 1 (Abdomen., Extrem. infer.)
422	1. LI. (D)	Colon transversum pars dextra
422	1. LI. (S)	Colon sigmoideum
423	9. Cir.	Vasa Arteriae
	+ 612	

Dorsum of the Hand

Measurement Points in Electro-acupuncture according to Voll

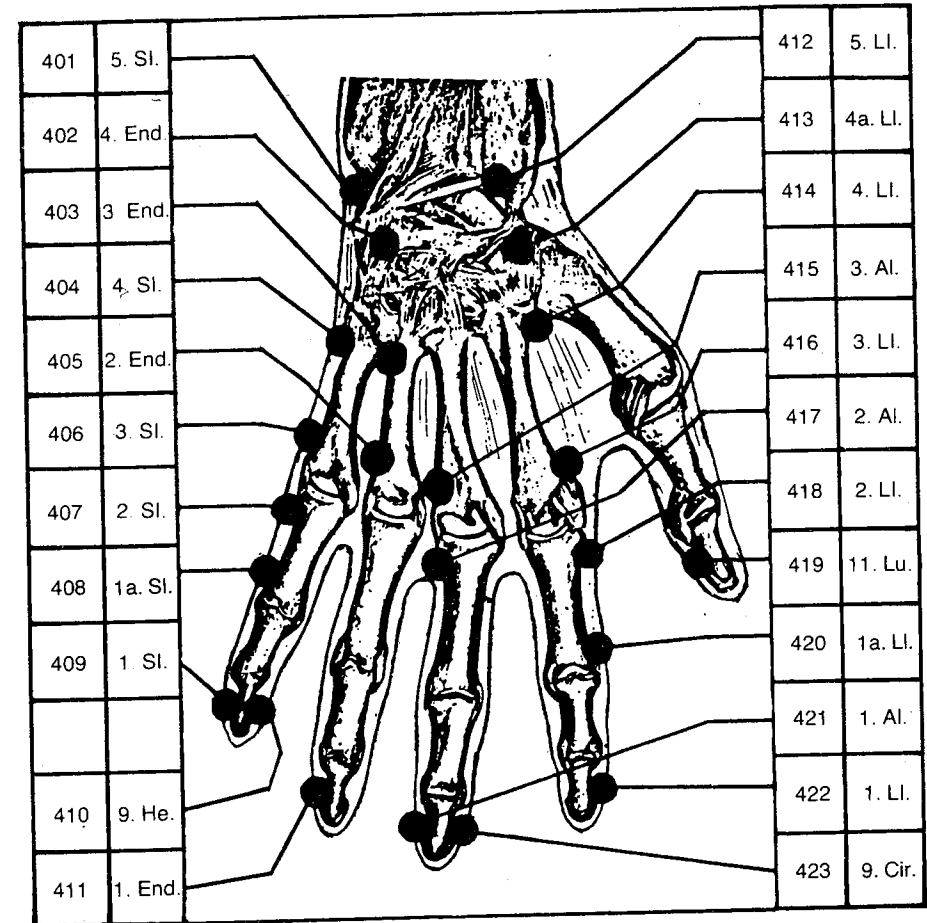
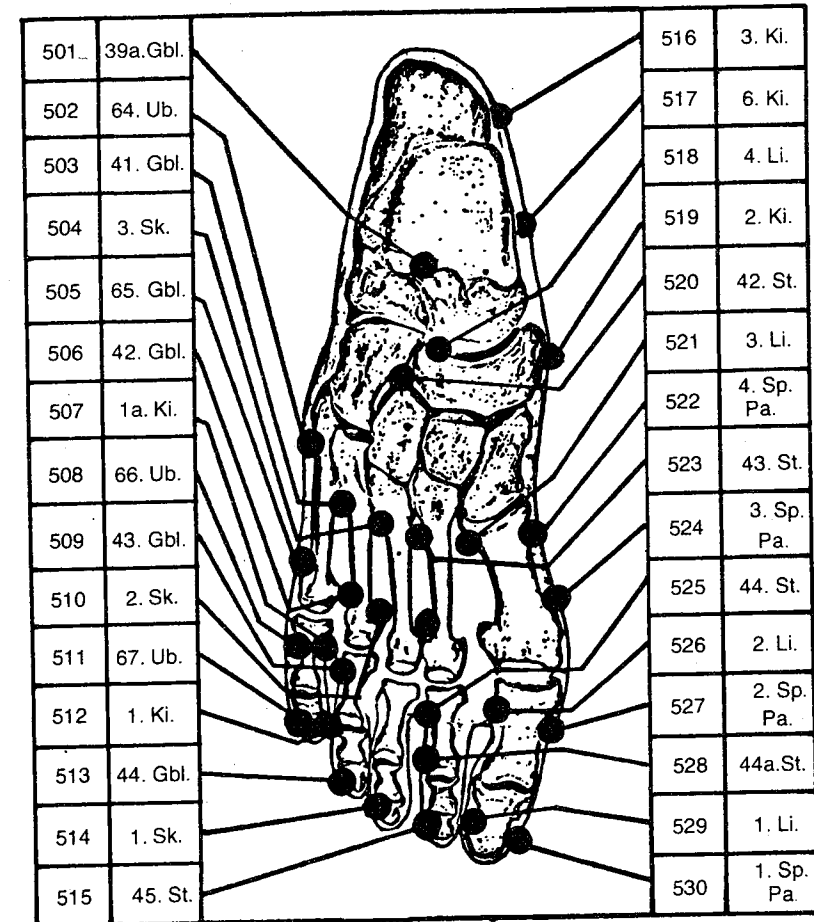


Table 5

501	39a.Gbl.	Articulatio talocrualis MP 3
502	64. Ub.	Ductus deferens, Epididymis, Tuba uterina
503	41. Gbl. (D)	Ductuli biliferi dextri, Duct. hepatic. dextra
503	41. Gbl. (S)	Ductuli biliferi sinistri
504	3. SK.	Cutis (Facies, Caput)
505	65. Ub.	Vesica urinaria Urethra anter. et poster, Vesicula et Colliculus seminalis, Prostata, Parametrium, Uterus, Pars interstitialis tubae uterinae, Penis, Vagina
506	42. Gbl. (D)	Vesica fellae Corpus
506	42. Gbl. (S)	Ductus hepaticus sinistra
507	1a.Ki.	Ren Ureter pars abdominalis
508	66. Ub.	Trigonum vesicae
509	43. Gbl.	Ductus cysticus
510	2. SK.	Cutis MP 2 (Thorax, Collum, Regio cervico-dorsalis, Extremit. sup.)
511	67. Ub.	Vesica urinaria Corpus
512	1. Ki.	Pelvis renalis
513	44. Gbl.	Ductus choledochus
513	44. Gbl.	Ductus hepaticus communis
514	1. SK.	Cutis MP 1 (Abdomen, Dorsum, Regio lumbosacralis, Extr. inf.)
515	45. St. (D)	Ventriculus Pylorus
515	45. St. (S)	Ventriculus Corpus pars sinistra
516	3. Ki.	Renal parenchyma
+ 130		
517	6. Ki.	Rectum
+ 131		
518	4. Li.	Articulatio talocalcaneonavicularis
519	2. Ki.	Ren Regio pyelo-renal
+ 132		
520	42. St.	Oesophagus pars superior
521	3. Li.	Hepar Regio periportal
522	4.	Pancreas Formatio ferm. Lipases
522	4.	Lien Reticulum (RES)
523	43. St. (D)	Ventriculus Cardia
524	3.	Pancreas Formatio ferm. Amylases et Insulinum
524	3.	Lien Pulpa rubra
525	44. St. (D)	Ventriculus Antrum pyloricum
525	44. St. (S)	Ventriculus Fundus ventriculi
526	2. Li.	Hepar Lobuli hepatici
527	2. Pa. (D)	Pancreas Formatio ferm. Nucleases
527	2. Sp. (S)	Lien Pulpa alba
528	44a.St. (S)	Ventriculus Periotoneum ventr.
529	1. Li.	Hepar Venae centrales
530	1. Pa.	Pancreas Formatio ferm. Proteases
530	1. Sp.	Lien Pulpa alba

Dorsum of the right foot

Measurement Points in Electro-acupuncture according to Voll



5

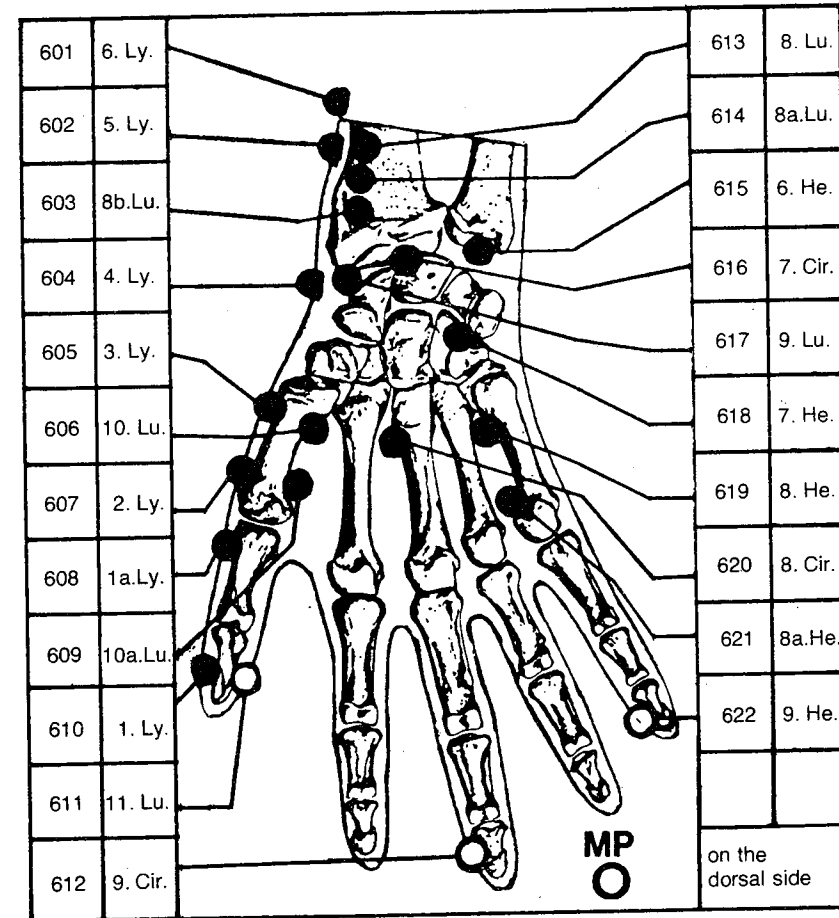
Table 6

601	6. Ly.	Vasa lymphat. extr. superioris
602	5. Ly.	Vasa lymphatica cordis et pericardii
603	8b.Lu.	Larynx
604	4. Ly.	Vasa lymphat. Nodi lymphat. pulmonales et pleurae + Nodi lymphatici tracheobronchopulmonales et mediastinales
605	3. Ly.	Vasa lymphat. Sinus frontalis, Sinus maxillaris, Sinus sphenoidalis, Cellulae ethmoidales
606	10. Lu.	Pulmo Bronchi
607	2. Ly.	Vasa lymphat. Nodi lymphat. dentium, mandibulae + maxillae.
608	1a. Ly.	Vasa lymphat. Tonsilla tubaria
+ 220		
609	10a.Lu.	Pulmo Pleura
610	1. Ly.	Vasa lymphat. Tonsilla palatina
611	11. Lu.	Pulmo Parenchyma et Alveoli.
+ 419		
612	9. Cir.	Arteriae
+ 423		
613	8. Lu.	Venae extr. superioris
+ 109		
614	8a.Lu.	Hypopharynx
615	6. He. (D)	Cor Myocardium dextrum
615	6. He. (S)	Cor Myocardium sinistrum
616	7. Cir.	Vasa Arteria coronaria
617	9. Lu.	Pulmo Trachea
618	7. He.	Cor Fasciculus atrioventricularis
619	8. He. (D)	Cor Endocardium atrii dextri Valva tricuspidalis
619	8. He. (S)	Cor Endocardium atrii sinistri Valva mitralis
620	8. Cir.	Vasa Venae
621	8a.He. (D)	Cor Pericardium dextrum
621	8a.He. (S)	Cor Pericardium sinistrum
622	9. He. (D)	Cor Endocardium ventriculi dextri Valva trunci pulmonalis
+ 410		
622	9. He. (S)	Cor Endocardium ventriculi sinistri Valva aortae
+ 410		

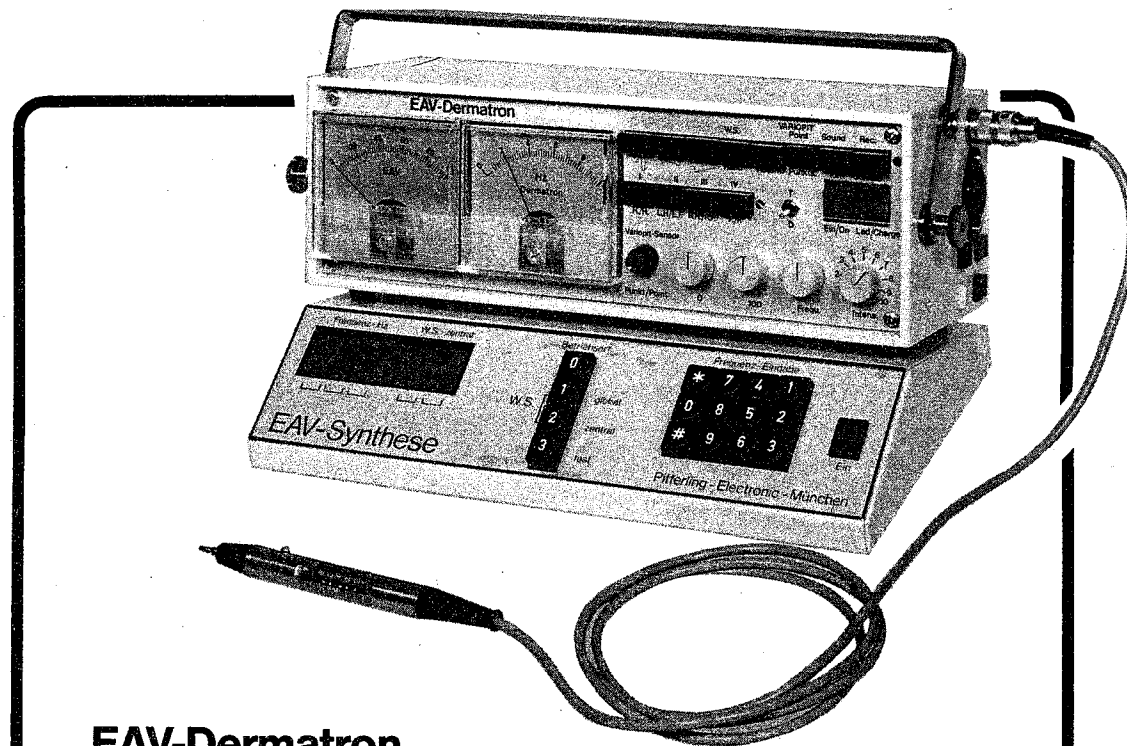
Palm of the right Hand

on the dorsal side

Measurement Points in Electro-acupuncture according to Voll.



6



EAV-Dermatron

according to Voll

Functional organ and tissue diagnostics by bioelectrical potentials.

Therapy with low-frequency relaxation oscillation pulses. Testing of medicine.

Transmitter for quick and painless loading in case of energetical low voltage of the body.

Variopit - high accuracy measuring device for the finding of acupuncture points, combined with an automatic skin humidity adjustment.

Point localization, EAV diagnostics and therapy in one procedure.

Several patents pending.

EAV synthesis apparatus

Quick result by resonance absorption can be obtained.

Allows aimed modulation of the organ frequency by frequency adjustment with two value figures.

Further intensification of the therapy occurs by modulation of the organ frequency.

The frequency range reaches from 1.00 to 999 Hertz. The rythm of the pulse duration and the interval is adjusted automatically.

Other EAV-devices from Pitterling Compagny are available:

Analyser, Portable unit, Junior, Recording unit (with value and pressure recording).



Pitterling Electronic

Pitterling Electronic GmbH, 8000 München 40,
Akademiestraße 5, Telefon (089) 34 72 81