COLLECTED
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OF THE
INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

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PAST CHAIRMAN I.C.A.K.

INTRODUCTION

by

SHELDON C. DEAL, D.C.,N.D.

PAST CHAIRMAN

This eighteenth collection of papers by the members of the International College of Applied Kinesiology represents 22 papers written by 16 authors.

These papers will be presented by their authors to the general membership at the Winter meeting to be held in St. Thomas on December 3,4,5,6, 1984. The authors welcome comments and further ideas on their findings either in St. Thomas or you may write them directly as their addresses are indluded in the Table of Contents.

These papers do not represent the official educational material of the International College of Applied Kinesiology, but rather areas of special interest to the individual members which have been under research. The papers are presneted in an unedited form.

The papers are being mailed out to the members well in advance of the St. Thomas meeting. This will allow the membership at large to read the papers in advance which will save time at the Winter meeting and hopefully stimulate more questions from the members and more demonstrations from the individual author.

We the members of I.C.A.K. can be proud of the amount of research being conducted and feel fortunate to have it at our fingertips in the form of these Collected Papers. It cannot help but be an asset to our health and also to the health of our patients.

* Diplomate

****** TABLE OF CONTENTS ******

		Page
Insurance Report Manual Muscle Testing	Michael Allen, D.C.* 22471 Aspan #108 Lake Forest, CA 92630	1
Cervical Disc Syndrome	John Bandy, D.C.* P. O. Box 467 Blowing Rock, N.C. 28605	11
Scoliosis	John Campbell, D. C. * P. O. Box 2192 Vineyard Haven, MA 02568	17
Postural Cervical Adjusting	Katherine Conable, D.C.* 608 N. McKnight St. Louis, MO 63132	23
Abstract	Carl Ferreri, D.C. 3850 Flatlands Ave. Brooklyn, N.Y. 10107	27
The Cranial Injury Complex	Carl Ferreri, D.C.	49
Idopathic Scoliosis	Carl Ferreri, D.C.	53
Pre-Stressing and Hidden Problems	Bert Hanicke, D.C.* 608 N. McKnight St. Louis, MO 63132	70
Subluxation of Clavicle	James Lent, D.C.* 614 W. Friendly Ave. Greensboro, N.C. 27401	73
The Effect of Calcaneal Elevation on Peripheral Muscle Strength	William Maykel, D.C. 31 Auburn Street Auburn, MA 10501	77
Sacral Stress Receptor	William Maykel, D.C.	79
A Form That Works	Thomas Roselle, D.C. 340 E. 4th Street Jamestown, N.Y. 14701	81
P. M. S.	Thomas Roselle, D.C.	87
Essential Fatty Acids, B Vitamins, and the Yaw #1 Fault	Walter H. Schmitt, Jr., D.C.* 87 S. Elliott Road #110 Chapel Hill, N.C. 27514	91
Suggested Procedures for Treating Structural Faults in Terms of Body Chemistry Imbalances	Walter H. Schmitt, Jr., D.C.*	121

The Relationship Between the Dorsolumbar Fixation and Vitamins A and D	Walter H. Schmitt, Jr., D.C.	143
Neutralizing Food Allergies by Combining Oral and Low Frequency Electrical Stimulation	Dale H. Schusterman, D.C. 1446 Ingleside Avenue McLean, VA 22101	153
Natural Health Care Techniques Class	Jason Schwartz, D.C. 915 E. Ocean Blvd. #1 Stuart, FL 33494	165
Residual Tension of the Muscles of Mastication:	Joseph Shafer, D.C. Lyngby Hovedgade 60 Lyngby, 2800 Denmark	255
Proving Therapy Localization by Use of Double Blind Studies	Paul Sprieser, D.C.* 23 Arthur Drive Parsippany, N.J. 07054	261
Learning Disabilities	Paul Sprieser, D.C.*	265
The Temporomandibular Joint Hand Stress Receptor	Leo B. Stouder, D.C. 1926 Hollywood Blvd., Ste. 105 Hollywood, FL 33020	293
Teaching Manual for Applied Kinesiology	David Walther, D.C.* 255 W. Abriendo Pueblo, CO 81004	295

INSURANCE REPORT -- MANUAL MUSCLE TESTING

by

MICHAEL D. ALLEN, D.C., N.D.

ABSTRACT: This paper should be of particular interest to those doctors who are interested in:

1. Getting paid for what they do;
2. Educating insurance companies about AK;
3. Streamlining their insurance reporting.

The attached insurance report will increase the communication between your office and the insurance company. We need to establish the difference between mere kinesiological testing and the more diagnostic applied kinesiological testing.

According to "Muscles -- Testing and Function", by Kendall, Kendall and Wadsworth, "Muscle testing is an integral part of physical examination. It provides information not obtained by other procedures, that is useful in differential diagnosis, prognosis and treatment of neuromuscular and musculoskeletal disorders.

"Many neuromuscular conditions are characterized by muscle weaknesses." (pg.3)

Muscle weakness may be due to one of several problems such as disuse atrophy, nerve involvement, stretch weakness, pain or fatigue. The return of the muscle's strength may be due to recovery following the disease process, return of nerve impulse after trauma and repair, hypertrophy of unaffected muscle fibers, muscular development resulting from exercises to overcome disuse atrophy, or return of strength after stretch and strain have been relieved, as in the chiropractic adjustment.

For years, kinesiology has been the domain of medicine. It has been used to diagnose muscular weaknesses, evaluate structural problems, and tell the patient what is wrong. Since the decade of the 60's, there has been a technique known as Applied Kinesiology which will DIAGNOSE AS WELL AS TREAT neuromuscular and musculoskeletal problems.

As you continue to read, you will see why it is so important to make such a distinction about the abilities of AK. Out of their ignorance, insurance companies will question the use of muscle testing codes by chiropractors. They simply do not understand how or why a chiropractor can use such a number when it has

traditionally been used by the medical community for so long.

The Chiropractic community has successfully moved into areas previously held as "sacred" by the medical community. This process should continue; using the proper RVS numbers for the provided services will help it happen even faster.

PROCEDURE:

The patient comes in for a physical examination. You perform any and all applicable tests, including manual muscle tests. You bill for your examination -- neurological and orthopedic testing -- counseling (report of findings), muscle testing and treatment.

"The patient may be deprived of adequate follow up treatment by the failure to distinguish between real and apparent weakness," states Kendall et al (pg. 8). For this reason, it is even more vital to know the real cause of a musculoskeletal or neuromuscular aberration. The traditional kinesiological testing may give an indication that something is wrong, but it cannot show you what to do to correct the problem. Applied Kinesiology can tell both the reason for the apparent weakness -- the muscle -- and the real problem -- the structure, chemical, neurovascular or neurolymphatic reflex, etc.

Kendall et al mention that the term, "'Weakness' is used as an overall term covering a range of strength from zero to 50% in non-weight-bearing muscles, but may be inclusive of 60% grades in weight-bearing muscles" (pg. 9). This term, however is relative to what the examiner finds.

Is a muscle that shows a weakness really weak? The latest research is showing that a muscle may not really be weak, but it is the nervous system that is unable to update the information from all the input fast enough. The muscle therefore shuts off in order to remain unhurt by a possible strain or other injury. It appears to be weak, but has actually gone into a protective mode; its strength is there, but the nervous system is slow to respond.

Without the insight of AK, this display of pertinent information may be missed, and the incorrect conclusion reached. Rather than saying a muscle is weak, it can be said to be functionally aberrant, or hypokinetic. This more properly defines the correct condition of the muscle, since correction of the aberration will reproduce the strong (or functional) muscle once again.

If you routinely provide AK testing as part of your diagnostic services during an examination -- as you would neurology or orthopedic testing -- then why not get paid for it? It is a good idea to separate the examination from the treatment; make the treatment on a subsequent visit -- preferably the next day, for

insurance reasons.

I feel it is important to sit down with each patient, after the examination, to discuss the findings. Relate the meaning of each finding to the patient's particular complaint(s). The time spent in this counseling can be included in the total cost of the exam. For example:

RVS	EXPLANATION	COST	
90020	New patient O.V.	65)	
95833	Muscle Testing	125)	X-rays not included
99833	Counseling	60)	
	Exam total	250	
90050	Treatment	30	(On a subsequent visit)
	Total w/ treat't	280	

The report is sent to the insurance company after each examination, or at their request. Be sure to keep a copy in the patient's chart for future reference.

The patient pays us directly and we fill out all the insurance forms properly. The patient gets reimbursed from the insurance company within the confines of their policy.

1. Your fees are not reduced;
2. Your RVS numbers are not changed to affect your cash flow;
3. You control your practice -- not the insurance company.

RVS code number 95833 (used with manual muscle testing and fully described on the report form) says,"...with report, by physician." The accompanying report is well documented with chiropractic as well as medical literature. The meaning of the code's text provides for the chiropractic (AK) utilization of the RVS number within its own definition.

Some insurance companies have tried to manipulate the meaning of the code and imply that the code number is to be reserved for medicine only. I have had specific experience with this. Below are a few examples of what insurance companies attempt to do to avoid paying for manual muscle testing:

Example I: The insurance company may try to reduce the code to extremity testing or kinetic activities (97720 or 97740 respectively). This is not what was performed. Extremity testing is described as,"...for strength, dexterity or stamina, ..."; kinetic activities is described as, "...to increase coordination, strength and/or range of motion, one area..." Kendall et al say

nothing about therapy in their definition of kinesiology. It is used for diagnostic purposes.

Example II: They may say that this number is reserved for the neurological community. Your response is that chiropractors are neuromusculoskeletal specialists. We are entitled to use that code as is any other physician.

Further, the code 95833 is found in "The Official Medical Fee Schedule for Services Rendered Under the California Workers' Compensation Laws" under the heading of "Specific Diagnostic Services". The other codes referred to above are listed in the same book under the heading of "Specific Therapeutic Services". Since we use the code number 95833 specifically for examination and not for treatment, and since no treatment was rendered in conjunction with this code, this specifically makes it a diagnostic service and not therapeutic.

Example III: The insurance company may refuse to pay on the grounds that their consultant does not believe this is a chiropractic procedure. Rather, they believe that this number is reserved for degenerative neurological problems such as MS, myasthenia gravis, etc., and to be used by a neurologist. There is no evidence for this in the definition. This is an area where the insurance companies need to be educated.

AK is only 20 years old, yet it is the fastest growing technique within the world's largest natural healing profession. We are experiencing some growing pains, but we have already reached a tremendous level of recognition in a very short period of time. Vigilance will guarantee our progress.

It is a good practice to inquire about the credentials of an insurance company's consultant. It is a regular procedure for insurance companies to evaluate chiropractic procedures with a medical consultant. As you know, this is like comparing apples and oranges. Likewise, inquiring from a chiropractor who does "straight" work about a chiropractor who uses AK, is a perpetuation of the same problem. A question about AK must be compared with AK procedures.

Example IV: They may say, "...you are not a physician..." You should check your specific state law to see how this term affects you. In most states, the Chiropractic doctor is considered a physician.

Example V: They may say that when the RVS book was written in 1974, Chiropractors were not considered physicians. Your response to that should be that you are now considered a physician and if the 1974 book applies today, then you are considered a physician within the confines of the definition as it is presented in the

1974 manual.

I cannot stress how important this education process is for the insurance companies. In today's economy and political climate, the insurance companies will do all they can to SAVE THEMSELVES MONEY BY CUTTING YOUR FEES. Protect yourself from this by:

1. Educating them on your procedures;
2. Teaching them how you are different from medical doctors yet staying aligned with their codes, and;
3. Working with the insurance companies to establish Chiropractic as a primary force in today's health field.

The insurance practice of today is soon to become yesterday's memories. The practitioner should be paid directly by the patient and the patient get reimbursed by the insurance company. The right codes should be used and the proper papers submitted. The difference is that you remain in control of your practice income. Any monies received by the patient should be considered "an early Christmas" for the patient.

SERRA NATURAL HEALING CLINIC
Michael D. Allen, D.C., N.D.
22471 Aspan Suite 108
Lake Forest, Ca. 92630
(714)855-9629

Insurance Co. name
Address
City, State, Zip

Attn: ----------

Date

Pt: ----------
Topic: RVS Number 95833 -- "Muscle testing, manual, total evaluation of body (excluding hands) with report, by physician (independent procedure)."

Dear ----------:

The following is a report on the manual muscle testing procedure (RVS #95833) performed on the above-named patient on ----------, 198-. The test was performed by the physician to evaluate the functional integrity of the individual muscles.

INDICATION FOR THE PROCEDURE
The test was indicated due to the severity of the pain, and the duration of the condition. The patient's complaints were as follows:

1.
2.
3.
4.

CRITERIA FOR DETERMINATION
The muscle was isolated and tested as defined by the authority of Kendall, Kendall and Wadsworth. The criteria for determining functional hypokinesia is according to Beardall, and is as follows:

1) Normal muscles are quick to react to testing and exhibit a locking quality;
2) Abnormal muscles are slow or sluggish in the state of contraction. They exhibit a spongy quality and often break down in contractile quality with repeated testing.

GRADING THE TEST
"Grades are an expression of the examiner's evaluation of the stretch or weakness of the muscles. To a considerable extent, the

evaluation is subjective", states Kendall.

The criteria for grading a functionally hypokinetic muscle is according to Daniels and Worthingham. It is designed for use in assessing the extent and degree of weakness following disorders primarily involving the contractile muscle elements, the myoneural junction and the lower motor neuron. The grading scale is as follows:

GRADE	ABBREV'N	DEFINITION
Normal/Good	(Blank)	The ability to hold the segment in the required position, against gravity and maximal/moderate pressure, with ease.
Fair	(/)	The ability to raise a segment through its range of motion against gravity, but being unable to hold the segment against minimal pressure.
Poor	(P)	The inability to move a segment through its complete or normal range of motion with gravity eliminated; it merely provides joint stability.
Trace/Zero	(T)	Determined by the careful observation and palpation of both the tendons and the muscle bulk. It may be felt to tighten, but it cannot produce movement.

DIAGNOSIS

The following diagnos(i)es is/are a result of the foregoing examination:

1.
2.
3.
4.

DISCUSSION

Enclosed is a copy of the examination form with a record of the information acquired, for your review. A check mark in any box indicates a functional muscular aberration with a grading of fair unless otherwise indicated. The areas with no designation may be considered normal or good.

TREATMENT PROGRAM

As a result of the injuries (sustained in the accident on ---------, 198-), the patient will probably continue to experience periodic remissions and exacerbations of the symptoms. Therefore, I recommend periodic Chiropractic treatments to help maintain the structural integrity of the spine and supporting structures, and to minimize progressive functional structural failure.

An appropriate treatment program has been developed for this patient consisting of the following:

1. Chiropractic manipulation;
2. Physical therapy;
3. Laboratory tests as indicated;
4. Subsequent examinations;
5. Patient counseling or conference as needed.

PROGNOSIS

According to Kendall, Kendall and Wadsworth:

> "Detailed grading of muscle strength is more important in relation to prognosis than to diagnosis. Diagnosis of the extent of involvement may be made by such simple grading as zero, weak, normal. On the other hand, more precise grading helps establish the rate and degree of return of muscle strength, and is useful in determining a prognosis."

The prognosis for (full and complete, or partial) recovery for this patient is (excellent, good, fair, poor, guarded, stable). This is anticipated in (#) to (#) weeks/months. After that time, periodic Chiropractic treatments are indicated due to the above information regarding the severity and duration of the condition.

Thank you for the opportunity to be of service to this patient.

Sincerely,

Michael D. Allen, D.C., N.D.

SERRA NATURAL HEALING CLINIC
Michael D. Allen, D.C., N.D.
22471 Aspan Suite 108
Lake Forest, Ca. 92630
(714)855-9629

Insurance Co. name
Address
City, State, Zip

Attn: ----------

Date

Pt: ----------
Topic: RVS Number 95833 -- "Muscle testing, manual, total evaluation of body (excluding hands) with report, by physician (independent procedure)."

Dear ----------:

The following is a progress report initially performed in this office on the above-named patient on ---------- --, 198-. It is to supplement our previous report to you dated ---------- --, 198-. These test results were obtained on ---------- --, 198-; a copy is enclosed for your review.

INDICATION FOR THE PROCEDURE
The test (RVS #95833) was indicated due to the severity of the pain, and the duration of the condition. The patient's complaints on this date were as follows:

1.
2.
3.

CRITERIA FOR DETERMINATION
The same criteria were followed for this test as for the previous test.

GRADING THE TEST
The same criteria for grading a functionally hypokinetic muscle were followed for this test as for the previous test.

DIAGNOSIS
The diagnosis (does not) require(s) modification at this time.

1.
2.
3.
4.

DISCUSSION
A check mark in any box indicates a functional muscular aberration with a grading of fair unless otherwise indicated. The areas with no designation may be considered normal or good.

TREATMENT PROGRAM
As a result of the injuries (sustained by this patient on --------, 198-,) the patient will probably continue to experience periodic remissions and exacerbations of the symptoms. Therefore, I recommend periodic Chiropractic treatments to help maintain the structural integrity of the spine and supporting structures, and to minimize progressive functional structural failure.

An appropriate treatment program had been developed for this patient consisting of the following:

1. Chiropractic manipulation;
2. Physical therapy;
3. Laboratory tests as indicated;
4. Subsequent examinations;
5. Patient counseling or conference as needed.

I feel that the patient is (not) in compliance with the treatment program and is (not) receiving benefit therefrom.

PROGNOSIS
As discussed in our previous reports to you on this case, Kendall, Kendall and Wadsworth state that:

> "Detailed grading of muscle strength is more important in relation to prognosis than to diagnosis. Diagnosis of the extent of involvement may be made by such simple grading as zero, weak, normal. On the other hand, more precise grading helps establish the rate and degree of return of muscle strength, and is useful in determining a prognosis."

The prognosis for (full and complete, or partial) recovery for this patient is (excellent, good, fair, poor, stable, guarded). This is anticipated in (#) to (#) weeks/months. After that period, periodic Chiropractic treatments are indicated due to the above information regarding the severity and duration of the condition.

Thank you for the opportunity to be of service to this patient.

Sincerely,

Michael D. Allen, D.C., N.D.

CERVICAL DISC SYNDROME

A Precise Diagnostic and Therapeutic Procedure for Correction of Cervical Disc Lesions

John V.N. Bandy, D.C.

ABSTRACT: Certain charactistics and signs are exhibited by cervical disc syndrome. Disc lesions generally do not therapy localize. However, they do challenge. Quite often disc lesions will cause neurological insult. When this occurs, the myomere will be affected causing a muscle or muscles to demonstrate measurable changes in particular patterns. We are concerned specifically with cervical disc syndrome in this paper.

INTRODUCTION

In cervical disc syndrome, muscle change or weakness is different in character from the typical weakness found in Applied Kinesiology. That is, these muscles are not "turned off" as is a muscle when a neurolymphatic, neurovascular, or a vertebral subluxation is involved, but rather show weakness indicating that they are not receiving full nerve supply. This is much like a reostat phenomenon in that the muscle strength is diminished in proportion to the degree of nerve root or cord pressure applied by the herniated disc. This peculiarity can be used to diagnose not only the level of the disc lesion, but also the best position for its correction.

There is disagreement among authors as to the myomere-muscle relationships. This author has examined more than five hundred patients exhibiting this peculiar weakness and agrees with Rene Calliet, M.D. as to which muscles are supplied by the cervical myomeres. He listed as his findings

the following myomere-to-muscle relationships:

Deltoid, C_6 nerve root, C_5 disc;

Triceps, C_7 nerve root, C_6 disc;

Finger Abductors, C_8 nerve root, C_7 disc.[1]

He also lists areas of subjective pain and tenderness that a doctor may palpate that correlates to each specific lesion. These areas that will help you confirm your diagnosis of a cervical disc lesion are seen in Figure 1. In addition, a positive dejerine's sign may be present along with neck rigidity and diminished range of motion (ROM) towards the involved side. Calliet also states that palpatory pain is often elicited over the exit of the cervical nerve root involved.[2] Paresthesia may also occur in the later stages of a cervical disc syndrome (CDS), and these are given in Figure 1.

CERVICAL DISC SYNDROME

The procedural outline that follows has been found to be most accurate in determination of cervical disc lesions. First, test the muscles listed on each upper extremity to determine any weakness. After determining that there is a muscle weakness (i.e. the right deltoid), there are two diagnostic procedures. First, find the direction of correction by directly challenging the disc (C_5) associated with the weak muscle (deltoid). The direction of challenge which strengthens the weakened muscle is the direction of the corrective thrust. Secondly, you must now determine the proper head position of the patient for your thrust by the following method:

1. Again determine that you have a muscle weakness.
2. Next, ask the patient to place their neck into <u>full</u>

---

[1] Calliet, Rene, M.D., <u>Neck and Arm Pain</u>, F.A. Davis Company, Philadelphia, 1973, pp.70-72

[2] Ibid.

extension. Many times this in itself will now strengthen the muscle. Frequently, however, this alone is not sufficient and you must add rotation to one side or the other to negate the weakness.

3. When the proper head position is found, muscle weakness will be abolished, and this is the proper head and neck position for your corrective thrust. Sometimes one corrective thrust is not sufficient to make a total correction. Here, the author has found that an additional line of correction is neccessary and can be determined by repeating the same procedure until all muscle weakness is abolished.

It may be important in certain situations to place the patient in a sitting position to again check for a cervical disc syndrome. Occasionally a posturally dependent cervical disc problem will not show any positive checks while the patient is recumbent. Also, on rarer occasions when a patient states that relief from their pain did not last, and yet you do not find any return of cervical disc signs, the patient will show positive signs when placed in a sitting or standing position. The important consideration here is to know that a correction properly made should be permanent, granting that there are no more future injuries or aggravations (see the last paragraph). It is also important to note that only the specific muscle involved with the disc is to be used as the indicator muscle for the challenge. Any other indicator muscle (I.M.) used may give information not directly concerned with the disc herniation, and should therefore be avoided. When using these specific related muscles, especially the Finger Abductors, it is important to compare them bilaterally. This helps to avoid confusion regarding the absolute

strength or weakness of these muscles.

Quite often, not all signs or patient symptoms may be at the stage where typical diagnostic procedures would pick up a cervical disc herniation. With the above Applied Kinesiological approach, many disc lesions are discovered long before usual methods of determination would be diagnostic.

THE CERVICAL DISC SYNDROME AND THE LOWER EXTREMITIES

Cervical disc syndromes can and do at times impair nerve supply to the lower extremities. The nerve roots L_4 (rectus femoris), L_5(anterior tibialis) and S_1 (gastrocnemius) have all been found at one time or another to be involved in CDS cases. In these cases, the author has found that the clue to this is with a patient presenting with multiple muscle weaknesses of the lower extremities, which are negated when the patient places the head and neck in the correct hyperextended position. After proper correction of the CDS, the doctor will find that these multiple lower extremity muscle weaknesses will be abolished.

Research conducted by Torkildsen, lended credence to the above etiology. He supports the view that changes in the cervical intervertebral canal giving rise to brachialgia may simultaneously be the cause of pains in the leg resembling sciatica. He terms this situation as brachialgic sciatica, and this differs in nature from pure lumbar disc lesions.

Pyramidal tract signs are discussed by Torkildsen relating to some differential diagnostic points. These include:

1. increased deep tendon reflexes on the involved (painful) side;
2. an extensor response to the plantar reflex;
3. two or more involved dermatomes on the involved (painful) leg side;
4. the bilateral achilles reflexes remain equal.

These clues are concomitant to the peripheral nerve lesions of the arm.[3]

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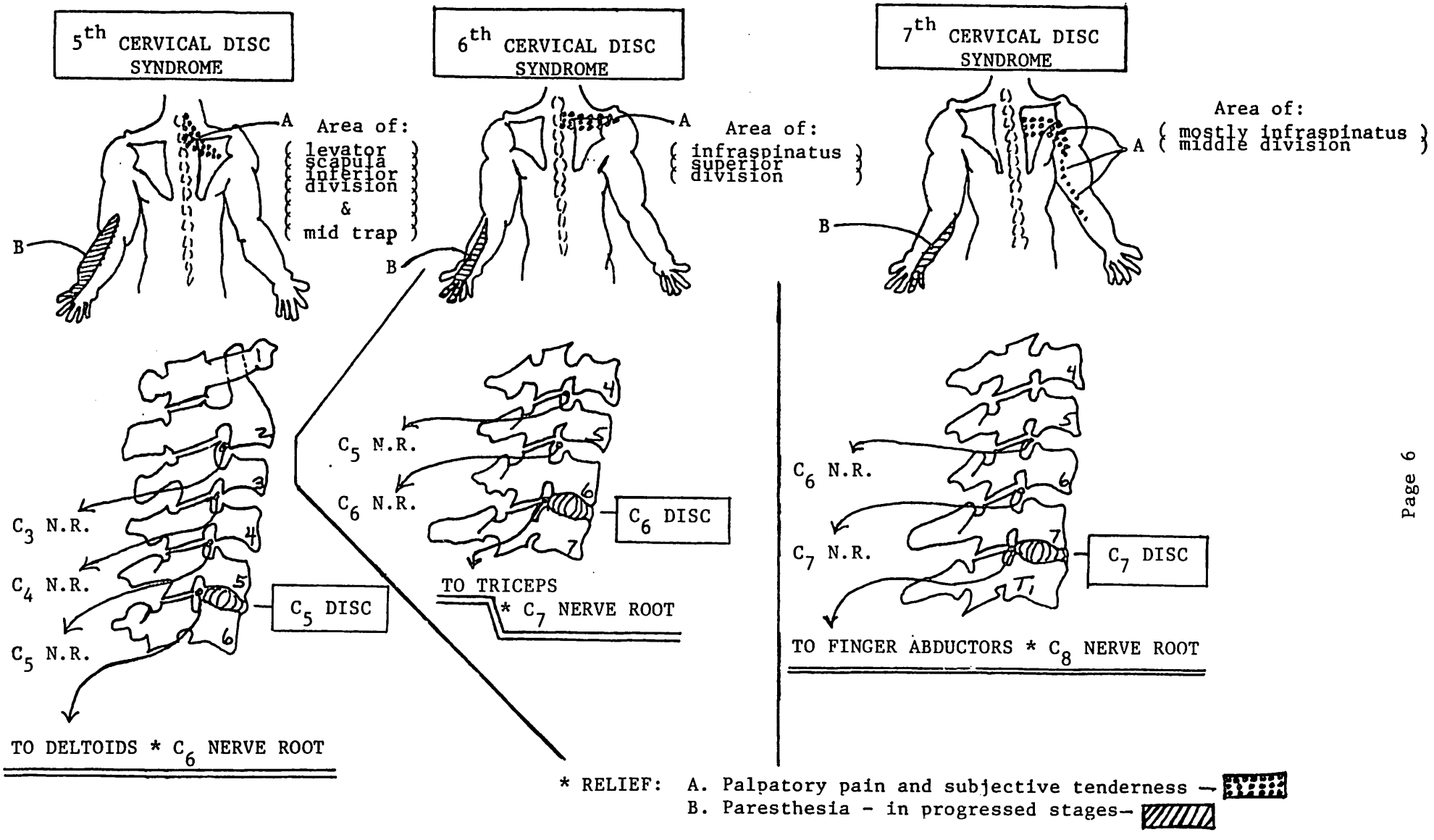
[3] Torkildsen, Acta Psychiatric Neurolcgy Scan, 1956; 31:333-44.

CONCLUSION

In conclusion, it is important to allow the patient unencumbered time in the repair of the disc herniation. Since it can take up to six months for annular fibers to heal, care must be used in avoiding activities which would again force nuclear material through the impatent area. Therefore, strict avoidance of activities employing neck flexion is to be carried out. This would include watching T.V. with the head propped up, reading in such a manner, or sewing in the lap while looking down, etc. It is also worth mentioning that the author has seen a high frequency of upper trapezius involvement with CDS, needing SCS technique for proper support.

FIGURE 1



* RELIEF: A. Palpatory pain and subjective tenderness —
B. Paresthesia - in progressed stages—

ABSTRACT: AT RECENT MEETINGS OF THE GENERAL MEMBERSHIP OF THE I.C.A.K. AND AT MEETINGS OF C.T.A.K. AND I.B.A.K. THE NEED FOR STANDARDIZATION OF TERMINOLOGY SO AS TO COMPLY WITH STANDARD SCIENTIFIC NOMENCLATURE HAS BEEN GREATLY DISCUSSED. THIS PAPER PRESENTS ACCEPTED TERMINOLOGY AND EXAMINATION PROCEDURES WHEN DEALING WITH SCOLIOSIS.

IN RECENT YEARS THERE HAS BEEN A RENEWED INTEREST, BY SCHOOL OFFICALS, IN SCOLIOSIS SCREENING OF SCHOOL CHILDREN. IN MASSACHUSETTS THIS TASK HAS MOST OFTEN BEEN ASSIGNED TO THE SCHOOL NURSE, WHO OFTEN HAS LITTLE OR NO TRAINING IN POSTURAL ANALYSIS. FREQUENTLY THIS EXAMINATION IS PERFORMED ON FULLY CLOTHED CHILDREN AND THE DIAGNOSIS, OR LACK THERE OF, OF SCOLIOSIS IS BASED ON THE LEVEL OF THE SHOULDERS.

IT IS MY BELIEF THAT AS APPLIED KINESIOLOGISTS AND, IN MOST CASES, CHIROPRACTORS, IT IS OUR RESPONSIBILITY TO SCREEN THESE CHILDREN. IF WE ACCEPT THIS RESPONSABILITY WE MUST BE FAMILIAR WITH AND USE STANDARDIZED EXAMINATION PROCEDURES AND TERMINOLOGY.

HIPPOCRATES WAS THE FIRST WRITER TO USE THE TERM SCOLIOSIS WHEN SPEAKING OF SPINAL CURVATURE.1 HIS UTILIZATION OF THE WORD WAS APPLIED TO ANY ABNORMAL SPINAL CURVATURE. TODAY THE DIAGNOSIS SCOLIOSIS IS RESERVED FOR A SPINAL CURVATURE IN WHICH THE CONVEXITY EXTENDS LATERALLY.2

SCOLIOSIS CAN BE CLASSIFIED AS TO TWO MAJOR TYPES; STRUCTURAL AND NON-STRUCTURAL.3

AN INDIVIDUAL WITH A STRUCTURAL SCOLIOSIS CANNOT VOLUNTARILY STRAIGHTEN THE CURVATURE NOR CAN IT OFTEN BE PASSIVELY OR FORCEABLE CORRECTED. THIS FORM OF SCOLIOSIS IS USUALLY PROGRESSIVE.1

WHEN IT IS FOUND THAT LATERAL FLEXION OF THE SPINE IS SYMMETRICAL BOTH CLINICALLY AND RADIOGRAPHICALY, AND WHEN IN THE ADAMS POSITION OR RECUMBENT, THE CURVE ALL BUT DISAPPEARS, THE SCOLIOSIS IS TERMED NON-STRUCTURAL. THIS TYPE OF SCOLIOSIS IS NOT USUALLY PROGRESSIVE BUT SHOULD BE MONITORED CLOSLY DURING THE CHILDS GROWTH AS IT COULD BECOME

STRUCTURAL.

NON-STRUCTURAL SCOLIOSIS MAY BE FURTHER BROKEN DOWN TO POSTURAL, TRANSIENT. OR COMPENSATORY. POSTURAL IS A RESULT OF POOR HABITS, COMPENSATORY IS THE RESULT OF A SHORT LEG, AND TRANSIENT CAN BE DUE TO SCIATIC IRRITATION, SUBLUXATION, INFLAMATION OR HYSTERIA.

WHEN AN ABNORMALITY IN SPINAL CURVE IS DETECTED, ONE SHOULD CLASSIFY IT ACCORDING TO ETIOLOGY.

THE MOST COMMON ABNORMALITY IS, OF COURSE, THE SO CALLED IDIOPATHIC SCOLIOSIS, WHICH BY DEFINITION IMPLIES THAT THE CAUSE IS UNKNOWN. SOME AUTHORITIES FEEL IT IS A RESULT OF POOR CO-ORDINATION OF THE ROTATORS LONGUS AND BREVIS.4

A FURTHER BREAKDOWN OF IDIOPATHIC SCOLIOSIS IS DONE ACCORDING TO THE AGE AT WHICH IT IS DETECTED.

INFANTILE SCOLIOSIS IS FOUND IN CHILDREN UNDER THE AGE OF THREE. RARELY FOUND IN THE UNITED STATES, IT IS QUITE COMMON IN ENGLAND AND NORTHERN EUROPE. THIS FORM OF SCOLIOSIS IS USUALLY A LEFT THORACIC CURVE AND FOUND IN MALES MORE OFTEN THAN FEMALES. PROGNOSIS IN 80% TO 90% OF INFANTILE SCOLIOSIS IS THAT OF SPONTANIOUS RESOLUTION.

AFTER THE AGE OF THREE AND PRIOR TO PUBERTY IS THE AGE GROUPING FOR JUVENILE SCOLIOSIS WITH AGE SIX BEING THE MOST COMMON. FOUND EQUALLY AMONG MALES AND FEMALES IT IS MOST OFTEN A RIGHT THORACIC CURVE. EARLY DETECTION AND TREATMENT OF THIS GROUP IS IMPORTANT AS JUVENILE SCOLIOSIS IS USUALLY PROGRESSIVE.1

ADOLESCENT SCOLIOSIS IS THE TERM USED FOR A SCOLIOSIS WHICH COMMENCES AFTER ONSET OF PUBERTY. FEMALES ACCOUNT FOR 85% OF ADOLESCENT SCOLIOSIS CASES. MOST OFTEN A RIGHT THORACIC CURVE, THESE TEND TO BE OF A STRUCTURAL NATURE AND AS SUCH ARE OFTEN PROGRESSIVE.

THE SECOND ETIOLOGICAL GROUPING IS THAT OF CONGENITAL DEFORMITY OF THE SPINE.

CONGENITAL SCOLIOSIS MAY BE A RESULT OF ABNORMAL OSSEOUS DEVELOPMENT SUCH AS FAILURE OF BONE FORMATION, WHICH MAY BE A COMPLETE UNILATERAL FAILURE (HEMIVERTEBRA), OR

PARTIAL UNILATERAL FAILURE IN DEVELOPMENT (WEDGE VERTEBRA). CONGENITAL SCOLIOSIS ALSO RESULTS FROM A FAILURE IN SEGMENTATION OF VERTEBRA. A PARTIAL OR UNILATERAL FAILURE IN SEGMENTATION IS REFFERED TO AS A BAR VERTEBRA WHERE AS A COMPLETE OR BILATERAL FAILURE OF SEGMENTATION IS KNOWN AS A BLOC VERTEBRA. A COMBINATION OF FAILURE OF SEGMENTATION AND BONE FORMATION MAY ALSO BE FOUND WITH CONGENITAL SCOLIOSIS.

INCLUDED UNDER THE HEADING OF CONGENITAL SCOLIOSIS ARE ABNORMAL CURVES RESULTING FROM ABNORMAL DEVELOPMENT OF THE SPINAL CORD, THIS IS TERMED MYELODYSPLASIA SCOLIOSIS.

ABNORMALITIES RESULTING FROM NEUROMUSCULAR DISORDERS COMPRISE THE THIRD ETIOLOGIC GROUP. INCLUDED IN THIS GROUP ARE LOWER MOTOR NEURON DISEASES, EG. POLIOMYELITIS, UPPER MOTOR NEURON DISEASES, EG. CEREBRAL PALSY, AND OTHER NEUROPATHIES SUCH AS SYRINGOMYELIA. ALSO IN THIS GROUP ARE MYOPATHIES THAT ARE PROGRESSIVE, EG. MUSCULAR DYSTROPHY, AND THOSE THAT ARE STATIC, EG. AMYOTONIA.

MESENCHYMAL DISORDERS BE THEY CONGENITAL SUCH AS MARFAN'S AND MORQUIOS DISEASE, ACQUIRED DISEASES LIKE RHEUMATOID ARTHRITIS OR OTHER CONDITIONS SUCH AS JUIVENILE EPIPHYSITIS, MAY ALSO RESULT IN ABNORMAL SPINAL CURVES.

SCOLIOSIS MAY BE SECONDARY TO TRAUMA WHICH COULD BE EITHER VETEBRAL, EG. FRACTURES, SURGERY OR EXTRAVERTEBRAL FROM SCAR TISSUE ETC..

THE NEXT ETIOLOGICAL CATEGORY IS THAT OF SCOLIOSIS SECONDARY TO IRRITATIVE PHENOMENA. IT WOULD BE UNDER THIS HEADING WE COULD LIST SUBLUXATIONS.

OTHER MISCALLANEOUS FACTORS ARE METABOLIC DISORDERS, NUTRITIONAL FAULTS, AND ENDOCRINE PROBLEMS.

EVALUATION OF PATIENT FOR SCOLIOSIS

1. VIEW PATIENT WITH MINIMUM AMOUNT OF CLOTHING
2. EXAMINE FROM FRONT, SIDE, AND REAR
3. NOTE:
   A) SCAPULAR ASYMMETRY & UNILATERAL PROMINENCE
   B) ASYMMETRY OR FULLNESS OF THE WAIST
   C) SHOULDER LEVEL
   D) ASYMMETRY IN THE DISTANCE BETWEEN ARMS AND TORSO

4. PLACE PATIENT IN ADAMS POSITION: WITH THE PATIENT FACING THE EXAMINER, HAVE THE PATIENT BEND FORWARD AT THE WAIST, BOTH ARMS SHOULD DROP VERTICALLY WITH THE FINGER-TIPS HELD TOGETHER.
   A) NOTE ANY ASYMMETRY OF THE THORACIC CAGE (A HIGHER THORACIC CAGE ON ONE SIDE IS A SURE SIGN OF A THORACIC CURVE)
5. OBSERVE THE PATIENT IN THE SAME MANNER FORM THE REAR
   A) NOTE ASYMMETRY IN HEIGHT OF THE LUMBAR AREA (A DIFFERENCE IN HEIGHT = ROTATIONAL PROMINENCE OF THE LUMBAR SPINE)
6. PERFORM ANY ORTHOPEDIC TESTS THAT ARE INDICATED.
7. A CAREFUL HISTORY MUST BE TAKEN AND SHOULD INCLUDE AN EVALUATION OF ALL SIBLINGS, PARENTS, AND KNOWN FAMILY MEMBERS.
8. RULE OUT DISEASES ASSOCIATED WITH SCOLIOSIS.
9. MEASURE PATIENTS HEIGHT.
10. NOTE AND RECORD LEVEL OF RIB OR LUMBAR PROMINENCE.
11. NOTE ANY ABNORMALITIES OF THE MOUTH AND PALATE, EXTREMITIES, AND APPENDAGES.
12. PERFORM INDICATED NEUROLOGICAL TESTS.
13. RECORD JOINT MOBILITY, ESPECIALLY OF THE HIPS.
14. MEASURE AND RECORD LEG LENGTHS AND CIRCUMFRENCES.
15. CORRELATE ALL ORTHOPEDIC, NEUROLOGICAL, AND POSTURAL FINDINGS WITH YOUR A.K. EXAMINATION.

X-RAY EVALUATION 1

1. A-P STANDING FULL SPINE
2. SUPINE A-P WITH PATIENT BENDING MAXIMALLY TO RIGHT AND LEFT (IF POSSIBLE).
3. A-P VIEW OF LEFT HAND AND WRIST TO DETERMINE BONE AGE.
4. STANDING LATERAL FULL SPINE WITH ARMS RESTING AT SHOULDER LEVEL.

X-RAY FINDINGS

1. (A-P) THE TOP VERTEBRA OF THE PRIMARY CURVE IS THAT WITH THE DISC BELOW IT BROADER ON THE CONVEX SIDE, AND THE DISC ABOVE BROADER ON THE OPPOSITE SIDE.
2. (A-P) THE BOTTOM VERTEBRA HAS THE DISC ABOVE IT BROADER ON THE CONVEX SIDE, AND THE DISC BELOW BROADER ON THE OPPOSITE SIDE.
3. COBB'S METHOD OF CURVE MEASUREMENT IS TO DETERMINE THE ANGLE BETWEEN THE PERPENDICULARS DRAWN FROM THE TOP AND BOTTOM OF THE VERTEBRA AT THE EXTREMITIES

OF THE CURVE.

USING THE ABOVE INFORMATION WE SHOULD ALL BE ABLE TO EVALUATE PATIENTS FOR SCOLIOSIS AND COMMUNICATE ON OUR FINDINGS IN AN INTELLIGENT MANNER.

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POSTURAL CERVICAL ADJUSTING

Katharine M. Conable

ABSTRACT: A discussion of the clinical effectiveness of examination and treatment of the cervical spine with the patient sitting and through the full range of motion, as well as recumbent, in cases of tortacollis and residual cervical discomfort.

For years Applied Kinesiologists have emphasized the importance of evaluating the spine in postures other than recumbent.[1,2] We suggest observing and challenging the spine in sitting and standing positions and in postures assumed for long periods at work. Often this procedure reveals distortions which might otherwise go uncorrected. I utilize a variant of this procedure in treating tortacollis and persistant cervical problems.

The mechanics of the cervical spine obviously are different from recumbent to sitting and standing. More importantly, the proprioceptive feedback in gravity is markedly different. As Dr. Goodheart has repeatedly pointed out - the patient does not usually spend his life lying face down on an adjusting table. If we are to correct the actual functional biomechanical problems the patient has, we must consult the body's computer throughout the full range of postures and motions which the patient experiences.

Most of us have had the experience of finishing what we feel to be a thorough treatment of a patient - balancing muscles, treating reflex points, precisely adjusting the spine - only to have the patient sit up, fussing with his neck and saying , "It's still there". We answer that it will take a little time for the knots to work out, and send him on his way, quietly grinding our teeth about the ingratitude of patients. Life has finally taught me that patients usually actually do know what is going on in their own bodies, and that the best route is to believe them and handle as many of those nagging complaints as possible, immediately. There is a reason for the pain, discomfort or "still not right" feeling, and it is our responsibility to identify and handle it if we can.

In treating patients with difficult cervical problems , tortacollis, or whiplash injury, following recumbent examination and treatment of subluxations and muscles, I routinely rechallenge the cervical spine sitting. Often new subluxations will now be evident. Next, rechallenge in each range of motion, particularly in those positions where the patient feels a "catch" or a "pull". Examine in rotation, flexion, extension, and if necessary, lateral flexion. Include the upper thoracic spine and ribs in all positions, as often these are keys to a persistent cervical discomfort. Include especially examination for anteriorities and lateralities in the cervical spine, and superior or inferior tilting in the thoracic spine. Correct whatever subluxations are found , in the position found. It is usually most efficient to do this kind of fine-tuning adjusting with an activator.

While not all residual pain is relieved by this procedure, frequently there is a significant change or total alleviation of pain, with increased range of motion and greatly reduced recurrence of subluxation. The few minutes of additional time are amply rewarded by patient response.

Another type of residual pain associated with chronic cervical and upper thoracic problems is one which appears to be a subluxation but is not. The patient will point to an upper rib, or the parascapular area and say, "It's right here". You may have challenged this spot 15 times in three different positions, and may even have adjusted it. You may adjust it and the patient says, "That was IT", but the pain does not change at all. These points feel to the patient like articular distortions, but in fact, they often prove to be trigger points in the paraspinal muscles or the Serratus posterior superior muscle, which respond beautifully to Strain-Counterstrain technique, as presented by Goodheart in Research Tapes # 81 and following[3]. and at I.C.A.K. meetings Winter of 1983 and Summer of 1984. Fascial release[4]. of the Serratus anterior muscle is also often useful for this type of pain. The intermittent weakness of the Serratus anterior causes Rhomboid and parascapular hypertonicity with pain. Also, the Serratus anterior trigger points can refer pain to the parascapular area[5]. Attending to hidden details such as these can make the difference between good, but slightly frustrating results and rapid, miraculous patient response.

Footnotes : 1. Walther 1976 - p. 125

2. Walther 1981 - pp. 31,42, 81, 87 ff., 153

3. Goodheart - monthly research tapes,#81 - 83

4. Goodheart - 1978 pp. 1-12

5. Travell & Simons - pp.622 ff.

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ABSTRACT

In our attempt to deal with the multitude of problems that beset mankind we must have a rationale as to where to start and what to look for. Therefore, as with all things, we must start at the begining. With living things we must start with the basic survival mechanisms of the species. These basic survival mechanisms are innate in nature, that is, they need no training or education. They act automatically. Some call them instincts. All living things have them to survive.

We find them in two basic catagories. The autonomic functions, which we can term internal survival mechanisms. Thes are responsible for circulation, respiration, digestion and other life support systems along with the limbic system function of immunization and self healing to protect us from environmental accident such as cuts, burns, breaks, bacterial and virus invasion etc. All things being equal, the body heals itself. The "external" basic survival mechanism, or reflex systems, deal with the very roots of our existance as a species. They are fight/flight, feeding and reproduction. All we are relates to one or more of these basic survival reflex systems. Just think about it for awhile. There is nothing else involved in survival. Therefore, these reflex systems which relate to, influence, and on occasion govern the internal reflex systems (ie: speed up heart, activate digestion, turn off digestion if energy is needed to fight, or run, or to engage in reproduction, alter blood flow, etc.), must be understood relative to health and function. Because structure and function are interdependent, we need to understand and deal with both.

The basic reflexes involved in the innate survival of the species functions of fight/flight, and feeding, and reproduction must take precedent over all other considerations as a basis for treatment. These systems must interact and integrate into one synchronously functioning body. Obviously, the basis for this integration and interaction is a properly organized and functioning central nervous system. Therefore we must concern ourselves first with neural system organization and intergration of reflex mechanisims that make all this possible. It is when there is a loss of this innate integration and/or organization that problems arise. If we don"t approach these problems from their roots, so to speak, we are only chasing symptoms. And, although we will have some success, we would not really eliminate the problem.

Everything in the body is essentially interrelated and coordinated in the body. Everything must be in balance or else disaster will certainly follow. There will always be some sort of unnecessary stress factors to consider. As the adage goes: The "head bone" is ultimately connected to the "foot bone".

Let us, therefore, consider the basic organization of the nervous system from the innate point of view, that is the automatic, born with survival of the species reflex mechanisims.

BASIC NEURAL ORGANIZATION

(The Primary Centering and Organizational Innate Reflex) System

By Carl A. Ferreri D.C.

Neural organization depends on the proper and coordinated function of basic or innate systems designed to run the body automatically. These automatic functions transcend the basic life support systems such as circulation, digestion, immunization, repair, etc. (which we can consider as the internal survival systems) to what we might consider as the external survival or preservation of the species reflex systems.

We are all aware of the basic neural arc phenomenon. So, that if we touch something hot, for example, we will immediately withdraw that part away from danger. This, however, is basicallya learned reflex because although the mechanism is present, it must be activated by action and reaction.

I will now discuss the external automatic, or innate, survival systems that need no action and reaction to make them work. In the introduction I spoke of the innate survival mechanism of feeding fight/flight and reproduction. The baby automatically suckles and has a centering reflex to guide it to the breast for nourishment. It has a sense of stability whether lying down or being held upright, and the sexual mechanism is functioning at this young age even though it is not matured(note the erectal activity in a baby male, and the mastibatory actions in all babies, at one time or another).

This is what we have to survive in the environment. All our basic reflex mechanisms are related to the intergration of these systems.

Neurophysiologists and others have observed these systems and given them specific names, but unfortunately, haven't,for the most part, seen them as part of a whole, functioning with all the others as part of an intergrated organizational system. If condidered in this way , and in their sequense, we then have an orderly procedure to begin treating any problem that befalls mankind. Everything necessary for survival, with the exception of food, drink and oxygen is found within the body. We were built that way. The innaye intelligence that made the body also provided all kinds of indicators or monitors, on the surface of the body,in order to monitor and know what is going on inside the body. All that remains ia to have inquisative minds seek these indicators, so that they could be used for the benefit of mankind. As Chiropractors, we are at a definate advantage over other disiplines. Major DeJarnette,recognized the genius of Southerland (an Osteopath), built on it,expanded his own concepts and increased the body of knowledge of the body tremendously. George Goodheart and others who would not let anything happen without wanting to know why exploded that knowledge and advanced our understanding of how the body really works two milleniums in the past 20 years. Agreat debt is owed these and other men. We need to be able to communicate with the body and its innate knowledge of what is going on within its own boundries.

We need, therefore, reliable indicators from the body itself to help us to determine what we are dealing with, how its own systems are functioning, and what is, or is not functioning properly, either with itself or in relation to the rest of body function. It is possible to have a function out of sync with other functions although it is relatively normal in its own right. The nervous system knows everything that is going on, be it is obvious or not.

Until recently, with the exception of Chiropractic and some osteopaths and naturopaths, external equipment, some of it very costly were and are being devised to help read what is going on inside the body. Some very sensitive palpatory skills and observable change in the posture, muscle tone, flexability and mobility of body structures have been devised. They are all good, and should be learned and used. However, all are not totally reliable (particularly under certain circumstances such as switching) as they are open to too many conflicting interpertations. Fortunately, Goodheart found the strong (weak) muscle indicator system and the therapy localization phenmenon as the most reliable indicators of body function to date. In my research, I prefer the muscle indicator system combined with therapy localization system of applied kinesiology as my indicator aystem for test and response, before and after treatment.

Because we are dealing now with innate survival mechanisms, andneed a place to start, we must again look at the body for the best answer. The dorsum, or back, of the body is less vulernable to injury than the anterior, or front, part of the body.

The back of the body is harder and stronger than the front, and if we must protect ourselves against blows of an enemy, etc., we usually turn our backs (dorsum of arm) to the blow if possible. The dorsum of the leg is in the front for the same reason. The dorsum also contains most of the bones for protection and support andthe large intergrated muscle groups related to this support. Therefore, it seems logical to start our examination with the back and its related centering reflex mechanisms. Using indicator, or intact, muscles as our criteria along with therapy localization technique, we must insure that they tell us the proper information. Therefore we must be aware of them find and elimate (correct) those things that would make the muscle respond less than accurately.

First, the testing doctor should be in neutral mentally and physically, (that is, with no presumption as to the outcome of any test procedure), and breathing normally. He/she should be unswitched. Always test your own K27 switching circuit!!

With the patient prone, a modified Derfield test indicates a a lateral atlas position (legs brought to a 90 degree angle. Short leg or even leg stays short or gets shorter (foot height about 90 degree) indicates atlas lateral on short side). This should be adjusted and neutralized first. A weakness of one hamstring muscle indicates a sacral fixation and/or 3rd cervical subluxation on the side of weakness. The lower 1/3 of the sacrum is the area of fixation

T.L. for precise area for adjustment. Chanlange 3C for involvement. This must be adjusted and neutralized. If both hamstring are weak in the clear then an occipital atlas fixation is indicated. In this case it is the occiput that must be adjusted and neutralized.

The limbic fixation should then be tested, adjusted and neutralized. The limbic fixation indicators are found at 7C -ld and 12D - lst L, the transitional vertebra. Although these fixations don't ordinarily interfere with the muscle test procedures, they are part of the basic neural organization (remember this is an innate function) and therefore must be adjusted and neutralized. Note, fixations are adjusted in whatever direction (TL) found, and must be adjusted together (simultaniously). That is, if high on right, low on left, then in that pattern.

Special note- Limbic fixation will indicate the presence of a systemic condition such as Reynauds disease, Scleraderma, Rheumatoid Arthritis, Psorisis, etc., Infection (acute or subacute), Allergy, or an immune system involvement. More on this subject in another paper on the "IMMUNE SYSTEM".

Any other fixations could be looked for and corrected, at this point (see fixation chart) but will usually not interfere with the use of the usual muscle used in testing in this position (hamstring). You will find that once you correct the centering/righting reflex system, these fixations will automatically correct themselves, with the exception of the "Limbic Fix"!

We must now test for the posterior switching mechanisms,ie:- coccyx umbilicus and coccyx K 27 both sides. Treat as found with a heavy simultaneous rubbing. We now have the posterior in neutral neurological so that we can continue with accurate results.

Testing for and correcting the posterior centering/righting reflex systems may be done at this time or....With the patient supine we now look for the things that would interfere with or render the anterior centering/righting reflex indicators less than accurate.

The first order of neurogical necessity, would be the lateral occiput. This is an entirely different fault than the occipital fixation, and, adjusting one will not correct the other. This is found by either protruding the tongue to the right and/or left, or by therapy localizing the occiput with both hands to one side. If indicator muscle weakness occurs, adjustment of occiput should be made either on the side to which the tongue is pointing, or on the side away from double hand contact. The lateral occiput has been called the universal fault, and nothing will really fix if it is present (an example would be 4 - 5 -6 meridians and their associated muscle weakness. This not a real possibility. Fix the lateral occiput and you will neutralize all the findings). The occiput must be adjusted on atlas, not atlas under occiput (it doesn't work that way). If the tongue or double hand contact localizes on both sides then this means you have an anterior ring of the atlas through the mouth (temporal tap the gag - reflex), or by a simultaneous bilateral thrust on the transverses of the atlas in the V groove posterior to the T.M.J.

Always test K 27, the master anterior switch of the body. This point is the meeting point of all the associated (spinal) points of the Acupuncture meridians and the meeting of Yin & Yang, this can be done with the umbilicus for specific side of fault, but works just as well using only both K27s. This is extremely important for the accuracy in any testing procedure used, whether it be an orthopedic, S.O.T., A.K., or other test. If this fault exists, the findings will be opposite of what they should be. All switches are fixed with a heavy rubbing, and should be clockwise or across, but not counter clockwise rub.

The T.M.J. function and balance should be analized and corrected, as this fault can literally have a thousand possibilities for problems in the body. (see my paper on T.M.J. update).This incredible mechanisim, which is almost totally ignored by the medical, dental and mainstream Chiropractic profession, is not only involved in the survival process, but aids in cranial bone movement and function, maintains the flexibility of the sutures of the skull, and is responsible for head balance. It is therefore involved in the fight/flight innate reflex reaction. The T.M.J. should be tested, and the muscles and/or joint corrected as indicated by the test. The only other thing that may interfere with testing in this position, if we use a leg or pelvic muscle would be an anterior femor subluxation. If the hinge of the testing aparatus is at fault, the aparatus will be at fault, This is tested with the leg raised approximately 45 degrees from the table - Knee straight pressure exerted on the femor above the knee.

If weak, adjust femor head into ascertabalum. The ilio femoral ligament should be also considered if this is a chronic problem. Either chalange the ligament in direction, or use double hand contact with the same side hand on ligament, placing the opposite side hand on top. Adjust accordingly. If posterior, contact ligament with fingers firmly, and as leg is rotated outward, lift ligament upward into grove. If anterior, contact as above and as leg is rotated inward, push ligament downward into grove. We have now set the stage for proper, reliable testing procedures.

We now approach the primary topic of this paper - The Primary Centering and Organizational Innate Reflex System. Although parts of this system have been given specific names and do specific things (see Walther - Cloacal,labrynthine, visual and neck righting reflex systems), they are all part of an intergrated neural reflex system on which our gaits and postures and movements are built. These systems can, and do, work separately but they must work together in a coordinated effort. For brevity and the purposes of this paper, I will refer to these reflex mechanisims as the Posterior and/or Anterior Cloacal Centering/Righting Reflex Systems. They encompass the posterior and anterior cloacal reflexes, the labrynthine and ocular (was visual) and neck righting reflex systems. The skin and other positional righting reflex systems will follow these intact systems in function. These systems must be functional, balanced, and coordinated for proper gait, body movements, balances and most functions of the body. Without proper function of these innate systems, the fight/flight and reproductive innate functions are now compromised.

George Goodheart has written about these systems many times but apparently most have not understood the importance of what was discovered.

These reflex systems are basic, innate, computer chips on which all coordinated movement is etched.

Let us consider, for a moment, the basic Cloacal Reflex System. What is it?, and why is it so important?

The Cloacal Centering Reflex System is found in all sexually active reproducing species. It is the system that allows successful copulation (and fertilization), and henceforth reproduction of the species. This reflex system centers the male to the female and the female to the male. Therefore, there are anterior and posterior sets. The basic coetal mount position is posterior for the female and the male, having no positional options, must be anterior. Because all fetuses are conceived female and the male characteristics are superimposed on a female fetus, with both vestages of the other, so that the male has similar posterior cloacal reflexes to the female although, in most cases, not as active. If we look at the origin of the word Cloacal, it comes from the latin cloacae meaning sewer. Why? Because in earlier and lower forms of life, the excretory and reproductive openings in the body were one. In the male we still have a dual purpose penis, both excretory and reproductive. When one system turns on (reproductive) the other system turns off (excretory) and visa versa, therefore insuring proper impregnation and fertilization without being washed out by the body excretory activity. I think you can start to see some the implications ,ramifications, and extrapolations of this one mechanism.

Anyone who has engaged in sexual activity, or at least knows something about it, realizes that trunk muscles, pelvic muscles, and leg muscles are at least involved in the activity. Because it (cloacal reflex) is a centering reflex device there is a certain amount of delicate coordination between these muscle groups to successfully complete the act. This system is therfore responsible for the reactive muscle system we know about and some reactive muscles we don't know about (to be more fully discussed in my paper on Scoliosis to follow). It is also the link between the feeding (digestive) and reproductive basic survival systems. We will now see how it relates to the fight/flight reflex for total involvement in the basic survival mechanisms of the species.

Because the Cloacal Reflex System is responsible for muscle coordination for the trunk, pelvic and leg muscles, it is involved in body motion and as such is demonstrably involved in all gait movements, front, back, side, etc.. Because it is a centering system, it is basic to, and is a part of, our righting reflex system so that we can stand erect and change position as necessary, etc.. This system coordinates with the head and neck righting reflex systems (as we will demonstrate). Although they can, and do, work independently of each other, and therefore can and must be tested that way, they must work together in order for us to function, stand, and mobilize. Therefore, they must also be tested together in the various possible combinations. Because these combined reflex systems allow us to have coordinated body to head and head to body movement, they now become part of the fight/flight reaction. This is basic to our survival as a species.

PAGE # 13

Because these reflexes are part of our defense system, they have functions related to our awareness of our environment for protection from danger. They therefore take on different awareness functions with our eyes open and our eyes closed, and in the light and in the dark with our eyes open and our eyes closed. This then enables us to not only sense danger, but mobilize the muscles and posture necessary to run from or fight the particular danger, be it light or dark, or to change body position in relation to danger with our eyes open or closed in the light or in the dark.

There has been some interesting work done regarding how our brain functions with our eyes open and/or closed, with our ears open and/or closed, and in combination and in the light and in the dark etc.. Brain Pet scan studies (P.E.T. Positron Emission Tomography at the University of Pennsylvania (Martin Reivich) and at the University of California at Irvine (Monte Buchsbaum) show different areas of activity in response to the different combinations. These being innate reactions, or responses of the brain to various body options (ie: eyes, ears, and light options, specifically light and dark) and because they are predictable, they must be related to awareness and the righting reflex systems. These being innate systems within the neural function of the body. I am sure you can see how the different phases of testing (eyes open, closed, etc.) are necessary to make proper analysis and correction for neural organization.

We all know that the cross crawl or cross patterning exercise has an organizing effect on the entire nervous system. The cross pattern is based in the Primary Cloacal Centering/Righting Reflex System.

An interesting exercise demonstrating the extensiveness of the cross crawl or patterning exercise is as follows: Have the patient lie supine, palpate, and find the lateral aspects or plates of the sphenoid wings. While maintaining contact on them, have the patient go through a cross pattern exercise and feel the motion of the sphenoid as it rocks up and down from side to side.

I hope you understand the importance of the primary cloacal centering/righting reflex system and the need for starting any treatment with it. Now let us consider the reflexes themselves, where to, and how to test and correct them. The posterior cloacal centering/righting reflex system - the posterior cloacal reflexes and the labrynthine righting reflex system.

The posterior cloacal centering reflexes are responsible for centering the pelvis posteriorally, and are located in the pelvis. Beardall locates them in the sacro tuberus ligaments in the grove lateral to the apex of the sacrum and the coccyx. I have found equal response on the tips of the ischium. Therapy localizing either area will produece a weakness in a strong indicator muscle (usually the hamstring is used in its normal test position, approximately a 45 degree angle of the lower leg) if there is a fault in the reflex. I must emphasize that the test, as with all others in this series, is done with the eyes open and the eyes closed.

Correction is made in one of three ways: 1) a wet hand contact on either area until a pulse is felt. 2) a heavy rubbing contact on the sacro tuberus ligament or ischium on the side of weakness. 3) a respiratory correction in which you contact the ischium and rotate the ischium medial and toward the opposite shoulder in a sort of scoop motion with a respiratory inhalation assist. This correction is preferred because of the fascial involvement in the structures and their reciprocal motion.

The labrynthine righting reflex system, which is one of the head centering reflex systems and is thought to be involved only when the eyes were not operating, and for balance. This reflex is located in a groove at the base of the skull on the suture between the temporal bone and the occiput. These may be three in number but we therapy localize the entire complex. If there is a fault, a strong indicator muscle will weaken. Remember this test, as with all centering and organizational tests, must be done with the eyes open and with the eyes closed. Correction is made: 1) by contacting the test area with a wet hand contact holding until a pulse is felt. 2) By a heavy rubbing in the groove. 3) by contacting the test area and exerting a rotating motion downward to cause the temporal bone to slightly rotate in its normal respiratory motion (in whatever phase of eye option, open or closed). Again I prefer the respiratory assist motion as it takes into account the reciprocal fascial mechanism.

Note - The pelvis tends to open anteriorly on inspiration with the ilii rotating lateral and inferior, therefore the ischii rotate medial and superior on inspiration. The occiput moves inferior and anterior, in a sort of arc, while the temporal bone rotates, using the mastoid as reference point, in an inferior and anterior arc while the superior border flares out on inspiration. Although these reflexes work independently and must be tested separately they must always work together (to center the head to the pelvis and the pelvis to the head), and must be tested that way. If you find a posterior cloacal reflex fault, you must find a labrynthine fault in the same phase of eye option, open or closed. The reflex test points are again tested in combination, that is, one posterior cloacal with one labrynthine reflex, with the eyes open and eyes closed in various combinations. Furthermore you must find which one of each, or which combination, is at fault and then make the proper corrections as described. If they are found separately (one of each), they must be fixed that way. As Goodheart says, fix them the way you find them.

The anterior cloacal centering/righting reflex system: The cloacal centering reflex and the ocular righting reflex (note: reference to this particular reflex system may be found under visual righting reflex, but because we take other functions of the eye into account other than the visual function and its orientation to the horizon, I have renamed it the ocular righting reflex (proof will be evident later)

PAGE # 17

The anterior cloacal cenering reflexes are responsible for centering the pelvis anteriorly, and are located in the anterior superior border of the pubic bones, approximately 1½ " lateral to the symphasis. If we consider the basic function of this reflex is to center the pelvis in copulation, then the position of the reflex points becomes obvious. Again, this reflex is tested, or therapy localized, with the eyes open and closed. If a fault is found it is corrected by: A) a wet hand contact on the points until a pulse is felt, B) with a heavy rub (very painful), or C) with a respiratory assist move. Contact the anterior superior spine of the ilium and rotate it lateral and inferior arc in its normal respiratory motion. The ocular righting reflex is one of the head centering or righting reflexes, and is found in the superior orbital notch in the superior border of the orbit on the frontal bone. Again, this reflex is tested or therapy localized with the eyes open and with the eyes closed. Correction can be made by: A) a wet hand contact until a pulse is felt. B) a heavy rub, or C) enhansing the normal respiratory motion of the frontal bone on inspiration. The frontal bone flexes like the wings of a gull on inspiration. Therefore, contact is made on the mitopic suture with the heel of the hand while fingers contact the lateral edge of the frontal bone and lifting motion is made on inspiration.

Again, as with the other centering/righting reflexes, these reflexes work separately and must be tested and corrected that way, <u>But</u> they <u>must</u> work together, and therefore must be tested

and corrected that way with the eyes open and the eyes closed. As the head must always be able to center to the pelvis and the pelvis must always be able to center the head, therefore we test them separately and we test them together in combination; ie: the anterior cloacal centering reflex with the ocular righting reflex in the various combinations with eyes open and closed. If you find an anterior cloacal reflex fault, you will find an ocular righting fault in the same phase of eye option, open or closed.

The literature only describes the visual righting reflex mechanism as functioning with the eyes open or visually operational, and makes reference to tests which demonstrate this righting function. It is true that a blind man holds his head awkwardly and has trouble centering or righting when he gets up from a lying position. They have taken only the obvious part of this reflex into consideration. That of righting the head to the horizon. They have not gone further into the coordinated function of this reflex system. Because this righting reflex must work with the anterior cloacal centering reflex, and the body must have its defence options at the ready at all time, there is an awareness function that we must take into consideration whether the eyes are open or closed, in the light or in the dark. They all make a difference. (refer back to the P.E.T. studies).

To prove the point we must test a patient for a gait deficiency. See which foot is forward. This is done by turning both feet medial (in). The one that resists full turning is the forward foot. If the patient is in a gait position the opposite P.M.C. will be strong and the homolateral or ipsilateral P.M.C. will be weak, (defacilitated). If you want to go further into the gait, the tricepts, posterior deltoid, latisslmus dorsi, etc., will be weak on the opposite side and the same muscles will be strong on the homolateral or ipsilateral side (facilitated). Now find and clear all the cloacal, labrynthine, and ocular righting reflexes with the exception of any ocular righting reflex found with the eyes closed. The patient remains in the gait position. But, as soon as the eyes closed, ocular righting reflex is corrected, the patient comes out of the gait position, and all muscles are now in neutral and test normally. This brings up some interesting factors which I will discuss later.

If in testing these reflex systems you find two labrynthine or ocular righting reflex faults in the same phase of the eye option, either open or closed, then this indicates a cranial injury that has registered in the central nervous system. This must be cleared in a very special way. Until this is cleared the head has lost its physiological center and nothing you do will ever remain truly corrected. Gait faults will reoccur, catagories will reoccur, particularly catagory one because of the dural torque. The body will always have to find new compensations for the unstable head. (See paper on the Cranial Injury Complex)

To clear this phenomonon we must therapy localize the labrynthine and ocular righting reflex mechanisms simultaneously, both right and left labrynthine with both ocular righting reflexes with eyes opened and eyes closed, making simultaneous corrections as above. To prove the necessity of making this correction, correct the neck righting reflex (to be discussed next) without correcting the cranial injury complex. Then, when clear, have the patient take only two steps (can be done lying down doing a cross pattern exercise) and retest the neck righting reflex. You will find the correction is completely lost. Therefore, if present, the cranial injury complex must be corrected at this time. If you redo the previous test you will find it now holds.

The neck righting reflex should now be considered in relation to the complete centering/righting and organizing procedure. The neck righting reflex mechanisms are located in teh articular facets and laminal groove of the 1st, 2nd, and 3rd cervical vertebra. They are therapy localized together with both hands with the eyes open and closed, as with all centering reflex systems. Correction is made with a heavy rubbing along the laminal groove in whatever eyes option phase the test indicated weakness. If may be in one or both phases. This then completes the basic, or primary, centering righting and neural organizational procedures. The body is now in physiological center, the gaits are normalized, the nervous system has been organized on a somatic level, and the patient is now ready for whatever specific correction necessary in relation to their specific health problems. We have noticed that many patients take a longer step with one foot, or that one arm does not swing as far as the other in a normal anterior gait.

This creates a problem of allowing them to walk themselves back into the destortion. The reason for this is the longer step is a result of that foot being in an anterior gait position, and is already muscle and reflex set in front of the other one. The same holds true for the arm motion, the less swing is because the arm is in a posterior gait position, that is the lesser swing is on the same side of the longer stride. This can also be tested with the patient lying on his/her back. Turn feet medial (in). The one that doesn't turn in as far, or with restriction, is the forward foot. This is completely eliminated by the correction of the total cloacal centering/righting reflex complex.

On special occasions these reflex systems must be tested front to back, that is the anterior cloacal to the labrynthine and the posterior cloacal with the ocular,again, as always, with the eyes open and eyes closed. Sometimes the entire complex must be tested and faults corrected in the sitting position or in the standing position. Sometimes with the head right or head left or eyes right or eyes left or head and eyes left and/or right etc.. These special occasions are necessary when there is a persistant weakness that does not respond under usual conditions of treatment, or when the specific injury was registered in that position and therefore must be corrected in that position. Sometimes you must fix it the way it happened!

We can see that there is almost an unlimitted number of possibilities to this reflex system in gait and organizational problems in the body. Almost always the basic lying position of correction is sufficient.

These reflex systems are sensitive to trauma, physical, emotional, and sometimes chemical. That is how they are disturbed for the most part. Being also sexual in nature, they may be disturbed by glandular activity problems at puberty or menopause, and certain complications of the sexual organs. Therefore, almost all patients will have a problem relating to one or more of these reflex patterns. (see paper on Scoliosis for glandular causes).

The patient is now ready to be treated for any catagory corrections necessary, and/or whatever other specific problems present. Any patient who has been in an accident or has sustained a traumatic injury must be examined and corrected in this manner. Many times the patient remains in the defensive muscle set position of the accident and no amount of any other technique or modality will release him/her from that position. I think you can see the immence value of this primary cloacal centering/righting reflex complex.

This reflex complex is extremely important relating to sports injuries. If a pitcher is right handed and is in a right gait fix, he cannot throw the ball correctly because the muscle needed to throw the ball are defacilitated. There are hundreds of examples but I think you can see them for yourself.

THE CRANIAL INJURY COMPLEX

ABSTRACT

By Carl A. Ferreri D.C.

Carinial injuries are many times insidious and give no specific outward manifestation of their presence. After the initial injury which may have been severe, with bolld, unconciousmess, concussion, etc., or relatively minor, with nothing more than a slight bruise, the patient seems to recover, the injury heals, the pain goes away, and everyone forgets about it. But the patient is never"right" after the incident. He/she may have headaches, back problems, neck problems, seem to injure themselves more easily or frequently, etc.. Careful investigation does not reveal any specific problems that can be attributed to this injury. There are the general problems faced by all patients. The doctor may find various cranial faults and attempt to correct them, only to find they recurr or that others appear down the line. The patient is always in some sort of a gait problem, with one foot forward, turning in, turning out, etc. There may be headaches, eye problems, ear and jaw problems, etc. All are treated the patient is greatly improved but always has some kind of problem. Yet nothing indicates a head injury. The cranial injury complex patient is an enigma.

THE CRANIAL INJURY COMPLEX

What is the cranial injury complex? How do you find it? How do you correct it?

Essentially, it is a disorganization of the reciprocal sutural motion of the skull. Because the reciprocal tension membranes of the skull are anchorel in the sutures and became part of the periostium of the sutre, the reciprocal motion of this support system of the brain is also at fault. This alone can create a merial of

problems. Because there is a continuum of fascia throughout the body there are many other direct implications to this problem (to be further discussed in a paper on fascia),therefore we can expect some disorientation of the normal brain activity. It is usually manifest in the motor functions but can be in memory, circulation, balance etc.

In doing my normal testing procedures I many times found the double labrynthine and/or ocular righting reflex pattern. I further found that making the usual (for me) cloacal, labrynthine, ocular and neck righting reflex corrections, that although the gaits corrected and other problems corrected at the time of treatment, the neck righting reflex fault would immediately return and gradually the cloacal, labrynthine, ocular righting reflex faults would return or different ones would occur without any apparent trauma. The case histories provided the first clue. They all had had head injuries. Some could not remember but upon questioning, it was found that they had a head injury they forgot about that may have been in their childhood.

Further analysis of the head posture and movement led to the conclusion that some fault was still present in the centering or balance mechanism of the head or skull. After clearing all cranial faults that would be found and some that I presumed were possibly involved even if they did not therapy localize, the problem of head centering or balance, particularly with its relation to the neck righting reflex still persisted. It was apparent that the

head and/or skull had lost its physiological center and was trying to balance on the neck by recruitment. The neck muscles were always in some sort of stress not necessarilly major stress to restrict motion, but stress never the less.

Closer inspection and a certain amount of reasoning indicated a problem in the reciprocal motion on respiration as the temporal, sphenoid and frontal bones move. Because they do not therapy localize in the usual way, it became apparent that the double labrynthine and/or ocular righting reflex was the indicator. Therefore the indicator or the cranial injury complex became the two labrynthine and/or the two ocular righting reflex therapy localizing with the same eye option open or closed. This double therapy localization can occur either in the clear, that is, by themselves (you have to therapy localize them one at a time however) or in combination with a cloacal reflex either anterior or posterior. This then indicates the presence of a cranial injury complex but not which reflex combinations need correction. To find what needs correction, now that you know something needs correction, you have to take another step.

You now therapy localize a labrynthine righting reflex with both ocular righting reflexes one at a time, with the eyes open and the eyes closed. Both labrynthine must be tested with the ocular complex.

Once the fault pattern is determined the correction is accomplished by correcting the labrynthine with the ocular simultaniously, with the respiratory motion correction on inhalation, with the eyes open or closed as found.

The labrynthine righting reflex is corrected by contacting the posterior edge of the temporal bone in the sutural groove between the temporal and occipital bones, with an inferior and anterior rotatory move, to enhance the respiratory motion of the bone, while simultaniously oorrecting the ocular righting reflex. The ocular righting reflex is corrected by contacting the mitopic suture of the frontal bone with the heel of the hand, while the fingers contact the lateral aspect of the frontal bone, and lifting with a inhalation respiratory assist. (The frontal bone flexes on respiration like the wings of a gull, somewhat fixed in the center.) If all combinations are corrected, the effects of the cranial injury on the cranial reciprocal sutural motion, and the reciprocal tension membranes of the brain and skull is eliminated or neutralized, and the head now is returned to physcologic center. The head can now center to itself, the head can now center to the neck, the head and neck can now center to the body. and this complex can now center to the pelvis and its centering reflex complex. This is a necessary correction for anyone who has had a head or cranial injury at any time in his/her life starting with a possible cranial injury at 2 or 3 years old, I have found that for the most part the cranial injury complex is activateted after the cranial bones are more completely formed so that the skull motion is accomplished in the sutures and not in membranes as in very early age.

The cranial injury complex had been responsible for a multitude of problems which up to now resisted detection and therefore resisted

IDOPATHIC SCOLIOSIS

Idopathic Scoliosis means of unknown causes or origins. Until now this has been true when speaking of scoliosis. There hasn't even been a viable theory as to the cause and/or a workable treatment. No one has demonstrated the cause or the mechanism that allows a scoliosis to form. Scoliosis has resisted all attempts at correction, and no technique has predictably arrested this condition. Since earliest times scoliosis has been recognized, and through the ages many treatments have been devised. All trying to arrest this condition, to no avail. Mud packs, massage techniques, bindings, steel armor corsets, braces, etc., etc., have been tried. All have failed. Spinal Operations were introduced in recent years, and were hailed by the medical profession as the "cure" for scoliosis. Imagine going through life with a steel rod up your spine, or with your spine fused!!.

Chiropractors have claimed the best approach to scoliosis because they consider it a condition or disease of the spine. They have adjusted into the curves, and with the rest of the healing arts have been attempting to use electric muscle stimulators on the concave side, to pull the spine back into line, or strengthen these "weak" muscles. Almost everyone considered these muscles weak allowing the spine to be pulled out of line. These are the normal muscles!!!. No one has looked at the front of the body, which is equally involved in scoliosis.

There is a lot of talk about scoliosis, schools test for it, so called research has spun the same old wheels, all looking at the spine as the problem, or the wrong muscle groups as the problem.

Idopathic Scoliosis is not a condition of the spine. The spine is just a structure cought in the middle of a reactive muscle complex, which was allowed to happen by a specific reflex mechanism fault.

Why is scoliosis almost always a female problem? Why does it

happen around 12 or 13 years of age most of the time ? Let us now consider the answer to thes and other questions about scoliosis. Let us demonstrate the real cause of scoliosis, and how to predictably, and successfully treat this condition, so that we can claim a "cure". If you know the cause, correct that cause, normalize the muscle complex involved, to completely neutralize the condition, so that it will get no worse, will get some to all better, depending on how soon treatment is instituted, and how much structural damage was done, then I think you can claim "CURE"

IDOPATHIC SCOLIOSIS

We must differentiate idopathic scoliosis from the other types of scoliosis which involves wedged vertebrae, incomplete segmentation of the vertebrae, and block vertebrae. These are different entities, and have very specific anominolies causing them. There is also a type of scoliosis caused by muscle paralysis and nerve injury. The cause of these is obvious. There is another kind of scoliosis we all see which is non pathologic, in that it is non progressive or almost so, will respond redilly to treatment and will come and go. It is apparently a fascial stretch syndrome caused at birth, which will be discussed later. What I am discussing, is the apparently healthy child with a normal spine, who all of a sudden develops scoliosis. This scoliosis is usually rappidly progressive, gets worse every year for many years, and resists all attempts at containment.

If we go back and review my paper on the Cloacal Centering/Righting Reflex System we can find the cause. We will specifically discuss that part of the system that involves scoliosis.

As with all conditions, we must go back to the basic innate mechanisms we have for the survival of the species, to start to understand the roots of a problem. The basic innate survival mechanisms

of all animals are feeding, fight/flight and reproduction. Underlying these functions is an innate centering/righting reflex system to allow 1) the head to center on the body, with gravity and the horrizon, so that the animal can orient to the environment and 2) a centering reflex system to center the pelvis to the body, to gravity, and in sexual activity for reproduction of the species. (see The cloacal centering/righting reflex system-Ferreri winter'84). Specifically they are the Labrynthine, Ocular, and Neck righting Reflex systems to center/right the head and neck, and the Cloacal CenteringReflex system to center the pelvis. Let us further discuss the cloacal centering reflex system, what is it, what it does, and how it works.

The cloacal centering reflex system is an innate centering reflex system found in all actively sexual reproductive species. The name cloacal comes from the latin meaning common opening or sewer, this because in lower and earlier forms of life, the eliminative system and the reproductive system shared common openings in the body. The male, for an example, has a duel purpose penis, both eliminative and sexual. When one system is activated (reproductive) the other system is deactivated (eliminative) and V.V. This insures proper impregnation and fertilization, without being washed out of the body by excretory activity. Because the reproductive system, with its reflex activity is an innate system, and part of our survival mechanism, it is always active as are all survival reflex mechanisms. This is obvious in the erectal activity in infant males, and the mastibatory activity of all infant mamals male and female.

Experimentation with the cloacal reflex mechanism has shown, that if you stimulate a female animal on the lateral part of the rump, she will move away from the stimuli, but if you stimulate her in the medial or inner part of the rump, she will move toward

the stimuli. If you stimulate the male on the rump,he will also move away from the stimuli, but if you stimulate him or the anterior pelvic area, he will move toward the stimuli, and also tend to thrust the pelvis forward. This is the cloacal reflex in operation, to center the male to the female, and the female to the male, to insure successfull copulation and therefore survival of the species, via reproduction. Anyone who has engaged in sexual activity or at least knows something about it realizes that trunk muscles, pelvic muscles, and leg muscle are at least involved in the activity. Because it is a centering reflex, there is a certain amount of delicate coordination necessary between these muscle groups, to successfully complete the act. This type of coordination requires extensive muscle action and reaction reflex activity, which in its innate form (survival), gives us the basis for the reactive muscle activity we know about. Because we stand erect this reflex mechanism takes an additional functions, in that, not only does it center the pelvis for sexual activity, but must help in centering the pelvis in postural activity. As we have seen this reflex system has posterior and anterior divisions. Each division must act and react with the other. They must also act and react with the centering or righting reflex mechanism of the head and neck, so that the head can center to the pelvis, and the pelvis can center to the head. This way we can orient our bodies to the environment (see paper on cloacal centering/righting reflex system - Ferreri - winter 84). Even in the infant we see the first stage of this system at work when we turn or hold the infant in different positions. They always try to right themselves, either

to gravity or to the horrizon (the things in a room or the room itself). This intact centering/righting reflex system is the basis for the attempts to center or "right the body". As we "learn" to walk the same thing takes place. We "learn" to walk and move in direction, and orient the body in space, by reflex. As the muscles get stronger and able to support the weight of the body these things are possible. We learn to put one foot in front of the other, but we do not learn all the intrigate muscle coordinations and reactions, necessary to that. They are built in so to speack. The cloacal, with their related labrynthine, ocular and neck righting reflex systems are the reflex systems responsible for the reactive muscle system. Part of this system is responsible for a conservation of energy system, that of facilitation and defacilitation reflex patterns, to allow the body to move smoothly in the meriad of postures. They are the computer chips, so to speak, already programmed, on which to build the moving and standing gaits, and the learned movements for sports, dance, etc. Depending on the species involved, this system is evident from the first moments of birth. In many four legged species and in fish, the infant is instantly mobile, is able to swim upright immediately, or walk and run moments after birth. This is essential for survival, as the infant is always defenseless, and must be herded out of the way of danger immediately, as the aroma of the birth process alerts preditors to the presence of easy prey. This is seen in such species as horses, cows, elephants etc.. In the lair type animals, the infant takes a somewhat longer maturation period, but the mother cleans up the after birth, and

hides the newborn from enemies, They are protected for a longer period until the muscles are strong enough to make the animal mobile. In the two legged species the maturation period is longer, but the species is able to protect the infant for a much longer period of time. In any event what I am trying to prove is that, despite the differnces in species the basic, innate reflex mechanisms for centering and righting are present from the begining, and it is the muscalar strength and usage that is developed, not the innate reflex, which is always present.

Now to get back to the sexual aspect of the cloacal reflex system. As was pointed out, there is sexual activity present from the very begining of life. The fact that glandular maturity is necessary to complete the act, is the next consideration. All species are born with innate sexual ability. The pelvic thrust activity is automatic. The muscle coordination to accomplish this, is automatic, and is basic to life. No one needs to teach a fish, bird or animal of any kind, how to reproduce. They all do it innately. Understanding this we see that the reflex for this activity is always present. As the species matures there comes a time when the glands necessary for viable reproduction activity starts to function. Although these glands are not dorment, they do not assume their cyclic functions necessary to reproduce the species, until puberty (sexual maturation). Until that time, these glands were involved in maintaining the sexual characteristics of the individual. When they start to mature, they produce the secondary characteristics of the sex. Development of breasts in the female to nourish the infant, and viable ova to be fertilized, and the enlargement of the penis in the male, with production of

mobile sperm, necessary for fertilization. Dramatic changes take place in the glandular function, which up to now, was a steady development to maturity.

To insure the best possible reproduction, less effected by periods of feast or famine, pestilence, etc. (as was the plight of earlier and primative man, and animal) fresh reproductive material is always being produced. Because nothing in nature is haphazard, everthing has a plan and a cycle, from the changes of the seasons, to renew the earth, to the renewing of the reproductive material (the ova particularly) in all the species. The old is broken down and/or expelled and new is put in its place. This function again is cyclic, in rythm with all things natural.

However, when the maturation process occurs, the cycle is rarely rythmic in the begining. The "engines" have to sort of warm up, and do a few trial runs. The rythmic cycling may take a year or more to stabilize. During the erratic period, when the fertilization cycle is not rythmically established, the reflex mechanism associated with this function, is also disturbed. Because this reproductive cycle is primarilly female and the normal mount position for copulation, is posterior for the female, the posterior centering (cloacal) reflex is dominent in the female. This being so, it is the posterior centering reflex mechanism, that is compromised during this time. It must be kept in mind, however, that all conceptions are initially female, with the male characteristics superimposed on a female fetus. Therefore both the male and the female have the same basic reflex systems. The posterior cloacal reflex being dominent in the female, and the anterior cloacal reflex dominent in the male.

This then, accounts for two phenomonon. One is that the female is more prone to scoliosis than the male, and two, scoliosis occurs at puberty when the fertility cycle is erratic, putting stress on the reflex mechanism associated with copulation.

Once the reflex system is comprimised, it cannot monitor the reactive muscle activity of the trunk muscles to the pelvic, and leg muscles. Any trauma which would cause the trunk muscles to become defensive or hypertonic, may result in a muscle imbalance. This imbalance will be side to side, and because of the reactive nature of the muscles, top to bottom. The back muscles of the trunk can not balance side to side, nor reset properly to the leg muscles. They, therefore, remain permanently hypertonic, starting a dramatic chain reaction in the entire body musculature.

This hypertonisity will not only pull the spine out of line, but will ultimately bend the bones, to which the muscles are attached. We must understand how the muscle system works, agian, from a defence and survival point of view. We find that all muscles are in some sort of readiness at all times. No muscle or muscle group completely relaxes or turns off. If that were to happen it would be detrimental to the body, as the supporting action of the muscle system, for organ and other body structures would be lost. The body would be in a very helpless condition. The rappid mobilization of the muscle system in times of danger, would probablypull a flacid muscle apart, or certainly damage it severely. This happens once in a while,anyway,even though the muscle is not completely turned off. The muscle is either defacilitated or is compromised by its related organ system. A muscle works in a way so that it

conserves energy, when not in use, but can be activated readily. Approximately one third of the muscle is in a form of contraction, lightly pulling, supporting or stabilizing vital structures, joints, etc. Approximately one third of the muscle is in a state of relaxation, recouping its energy and repairing itself, and approximately one third of the muscle is going into or coming out of contraction or relaxation, which ever way you wish to look at it. We can therefore give an arbitrary figure of four, on a scale from one to ten, as the normal tonus or state of contraction of a non working muscle. There are propriceptive or feedback monitors of this tone found in the muscle bundles, the golgi tendon fibers, fascia, joint surfaces, etc. Even lying down, the body is in a posture and must be ready to defend itself or get out of the way. The overall monitor of body position, the centering/righting reflex system, is involved. If a muscle increases its tone to work it must return to the resting state eventually when it is finished working. This tonus, we have agreed, is approximately a four, on a scale of one to ten. If the monitor system is not operating properly and is not in balance the muscle reset is out of balance and it may reset at a higher percentile because the feedback information tells it it is not finished working. If it sets at four and a half or five and imbalance is established and the normal opposing muscles cannot maintain the status quo. Distortion of structure results.Only in the case of paralysis due to nerve injury, would a muscle set or reset at a lower percentile.

In that case, the normal muscle, having lost its opposing resistance, will act as if it were hypertonic and pull the structure out of line.

Another phenomenon that allows the body to assume a scoliotic posture under certain conditions of stress, and allows the peculiar scoliotic curve found in most idiopathic scoliotic conditions, ie, the left lumbar, right thoracic and left cervical curves, is the stretched fascial sheath.

The body is completely enveloped in and invested with a continuum of fascia from the bottom of the feet to the top of the head. This fascia holds the body together. Every part of the body is wrapped in it. A single muscle fibre is wrapped in it with a filament of fascia extending to where it is attached to bone. Many of these filaments form the muscle tendon. Groups of muscle fibres are wrapped into bundles; these bundles are wrapped into larger bundles or "heads". These larger bundles are then wrapped together to form the muscle itself. The muscle is then wrapped with other muscles, bones, blood vessels etc, to form structures such as a leg or arm. Some fascias have names such as pericardium, pleura etc. All these fascia are attached to each other and are ultimately wrapped in a complete body fascia. This results in the entire structure being held together.

During the birth process the more usual fetal presentation is L.O.A. (left occiput anterior). This position and some others involve a dramatic left lateral flexion of the head.

The right shoulder is presented after considerable traction of the pubic bones of the mother. The body fascia is therefore stretched, favoring the most common of postural distortions, right thoracic scoliosis. The left hip is then stressed as the baby twists free of the birth canal and the innominate is usually posterior and inferior which would favor a left lumbar scoliosis and sacro iliac lesion.

It should be noted that although many authors indicate that the body fascia is laid out on the long lines of the body, from feet to head and visa versa I find by challange that the body fascia has a definite cross or X pattern, which not only gives better stability to the body but is probably responsible for the ligament interlink phenomenon.

Taking all this into account we see the glandular and neurological reason for the onset of the scoliosis condition at puberty, why it is mostly a female condition and why it is mostly a lumbar left, thoracic right, cervical left pattern.

Once the cloacal centering/righting reflex system is balanced, using the respiratory assist correction to take advantage of the fascial response (see Cloacal Centering/Righting Reflex System- Ferreri - winter 1984) we are ready to start to correct the muscles involved in the scoliotic twist of the body.

Let us go back to the begining. Which muscle group started the scolios problem?

The muscle system which will unfold is somewhat unique, as most of the muscles will not challange untill the muscle before it in the pattern is corrected. This reactive muscle pattern happens in motion and each is a compensation for the other. The scoliosis started with the muscles of the back, primarilly the sacro spinalis group. Challange these muscles for strength and reactivity. You will find that on stress test (continued pressure past the usual muscle test time) the hypertonic muscle will weaken. This is so because the muscle is in abnormal contraction twenty four hours a day and never fully rests. It is usually necessary to test this group in two sections. There may be enough normal fibers to over-ride the usual test. In testing the side of lumbar scoliosis, if the pelvis is anchored and pressure is applied to the raised shoulder on that side, many times nothing happens. If however the shoulder is raised and pressure is applied under the scapula on that side, the muscle on that side immediately weakens. Quickly test the hamstring on the same side and you will find the previously strong hamstring has weakened (reacting to the stress on the sacro-spinalis). Now test the sacro-spinalis on the thoracic curve side but anchor or support under the rib cage as you apply pressure instead of anchoring the pelvis, and again, the upper sacro-spinalis group will weaken. This will also cause the hamstring on that side to weaken. At this stage we find both sacro-spinalis groups and both ham strings involved reactively. I find that spindle cell weakening technique usually will normalize the tonicity of these muscles very quickely.

Neurolymphatic and neurovascular contacts are helpful. You have now basically cleared the back of the body. The rest of the correction is done on the anterior of the body.

With the patient supine, challange the quadriceps against the abdominals. This can be done by having the patient sit up, fold arms over the chest, lean slightly backward, turn the shoulder slightly anterior,and challange the quadriceps by stabilizing the leg under the knee with your arm while trying to flex the leg. Have the patient resist, then press the patient backward as you anchor the legs to the table; he will immediately weaken on both sides. An easier way of testing this reactive complex is to have the patient lift his leg off the table knee bent to 90% , have the patient contact the neurolymphatic reflex for the abdominals on the leg being challenged and push the leg footward. The quadriceps will immediately weaken. Note that both quadriceps and both sides of the abdominals will weaken under challange.

A basic concept in reactive muscle patterns is - in adjacent structures, ie, back to leg - the muscles are reactive on the same side of the body. In the same structures ie. a leg or arm, the muscles are reactive front to back or visa versa and in the trunk they are front to back, side to side, outside to inside. In non adjacent structures they are opposites - right to left and left to right.

Again spindle cell correction for abdominals and quadriceps is usually suficient but neurolymphatic and neurovascular points are

always helpful.

We know that there should be psoas involvement in any curvature of the spine but usually they will not challenge even with stress until the abdominals we corrected. They will then challenge. Usually both are involved, as they have been attempting to stabilize the spine anteriorally, because the abdominals were not able to do their normal anterior stabilization. N.L. and N.V. corrections are usually sufficient for the psoas.

If the psoas muscles are involved, obviously neck flexor muscles must be involved. When the psoas are corrected the flexors will then show weakness on challenge bi-laterally. These also are corrected with the neurolymphatic and neurovascular reflexes.

If we look at the scoliotic we will see that the trapezious should be involved on the side of the thoracic curve, as the shoulder is thrust forward. When the neck flexors are corrected, the trapezious will challenge on the thoracic or anterior shoulder side. This is again corrected by the N.L and N.V. reflexes. The upper trapezious is only found on the anterior shoulder side but the middle or lower are usually found on both sides.

(Reactive muscles in adjacent structures can also be reactive front to back and back to front; distant structures can be front to back but across the body)

As we look at this complex we would expect the P.M.C. to be strong on the anterior shoulder side because it is in an action pattern

but because it is always turned on or slightly hypertonic when the trapezious group is corrected it now becomes more hypertonic and the P.M C. will immediately weaken upon challenge. N.L. and N.V. will correct this muscle.

If the P.M.C. is involved you would expect the opposite glutius maximus to be involved and after the P.M.C. is corrected the opposite glutius maximus now challenges weak on the side of the lumbar curve. Correction is N.L. and N.V.

When the glutius maximus is corrected the piriformis on the same side then challenges. To understand this better you must look at the neck. The anterior shoulder forces the head to be turned toward that side to keep it forward. Therefore the spleneus capitus must be involved. When the piriformis muscle is corrected the opposite spleneus capitus will now challenge. N.L. and N.V. correction must be accompanied with a fascial flush (a heavy stripping) to correct this muscle because the fascia has to be stretched to return the muscle to proper length.

At this point as the occiput is released, a spheno basilar fault now shows. It is corrected by contacting the occiput with one hand and the superior orbits or roof of the mouth with the other and lift on inspiration gently.

Because the body has been in a torque pattern since the inception of the scoliosis and as we discussed before, possibly from birth, the body fascia must be realligned. Place the DeJarnette Blocks under the anterior shoulder and the anterior hip - challenge an indicator muscle.

You will find it weak. Leave the blocks in place, contact the opposite shoulder and hip (you never adjust into the blocks) and stretch the fascia of the body in that direction. This is done on the anterior and/or the posterior of the body.

This is the scoliosis complex correction. The reflex system that allowed or caused the scoliosis is corrected, restored to balance and function, the reactive muscles are all neutralized and restored to balanced function, releaving the abnormal muscle pull on the spine and pelvis. The fascia of the body is realigned and the cranial function normalized. I think you can call this "cured"

If the bones of the spine and the ribs have been distorted in their shape as they grew with the muscles pulling them, not just out of line but out of shape, then we have further problems as the body is still distorted this may not be correctable, and most times depending upon the extent, is not correctable.

With further and more refined fascial corrections, and infra-ossious adjusting, some of the distortion of the bones can be changed, notably the ribs, spinous and transverse processes of the vertebrae. This is done by challenging one part of the bone to another part of the same bone by spreading or compacting and adjusting into weakness with strong movements with a respiratory assist. This technique will minimize the remaining distortion to some degree, and some cases a very large degree, depending on the extent of the scoliosis.

If the scoliosis is found in the first few months it can be completely iliminated and "cured" within a few days.

Remember, every day is important, particularly during the growth period. The summers are more important than the winters, for we grow faster in the summer.

We finally have a treatment for scoliosis that really works and works fast. In one particular case on the first treatment I increased the height of a scoliotic girl of 14 by 2¼ inches by witnessed measure.

References

1-George Goodheart - research manuals and seminar presentations

2-David Walther - Applied Kinesiology Vol 1 and seminar presentations.

3-Major DeJarnette - S.O.T. and Cranial seminars and manuals

4-Playboy series on Human Sexuality

5-Craniosacral Therapy-Upledger

6-Miscellaneous information

7- Personal research

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PRE-STRESSING AND HIDDEN PROBLEMS

Bert T. Hanicke, D.C. Diplomate IBAK Member ICAK

ABSTRACT: A rapid method of revealing hidden muscle weaknesses and active reflex areas by stimulation of 3 points on the anterior body surface.

One of the problems facing all Applied Kinesiologists from time to time is the patient who is obviously sick and/or in pain yet on examination shows no muscles weak by manual muscle testing. These patients then take extra time and effort to trace out the relevant areas of weakness and problems. These we refer to as the Fifty-one Percenters.

In German Electro Acupuncture the same type of problem occurs. You may have meridians or vessels that give no clear cut reading as to which is the major one of involvement. Dr. Schimmel, in his research using the VEGA Method, found a way of making the major involved meridians available by pre-stressing the patient before measurements are taken. The effect of "pre-stressing" lasts up to 20 minutes, ample time for most tests. If more time is needed the patient can be "stressed" again.

The pre-stressing used in the VEGA method is activation of points on the upper lip midway between nose and mouth, lower lip midway between mouth and chin, and one finger breadth above the umbilicus with a 13 cps stimulating current. (The exact wave form depends on the model of electro acupunture unit being used.)

In applying this principle to Chiropractic and in particular to Applied Kinesiology, I found that tapping these same points 4 to 5 times frequently would bring the patient out of the Fifty-one Percenter category and make accurate muscle testing again possible.

When this was first tried in my clinic, I took the next 20 patients who clearly fell into the Fifty-one Percenter category and tapped the 3 points. The following results occurred:

18	clearly brought out hidden weaknesses
2	no hidden weaknesses disclosed

Continued use in my practice has yielded a similar proportion of successes although statistics were not kept. Similar results have been obtained by 2 of my student assistants using this procedure in the Logan College Clinic.

This procedure is simple and fast and can in many cases shorten our hunt for hidden problems and the process of making an accurate diagnosis. With an accurate diagnosis we can be more effective therapeutically.

Reference:

Fehrenbach, Noll, Nolte and Schimmel. Short Manual of the Vegatest Method. VEGA Grieshaber, GmbH & Co., Schiltach/Schwartzwald. 1981.

SUBLUXATION OF CLAVICLE

by James R. Lent, D.C.

Abstract: Not withstanding the usual AK testing and treating procedures for shoulder injuries, an additional finding was made in a particular type injury, a subluxation of the acromioclavicular joint.

This winter there was a surprising increase in the number of patients who had slipped, fallen backward, and caught themselves with their arm extended behind them. In the majority of cases, it was the right arm.

The involvement of the wrist, elbow, muscles of the shoulder girdle, brachial plexus, and so forth will not be discussed here since they would normally have already been considered.

In the type fall described above, the shock of the hand hitting the ground, with the arm extended, is transmitted up to the shoulder joint with body weight first, causing the force to the shoulder joint to be in an anterior superior direction, and then an anterolateral direction, as the body drops to the unsupported side. Granted, the joint capsule could be torn, but usually it results in a subluxation of the acromioclavicular joint.

These patients often describe a catch, or pain, when they elevate their elbow laterally, above the level of the shoulder.

In the book, Essentials of Roentgen Interpretation,[1] the authors Paul and Juhl, describe the following roentenographic appearances of the acromioclavicular joint: "Subluxation - The

joint space is abnormally wide and the clavicle is displaced upward on the acromion. Fractures - Are usually at the junction of the middle and distal thirds with a downward and forward displacement of the distal fragment on the proximal."

With AK the acromioclavicular joint can be therapy localized. Place the hand of the affected shoulder on the opposite shoulder, place a finger of the other hand on the affected acromioclavicular joint and test with a convenient strong muscle. Having demonstrated the necessity for treatment, the clavicle could be challenged for direction, however, because of the initial direction of trauma, in this type injury, the direction of subluxation of the clavicle is usually superior and anterior.

Correction is made with the patient seated. Assuming it is the right side, stand on the patient's right, place the palm of the left hand on the vertebral border of the right scapula, with the fingers extending upward along the border in order to stabilize the scapula, the side of the right hand contacts the clavicle just proximal to the acromioclavicular joint, a short thrust is given with an angle of about 35° from the superior to the posterior. Therapy localization should now show correction has been achieved.

Nutritional supplementation of manganese would be indicated for the ligamentous structure. For the effects of the trauma vitamin C, bioflavinoids, calcium pantothenate, and B_6 would be of benefit.

In patients with poor ligamentous tone it might be necessary to employ taping, for a short period, in order to retain the proper joint relationship. In the book, The Dixonary of Athletic Training,[2] the author, Dwayne "Spike" Dixon, who was an athletic trainer from 1930 - 1973, described the traction taping of the clavicle quite simply. "Anchor the tape well over the pectoral area, pull it up over the top of the shoulder and set it down on the scapula." As you can see, this will hold the clavicle down and ease the ligamentous tension during the repair stage.

REFERENCES

[1]Lester W. Paul and John H. Juhl, The Essentials of Roentgen Interpretation, Third Edition, Harper & Row, 1972, p. 160.

[2]Dixon, Dwayne "Spike," The Dixonary of Athletic Training, privately published, Bloomington, Indiana, 1975, p. 110.

THE EFFECT OF CALCANEAL ELEVATION ON PERIPHERAL MUSCLE STRENGTH

Abstract: The height of calcaneal elevation has a direct effect on the ability of the nervous system to maintain peripheral muscle strength. It is readily demonstrable using muscle testing and a measuring wedge that each individual has a certain fixed capacity for calcaneal elevation (calcaneal tolerance factor) beyond which point every muscle in his body becomes weak. Preliminary studies have shown this to occur between 1.25 and 1.5 inches in most cases. This author feels that all patients should be screened for their individual tolerance factor and footwear changed accordingly.

Introduction: Early in practice a friend and musician presented himself for treatment of a severe recurrent torticollis. He had been treated chiropractically on an average of two to three times a week for seven years for this problem. It seemed as though every night while dancing on stage, singing and playing the guitar, he would experience his neck muscles going into severe spasm, which worsened as the night progressed. Upon questioning, he told me that he routinely wore boots with a three inch heel. I had him back up to that approximate height on a pair of DeJarnette blocks and found to my astonishment that every neck and shoulder muscle was markedly weakened. Eradication of his heels corrected the problem and he has had no recurrence.

Testing people on the DeJarnette blocks became commonplace in our office after this experience and has proven to be a useful screening tool to help solve "another piece of the puzzle." In an effort to more accurately and safely measure this calcaneal tolerance factor, I devised a stainless steel wedge--The Heal Helper. The wedge can measure elevation to a maximum of four inches and has both metric and customary markings.

The mechanism of this observation may be linked to dural stress. With the dura mater connected to the occiput, C1, C2, and again at S2, it would seem reasonable to assume a stretch of the entire spinal cord is occurring with advancing calcaneal elevation. It is interesting to note one exception with respect to this. The only person tested who was actually stronger in a three-inch heel than in a level position was a woman with a spinal fusion at L5/S1. Evidently her nervous system had adapted to the change in her spinal cord length.

In practice the number of diverse problems potentially related to this factor is enormous. Changes in footwear with the subsequent spinal and peripheral muscle strength changes have helped solve muscle and joint problems in virtually every area of the body. In conclusion, I respectfully submit that all patients should be made aware of their own calcaneal tolerance factor and proceed to adjust their footwear accordingly.

SACRAL STRESS RECEPTOR

The sacrum has multiple stress receptors having profound effects on the surrounding musculature. The most important of these is a pair of vertical receptors that run parallel to one another along the line of the posterior sacral IVF's (see picture). They are present in a very high percentage of category I and II's, and are responsible for balance of the piriformis and gluteus maximus muscles. Correction of these receptors supercedes correction of the related cranial stress receptors. In my experience, the correction of the stress vectors on the sacrum saves a lot of unnecessary origin-insertion, golgi tendon, and muscle spindle correction.

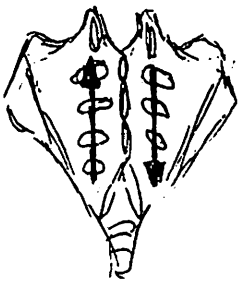
Example of the usual pattern in a category II- right pi, left as, ilia:

<u>weak</u>
piriformis

<u>strong</u>
gluteus maximus

positive challenge

Left



Right

<u>weak</u>
gluteus maximus

<u>strong</u>
piriformis

Correction is opposite the direction of challenge.

A FORM THAT WORKS

By R. THOMAS ROSELLE, D.C.

ABSTRACT:
The busy applied kinesiological practice is plagued with forms. Forms for insurance, treatment, examination, consultation, and reports. This is a presentation of what we have found to be the biggest time saver for our doctors and staff. A simple but very complete "Super Form".

We, as many of you, have been deluged by the bureaucratic paper mill that is essential to the proper functioning of our practices. The size of our practice demands that the doctor is free to move from one treatment area to another without having to spend much time rifling through charts, entering treatment notes, on communicating with the front desk. In addition bi-monthly billing, extracting information for insurance carriers, attorneys, compensation hearings, or personal injury cases is time consuming and frustrating job at least.

The form we have devised for use in our office has greatly reduced these problems. Although not a total solution, it comes close to solving our "paper chase". We present it to you in the hope that it will help you do what you should be doing, practicing applied kinesiology and getting sick people well.

The form is a two sided three section form:

SIDE I

Insurance Claim Form	Billing Statement and Account Card	Daily Treatment Notes

SIDE 2

Applied Kinesiology Examination Sheet	Orthopedic and General Physical Examination	General information Sheet-Examination finding, X-ray, Lab. Treatment instructions

The form is produced on paper that can be used with a carbon one write pegboard system.

In our office our CA pulls the card, which is stored in an upright card bin (It has been folded in thirds for storage) and attaches it to a clipboard. The doctor has all his information at hand regarding his initial findings, treatment procedure, patient account status and previous notes. The doctor then can make any additional notes and hand the chart to the patient, attached to the clipboard, to be returned to the CA. The CA can then pick up any communication from the doctor and bill and reschedule accordingly.

We do use special forms for specific patients and work-ups. However, the "Super Form" works most of the time.

		PATIENT		INSURANCE		BALANCE		BALANCE	
-84-									

CPT 4 PROCEDURAL CODES

NEW PATIENT PROCEDURE

- AA 90000 Brief
- A 90010 Limited
- B 90015 Intermediate
- C 90017 Extended

ESTABLISHED PATIENT SERVICE

- D 90030 Minimal
- E 90040 Brief
- F 90050 Limited
- G 90060 Intermediate
- H 90070 Extended

MANIPULATION

- I 97260 First Area
- J 97261 Ea. Add'l Area

SUPPORTIVE PROCEDURES

- F 97000 Modality-one of the following:
  - a) Hot/Cold Packs
  - b) Traction, mech.
  - c) Elec. Stim. (unatt)
  - d) TENS
  - e) Cum Gravity Traction
- L 97050 Modalities-two of above
- M 97100 One of the following procedures
  - a) Therapeutic Exer.
  - b) Neuromusc Re-edu.
  - c) Gait Training
  - d) Elec. Stim.
  - e) Traction, manual
  - f) Massage
  - g) Ultrasound
- N 97191 Ea. Add'l Stm. or area
- O 97540 Nutritional Evaluation

X-RAY

- XA 72020 Spine: One view: Cerv. Thor. Lum.
- XB 72040 Spine: Cervical AP/LAT
- XC 72050 Spine: Cervical (4 views)
- XD 72070 Spine: Thoracic AP/LAT
- XE 72100 Spine: Lumbosacral AP/LAT
- XF 72110 Spine: Lumbosacral (4 views)
- XG Other: _____
- -26 Interpretation Only (ea. film)

SUPPLIES

- P 99070 C-Pillow
- Q 99070 C-Collar
- R 99070 Overdoor Traction
- S 99070 Lumbosacral Support
- T 99070 Back Support (seat)
- U 99070 Cold Pack
- V 99070 Nutritional Supplements

REPORTS

- W 99080 Narrative Report

ROSELLE CHIROPRACTIC CENTER
340 E. Fourth Street
Jamestown, New York 14701
716-483-1869

I HEREBY AUTHORIZE PAYMENT directly to this office for professional services rendered and I shall be personally responsible for any unpaid balance to the Doctor. I hereby authorize the attending Doctor to release any information concerning my examination or treatment.

HOME PHONE

WORK PHONE

FILE # 55?

Signature of Insured/Patient _____ Date _____

PATIENT ADDRESS

INSURANCE COMPANY ADDRESS

Patient's Date of Birth [ ] Male [ ] Female

Patient's Relationship to Insured
[ ] Self [ ] Spouse [ ] Child [ ] Other

Was Condition Related To:
Patient's Employment ( ) Yes ( ) No
Auto Accident ( ) Yes ( ) No

Date of Illness (first Symptom) o Injury (accident)

Insured's Name or Employer

Address, City, State, Zip (if other than above

POLICY #

Date First Consulted for This Condition

Has Patient Ever Had Same or Similar Symptoms ( ) Yes ( ) No

Dates of Disability From _____ Through _____
( ) Total ( ) Partial

Date Patient Able To Return To Work

Place of Service: ( ) Office ( ) _____

DIAGNOSIS: (ICD-9CM)

[ ] NEW DIAGNOSIS [ ] UPDATE

1 _____ 4 _____

2 _____ 5 _____

3 _____ 6 _____

CLAVICAL
- 723.1 Cervicalgia
- 723.2 Cervicobrachial Syn.
- 722.0 Intervertebral Disc Syn.
- 847.0 Sprain/Strain Cervical
- 839.0 Subluxation
- 723.5 Torticollis

THORACIC
- 737.1 Kyphosis
- 724.1 Pain/thoracic spine
- 847.1 Sprain/Strain Thoracic
- 839.2 Subluxation
- 724.4 Thoracic radiculitis

LUMBAR
- 722.1 Intervertebral Disc Syn.
- 737.3 Lordosis
- 839.2 Subluxation
- 724.3 Vertebro Sciatic Neuritis

LUMBO SACRAL
- 724.4 Radiculitis
- 846.0 Sprain/Strain Lumbosac
- 839.4 Subluxation

SACROILAC
- 724.6 Disorder of Sacrum/sacro
- 728.5 Hypermobility syn

SACROILAC(CON'T)
- 728.4 Laxity of ligament
- 846.1 Sprain/Strain Sacro Lig.
- 846.9 Sprain/Strain Sacro. unspec
- 839.4 Subluxation

GENERAL
- 724.5 Backache, unspec
- 354.0 Carpal tunnel Syn.
- 564.0 Constipation
- 352. Cranial nerve disorder
- 715.0 Deg. Joint Disease
- 577.9 Disorder/Pancreas, unspec
- 401.0 Hypertension

GENERAL(CON'T)
- 346.0 Migraine
- 726.1 Rotator cuff syn.
- 737.3 Scoliosis
- 461.9 Sinusitis, unspec
- 737.4 Spinal curvature
- 756.1 Spondylolisthesis
- 535.5 Stomach, gastritis
- 845.0 Sprain/Strain, Ankle
- 841.9 Sprain/Strain, Elbow
- 843.0 Sprain/Strain, Hip/
- 844.0 Sprain/Strain, Knee/
- 848.3 Sprain/Strain, Ribs
- 842.0 Sprain/Strain, wrist/
- 355.5 Tarsal tunnel Syn
- 382.6 Temporomandibular J
- 784. Vascular, Cosmetic
- 780.4 Vertigo

Doctor's Signature _____ Date _____ #_____

ID# 16-10855??

C

TREATMENT

-85-

SIDE 2 C

HISTORY/MAJOR COMPLAINT

PRIMARY

SECONDARY

NEW / /

BP (Sit) (Lay) (Stand) P

EXAM FINDINGS:

X-RAY FINDINGS:

SCHEDULE:

CHANGE:

CHANGE:

TX: CMT PHMP DIATHERMY GALVANISM ACCUP U-

RX: CAT II BELT LBB COLLAR PILLOW NUT

OTHER:

PAMPHLETS: 1 2 3 4 5

COMMENTS:

OTHER:

MISC.:

A

R	L		R	L
		LATISSMUS DORSI		DIAPHRAM
		SUBSCAPULARIS		TEMPORALIS
		DELTOID		PARIETAL
		TERES MINOR		SPHENOBASILAR
		SERRATUS ANTICUS		GALLBALDDER
		SUPRASPINATUR		UNIVERSAL
		INFRASPINATUS		FRONTAL
		UPPERTRAPEZIUS		PINEAL
		LEVATOR SACPULA		HEAT R
		RHOMBOID		
		NECK FLEXORS		TMJ
		PEC. MINOR		CAT I
		PEC. MAJOR-STERNAL		CAT II
		PEC. MAJOR-CLAV.		CAT III
		BICEPS		S.W.
		TRICEPS		
		CORACOBRACHIALIS		PRY
		QUADRACEPS		
		PSOAS-ILIACUS		OCCULAR LOCK
		SARTORIUS		SCAN
		GRACILIS		HYOID
		PERONEOUS TER.		SWITCHING
		ABDOMINAL RECTUS		
		ABDOMINAL OBLIQUE		~~ILIOCECAL VALVE O/C~~
		ADDUCTOR		SIGMOID O/C
		GLUTEUS MEDIUS		
		HAMSTRING		
		GLUTEUS MAX.		
		PIRIFORMIS		RAGLANDS
		POPLITEUS		ROGOFFS
		GASTROCREMIUS		
		NECK EXTENSORS		
		TERES MAJOR		
		LOWER TRAPEZIUS		
		MIDDLE TRAPEZIUS		
		QUADRATUS LUB.		
		SACRO-SPINALIS		

B

R.O.M.	CERVICAL	EYES-
	60-Flex.	
	50-Ext.	
	80-RLR	EARS-
	80-LR	
	40-LLF	
	40-RLF	NOSE-
R.O.M.	LUMBAR	
	90-Flex.	
	30-Ext.	HEART-
	20-LLB	
	20-RLB	
REFLEX-		LUNGS-
	Biceps	
	Triceps	
	Patellar	
	Achillis	LYMPH-
	Clonus	
	Babinski	
	Trendelenberg	GENITALIA-
PALPATORY-		
		ABDOMINAL-
Iridology-		
		PULSES-
ACCUPUNCTURE-		LASEQUES
		BRAGGARDS
		NAFFZIGER
POSTURE-		SOTO-HALL
		LINDNER'S
		ADAMS
		MENEL'S
		WRIGHT'S
		ALLEN'S
		ADSON'S

P. M. S.

By R. THOMAS ROSELLE, D.C.

Part 1 of 2

ABSTRACT:
P.M.S. or Pre-menstrual syndrome has been estimated to effect 85% of all women at sometime during their lives. This is the first of two papers that will deal with P.M.S. related illness, suspected causes, treatment, and statistical evaluations compiled since 1982 when this study was initiated.

Until recently, (the last five years), very little has been written on the subject of pre-menstrual syndrome. Medically the subject was one in which only palliative measures were prescribed for exaggerating neurotic housewives, most often Valium being the drug of choice.

Pre-menstrual syndrome is a "pandora's" box of symptoms that occur with regularity from anytime after the menses have ended. The symptoms range from irritability, headaches, bloating, allergy exacerbations, mood swings, lethargy to asthma attacks, tremors, and psychotic episodes. These clinical presentations can vary from mild water retension and a dull headache, just prior to the onset of menses, to a full blown schizophrenic presentation with a relative amnesia of the episode afterward. Because the symptom pattern is so varied in its presentation P.M.S. is an extremely difficult entity to diagnose. Even the most talented physician will look to the amelioration of the symptom complaint, rather than treating the underlying organic dysfunctions and chemical toxicities that exist. By so doing, often worsen the clinical presentation at the next episode.

There are a set of guide lines that we have utilized in our office to determine P.M.S. syndrome from other symptom presentations.

The initial symptom complaint usually appears during the transistion stages of puberty, most often after pregnancy (sometimes mis-diagnosed as post-partum blues), and manytimes after the withdrawal of hormonal supplementation; i.e., Birth Control pills, progesterone treatment for amenorrhea, or long term fertility therapy.

P.M.S. pattern can exist for many years with mild, copable symptoms. Then, seemingly for no apparent reason exacerbate causing a mirad of clinical presentations that have caused many women to become; alcoholics, drug addicts, and many have gone all the way and committed suicide.

Marked exacerbations of the symptom pattern usually occur after a symptomatic pregnancy (excessive morning sickness, excessive swelling and kidney tension, migrane like symptoms, etc.), abrupt cessation of breast feeding (in the case of utilizing drugs to "dry up" milk production) tubal ligation, hysterectomy (partial or total), shock induced amenorrhea, discontinuance of long term medication, sudden changes in dietary habits, and extreme life style habit changes. (1)

We have not found menstrual pain, cramping, increase or decrease of the menstrual flow, or clotting to be associated with P.M.S. Although, some women who are textbook P.M.S. patients have difficult periods may have no problem at the time of menses. Also by definition, the condition is pre-menstrual.

Most patients that suffer from P.M.S. have uncontrollable cravings for sugar or sweet things, salty foods, and alcohol. These often cease or at least ameliorate at other times. It has been noted that women who do have alcohol cravings are usually very light, social drinkers, (1) often relating a history of not being able to handle alcohol well.

Women with P.M.S. often exhibit anger, neurotic manifestation, phobias and life threating acts towards themselves or others. There have been recent court cases where some women have been found innocent of murder due to temporary insanity produced by very severe episodes of P.M.S.

The P.M.S. presentation and its relation to the onset of the menstrual cycle is essential in establishing the diagnosis.

> The symptom pattern usually begins from immediatley after the menses to up to fourteen days later.
>
> When it begins early the symptoms seem to ameliorate at ovulation and dramatically worsen afterwards.

At menses there is an immediate release of the symptom pattern. Described by many as "it just suddenly let go". "I feel as if I'm in touch with reality again".

From our records and readings, we have found the majority of patients to present one or several of the following histories: long term antibiotic therapy, steroid therapy, recurrent fungal and yeast infections, unresolvable allergy symptoms, chronic fatigue, asthma, night sweats, hormonal imbalances, and lastly junk food ingestion as a dietary mainstay.

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THE RELATIONSHIP BETWEEN THE DORSOLUMBAR FIXATION AND VITAMINS A AND D

Walter H. Schmitt, Jr., D.C.

ABSTRACT: Twenty-six (26) patients with a bilateral lower trapezius weakness (indicative of dorsolumber fixation) were tested with oral insalivation of vitamin A and also with vitamin D, and observed for strengthening of the lower trapezius muscles. Twenty-three (23) responded to vitamin A. Fourteen (14) responded to vitamin D. Eleven (11) responded to vitamin A only, two (2) responded to vitamin D only, and twelve (12) responded to both vitamin A and vitamin D. A rationale is presented for the use of the dorsolumbar fixation and associated bilateral lower trapezius weakness as an indicator for the need of vitamins A and/or D.

INTRODUCTION

The traditional applied kinesiology (A.K.) indicator muscles for a need for vitamin A are the psoas and the pectoralis major, sternal division.[1] The traditional A.K. indicator for vitamin D is the quadriceps muscle.[1] In this author's experience vitamin A needs are not uncommonly observed by a response to vitamin A of one or both of the above weak muscles. Vitamin D needs in relation to a weak quadriceps are seen quite infrequently (compared to other nutrient needs) by this author. This may be a matter of clinical observation rather than actual occurrence.

Harold Hawkins, D.D.S., reported in his classic text, Applied Nutrition, that "70% of our patients (in his practice) are borderline or definitely short in vitamin A."[2] As Goodheart has wondered out loud many times, 70% of patients needing vitamin A seems a quite high percentage,

especially since Hawkins practiced in Southern California where fresh fruits and vegetables are available throughout the year.[3] Goodheart has further commented that the percentage of his patients who show a need for vitamin A is nowhere near the 70% reported by Hawkins, and has mentioned that either Hawkins is wrong, or there must be another, as yet unidentified, A.K. indicator of a vitamin A requirement. We feel that we have identified this missing A.K. indicator of a need for vitamin A.

D.D. Palmer, in his text, The Science, Art and Philosophy of Chiropractic,[4] reported that the most commonly found subluxation was at the level of the 12th thoracic vertebra. Goodheart[3] and others, including this author, have observed that the most commonly encountered lesion of the spine is a fixation at the dorsolumbar junction (T-12, L-1, and L-2) which, as A.K. research has pointed out, is accompanied by weakness bilaterally of the lower trapezius muscles. The dorsolumbar fixation is also a major concomitant of the "diaphragm technique,"[5] presumably due to the attachments of the diaphragm to the anterior part of the spine at this level.

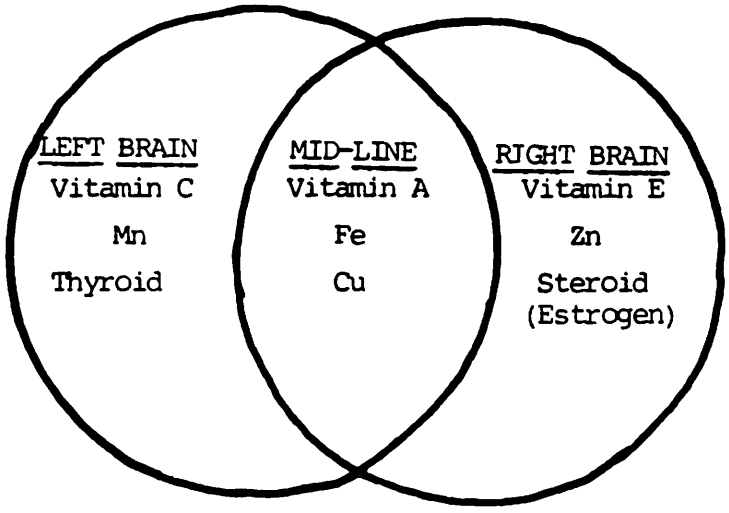
VITAMIN A AND THE ELECTRON POISING SYSTEM

An additional indicator of a need for vitamin A was identified by Goodheart in his investigations of the body language expressions of imbalances in the electron poising system.[6] Based on the work of Isaacs,[7] the needs for vitamin C and vitamin E were associated by Goodheart with left brain and right brain activity, respectively. Goodheart has shown that left brain/right brain problems will frequently respond to these nutrients when given separately, yet when vitamins C and E are given together in the patient's mouth, there will frequently be no neutralization of the left brain/right brain problem unless vitamin A is also added.[6]

Vitamin A is, therefore, important in the communication between the left and right hemispheres and is represented by Figure 1 as a "mid-line nutrient."

Figure 1:

Right Brain and Left Brain Chemical Factors



This mid-line, or communicator, role of vitamin A is in keeping with Isaacs' description of the role of vitamin A in the cellular activity of the electron poising system.[7] Isaacs points out that vitamin A finds itself a place in the cell membrane in such a way that it is in touch with both the external and internal environment of the cell. (See Figs. 2a and 2b.)

VITAMIN A MOLECULE (PARTIAL)

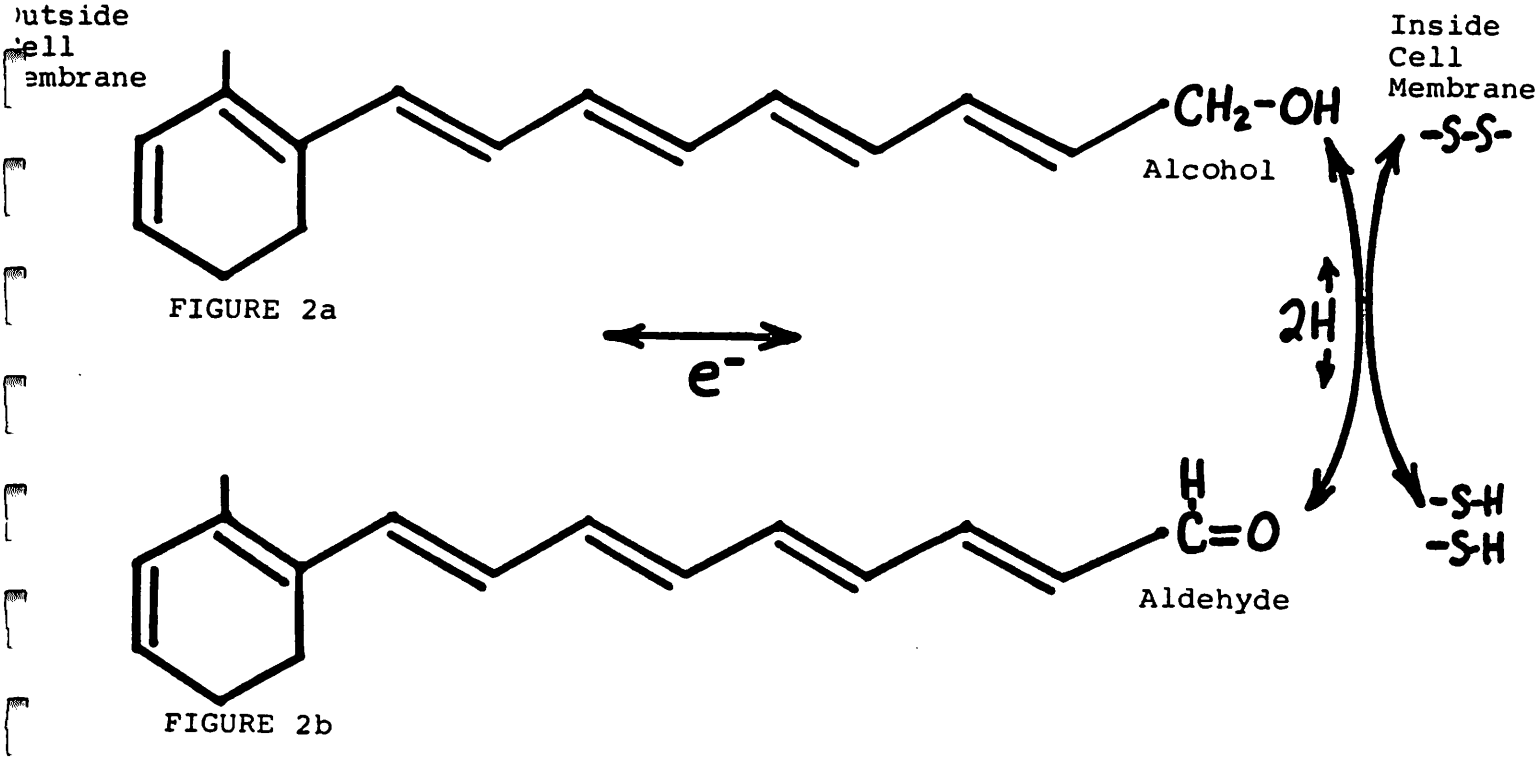


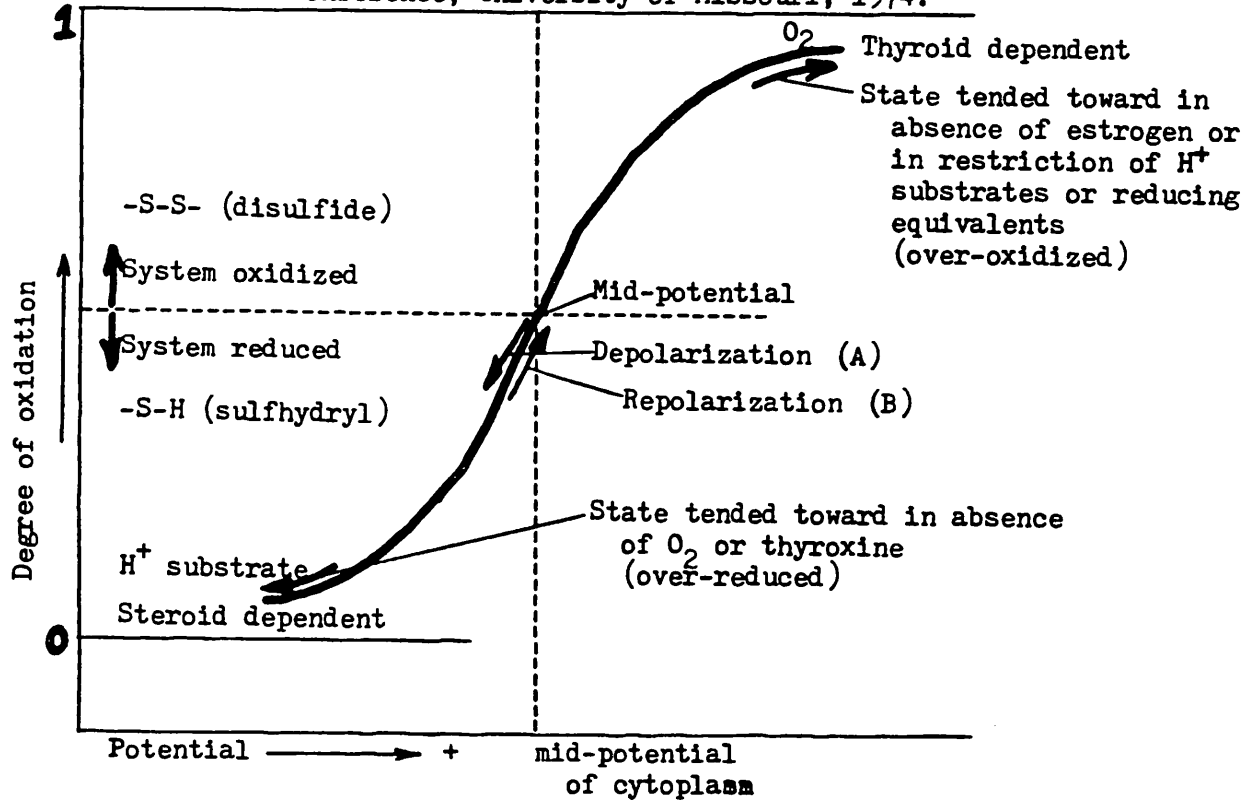
FIGURE 2a

FIGURE 2b

As Isaacs describes, the conjugated double bonds of vitamin A and the alcohol-aldehyde end of the vitamin A molecule allows a rapid shifting of the vitamin A molecule from its alcohol form to its aldehyde form. This frees up hydrogen (i.e., two H^+ ions) for availability to the intercellular environment when it is necessary. This hydrogen ion is needed for cellular depolarization to take place for the activation of reduced -S-H enzymes (from their oxidized -S-S- forms) that takes place during depolarization. (See Fig. 3.)

Figure 3 : DYNAMICS OF THE ELECTRON POISING ACTION OF THE SH/SS ENZYME CONTROL SYSTEM

Adapted from "A precis on Cellular Electron Poising, Ergodization, and Molecular Quatnization" by James P. Isaacs and John C. Lamb, 6th Annual Trace Mineral Conference, University of Missouri, 1974.



Cell desires to be at the mid-potential for 50:50 ratio of SH:SS molecules. This allows the best options for the activity of: 1)structural proteins, 2)enzymes, and 3) nucleoproteins, chromosomes, and the spindle of the cell.

(A) Depolarization of the cell - change in SH:SS ratio (toward SH)
(B) Repolarization - return toward normal SH:SS ratio

As a neurotransmitter moves near the cell membrane (but an instant before depolarization takes place), the vitamin A in the cell membrane "feels" the presence of the neurotransmitter and shifts electrons in such a way that two hydrogen ions on the inside of the cell membrane are "bumped off" into the internal environment of the cell, as in Figure 2b. Then, as depolarization takes place, the hydrogen ion is already available for the reduction of the oxidized -S-S- enzymes to their activated -S-H forms, which are necessary for muscle contraction, etc. to take place. By this mechanism, the cell doesn't have to "wait" for the H^+ ions and can react to a neurotransmitter in a very rapid fashion.

The exact opposite mechanism takes place during repolarization (See Fig. 3) as the hydrogen ions again find their place back on the end of the vitamin A molecule, that is, shifting from the pattern shown in Figure 2b back to the resting state in Figure 2a. From this discussion, it can be seen that vitamin A has a very essential role in communication between the extracellular and intracellular environments, and deserves its mid-line position in Figure 1.

MUSCLE RELATIONSHIPS OF VITAMINS C AND E, AND PROPOSED RELATIONSHIP OF VITAMIN A

We know that the muscles reflecting vitamin C status in the body (unilateral deltoid, serratus anterior, coracobrachialis, middle trapezius, and/or lower trapezius) are all upper extremity muscles. Likewise, vitamin E related muscles (gluteus medius, gluteus maximus, adductors, hamstrings, piriformis, and abdominals) are all attached to the pelvis and/or lower extremity. Viewed in another way, we can say that all of the vitamin C muscles are above the diaphragm and the vitamin E related muscles are below the diaphragm. (See Fig. 4.) The diaphragm is in the middle, between the vitamin C muscles and the vitamin E muscles.

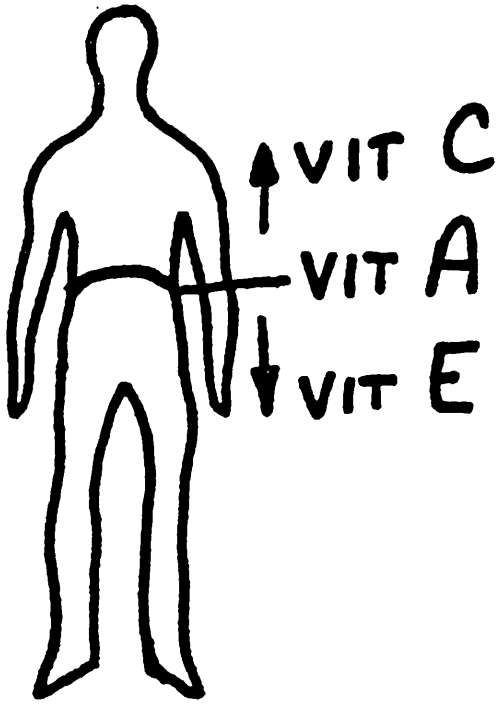


FIGURE 4

This observation has led to the hypothesis that the diaphragm area, particularly the dorsolumbar junction, reflects the status of vitamin A in the body. That is, when a vitamin A need is present, there will be a compromised dorsolumbar area which will be demonstrated by a dorsolumbar fixation and its associated weakness of the lower trapezius, bilaterally. (See Fig. 4.) The high percentage of dorsolumbar fixations which are observed is at least in the ballpark with the percentage of patients which Hawkins observed as needing vitamin A.

CLINICAL INVESTIGATION

To test this hypothesis, we recorded findings on 26 of our patients who showed a bilateral lower trapezius weakness (representing a dorsolumbar fixation) with vitamin A. Because of the close association of the fat soluble vitamins A and D, we also observed a number of patients whose lower trapezius muscles responded to vitamin D with or without a response to vitamin A. The results of these investigations are summarized in Table 1.

TABLE 1

RESPONSE OF LOWER TRAPEZIUS MUSCLES TO:

	A only	D only	both A & D	neither	only 1 lo. trap. responded	total
# of patients	11	2	12	0	1	26

It can be seen that 88% (23) of these 26 patients responded to vitamin A while 42% (11) responded only to vitamin A. 54% (14) responded to vitamin D while 8% (2) responded to vitamin D only. 46% (12) responded to both vitamins A and D, and 4% (1) responded to neither vitamin A nor vitamin D. The fact that some patients showed no response to either nutrient represents, we feel, the fact that the body is a structural, chemical, psychological triangle, and that although many patients have a structural-chemical link as a part of their problem, in a few, the DL fix was merely a structural prpblem.

In all cases studied, structural correction of the DL fix was made regardless of the response pattern to the tested nutrients. Some patients were given supplementation in the form of A and/or D as indicated by testing. Others were given no supplementation. However, if the dorso-lumbar fix recurred, it was felt that there was likely

a chemical basis for the recurrence, and the patient was supplemented at that time. Supplementation with vitamins A and/or D seemed to prevent recurrence of the dorsolumbar fix and the associated lower trapezius weakness. Further, major clinical improvements were seen in a few difficult patients upon supplementation with the appropriate vitamin (A and/or D) where the traditional muscle indicators for these nutrients (i.e., psoas and PMS for vitamin A, and quadriceps for vitamin D) were not observed.

It is felt that this pattern of a dorsolumbar fix and the associated bilateral lower trapezius weakness represents a heretofore unidentified indicator for the body's needs for vitamin A and/or vitamin D. Also that these patterns are further evidence for the links between the nervous system and body chemistry based on the microscopic principles of the electron poising system being the holographic basis for understanding the macroscopic reflection of body chemistry into body structure

PROCEDURE FOR TESTING HYPOTHESIS:

1) Identify bilateral lower trapezius weakness.
2) Test these muscles with vitamin A* insalivated.
3) Remove the vitamin A and note return of weakness of both lower trapezius muscles.
4) Test these muscles with vitamin D* insalivated.
5) Note findings.

*In our study the sources of vitamin A and vitamin D were obtained from Standard Process Laboratories, 2023 W. Wisconsin Avenue, Milwaukee, Wisconsin 53201.

DORSOLUMBAR FIXATION VITAMIN A & D RESEARCH PROJECT

+ = both
o = neither

R = right one
L = left only

M = male
F = female

DATE	NAME	AGE	SEX	LOWER TRAPEZIUS RESPONSE TO VITAMIN A	LOWER TRAPEZIUS RESPONES TO VITAMIN D

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NEUTRALIZING FOOD ALLERGIES BY COMBINING ORAL AND LOW FREQUENCY ELECTRICAL STIMULATION

by Dale H. Schusterman, D.C.

ABSTRACT: This paper will present a new way to neutralize food and chemical allergies that are histaminic in reaction. The effect of these allergies on the brain stem will be discussed. Allergies create confusing left brain/right brain patterns and switching, therefore, the Governing and Conception Vessel meridians can be used to monitor the effect of the allergic substance through the course of treatment. This procedure combines low frequency, low current electrical stimulation to the brain stem, while the allergic material is insalivated to create a desensitization or neutralization of the allergic reaction.

In 1983 I came across the book "Getting Off the Hook"[1] by Dr. Meg Patterson. She is the physician who attained great publicity helping Keith Richards of the Rolling Stones, Pete Townshend of the Who and other rock musicians to kick heavy drug addictions by the use of neuroelectric therapy. She had developed a small black box similar to a TENS (Transcutaneous Electrical Nerve Stimulation) device that she hooked to the ears of her addict patients and was able to completely detoxify the drug dependency in 4 to 10 days.[2] Using this low frequency, low current device, the addicts experienced no withdrawal symptoms and did not return to their drugs. However as one might expect, once detoxified they then required much counseling, nutritional therapy, and other forms of rehabilitation. Dr. Patterson claims that there is an increase in serum endorphin and corticosterone levels in humans and rats when administered the neuroelectric therapy.[3] There is much research ongoing concerning the effect of low frequency electrical stimulation on neurotransmitter production in the brain.

This paper will not deal directly with drug detoxification, but will concentrate on food allergies. Dr. Philpott in his book "Brain Allergies"[4] described many food allergies as similar to addictions. He states, "Understanding addiction as an extension of a maladaptive allergic like state is necessary if one is to understand the seriousness of the addiction to frequently eaten foods and commonly met chemicals which plagues about 80 percent of mankind."[5] We all know that people frequently crave what they are allergic to, such as milk, chocolate, tobacco, etc. Philpott goes on to talk about the four day withdrawal period or four day fast that patients are commonly put on prior to food allergy testing after which time substances are readmitted one at a time to detect reactivity. Philpott states: "Dr. Theron G. Randolph (noted clinical ecologist) has clinically demonstrated that when there is a break in exposure to addictive substances of any kind for at least four days, then the addictive-adaptive reaction is converted to an immediate reaction with an allergic-like quality upon renewed exposure to the substance. Hippocrates reports in his writings the knowledge that if a food was avoided for as much as four days, a reexposure to that food might create a severe reaction in certain people. And this point cannot be over emphasized: <u>all</u> addictions display this pattern whether they are narcotic, alcohol, tobacco, food or chemical in source."[6] On reading this it became apparent that Patterson's experience of 3-10 days withdrawal from drugs as addictive as heroin and methadone might not be too far fetched, if electrical stimulation could somehow turn on the neurotransmitters and create internal neurological balance.

About the time of reading these books I met an electronics engineer, inventor from California who knew Dr. Patterson and who produced his own black box or 'brain tuner'[7] and discussed the various frequencies and instruments with him.

Apparently, different frequencies detoxify different drugs and certain of the black boxes (his were blue) contain different combinations of wave forms and frequencies. Similar instruments more familiar to us include TENS devices, Electro-acuscope,[8] Myomatic,[9] Accu-o-matic,[9] and Electrostim.[10] Of course each instrument has its own proponents and claims, but they are all of similar design and each will work if in proper hands. He also said that the current research showed the most effective points detected for drug detoxification using low frequency stimulation were bilaterally between the posterior ramus of the mandible and anterior tip of the mastoid process or lateral to the styloid process.

I then decided to see if it was possible to apply this therapy to the addictions of foods and commonly ingested chemicals. The brain tuner and Wing Accu-o-matic, both produced relaxation, balanced many muscles, and eliminated switching, but were inconclusive for food allergies. It would seem difficult to get the frequency for each type of food or chemical. What was discovered however, was that if the allergic substance was placed in the mouth and the proper stimulation applied, the person would no longer test weak to the food. By applying the low frequency stimulation to the brain stem while the chaotic neurological reactions from the food were taking place, a neutralization could be obtained. After much trial and error it was found that several other areas also had to be stimulated while the allergic substance was being tasted in order for full desensitization to take place.

Dr. George Goodheart introduced the observation of right brain/left brain patterns in AK muscle testing in 1979.[11] Since then much has been written and discovered concerning this phenomenon. Dr. Walter Schmitt Jr. discussed methods of inducing right brain/left brain activity through insalivation of allergic foods, chemicals or histidine (a precursor

to histamine).[12,13] Schmitt further discussed the use of Antronex (a natural anti-histaminic factor of Yakriton from liver, produced by Standard Process Laboratories)[14] as a substance that when insalivated would neutralize the histamine-type allergic reaction.[13] In his priority system from "The Links Between Body Chemistry & the Nervous System"[15] Schmitt states that in unravelling the smoke screen of neurological confusion in the body, the allergic response must be eliminated prior to other switching techniques such as K27, hyoid, etc., due to the chaotic, complicated and seemingly random neurologic distortion created by allergies. Others have adequately described an AK approach to testing food and chemical allergies so this paper will not repeat those works.[16,17]

It has been my experience that several factors will consistently neutralize muscle weakness in an allergic patient who insalivates histidine or a susceptible food or chemical. Besides Antronex, having the patient TL to the Governing Vessel Alarm Point (GV1) will negate the multiple muscle weaknesses produced by an allergic substance. Often, contact anywhere along the GV will eliminate weakness. The relationship of the Governing and Conception Vessels to switching patterns is well known in AK.[18] The effect of switching may be caused by many things-in this case an allergic substance. If the patient has Antronex on the tongue counteracting a weak muscle resulting from a food test, having the patient TL to GV1 will bring back the weak muscle. Goodheart observed that the GV related to sacral respiratory function[19] and Schmitt has correlated histamine-type allergy neutralization to the sacrum.[13] The supraspinatus will always test weak when an allergic substance is tasted due to its relationship to the GV. Other muscles that usually show weakness are the pectoralis major sternal, tensor fascia lata, quadriceps, pectoralis major clavicular,

sartorius, etc., but these may vary. Having the patient TL to the auricular points correlating to the brain stem will also neutralize the weakness. The brain stem points will become clearer in a moment when treatment is discussed.

Once a histamine-type food allergy has been detected and the foods and chemicals have been tested, treatment can begin. At first only one offending food was desensitized at a time, but is has since been found that several if not all substances may be neutralized at the same time as long as the combination still tests weak when placed on the tongue. This is actually preferable, because it was found that doing one food at a time would after the second, third or fourth treatment (one week apart) suddenly negate the need for further desensitization even though 6-20 other items may be on the allergic list. In other words, by clearing a few of the food allergies, the body got the message and stopped reacting generally. It seems that the treatment organizes and integrates the brain stem so that further reactions of this type are eliminated. The foods themselves are not as important as the reactions they create in the nervous system. Once the neurological alignment occurs, the allergic response is no longer present. In many cases this procedure need only be performed once, however check on subsequent treatments to see if further neutralization is required. With a highly allergic patient or someone with narcotic addiction, more intense treatment might be necessary. I have not yet attempted this procedure for narcotic addiction.

The following procedure is now being used effectively:

1. Identify a positive response to Histidine that is neutralized by Antronex. Patient TL to GV1 or auricular brain stem points will momentarily negate weakness, but Antronex in the mouth will reset the muscle strength for further testing.

2. Test individual foods in the mouth. Make sure the

patient tastes the substance and that it is placed on the center of the tongue.

3. Make a mixture of allergic foods keeping several foods aside to see if treatment clears all reactions. Be sure mixture still tests weak when tasted and weakness is cleared by tasting Antronex.

4. Set Accu-o-matic, Myomatic, Electro-acuscope or similar low frequency device to 10 Hertz and the timer to 2 minutes and microamperage to patient tolerance. The 10 Hz tests to be the best frequency, however the current can be set to tolerance (40-150 microamps).

5. Place allergic mixture on the tongue and have the patient taste it but not swallow it.

6. With patient supine, place cotton tip probes of Accu-o-matic, Myomatic, etc. just anterior of the mastoid tips, lateral to styloid processes. (See figure 1.) The probes are pointed toward each other just slightly anterior and superior, aiming at the lower and middle medulla areas. You can have an assistant help muscle test the angle when current is started.

7. Initially I would hold the probes for 2 minutes, add more mixture, retest weak muscles (supraspinatus, pactoralis major sternal, etc.),stimulate with probes, add mixture, retest, etc. until testing was strong. Usually this took 3-5 two minute intervals. Now it seems that by very slowly rotating the two probes up, down, foward and backward so as to stimulate the entire medulla and brain stem area, the time can be cut to about 1-3 minutes or so, but let the testing determine the results.

8. Place more of the substance on the tongue and check to see that the supraspinatus and GV1 is strong. Most muscles will now test strong however a few weaknesses will remain, especially in the teres major, the muscle correlating with the Conception Vessel. Have patient TL to the

alarm point of the Conception Vessel (CV24) and retest the originally weak muscles and they should show weakness once again. The supraspinatus (GV) however, should be strong with or without TL to GV1 or CV24.

9. With patient prone and mixture in the mouth, place probes on skull near the asterion on the occiput. (See figure 2.) Aim the probes toward each other and slightly anterior. Again apply current while very slowly rotating both probes around the pivot point of contact with the skull. Aim toward the upper medulla, lower pons and cerebellum. Have assistant aid in testing using teres major. Refresh mixture on tongue every 1-2 minutes or as necessary. Experience shows this step to take less time than step 7, especially if direction of stimulation is varied, however let the patient's nervous system tell you.

11. Turn patient supine, place mixture on tongue and recheck weak muscles. All muscles relating to the allergy pattern should now test strong and no left brain/right brain pattern will be detectable. Therapy localization to the sacrum as well as to the occiput should now both show weakness (GV, CV). These weaknesses will strengthen if the patient TL's to the liver alarm point (LV14). The pectoralis major sternal should test strong in the clear but will weaken with TL to liver alarm point. Stimulate liver meridian tonification points (LV8, K10 and LV4, LU8) using probes 20 Hz, 8 seconds or however you prefer.

12. At this point you should find that everything relating to the food sensitivity is neutralized. This might include parietal descent/temporal bulge or ICV. You should also find that fixations and gait imbalances are cleared as well. Tell the patient to avoid the offending foods for a minimum of 4 days. Follow up with correlative nutrition, AK procedures, chiropractic, detoxification, stress management, etc. Only the allergic response is cleared and the patient

will usually require support to the damaged immune system, liver, digestion, large intestine, etc. Frequently symptoms will persist but they now will test to the liver or lymph as a need for nutrition, and other therapies. Now that the trigger mechanism of the allergy is removed, however, there is a greater chance of correcting the underlying problem. Sometimes the allergic smoke screen in the nervous system hides the underlying fire of imbalance thus preventing proper therapy. In time the smoke screen itself becomes a primary problem and any attempt to snuff out the fire is thwarted.

The sequence again, is to determine food allergy reactions, place the substance in the mouth, stimulate lower and middle brain stem at 10 Hz for 1-3 minutes, add more substance to the mouth and stimulate upper brain stem for 1-3 minutes, then tonify the liver meridian. You can follow the effect of the treatment by testing the Governing and Conception Vessels and their respective muscles and structures. This balances the two major midline meridians and the sacro-occipital relationship. The liver meridian involvement is understandable due to the liver's part in allergies and it appears to lock the two ends together.

By varying the angles between the two probes it was pinpointed that the target area was the brain stem, the medulla and part of the pons and cerebellum. This is verified by the auricular points to the cerebellum, pons, and medulla. These auricular points did not seem therapeutic as much as correlative.

The brain stem is the most likely area of involvement for several reasons. First, the nuclei for cranial nerves V, VII, and IX are located in the brain stem in the medulla and pons. These cranial nerves carry sensory information from the taste buds, the tongue and mouth through the brain stem up to the higher neurological centers. Secondly, 85 percent of all corticospinal nerve fibers decussate in the

pyramidal structure of the medulla. Confusion or incoordination in this area could certainly be responsible for the strange left brain/right brain patterns. It might be accurate therefore, to describe switching as brain stem incoordination. Stimulation to the brain stem without reactive substances in the mouth did not produce consistent results with allergies, therefore the aberrant neurological reflexes must be activated in the brain stem and then neutralized by the current.

Whether or not the desensitization occurs through neurotransmitter stimulation, entrainment of the nerve fibers to the 10 Hz frequency or by erasing the malfunctioning neurological 'tapes' is not clear. Studies with rats have shown as much as a three fold elevation of endorphin levels with low frequency stimulation.[20] Another study in which barbituate detoxification of rats was performed, "it was learned that the ten-hertz signal speeds up the production and turnover rate of serotonin."[20,21] This effect on the neurotransmitters may be responsible for the feeling of well being and relaxation that people frequently report following transcranial electrical stimulation.

These are only some thoughts about how this procedure works. The results of this therapy have been gratifying, and it has many exciting possibilities. Some people are so vulnerable to their enviroment or nutrition habits that they live in a constant neurological fog. They are perpetually switched and present difficulty to the physician attempting to unravel the problem. These people derive great benefit from the above desensitizing process. It must be emphasized however that this procedure only prepares the body for further AK diagnosis and treatment by clearing the confusion from the nervous system.

CONTRAINDICATIONS: Transcranial electrical stimulation should not be done on anyone with malignancy and care must be taken with anyone having epilepsy or on anti-seizure medication.

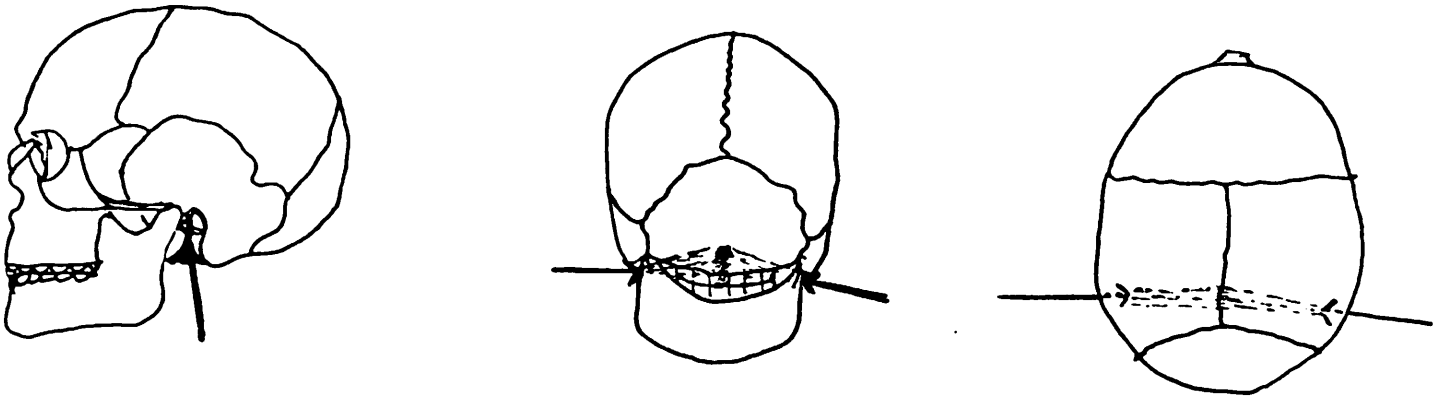

FIGURE 1

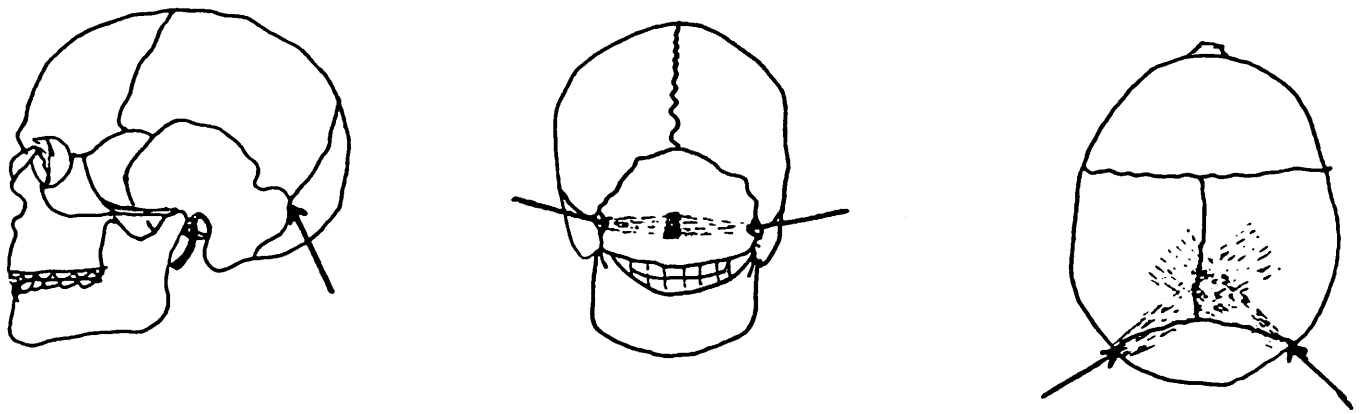

FIGURE 2

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NATURAL HEALTH CARE TECHNIQUES CLASS

by Jason P. Schwartz, D.C.

ABSTRACT

The education of the lay public concerning the concepts and basic techniques of applied kinesiology as well as natural health care in general is the purpose of the OMNIHEALTH courses of instruction. Dr. John Thie has done so much towards this same goal with the "Touch for Health Foundation." Dr. Thie's efforts have benifited thousands of lay people. Also, we have all found as A.K. practitioners that many doors have been easily opened, bridges already built and dialogues easily established as a result of Dr. Thie's efforts. Our ability to practice A.K. has been augmented by the presence of the "Touch for Health Foundation." For these and many other reasons, we will always be grateful and supportive of "Touch for Health." Experience has shown however that the methodology used in Touch for Health was often cumbersome for many lay students. Touch for Health instructors often found that six months to a year after taking the course only a small percentage of their students actually were using the techniques.

Upon extensive evaluation we felt that many lay students had difficulty remembering how to test the twelve to fourteen individual muscles commonly used in evaluating a subject via the Touch for Health methods. We realized that most A.K. practitioners did not routinely individually test fifteen or twenty muscles. The practitioners would instead use a short cut into the system via one or more of the following approaches: 1. Postural analysis, Symptomatology, T.S. line evaluation, Meridian pulse points, Meridian alarm points and/or Therapy localization of neurolymphatic and other points.

Therapy localization of acupuncture alarm points was chosen as the easiest method of broadly evaluating the subject being tested. We have used four easy to learn indicator muscles: Mid Deltoid, Anterior Deltoid, Gluteus Medius (in the supine position) and Hamstrings.

Therapy localization is also used to determine which points on the involved meridian need acupressure stimulation. Instead of using general tonification or sedation points we decided to become much more specific. There are so many different philosophies used in evaluating which acupuncture points to treat that to arbitrarily choose any one school of thought would leave room for too much error.

Most of the various acupuncture points that one might consider treating lie on the meridian itself that is being treated. These points may include the 1. command points which include the luo points, source points, element points and horary points, 2. the major tonification and sedation points and 3. the HSI points. We have therefore chosen to teach the students to therapy localize the involved meridian from end to end a few inches at a time in order to specifically find any points needing pressure stimulation. We also teach them to stimulate alarm points and the associated points.

Therapy localization is also used to find and recheck the involved neurolymphatic and neurovascular points.

The meridian-muscle-organ relationship is taught with illustrations of each muscle test included in the manual, yet we do not require that the student know how to test each associated muscle in order to evaluate the meridian/organ balance of energy.

The utilization of the proper nutritional supplement is also approached. We use the negation of a therapy localized point while a subject is tasting a supplement as our method of determining which will be effective.

In the course a brief yet clinically important explanation of the function of each organ and gland is given.

The Natural Health Care Techniques class shown here is the introductory level with an intermediate and advanced level being the triad of the full course. The intermediate course covers the areas of cross patterning, clinically effective acupressure points for common health problems, foot reflexology, iridology, ileo cecal valve, postural analysis, surrogate testing and food allergy testing.

The following procedure outline will illustrate the method of evaluation used:

1. Find a stong indicator muscle. (Anterior Deltoid, Middle Deltoid, Gluteus Medius, or Hamstrings)

2. Place the person's hand on each alarm point.

3. When you find a weak alarm point (a previously strong muscle will test weak) look up the meridian that went weak and look up the associated muscles.

4. Look up the muscles, (they are in alphabetical order) locate the neurolymphatic and neurovascular points and note any weaknesses by therapy localizing. You may also test the certain meridians that have a relationship to more than one organ. An example of this is the Triple Heater. This meridian can either refer to the Thyroid or Thymus. In this case, you may want to test the Teres Minor (Thyroid) and the Infraspinatus (Thymus) muscles.

5. Before correcting any weaknesses, if you would like to test any nutrients, do so now.

6. Follow the associated meridian and locate any points by therapy localizing any points that may be weak (they may be sore to the touch).

7. Correct any weaknesses on the **meridian, neurolymphatic, and neurovascular** points.

8. Challenge the correction by retesting the previous weak points.

9. Therapy localize each alarm point once more to be sure there are no additional weaknesses. (The body is dynamic and changing. After a correction is made, the body's energies sometimes will shift and may reveal new areas of involvement that will come to the surface.)

We are making these courses available to members of I.C.A.K. who have taken at least the basic 100 hour Walther course of Applied Kinesiology. For further information on how to become an OMNIHEALTH Instructor contact me at OMNIHEALTH, 915 East Ocean Boulevard, Suites 1 and 2, Stuart, Florida 33494, (305) 286-3650.

OMNIHEALTH

A HOLISTIC HEALTH ASSOCIATION

COURSES IN NATURAL HEALTH CARE

BY
DR. JASON P. SCHWARTZ
AND
JACQUELINE BROEDELL

ILLUSTRATED BY JIM TERRUSA

OMNIHEALTH

A HOLISTIC HEALTH ASSOCIATION

NATURAL HEALTH CARE TECHNIQUES

INTRODUCTION

ABOUT THE AUTHORS

Jason P. Schwartz attended Fordham University in New York City receiving a Bachelor of Arts Degree, summa cum laude. He received a Doctor of Chiropractic Degree from the University of the State of New York, New York Chiropractic College. He is the Clinical Director of the Health Awareness Center in Stuart, Florida. Dr. Schwartz is a member of the International College of Applied Kinesiology, the American Chiropractic Association, the American Society of Chiropractic Gynecologists and the Florida Chiropractic Association. For the past seven years, he has devoted himself to the specialty of Applied Kinesiology as well as other interdisciplinary holistic health care techniques. He is the Expert Witness in Applied Kinesiology for the State of Florida. Dr. Schwartz is also a certified Acupuncturist.

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CONTENTS

INTRODUCTION - CLASS I..... 1
INTRODUCTION - CLASS 2..... 9
INTRODUCTION - CLASS 3.....14
INTRODUCTION - CLASS 4.....18
PROCEDURE OUTLINE.....19
ALARM POINT CHART.....20
INDICATOR MUSCLES CHART.....21
MERIDIAN CHARTS
  STOMACH.....22 & 23
  SPLEEN/PANCREAS.....24 & 25
  HEART.....26
  SMALL INTESTINE.....27
  BLADDER.....28 & 29
  KIDNEY.....30 & 31
  CIRCULATION-SEX.....32
  TRIPLE HEATER.....33
  GALL BLADDER.....34 & 35
  LIVER.....36 & 37
  LUNG 38
  LARGE INTESTINE.....39
  CONCEPTION VESSEL.....40
  GOVERNING VESSEL.....41
MUSCLE-ORGAN-MERIDIAN CHARTS
  ABDOMINAL MUSCLES - SMALL INTESTINES.....42
  ADDUCTORS - REPRODUCTIVE ORGANS & GLANDS.....43
  BICEPS -BRACHII - STOMACH.....44
  DELTOID - ANTERIOR - LUNG.....45
  DELTOID - MIDDLE - LUNG.....46
  GLUTEUS MAXIMUS - REPRODUCTIVE ORGANS & GLANDS.....47
  GLUTEUS MEDIUS - REPRODUCTIVE ORGANS & GLANDS.....48
  HAMSTRINGS - RECTUM.....49
  INFRASPINATUS - THYMUS.....50
  LATTISIMUS DORSI - PANCREAS.....51
  LEVATOR SCAPULAE - PARATHYROID.....52
  NECK FLEXORS - SINUSES.....53
  PECTORALIS MAJOR CLAVICULAR.....54
  PECTORALIS MAJOR STERNAL.....55
  PERONEUS - BLADDER.....56
  PIRIFORMIS - REPRODUCTIVE ORGANS & GLANDS.....57
  POPLITEUS - GALL BLADDER.....58
  PSOAS MAJOR - KIDNEY.....59
  QUADRICEPS - SMALL INTESTINE.....60
  RHOMBOIDS - LIVER.....61
  SACROSPINALIS - BLADDER.....62
  SARTORIUS - ADRENALS.....63
  SUBSCAPULARIS - HEART.....64
  SUPRASPINATUS - BRAIN.....65

CONTENTS

TENSOR FASCIA LATA - LARGE INTESTINE.....66
TERES MAJOR - SPINE.....67
TERES MINOR - THYROID.....68
THYROID ARTICLE: SIMPLE TEST MAY CHANGE YOUR LIFE....69
TIBIALS - BLADDER.....70
TRAPEZIUS - MID & LOWER - SPLEEN.....71
TRAPEZIUS - UPPER - EYES AND EARS.....72
TRICEPS - BRACHII - PANCREAS.....73
SKELETAL CHART.....74
MUSCLE CHART.....75
ASSOCIATED POINTS CHART.....76
GLOSSARY OF TERMS.....77
REFERENCES 80
FURTHER READING REFERENCES.....80

INTRODUCTORY NOTE

ARE YOU HEALTHY ... REALLY?

I'm already healthy - what's all the commotion about? What "already healthy" means to many people is in a very overpopulated dimension known as the twilight zone of health. Residing there are those who, while not seriously ill, are certainly not buoyantly healthy. Being tired most of the time is a way of life. Coffee, cigarettes and alcohol are essential to a feeling of well being. Frequent colds, indigestion, constipation, blotchy skin, nervousness and postnasal drip are all considered a normal part of existence. Average it may be, but normal - it definitely is not!

Vigor, zest, alertness and optimism may be too subjective for scientific evaluation, but we should measure our own health by such standards. Those who won't settle for being marginally well have devised a new health standard and coined the term "POSITIVE WELLNESS" to encompass it. Positive wellness means being trim and physically fit, full of energy (and that means rarely tired) free from minor complaints (indigestion, constipation, headaches, insomnia) destructive health habits (smoking, overeating, overdrinking) and alert (able to concentrate, clear-headed). It also means having clear skin, glossy hair, sparkling eyes and being relaxed, not worried or agitated.

Sound wonderful? Now that we have redefined our health goals, let's talk about actually gaining them. Each person's pathway will be different and by participating in self responsibility, nutritional awareness and physical exercise you are providing a good foundation upon which to build "POSITIVE WELLNESS".

Self responsibility is, quite simply, acknowledging that the way we live carries the key to our physical, mental and emotional well being. We have been taught to assume responsibility for our possessions, our work - even other people; but if anything happens to our health, we had nothing to do with it. It has always been the fault of nasty weather, someone else's germ, bad luck; and beyond that, it is the doctor's job to find the problem and fix it. We have learned to depend upon him to find our health and sell it back to us. Leaving this childish attitude behind is the first step toward Positive Wellness.

The way we choose to live obviously involves our selection of food. Most people approach it rather haphazardly, being governed by whim or craving rather than purpose.

The development of nutritional awareness causes many people to shy away, thinking that it is just too complicated, time

consuming and confusing. Just the opposite is true. With a combination of simplicity, common sense and self respect as your guidelines, you will find that making intelligent, nutritionally sound food choices are a snap. An important part of self respect is the development of an appreciation - even awe - for the miraculous working of your body. If you have reached that point, then common sense dictates that you don't insult your body with devitalized, fried, dyed, emulsified, hydrogenated foods loaded with extra sugar, salt and fat.

There can be no really buoyant health without vigorous physical exercise. It stimulates metabolism, tones the muscles, frees the body of extra weight and increases stamina by ridding the body of wastes. We recommend the book on aerobics: **Fit or Fat,** by Covert Bailey (available at local book stores). Specific scientific programs are simply outlined in this book. Once you begin the conditioning program right for you and have no serious ailments, you should find that you are getting solid results within eight weeks. You should be in good condition by 16 weeks at the most. In addition to the physical transformation that comes with your exercise program, expect a brighter disposition as well. Just 15 minutes daily of aerobic exercising has been proven to fight depression more effectively than anti-depressant drugs.

We all know that in the kind of world we live, it is easier to eat junk food, ignore exercise, disregard tension and adopt the attitude of "let someone else do it," but if you decide to give the positive wellness concept a try, chances are you will get hooked. Dr. William Glasser wrote **Positive Addiction** in which he says people actually become addicted to positive behaviors that develop the body and the character. If you just take one of the steps toward making yourself feel more alert and vigorous, you will find yourself motivated to try other wellness activities. Soon you will be doing more positive things for your body than negative things against it, pursuing fitness with a new sense of enthusiasm and purpose.

The courses of OMNIHEALTH have been designed to allow us to better understand our body and how we can help it achieve its optimal health level. By utilizing lifestyle modifications and the Natural Health Care Techniques OMNIHEALTH teaches, one can reach that goal of "Positive Wellness."

(These courses are not designed to substitute for health services provided by professionals. If a problem or symptom persists, please contact a health professional.)

and treatment of functional imbalances. Applied Kinesiology was developed in the Mid 1960's by Dr. George Goodheart, a second generation chiropractic physician from Detroit. Dr. Goodheart is a true genius and has been able to combine clinically effective techniques from many different aspects of health care into an approach called Applied Kinesiology. This is certainly an example of the whole (Applied Kinesiology) being more than the sum of its parts (acupuncture, nutrition, chiropractic, reflex point work, cranial therapy, kinesiology and other clinically successful techniques).

3. Applied Kinesiology does also use standard medical diagnostic and treatment tools as needed. Applied Kinesiology has added so much to our understanding of health care that Dr. Goodheart was appointed to the Commission of Sports Modalities of the U.S. Olympic Council on Sports Medicine in order to make Applied Kinesiology available to our Olympic athletes.[1] A similar appointment has also taken place with the Canadian Olympic Team.

Today physicians and health practitioners from all fields utilize Applied Kinesiology to explore aspects of health care that were previously ignored or referred to as incurable. Dr. John Diamond, past President of the International Academy of Preventative Medicine, has made many advances in psychiatry, preventative medicine and nutrition with these techniques and he states: "Applied Kinesiology may turn out to be the most therapeutic advance of this century. In the next few years, it is going to cause tremendous changes in all branches of the healing professions open to change and improvement."

The ability to diagnose (find) imbalances in function via Applied Kinesiology has expanded our knowledge concerning that twilight zone between health and pathology, so that now many Applied Kinesiologists everyday deal successfully with those difficult chronic degenerative diseases.

4. This course has been designed to teach or share with the interested public some of the incredibly successful and effective aspects of Applied Kinesiology. The content of this and the other OMNIHEALTH courses is only a fraction of the total information in the parent technique of Applied Kinesiology.

The diagnosis or treatment of disease is not within the scope of the OMNIHEALTH courses; and these courses are not intended to keep you from seeking the help of your family physician when needed.

We intend these courses to allow you to better understand and appreciate the miracle of the human body and learn how to work with it in achieving body harmony and health.

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 1

A. Functional imbalances versus disease and pathology.

1. Traditionally physicians have been trained to find (diagnose) and treat diseases. Yet many people have glands, organs and systems of their body which are not functioning ideally or at an optimal level. These disturbances or imbalances in function may not have progressed far enough to be considered a disease or pathology and therefore, may often be overlooked by traditional medical examination and testing procedures.

Often these metabolic or functional imbalances are the causes of the headaches, indigestion, fatigue, menstrual cramps, constipation, depression and the other hundreds of common complaints we are told we should just accept as part of life.

Of course, many of us try to "treat" these common complaints or symptoms by covering them up with over the counter or prescription medications. Usually these "treatments" simply allow us to forge on through life as the imbalances at the root of the problem continue on untreated. These untreated imbalances may finally show up as more serious problems such as arthritis, diabetes, high blood pressure, cardiovascular disease, or even cancer. When these diseases appear, finally they are taken seriously by physicians. Yet most physicians will still only treat the symptoms or complaints, ignoring the underlying root imbalances which allowed the degenerative disease to begin in the first place, ten or twenty years prior to the disease being recognized in its full bloom.

The realization that the entire person has to be approached when treating a health problem is a basic tenet to holistic care. A person's lifestyle must be carefully evaluated. The major causes of death in our country at the turn of the century were infectious diseases such as small pox, pneumonia and tuberculosis. Today the diseases that are ravaging our populace are the chronic degenerative diseases.

What are the causes of degenerative disease? Degenerative diseases are not caused by any one single agent. Instead, cancer, heart disease, diabetes and arthritis are related to a whole series of lifestyle and genetic problems, which reduce the level of vitality in that person. Even diabetes which has strong genetic or family ties is only about 50% hereditary. The other 50% of the influencing factors are alterable by the holistic health care approach.

2. New systems of diagnosing (finding) and treating imbalances must be employed. The traditional should not be abandoned, but instead augmented by the new holistic techniques. At the forefront of this new wave of techniques is Applied Kinesiology. Applied Kinesiology plays a leading role in the diagnosis

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 1

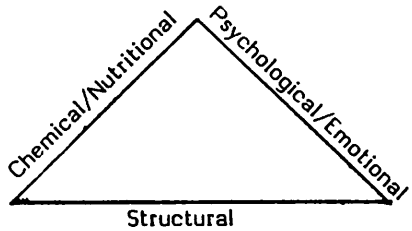
B. Triad of Health

1. From a holistic approach, all three factors of the triad should be considered; any change in one side affects the other two sides.

a. Chemical - emphasized by nutritional therapist and allopath.

b. Structural - emphasized by chiropractors.

c. Psychological/Emotional - emphasized by therapists, psychologists and psychiatrists.



II Muscle Testing is used in Applied Kinesiology as a diagnostic tool.

A. Dr. George Goodheart noted that each muscle in the body is related to a specific organ. He found that each organ shared reflex points and acupuncture circuits with a specific muscle or muscles. Treating a weak muscle in a number of ways to turnon reflex points and acupuncture circuits would return strength to a previously weak muscle and the function of the related organ would improve.

Utilizing muscle testing procedures, one can find "energy" weak muscles which are weak because of an imbalance in the specific organ they relate to. It should be noted that the weakness of the muscle may not be a total weakness but instead a lack of "locking" in place when the muscle is properly tested.

Dr. Goodheart also discovered that often what we think of as muscle spasms are actually the opposite counter balancing muscle, being weak thus giving the normal muscle the appearance of being in spasm. By strengthening the weak muscle the "spastic" muscle assumes its normal tonicity.

We, therefore, find that Applied Kinesiology is the science of muscle activation using muscle testing techniques to determine imbalances in the body and the necessary methods of treatment to correct the imbalances.

B. The Art of Muscle Testing

1. There are five major categories of muscle weaknesses which appear when proper muscle testing is used.

a. A muscle will test weak if an organ or muscle has been stressed. The appropriate reflex points need to be activated to correct these imbalances and specific nutritional therapy may also have to be used.

b. A strong muscle becomes weak when a person places their hands on an area or aspect of the body that is out of balance. This is called THERAPY LOCALIZATION and will be discussed in greater detail on page nine.

(The above two types of muscle weakness are the areas of major concern in this introductory course.)

c. A muscle will test weak if it is injured or damaged or if there is nerve damage to the muscle, joint damage or if the area being tested is in pain.

Note: 1). A significant number of joint problems (bursitis, tennis elbow, knee pains, misdiagnosed arthritis) are often really muscular imbalances in the muscles that offer structural support to the involved joints. These often can be helped by standard Applied Kinesiological muscle balancing and strengthening techniques.

2). In the instance of muscle tears or muscle damage as a result of athletic injuries, it is often found that the muscle or muscles involved in the injury were weak prior to the injury.

d. General overall muscle weaknesses in all or many muscles when tested could be a centralized functional problem such as dehydration, malnutrition or a marked cranial or vertebral subluxation. (see glossary)

e. There are several muscles that will show weak on both sides indicating a spinal fixation (see glossary), which will need to be corrected with a specific chiropractic adjustment. These muscles are:

Psoas	Gluteus Maximus	Hamstrings
Popliteus	Teres Major	Lower Trapezius
	Middle Deltoid	

The technique of muscle testing as used in this course is not exactly comparable to the standard muscle testing used by physicians to determine muscle or nerve damage. Yet, using the traditional grading method we would say that we are looking for a grade #4 muscle weakness which signifies the muscle not locking in place and therefore lack of full function.

2. To insure the proper art of muscle testing, communication with the person being tested is important.

a. It should be explained that this is not a contest of strength and that gradual pressure is used. We are testing to see if the muscle "locks" in place.

b. The tester must isolate the muscle. The exact muscle test is important so that as much as possible the one muscle being tested can be isolated and not a combination of several muscles coming into play. The person being tested should be told to "hold" against the pressure you are applying to their muscle.

c. It may sometimes be helpful to show the person being tested where the muscle is located and the range of motion involved with the muscle test.

d. The tester should be objective - don't be certain what you are going to find. Also, avoid telling the person being tested what to expect. This is done in order to increase the objectivity.

e. Things to check before beginning the muscle testing procedure:

1). First, ask the person if they have any injuries that may affect the area being tested and if they are taking any medication that may affect the validity of the tests. Some drugs, such as prescription items that dull or affect the nervous system might affect the validity of the muscle test. This is especially true of pain killers.

2). Dehydration should also be checked for. General muscle weakness throughout the body can occur if a person is dehydrated. Drinking a full glass of water (preferably distilled) will remedy this condition. However, if tea, coffee, fruit juice or other liquid is taken, there will be no change in this problem. These drinks are considered nutrients or stimulants and bodily response is different than it is with water.

3). The person being tested should not have their hand placed on any part of their body. Their arms should be resting at their side.

f. At this point, the demonstration of four muscle tests, the Mid Deltoid, the Anterior Deltoid, the Gluteus Medius and the Hamstrings will take place. These will be the muscles we will be working with during the OMNIHEALTH Introductory Course to Natural Health Techniques. These muscles are referred to as Indicator Muscles because they help establish or "indicate" the status of the energy pathways in the body. (See Chart on page 21.)

g. We now want to become familiar with the Muscle-Organ-Meridian Charts which are on pages: 42 - 73

1). Muscles are on both sides of the body as well as the meridians being bilateral or on both sides of the body, even though the charts and diagrams may only show the muscle and the meridian on one side of the body.

2). There are two unilateral meridians that go up the back of the spine and down the front of the body - the Governing Vessel and the Conception Vessel. All the other meridians are located on both sides of the body (bilateral) even in cases where the organ the meridian relates to is only on one side of the body.

3). Each chart also lists the origin of the muscle and the muscle insertion. These parts of the muscle work in opposition to allow movement.

a. The muscle origin is the beginning of the muscle.

b. The muscle insertion is where the muscle attaches to another muscle, tendon or ligament.

When a muscle contracts or gets smaller it pulls the insertion towards the origin, thus moving the bones and structure of the body.

If you were testing an individual who had pain or discomfort in a specific area, you would test the muscles in the specific area to determine if it is a musculoskeletal problem (related to the structure of the body). For example, if a person complained of a sore knee, you would test the muscles surrounding the knee such as the Hamstrings, Popliteus, Quadriceps, Sartorius, etc. (Refer to the Muscle Chart on page 75.)

III. Understanding Body Structure (Refer to Skeletal Chart on page 74.)

A. Muscles move bones, therefore, muscles are important in

body will not allow the body to maintain its proper structure which can cause problems such as a tight neck, sore shoulders, a sore knee, low back pains, etc.

1. Bones have no direct nerve supply, therefore, there is no pain involved. There are nerves surrounding the bones and in the connective tissue that attaches the muscles to the bones and pain can be felt in these areas.

a. Ligaments connect bone to bone.

b. Tendons are the fibrous ends of the skeletal muscle and they connect muscle to bone.

c. Fibrous capsules surround joint cavities and are continuous with the ligaments and tendons that reinforce or insert into them.

2). Skeletal Summary

a. The skull rests upon the first cervical vertebra or the top vertebra called the Atlas, also known as C-1.

b. The skull is made up of many bones called the cranial bones. Until recently it was believed that the cranial bones would fuse in adulthood. It has been proven that the cranial bones do not solidify totally and that there is a micromovement among the cranial bones as one breathes in and out. This micromovement helps pump cerebrospinal fluid around the brain and spinal cord.[2]

c. The SPINE consists of 24 vertebrae that also move with an up and down movement which helps pump cerebrospinal fluid. The spinous processes move Cephalad (toward the head) when inhaling and Caudad (down toward the feet) when exhaling. The spine starts at the base of the skull ending at the sacrum and coccyx which are separate and movable at birth, but slowly fuse together to make one bone by the time a person is 30 years of age. The spine is divided into three sections of vertebrae:

1). C1 - C7 Cervical vertebrae
2). T1 - T12 Thoracic vertebrae
3). L1 - L5 Lumbar vertebrae

d. The PELVIS forms a bowl-like shape consisting of the two hip bones, the sacrum and the coccyx. The female pelvis is rounder and wider than the male. The pelvis flares out or externally rotates when breathing in and internally rotates when breathing out.

1). The apex or tip of the sacrum moves forward when breathing in and moves backwa-d when breathing out.

2). The tip of the coccyx moves backward when breathing in and moves forward when breathing out.

e. The STERNUM or breastbone is the hard flat bone in the center of the chest; the ribs are attached to this bone.

f. The CLAVICLES or collar bones are at the top of the chest and extend from the top of the sternum to the shoulders. They move with upward movement when breathing in and downward movement when breathing out.

g. There are 12 pair of RIBS which attach to the 12 thoracic vertebrae in the back. The top seven ribs are attached to the sternum in the front. The next three ribs are attached by bands of cartilage to the sternum. The last two are floating ribs as they only attach to the vertebrae in the back.

h. The SCAPULAE, better known as the shoulder blades attach to the clavicles and form the socket for the humerus in the upper arm.

REVIEW QUESTIONS - CLASS 1

1. A person has just had a complete blood test, electrocardiogram, physical exam and x-rays. The doctor says everything is normal and therefore, you are healthy. You still have daily headaches, fatigue and indigestion. Are you sick or are you healthy? Explain.

2. What are the three aspects of the Triad of Health and name the types of doctors which treat each aspect.

3. Who developed the science and art of Applied Kinesiology?

4. In OMNIHEALTH, we know that there is a specific relationship between the muscles of the body and the _____ of the body.

5. Name the four muscles you were shown and the organs they relate to.

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 2

I. Therapy Localization is a great diagnostic breakthrough in Applied Kinesiology.

A. In 1974, Dr. George Goodheart observed that when a patient's hand touched certain parts of their body, it affected the muscle testing response. This means that when a person places their hand on any area of the body that is out of balance, a change in the strength of a strong indicator muscle takes place.

1). While touching an area that is out of balance, a previously strong indicator muscle will test weak.

2). Imbalances that will appear using this technique can be a result of disease, fracture, mild imbalances, and functional disturbances which include acupuncture points needing treatment and other various points and reflexes taught in this and other advanced classes.

B. Using this technique provides a way of quickly assessing areas of the body needing treatment. Therapy localization can be used to identify:

Neurolymphatics	Acupuncture Points	Subluxations
Neurovasculars	Organ Dysfunction	

C. There will be times when one may want to increase the sensitivity of the therapy localization. This can be done by:

1). Having the person being tested place their hand on the area to be tested, then have them place their other hand directly over the first hand.

2). Having the person being tested wet their hand prior to placing it on the area to be tested. Energy conduction can be increased by wetting a person's hand, especially if dehydration is present.

D. The INDICATOR MUSCLE that will be used should always be tested prior to therapy localization, challenging or testing for nutrition to determine its original status.

II. The Chinese Philosophy of Healing

A. Acupuncture is described in one of the oldest known written works, the Nei-Ching. The Nei-Ching was written between 2697 and 2597 B.C.

1). The Nei-Ching was ahead of the West in many areas.

The Nei-Ching indicated that our solar system contained nine planets, but Western science did not discover Neptune until 1846 and Pluto until 1930.

2). Western interest in acupuncture was developed in the 1970's when a New York Times Journalist, James Reston underwent an appendectomy with the use of acupuncture needles as the only anesthesia.

B. Meridian Therapy is a more appropriate name for acupuncture. Meridian therapy is an ancient Chinese system of health care in which specific points on the body are stimulated by the use of needles, pressure, massage, heat, or cold. Today, ultrasound, electricity, magnets and cold lasers are also used to stimulate acupuncture points. (See Meridian Charts on pages 22-41.)

1). The stimulation of these certain points on the body is believed to affect certain glands, organs, muscles, functions and systems of the body.

2). The points that are stimulated which are thought to number in excess of 1000 are said to follow a series of life force lines called meridians.

a. Meridians flow longitudinally, encircling the body and are generally named for the various body organs or functions in which they are thought to have a controlling influence.

b. These life force lines, consist of 12 main pairs of meridians (found on both sides of the body) and two midline meridians which go up and down the center or midline of the body.

c. Meridians should be looked at as a closed system for the circulation of energy through the body - energy enters the body, flows from one meridian directly into another meridian, covering all the meridians and then flows out of the body.

3). Meridian therapy has been practiced throughout history in China, India and Persia for 5000 years. Meridian therapy has employed different aspects in addition to needles to balance the energy systems and heal the body. Meridian therapy helps to restore balance or harmony to the body.

The Orientals believe there is a positive and negative aspect of everything which they refer to as Yin and Yang. Yin is the negative force and Yang is the positive force. It is felt that when the normal balance between these opposing but interrelated forces is disturbed, illness will result.

a. Meridian therapy traditionally included the use of herbal medicines and diet to chemically balance the meridians or energies of the body.

b. Psychotherapy, counseling and meditation in the form of contemplation to relax the body and improve energy balance was also used.

c. Meridian therapy also involved structural corrections through the use of manipulation, similar to the chiropractic adjustments of today, and the use of needles, pressure points or cauterization to stimulate specific points following the meridian pathways.

These two prints, which were taken from the original and discovered at the Tai Chung Medical School in Taipei, China, are estimated at more than 3,000 years old. They were originally inscribed on the breast plate of a tortoise shell. These charts clearly show spinal manipulation as an ancient healing art.

4). At this point, we will demonstrate, using a Deltoid Muscle as an Indicator Muscle, and a lead square to interrupt the meridian energy.

a. One portal of entry of energy to the body is through the ears and a strong muscle will weaken when a lead square is placed over the ear because the normal flow of energy into the body has been disturbed.

b. One portal of exit of energy from the body is through the mouth and a strong muscle will weaken when a lead square is placed over the mouth because the normal flow of energy out of the body has been disturbed.

5). 24-Hour Cycle Reference Chart

a. Chi enables a person to move, breath, digest food, and to think. The Chi is one of the fundamental Chinese concepts. The Chi or life energy flows through the meridians in a constant pattern of daily circulation in the same direction during each 24 hour period.

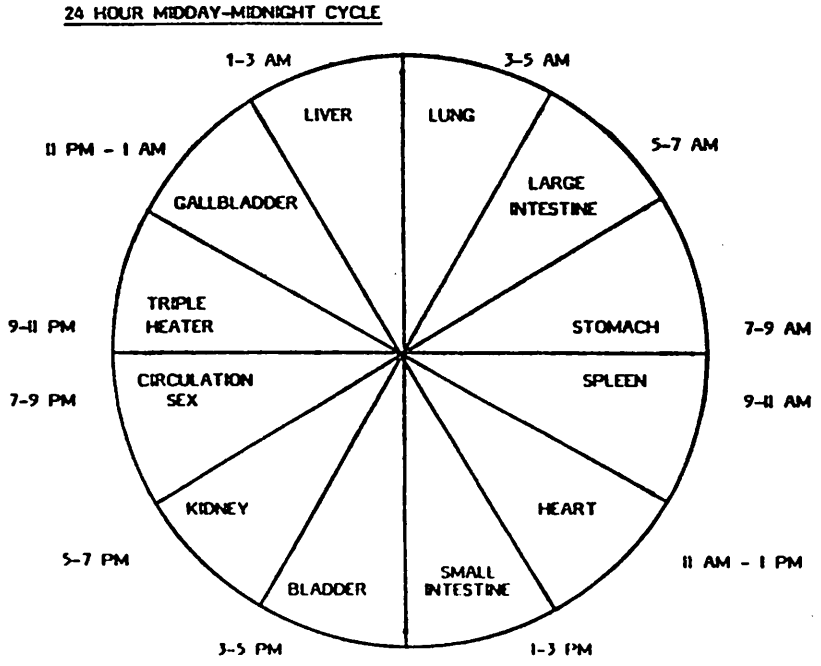
b. Each meridian has a two hour energy peak where the Chi is most abundant and a corresponding two hour energy low where the Chi is least abundant in that meridian.

1). This cycle is helpful in identifying which meridian is involved when a problem always occurs at a certain time within a two hour period.

2). The problem can appear either in the peak or low period of the meridian.

3). The meridian and its opposite on the 24-Hour Cycle should be considered in the testing procedure.

4). This cycle of energy ebb and flow may explain the jet lag phenomenon from crossing time zones.



NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 2

III. Alarm Points (Reference Chart, see page 20)

Alarm points are reflex points which are associated with meridians in the body and can be used to determine if there are any imbalances in specific meridians. Chinese philosophy believed that if disease occurred in the internal organ associated with the meridian or when Chi was abnormally disturbed, the alarm point would become tender.

A. Therapy localization of the alarm point can be used as a diagnostic tool to determine the status of the meridians. Therapy localize the alarm point and if a meridian is out of balance, a previously strong indicator muscle will test weak.

B. When tenderness is present upon light pressure to the alarm point, the meridian is considered to be overactive.

C. When tenderness is present upon deep pressure to the alarm point, the meridian is considered to be underactive.

D. Massaging the alarm point is one method of treatment to restore balance to the meridian involved.

REVIEW QUESTIONS - CLASS 2

1. Explain Therapy Localization and tell what can be therapy localized.

2. What is an indicator muscle?

3. What do the Chinese call the life energy?

4. How many acupuncture meridians are there? How many are bilateral (on both sides of the body)? How many are unilateral?

5. When does the Bladder Meridian get its most energy? When does it get its least energy?

6. If a person tended to feel poorly at 11:30 AM to 1:00 PM what meridians would you suspect?

7. Name the methods or aspects of traditional Chinese meridian therapy.

8. What is an alarm point?

9. What is the significance of an alarm point being tender upon deep pressure?

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 3

I. Applied Kinesiology Correction Techniques

A. Nutrition plays an important role in the permanent correction of imbalances in the body.

1). When an individual tastes a substance, the brain reacts to that substance almost immediately as if it were a part of the body's chemistry.

It is interesting to note that the standard procedure for children that have had damage to their esophagus from swallowing a caustic substance such as lye, is to feed them through a hole cut in the stomach. Even though the ground up food is nutritious and balanced, these children often do poorly.

An experiment was performed on children who still had an intact oral cavity. These children were asked to chew the food and after complete chewing, the food was placed into the stomach. These children made a remarkable recovery in their total health picture.

2). According to "Science Magazine," Volume 63, February, 1969, the article entitled: Direct Pathway to the Brain, specially labeled glucose and sodium chloride were introduced into the mouth cavity of a rat. The esophagus and trachea were tied off. The glucose and sodium chloride were left in the oral cavity for four minutes. The substances were then rinsed out with distilled water. The animal was then quick frozen. Radio trace studies were made which found the glucose and sodium chloride to be concentrated in the tissues of the face region, intracranial cavity and the brain, but not below the body where the trachea had been tied off. This proves that there is brain activity immediately upon chewing a substance. The brain tells us whether we like the substance or not.

3). In Applied Kinesiology, this fact allows us to evaluate the affect on the body of certain nutrients.

a. When a muscle or specific area is tested and found to be weak, have the person being tested chew a food or nutritional product which you suspect may be beneficial.

b. If the substance the person is tasting will help correct the weakness, there will be an immediate strengthening of the muscle being tested, whether the nutrient is swallowed or not.

4). An example of the way one would utilize this concept is to have an individual therapy localize a reflex point

involving the thyroid. If a strong indicator muscle weakens, have the individual chew one of the substances listed as a support for the thyroid such as iodine. (Refer to page 68 relating to the thyroid, the Teres Minor.) In many cases this will neutralize the therapy localization, meaning the previously weak muscle will now test strong.

5). This method for testing nutrients, i.e, finding an imbalance in the system and introducing a nutrient into the mouth to abolish the weakness is the only accepted way of testing for nutrients in this course.

6). All nutrients should be chewed when possible with the exception of those nutrients containing hydrochloric acid, bile salts or specific digestive enzymes. Chewing nutrients allows the body to "tag" the nutrient and send it to the specific area in the body where it is most needed.

At this point, we will discuss the use of glandular supports. These specific supports are mentioned throughout the OMNIHEALTH text under nutritional recommendations for specific organ-muscle systems.

There are two categories of glandular supports. Each of these different categories of substances is separate and distinct. A person may need support from a substance in one category or several categories. The only way of determining which type of glandular support to use is through the nutrition muscle testing procedures described in the OMNIHEALTH courses. We feel that no nutrient should be administered unless it is first muscle tested. This procedure requires a weakness of an Indicator Muscle which responds by strengthening immediately (within 15-20 seconds, at most) when the person tastes the substance. No other procedure for testing nutrients can be recommended. The two types of glandular preparations are:

1). Whole glandular concentrates
2). Glandular extracts

The whole glandular concentrates are sold through many sources and can be found at Health Food Stores.

The glandular extracts are at this time only made by Standard Process Labs, Inc. Standard Process' policy is to only make their products available through licensed physicians.

If you have difficulty obtaining Standard Process products, please contact Dr. Jason P. Schwartz, 915 East Ocean Blvd., Suites 1 & 2, Stuart, Florida, 33494, and we will advise you how to obtain these products.

B. Neurolymphatic Reflex Points (NL) are specific points located throughout the body which when stimulated, encourage lymph drainage.

1). Dr. Frank Chapman, an Osteopathic Physician, discovered in the 1930's that these points affect lymphatic drainage in a specific organ. Dr. Goodheart related these points to specific muscles.

2). The lymphatic system flows in one direction and acts as a drainage system for the body and carries protein, hormones, white blood cells and fats to all cells.

3). Neurolymphatic points act like circuit breakers which turn off when the lymph system is overloaded. Stimulation of these points provide a method of turning the lymph system back on.

a. When a neurolymphatic point is not functioning properly, the area involved performs at minimum function, but does not shut down completely.

b. If the area stays shut down, the body can become weakened to a state of disease.

4). Stimulation of the neurolymphatic points allows normal lymphatic drainage.

a. We will now demonstrate therapy localization of a neurolymphatic point. Once a neurolymphatic point that is out of balance has been found, massage the point in a circular motion using moderate pressure.

b. Neurolymphatic points are located on the front and the back of the body. The points on the front are generally more painful.

c. The degree of tenderness upon massage can be an indication of the extent of the problem.

d. Once the neurolymphatic point has been massaged (for approximately 30 to 45 seconds), retest by therapy localizing to see if the area is strengthened.

5. The location of the neurolymphatic points does not usually correspond to the location of the lymph glands, but there is a reflex relationship.

C. Neurovascular Reflex Points (NV) are points that influence circulatory function in various areas of the body and increase the blood supply to those areas.

1. Neurovascular reflex points were first discovered by Dr. Terence Bennett in the 1930's. Dr. Goodheart related these points to specific muscles.

2. There are 16 neurovascular reflex points primarily located on the skull.

3. Neurovascular reflex points have a pulse that can be felt. The pulse is not related to the heart beat but to the pulsation of the microscopic capillary beds in the skin. Neurovascular reflex points beat at a rate of 70-75 beats per minute, regardless of the heart beat.

4. Stimulation of the neurovascular reflex points appears to improve and normalize the blood circulation to both the muscle and its related organ.

a. Test a neurovascular point by therapy localizing.

b. To stimulate a neurovascular point, hold the point with a light touch and a slight tugging action in any direction for about 30 seconds. You should apply no more pressure than you would use on the eyeball.

c. Retest by therapy localizing to determine if the correction is complete. (If the point has been held long enough, a previously weak indicator muscle will now test strong when the person being tested touches the neurovascular point.)

D. Meridian System or Acupuncture System

1. There are over 1000 acupuncture points on the body.

2. In all meridians there are certain acupuncture points that are used for specific purposes.

a. All acupoints are considered to be LOCAL POINTS. Each local point controls the area in which it is located. The specific names and functions of most of the points on the meridians is not necessary for this course. Utilizing therapy localization, you will determine exactly which points need to be stimulated.

b. ASSOCIATED POINTS are located along the spine on the Bladder Meridian. Each of the 12 bilateral meridians and the Conception and Governing Vessels have an associated point that represents it.3

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 3

1). Stimulating the associated points, the Bladder Meridian or the meridian which it is associated with will be affected, depending on which is deficient.

2). Dr. Goodheart found that every time a meridian is disturbed there is always a subluxation present at the associated point level. It is sometimes necessary to treat a meridian by adjusting the vertebra adjacent to the associated point (by a qualified chiropractor). Chiropractors have been affecting the energy of the meridians by finding these subluxations and correcting them much the same way as the ancient acupuncturists.

3). See Reference Chart for Associated Points on page 76.

3). To locate the points that require treatment, therapy localize using a strong indicator muscle all along the meridian.

4). To stimulate the point, rub or tap (if the area is painful) approximately 45 seconds.

5). To work on specific problems (rash, boil, callous, etc.) test the meridian that travels through the area of involvement, by therapy localizing and strengthen any weak points by rubbing or tapping.

E. Procedure Outline (See page 19)

REVIEW QUESTIONS - CLASS 3

1. How can you determine what nutritional supports will help an organ or gland?

2. What is a neurolymphatic reflex point?

3. What is a neurovascular reflex point?

NATURAL HEALTH CARE TECHNIQUES - INTRODUCTION CLASS 4

I. Review

PROCEDURE OUTLINE

1. Find a strong indicator muscle. (Anterior Deltoid, Middle Deltoid, Gluteus Medius, Hamstrings)

2. Place the person's hand on each alarm point.

3. When you find a weak alarm point (a previously strong muscle will test weak) look up the meridian that went weak and look up the associated muscles.

4. Look up the muscles, (they are in alphabetical order) locate the neurolymphatic and neurovascular points and note any weaknesses by therapy localizing. You may also test the associated muscle, but this is not always necessary. There are certain meridians that have a relationship to more than one organ. An example of this is the Triple Heater. This meridian can either refer to the Thyroid or Thymus. In this case, you may want to test the Teres Minor (Thyroid) and the Infraspinatus (Thymus) muscles.

5. Before correcting any weaknesses, if you would like to test any nutrients, do so now.

6. Follow the associated meridian and locate any points that may be weak by therapy localizing (they may be sore to the touch).

7. Correct any weaknesses on the **meridian, neurolymphatic, and** neurovascular points.

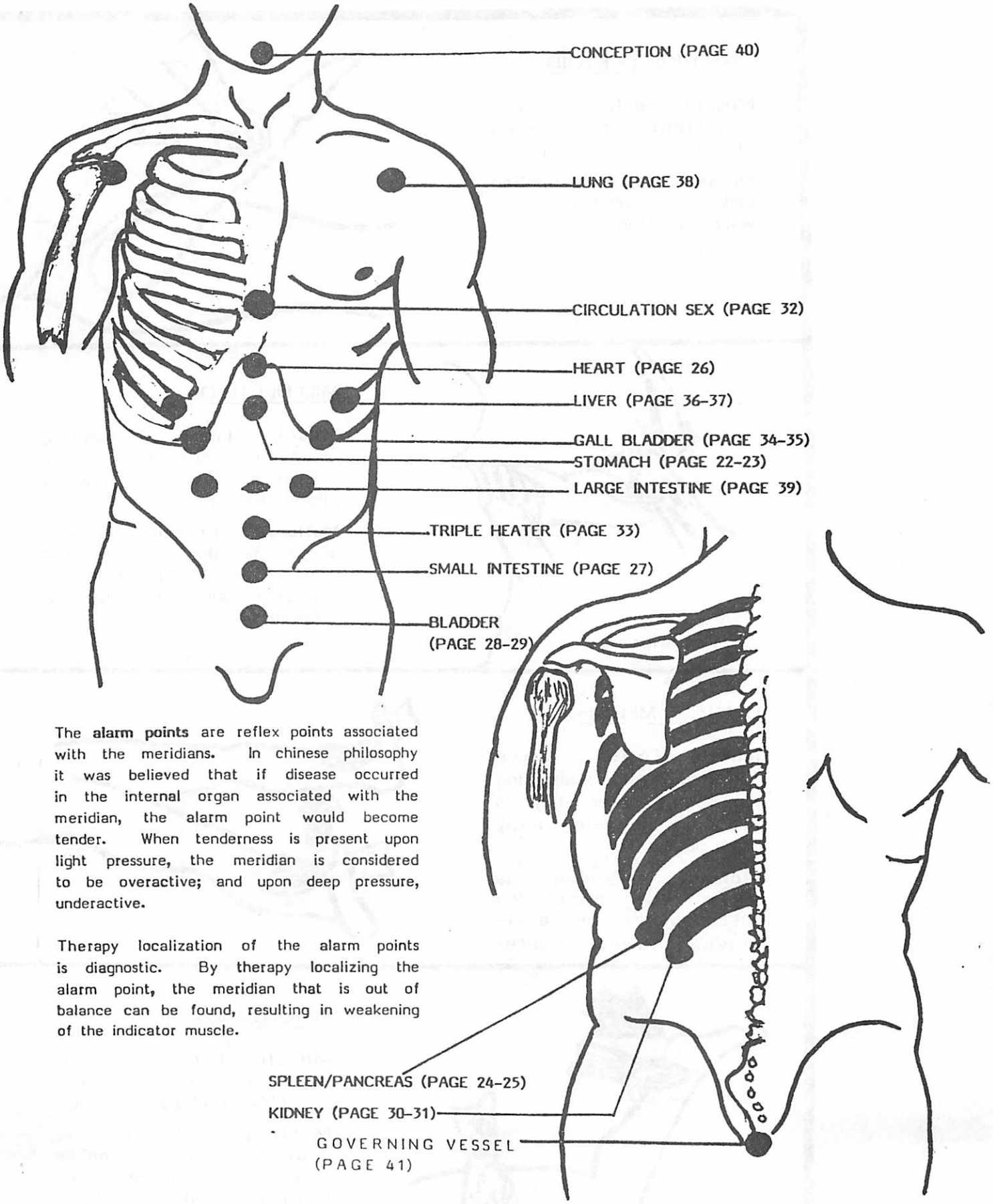
8. Challenge the correction by retesting the previous weak points.

9. Therapy localize each alarm point once more to be sure there are not additional weaknesses. (The body is dynamic and changing. After a correction is made, the body's energies sometimes will shift and may reveal new areas of involvement that will come to the surface.)

NOTE - There are several muscles that if weak on both sides (bilaterally) when tested may indicate a fixation (see glossary) is present. A fixation should be corrected by a chiropractic physician. The following muscles when found weak on both sides may indicate a fixation is present:

Psoas	Gluteus Maximus
Popliteus	Teres Major
Middle Deltoid	Lower Trapezius
Hamstrings	

ALARM POINTS CHART



The **alarm points** are reflex points associated with the meridians. In chinese philosophy it was believed that if disease occurred in the internal organ associated with the meridian, the alarm point would become tender. When tenderness is present upon light pressure, the meridian is considered to be overactive; and upon deep pressure, underactive.

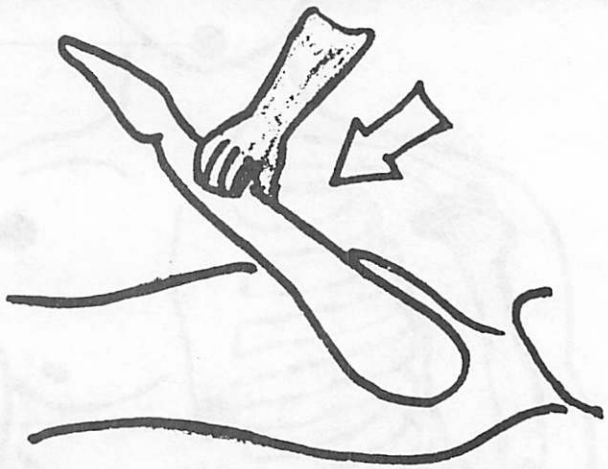
Therapy localization of the alarm points is diagnostic. By therapy localizing the alarm point, the meridian that is out of balance can be found, resulting in weakening of the indicator muscle.

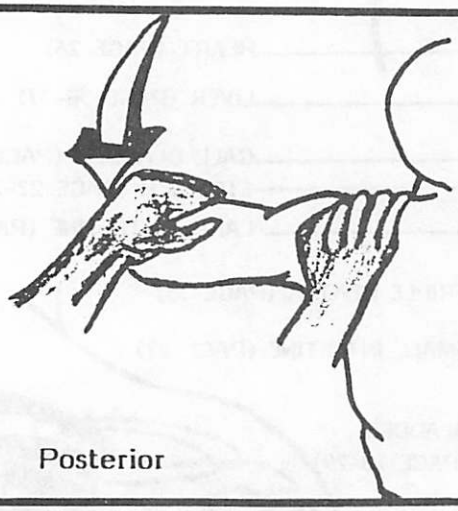
The "Four" Indicator Muscles

ANTERIOR DELTOID

Muscle Test: Supine position; arm raised at 45°, elbow straight

Motion: Pressure applied just above wrist in downward direction





Posterior

MID DELTOID

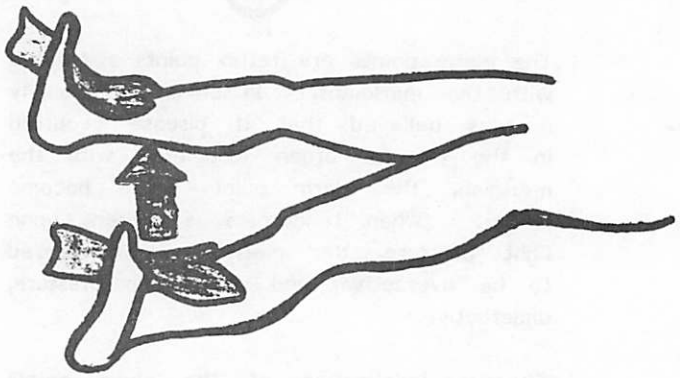
Muscle Test: Standing or sitting, arm is held to side at 90°, level with shoulder elbow bent at 90°

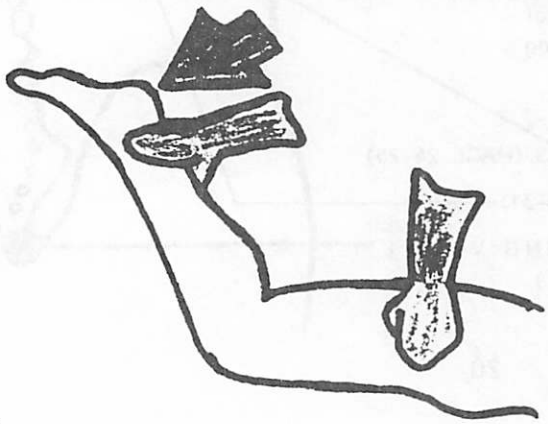
Motion: Pressure is just above the elbow in downward motion. Stabilization at opposite shoulder may be necessary

GLUTEUS MEDIUS

Muscle Test: Supine position; while stabilizing one leg, other leg is brought laterally away from body

Motion: Pressure is against the lateral leg just above the ankle moving toward center





HAMSTRINGS

Muscle Test: Prone position, knee bends to 60°, stabilizing thigh

Motion: Pressure is against back of ankle to extend knee in downward motion. Stabilization in belly of muscle will help prevent cramping

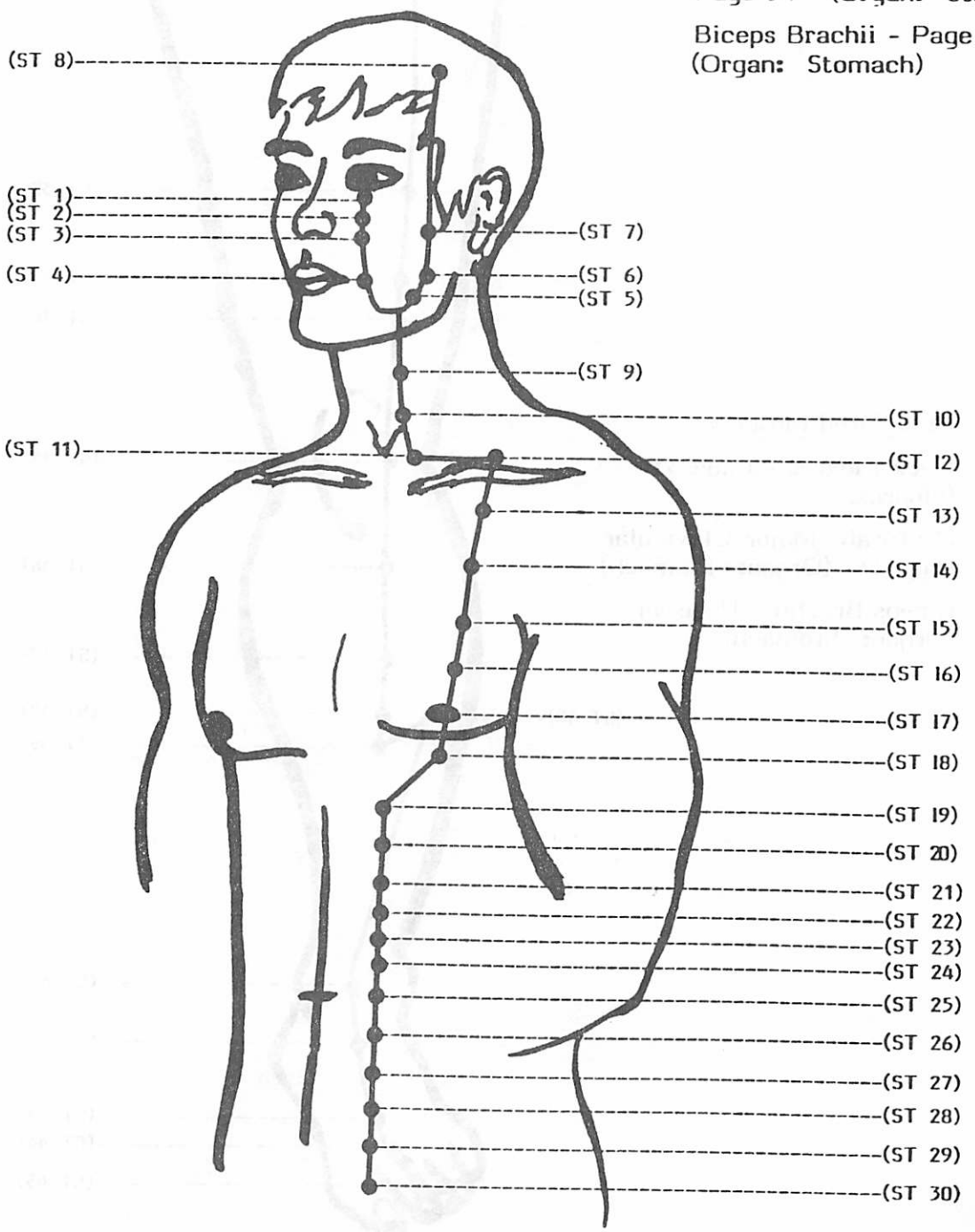
STOMACH MERIDIAN - ST

Associated Muscles

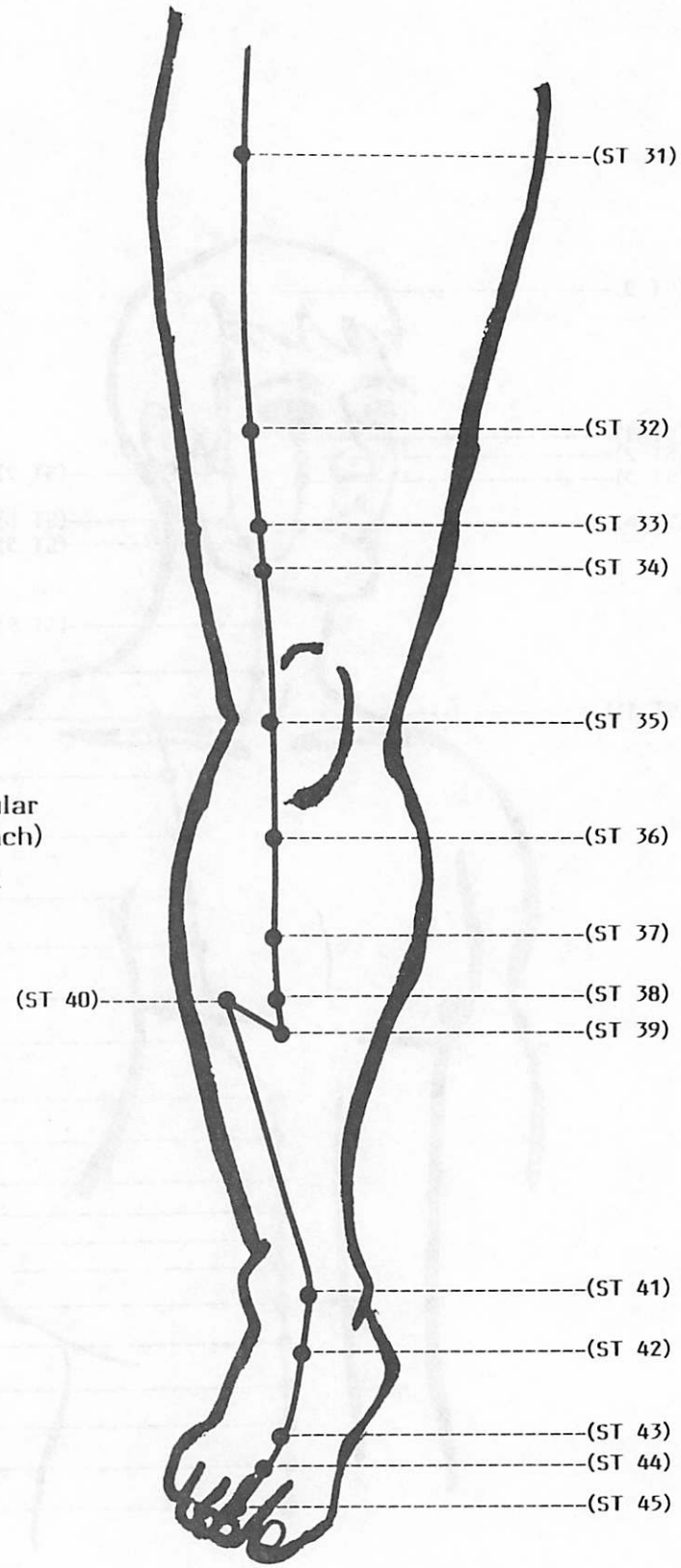
Neck Flexors - Page 53
(Sinuses)

Pectoralis Major Clavicular
Page 54 (Organ: Stomach)

Biceps Brachii - Page 44
(Organ: Stomach)



STOMACH MERIDIAN - ST



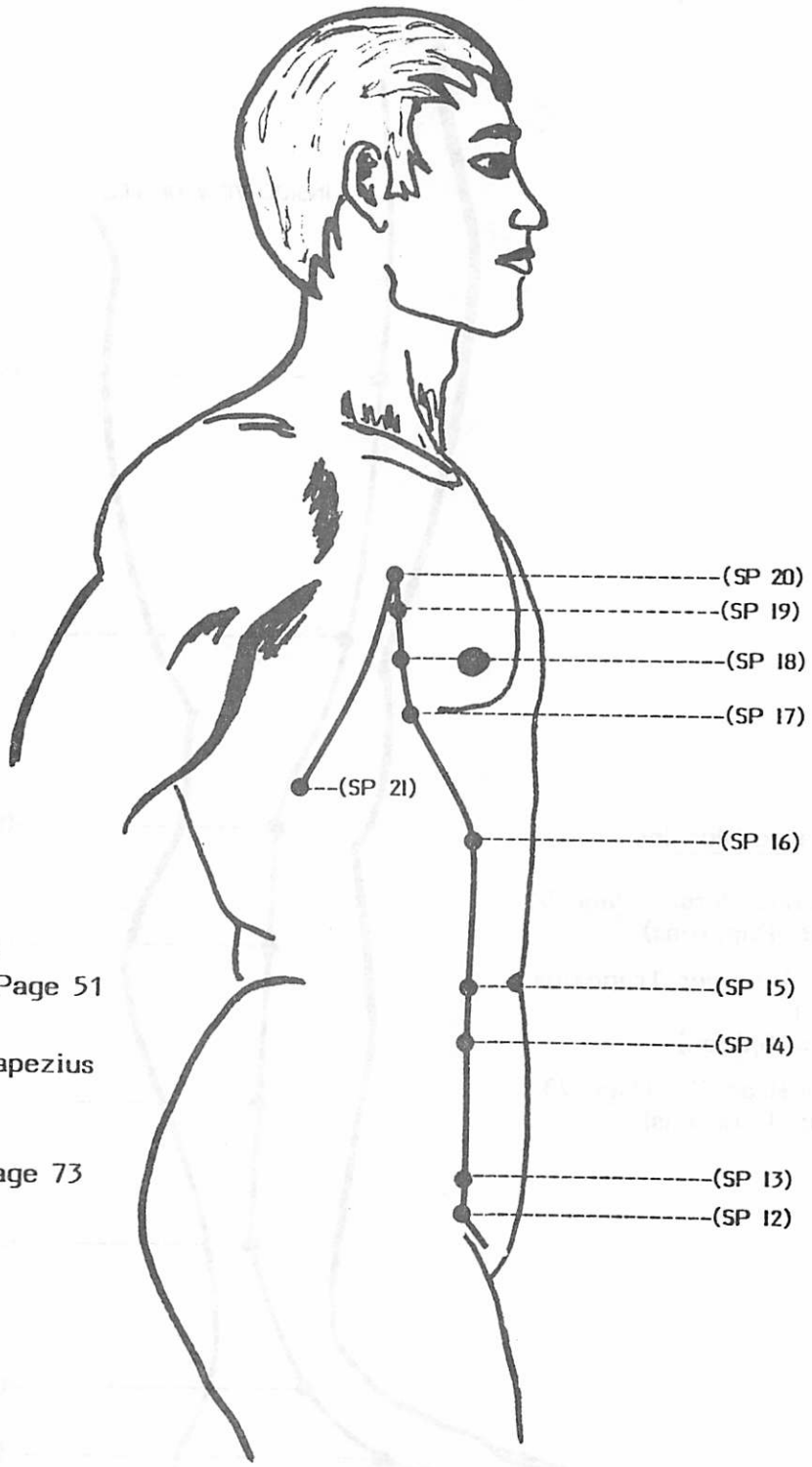
Associated Muscles

Neck Flexors - Page 53 (Sinuses)

Pectoralis Major Clavicular Page 54 (Organ: Stomach)

Biceps Brachii - Page 44 (Organ: Stomach)

SPLEEN/PANCREAS MERIDIAN - SP



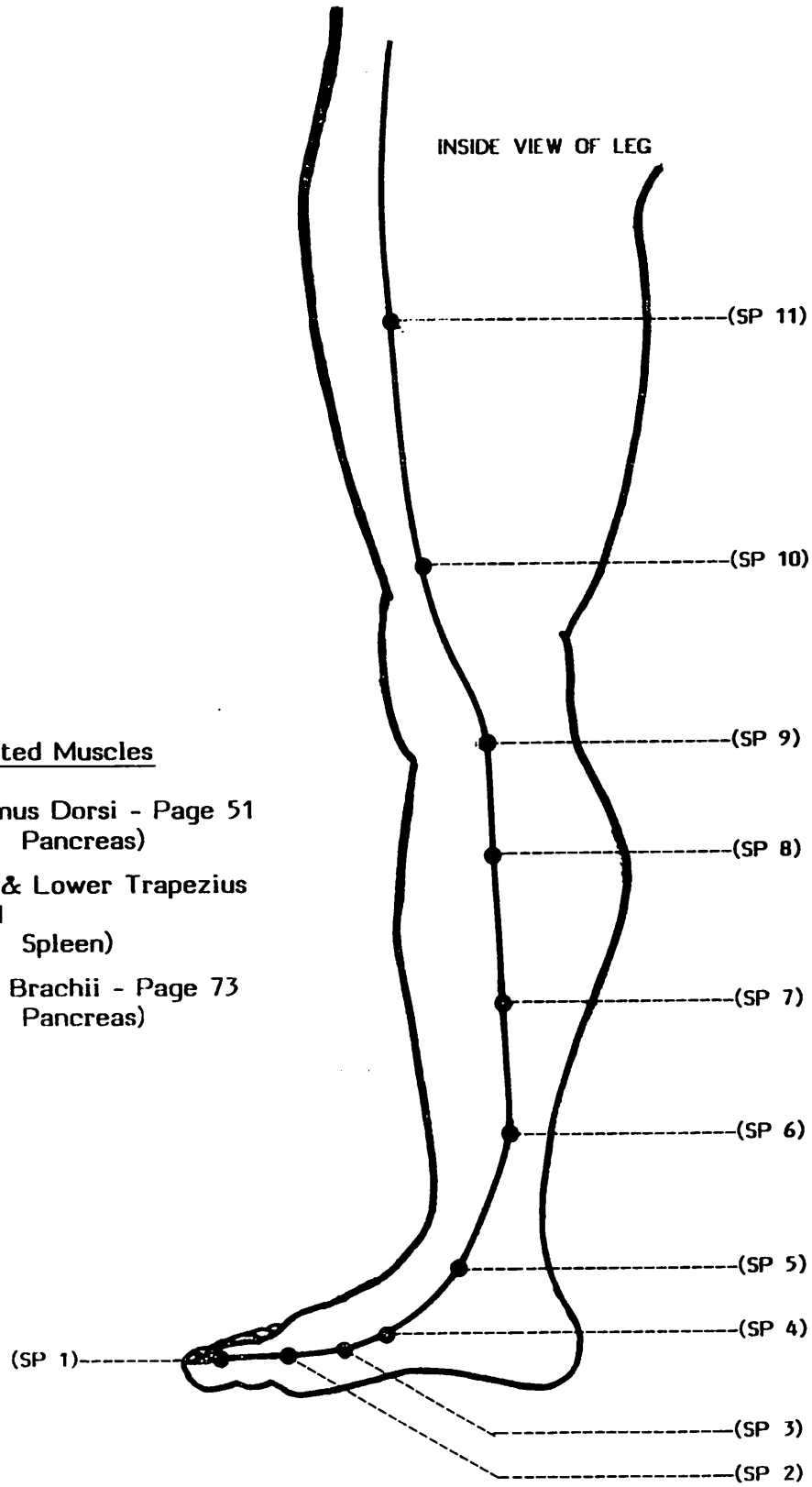
Associated Muscles

Latissimus Dorsi - Page 51
(Organ: Pancreas)

Middle & Lower Trapezius
Page 71
(Organ: Spleen)

Triceps Brachii - Page 73
(Organ: Pancreas)

SPLEEN/PANCREAS MERIDIAN - SP



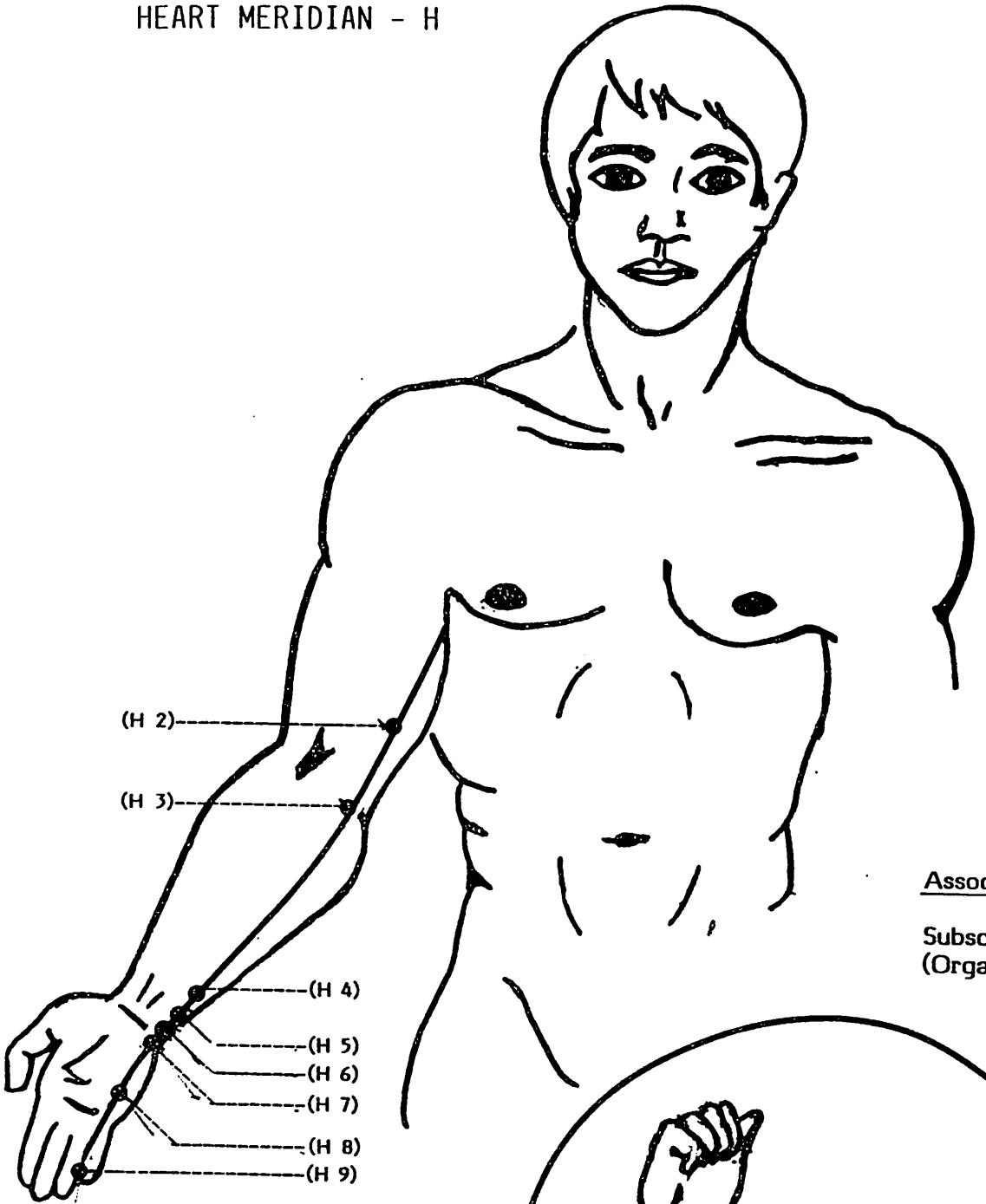
Associated Muscles

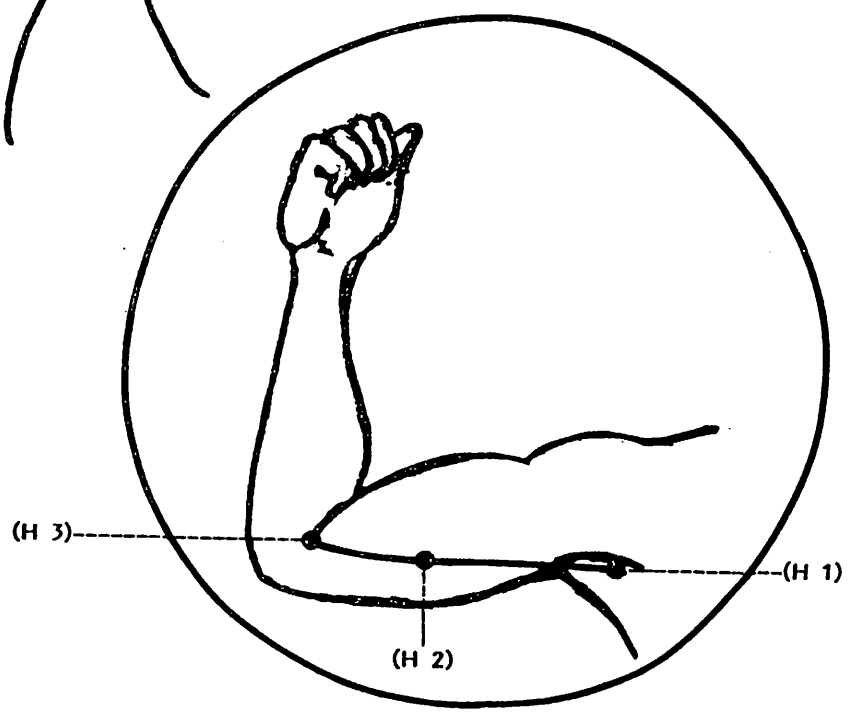
Latissimus Dorsi - Page 51
(Organ: Pancreas)

Middle & Lower Trapezius
Page 71
(Organ: Spleen)

Triceps Brachii - Page 73
(Organ: Pancreas)

HEART MERIDIAN - H

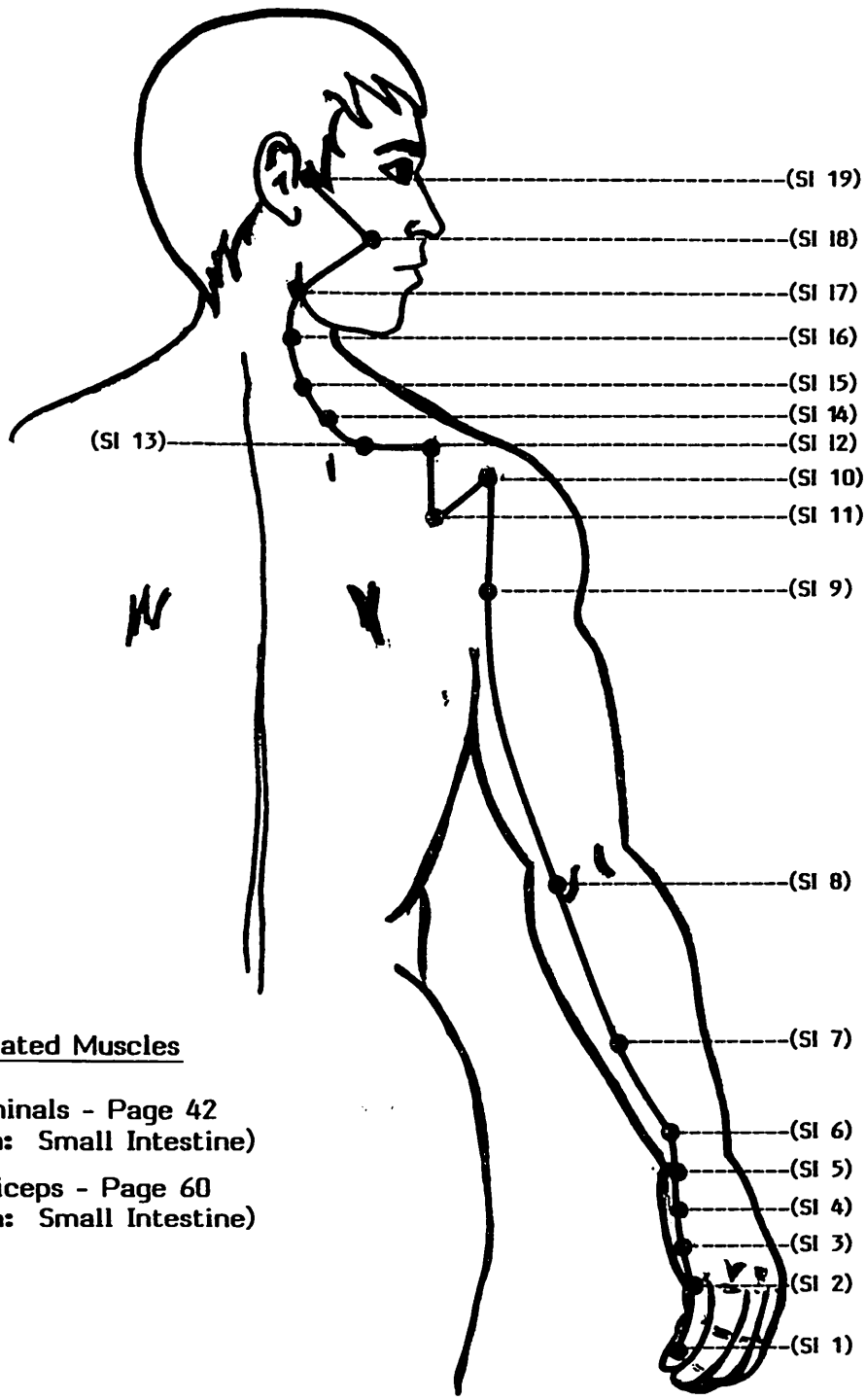




Associated Muscle

Subscapularis - Page 64
(Organ: Heart)

SMALL INTESTINE MERIDIAN - SI



Associated Muscles

Abdominals - Page 42
(Organ: Small Intestine)

Quadriceps - Page 60
(Organ: Small Intestine)

BLADDER MERIDIAN - BL

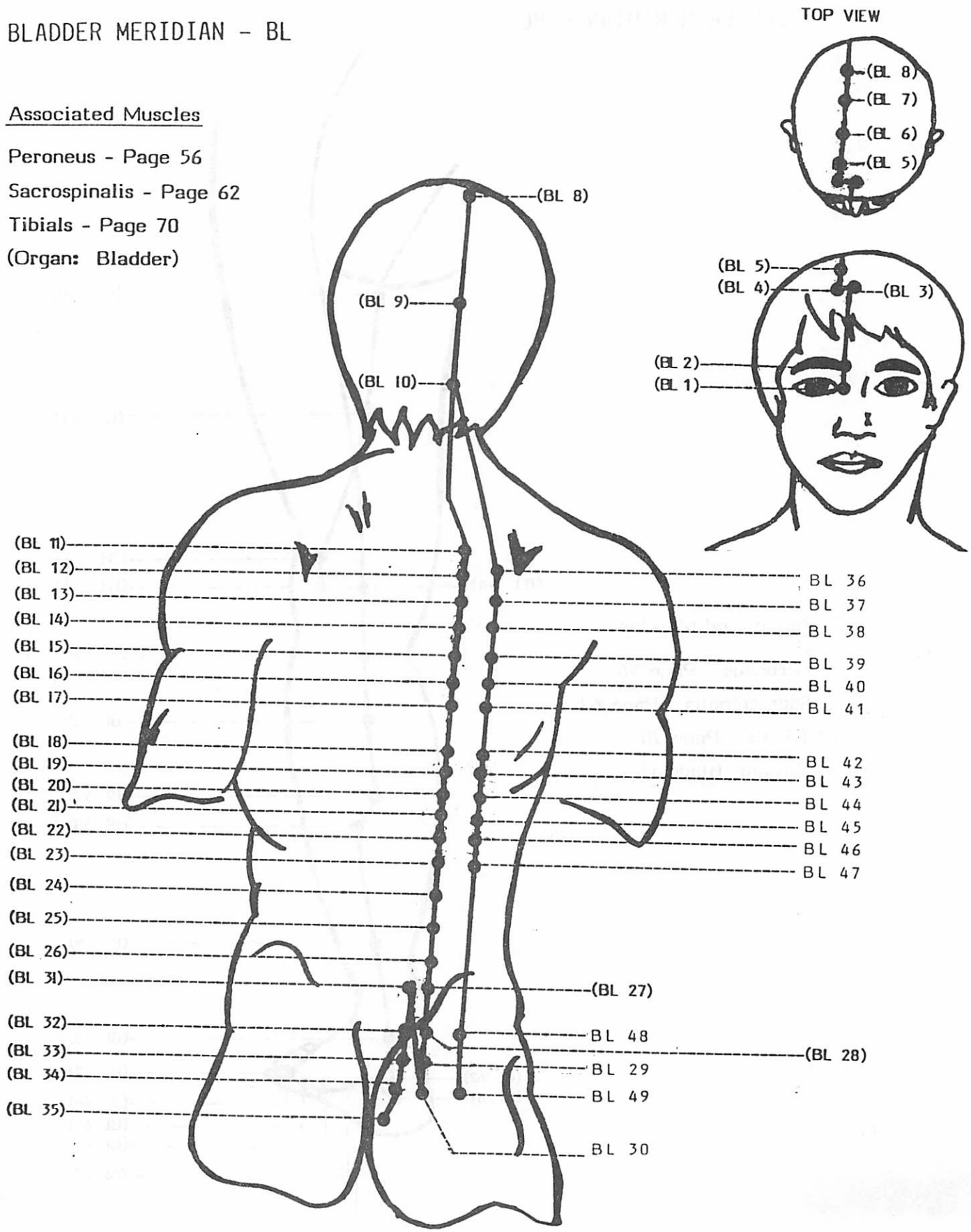
Associated Muscles

Peroneus - Page 56

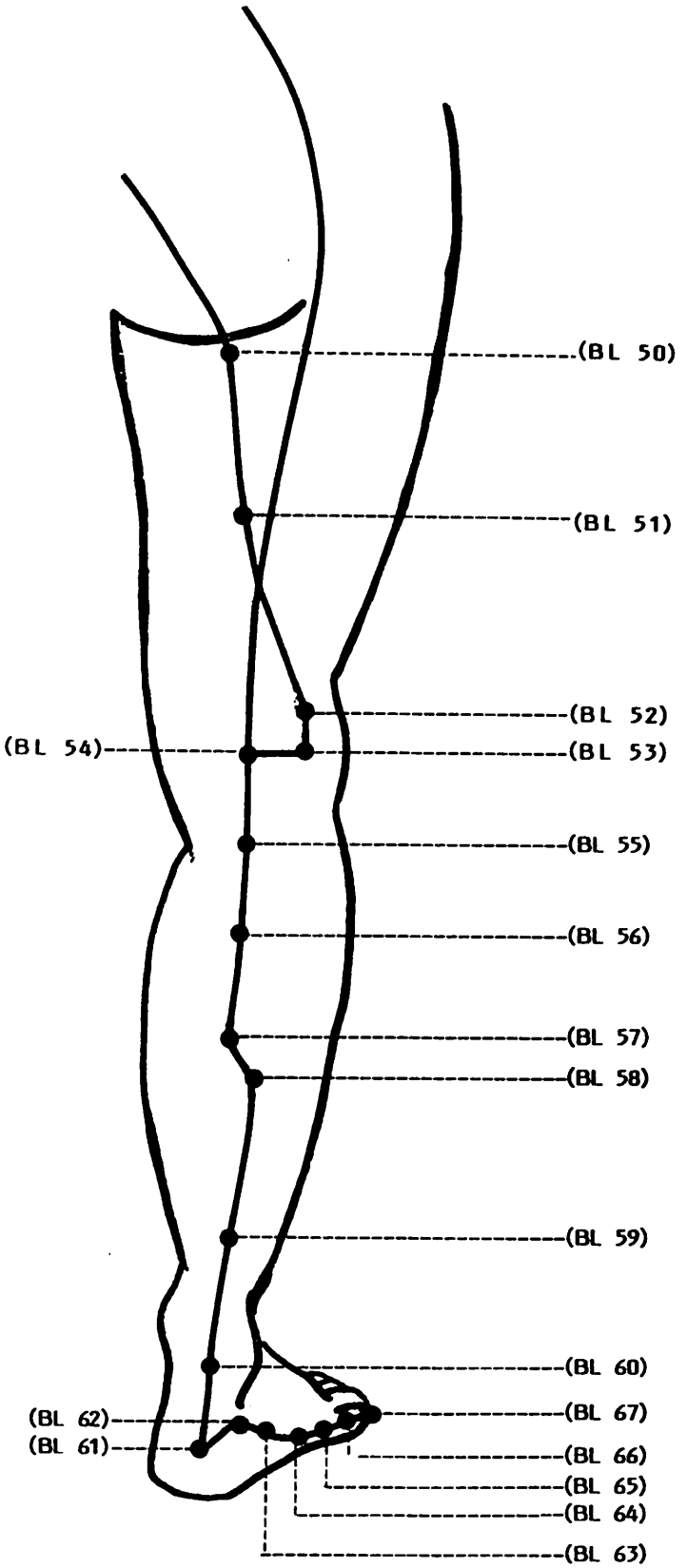
Sacrospinalis - Page 62

Tibials - Page 70

(Organ: Bladder)



BLADDER MERIDIAN - BL



Associated Muscles

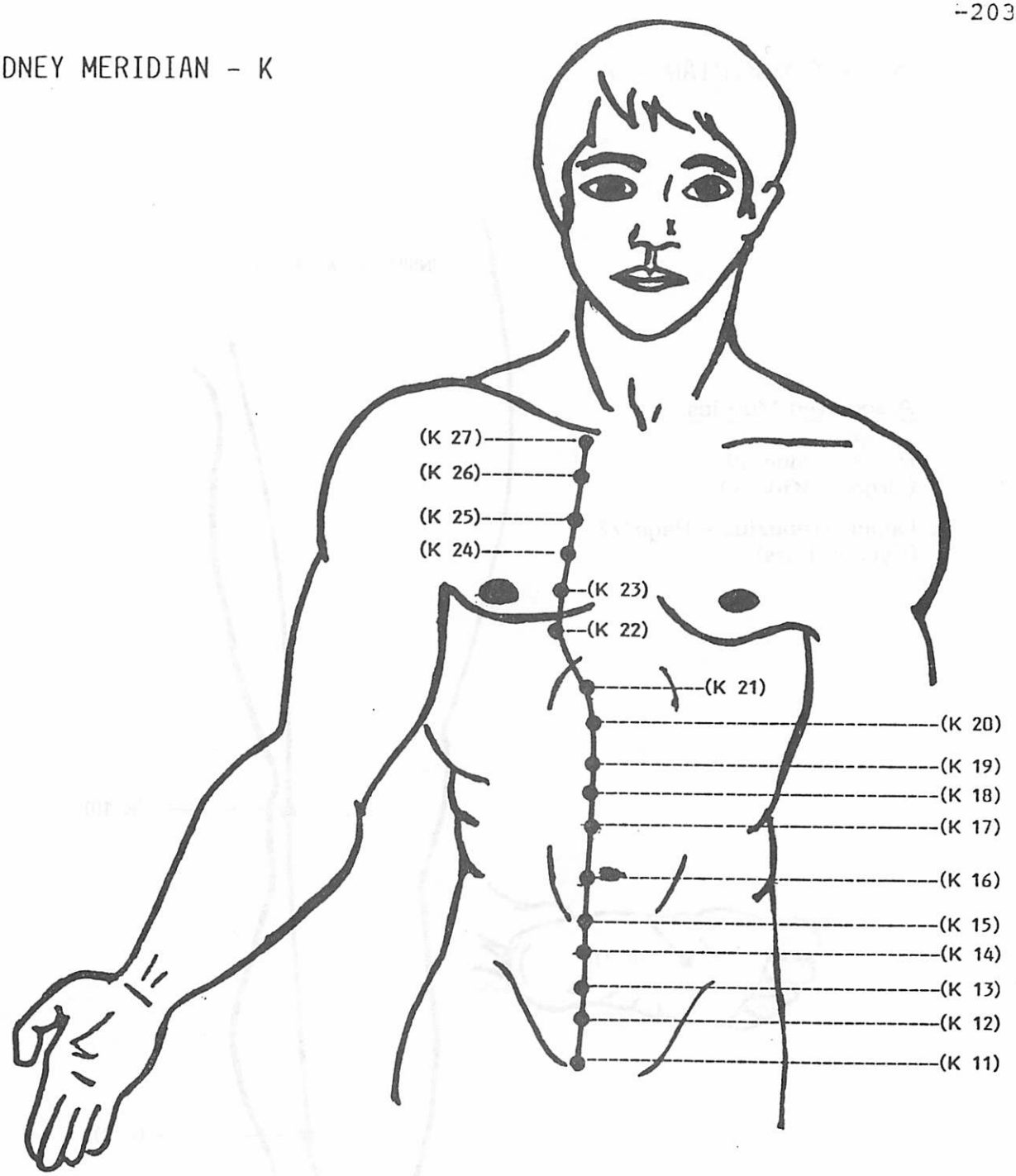
Peroneus - Page 56

Sacrospinalis - Page 62

Tibials - Page 70

(Organ: Bladder)

KIDNEY MERIDIAN - K

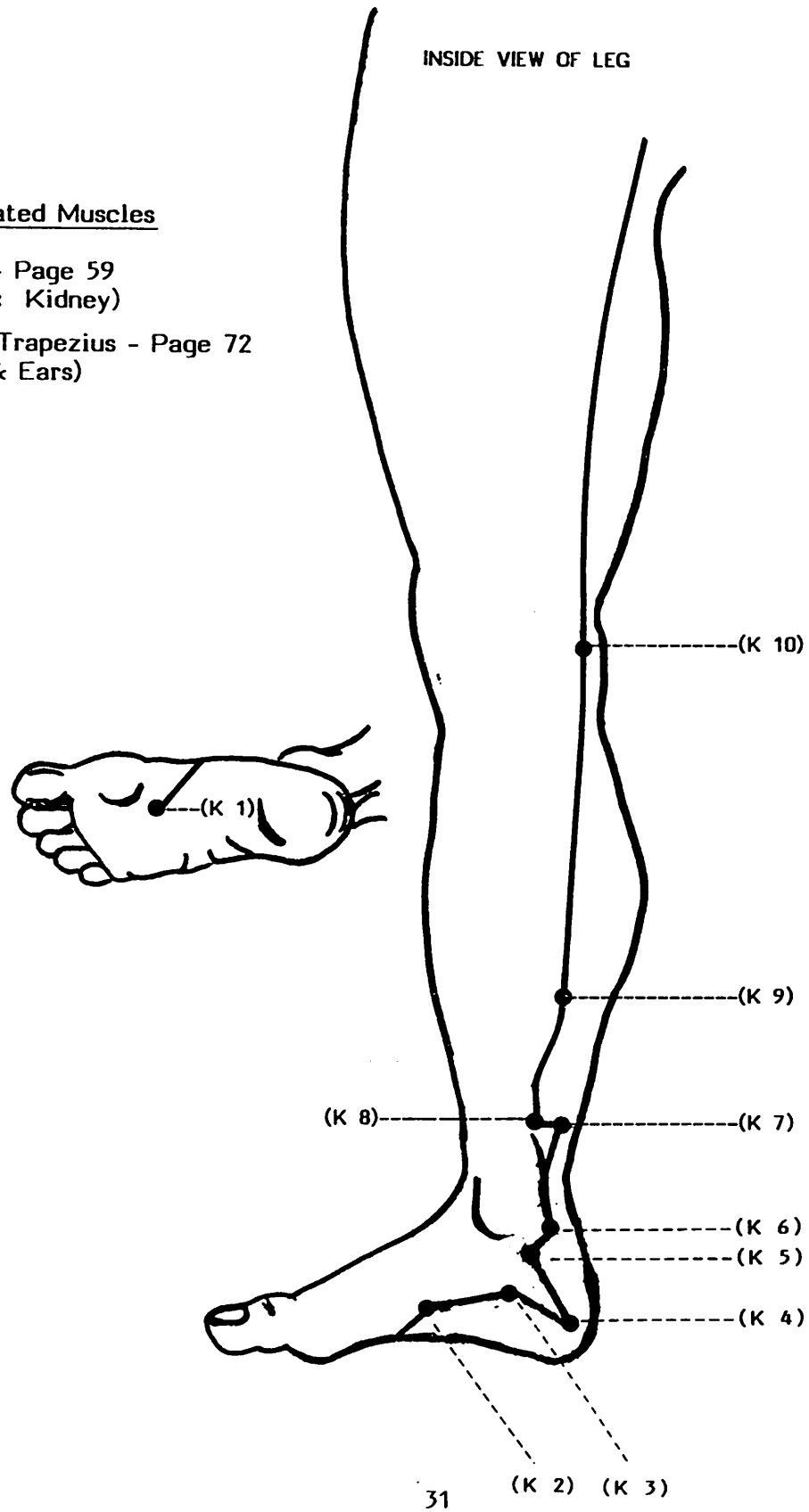


Associated Muscles

Psoas - Page 59
(Organ: Kidney)

Upper Trapezius - Page 72
(Eyes & Ears)

KIDNEY MERIDIAN - K

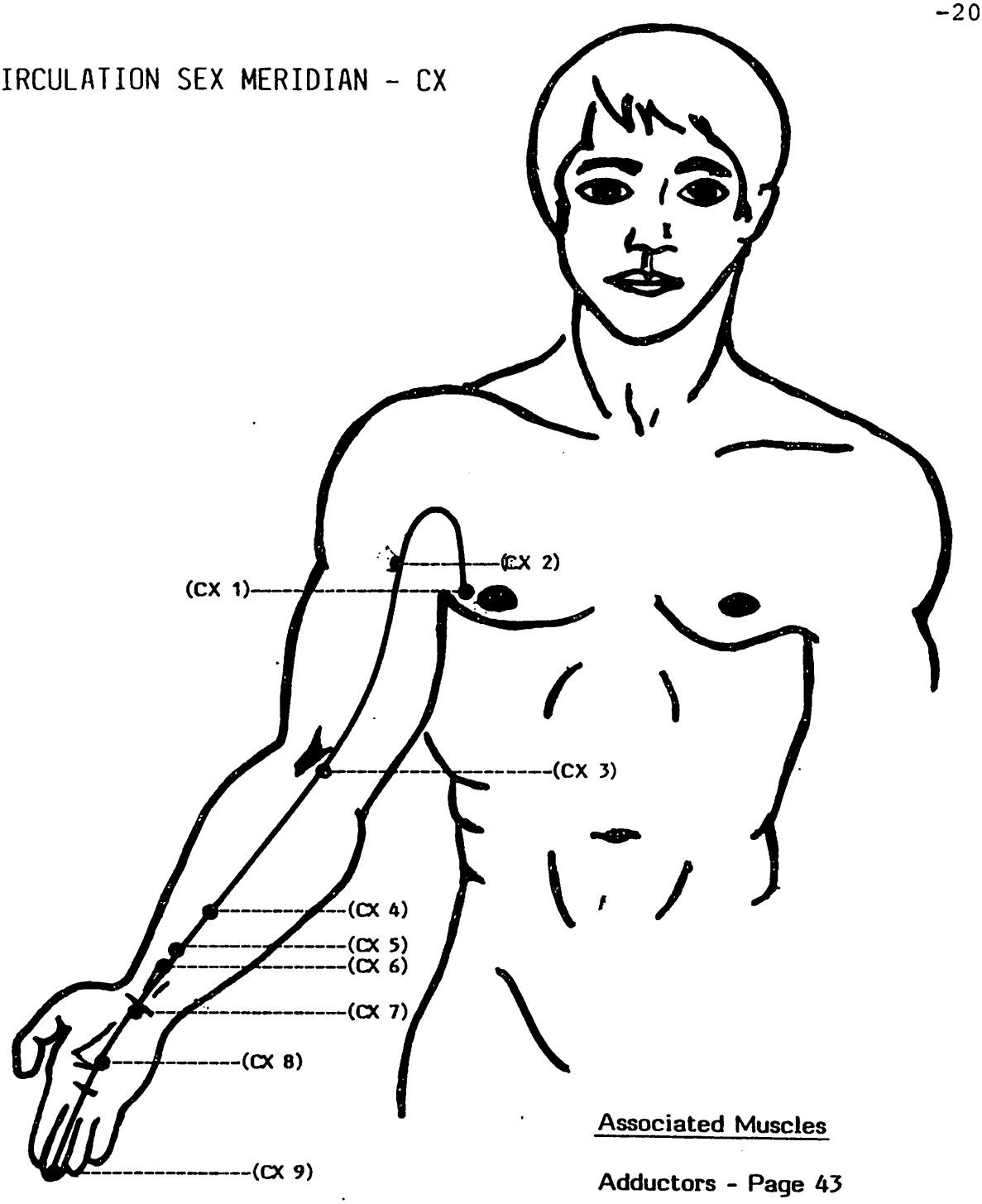


Associated Muscles

Psoas - Page 59
(Organ: Kidney)

Upper Trapezius - Page 72
(Eyes & Ears)

CIRCULATION SEX MERIDIAN - CX



Associated Muscles

Adductors - Page 43

Gluteus Maximus - Page 47

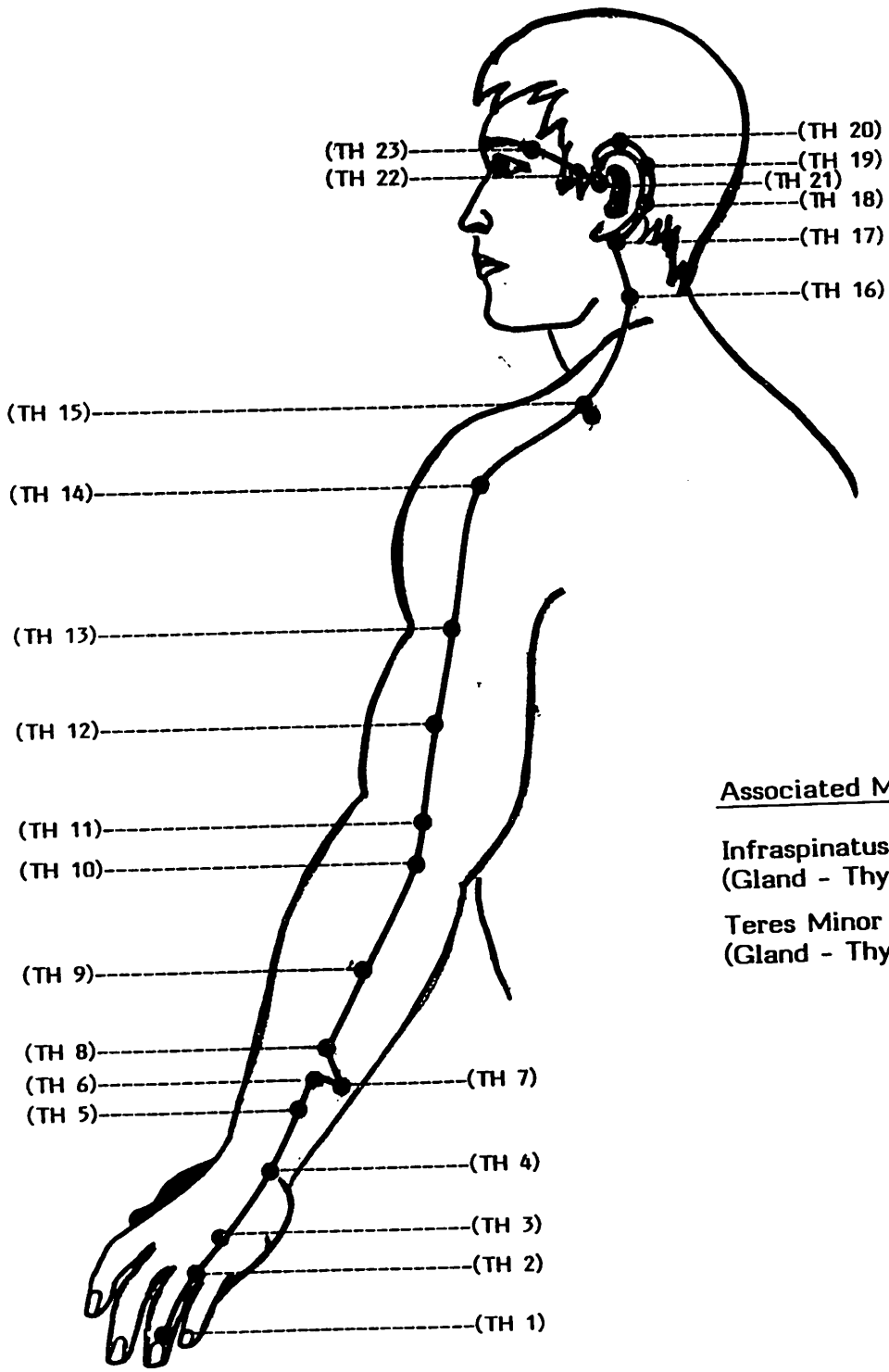
Gluteus Medius - Page 48

Piriformis - Page 57

(Reproductive Organs & Glands)

Sartorius - Page 63
(Gland: Adrenal)

TRIPLE HEATER MERIDIAN - TH

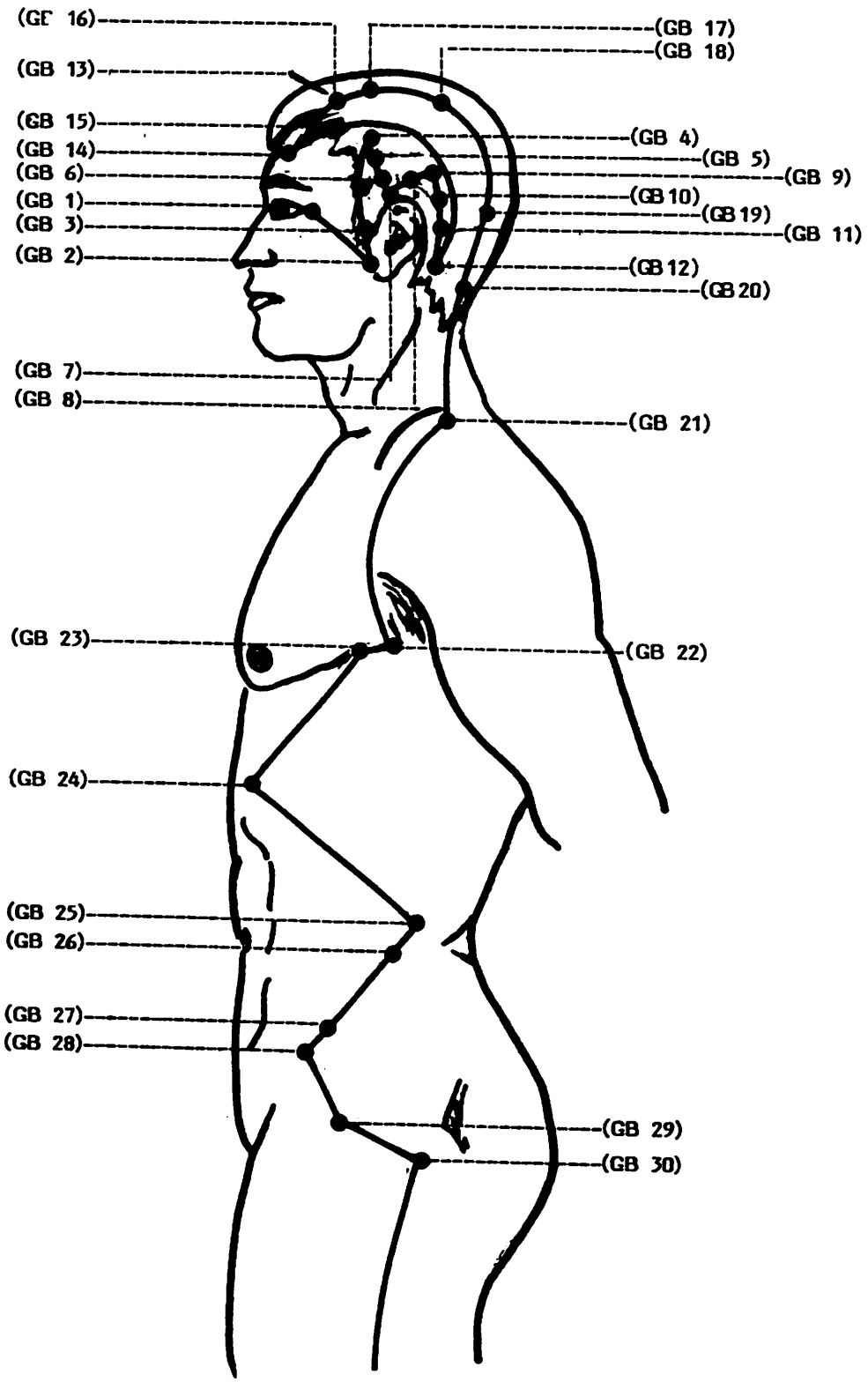


Associated Muscles

Infraspinatus - Page 50
(Gland - Thymus)

Teres Minor - Page 68
(Gland - Thyroid)

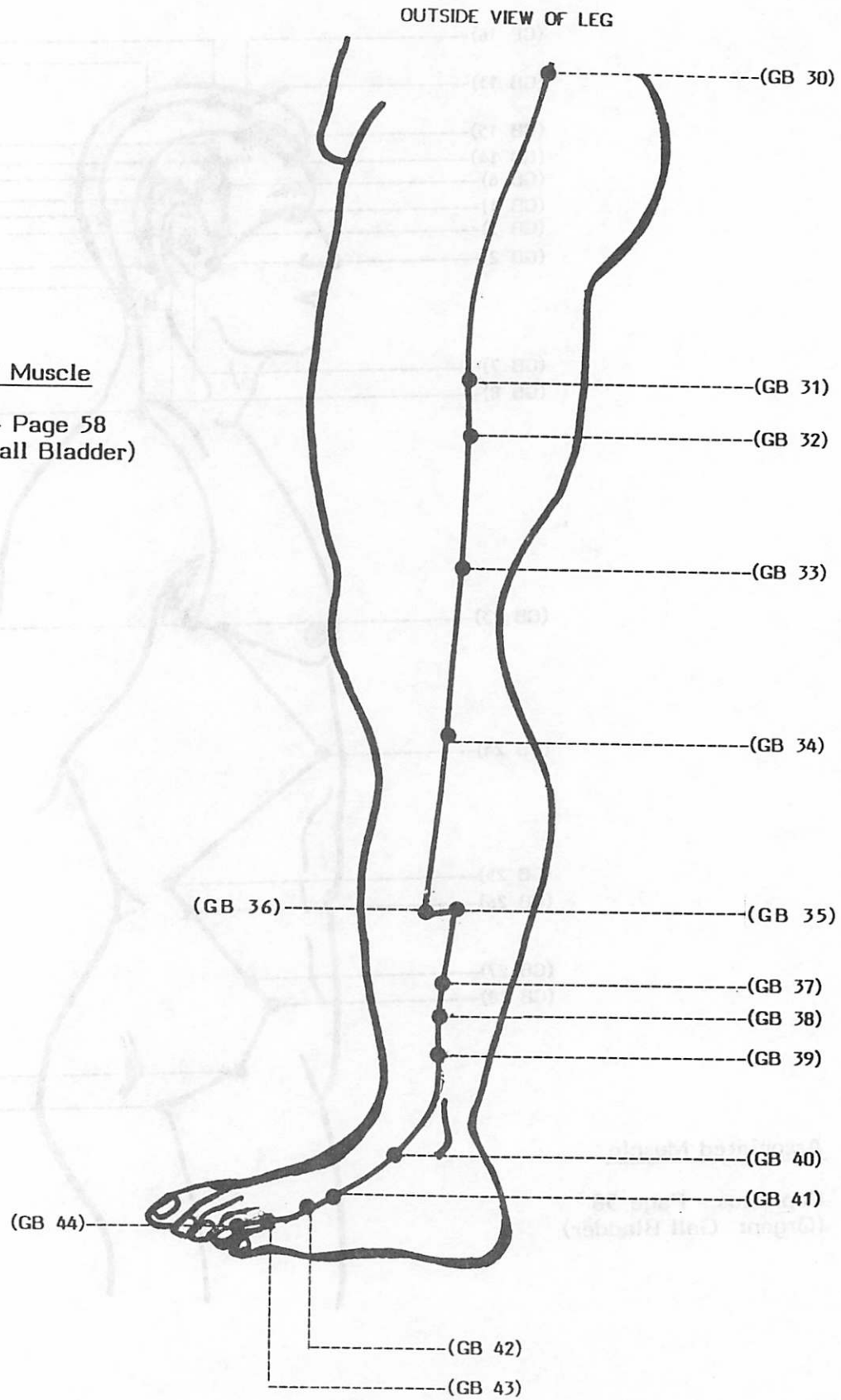
GALL BLADDER MERIDIAN - GB



Associated Muscle

Popliteus - Page 58
(Organ: Gall Bladder)

GALL BLADDER MERIDIAN - GB



Associated Muscle

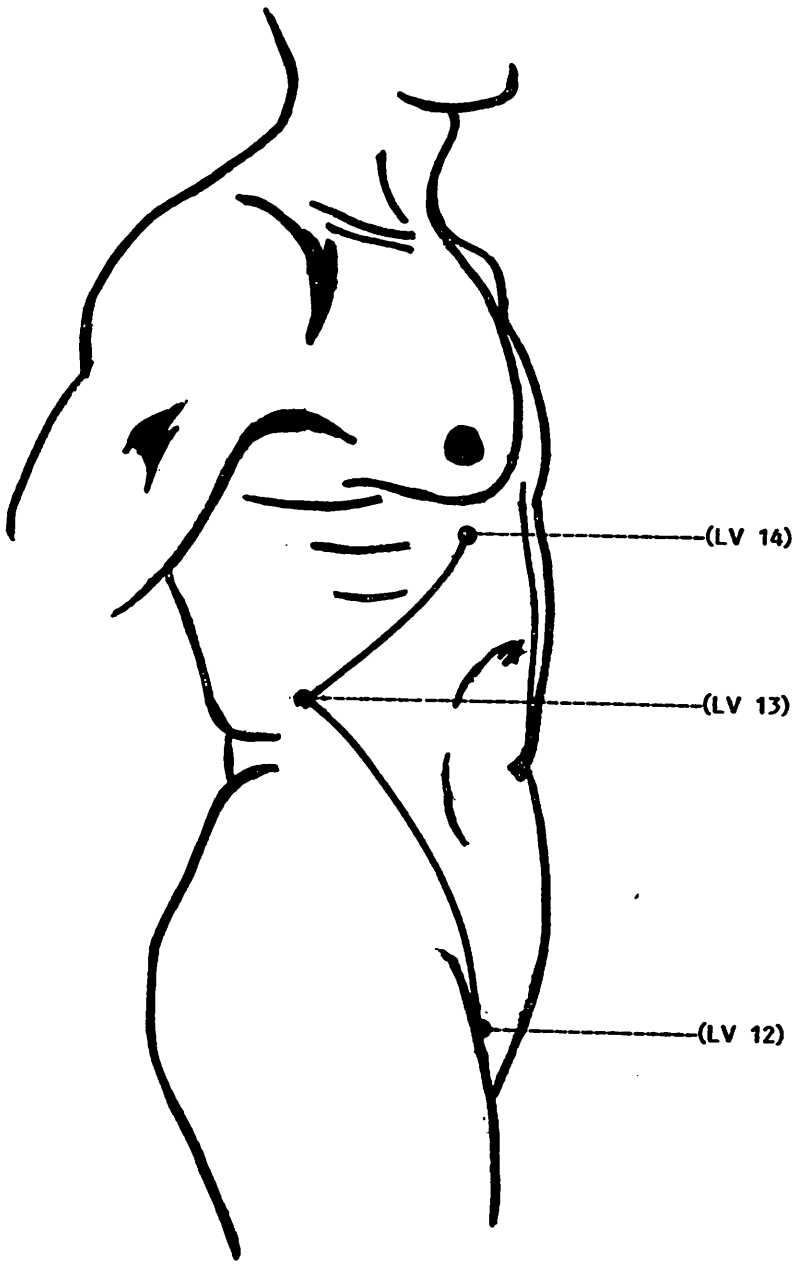
Popliteus - Page 58
(Organ: Gall Bladder)

LIVER MERIDIAN - LV

Associated Muscles

Pectoralis Major Sternal - Page 55
(Organ: Liver)

Rhomboids - Page 61
(Organ: Liver)

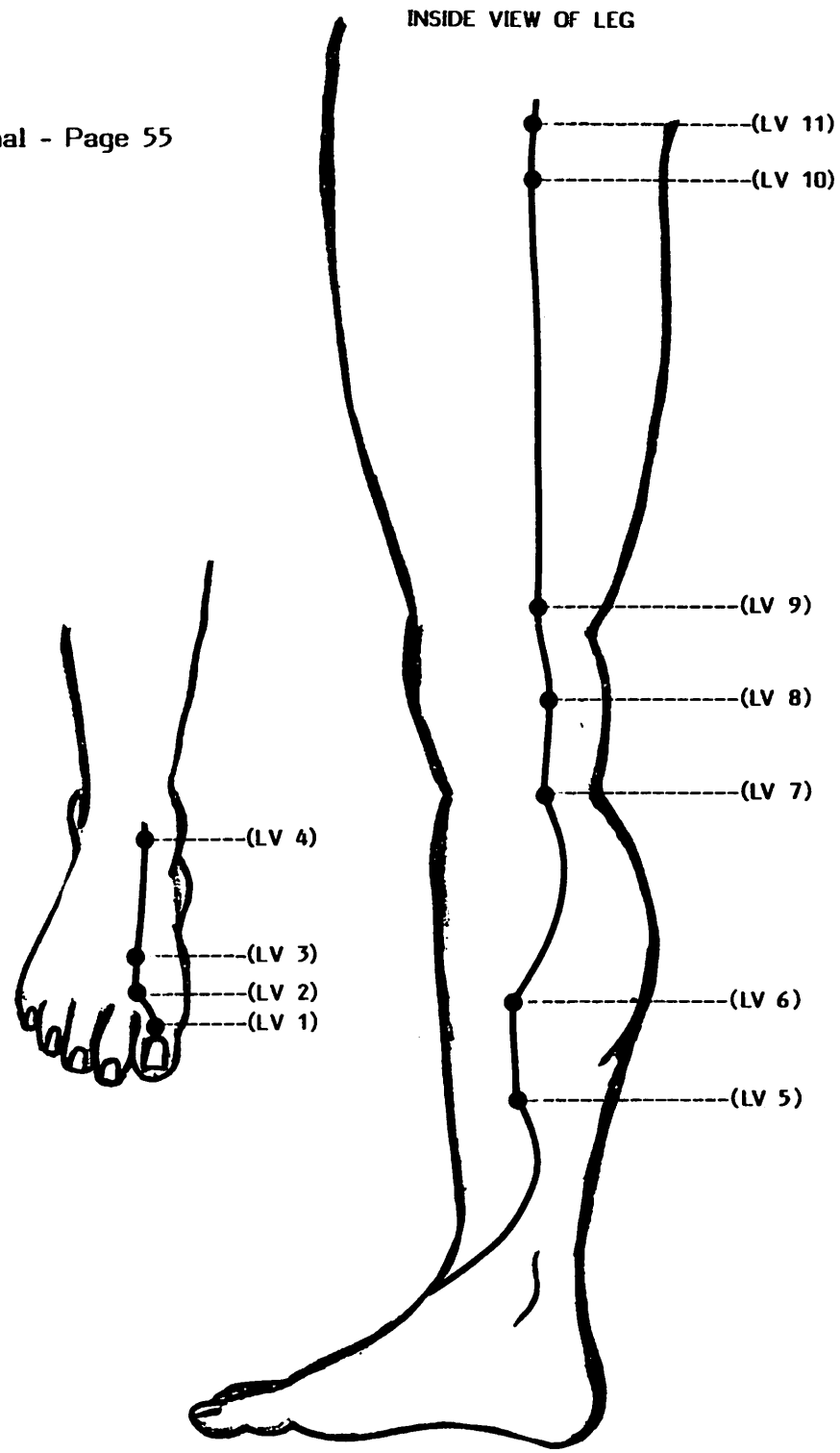


LIVER MERIDIAN - LV

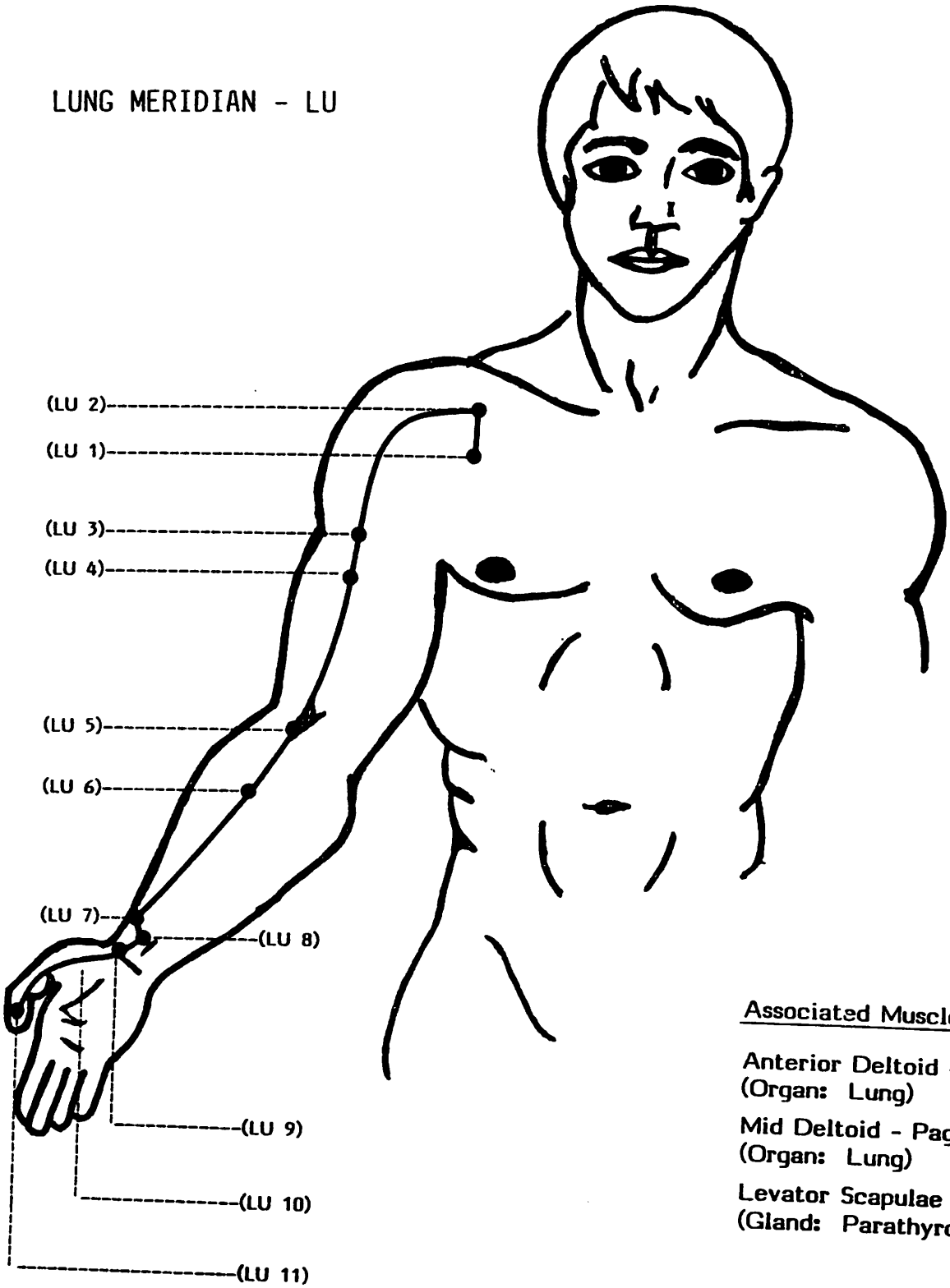
Associated Muscles

Pectoralis Major Sternal - Page 55
(Organ: Liver)

Rhomboids - Page 61
(Organ: Liver)



LUNG MERIDIAN - LU



Associated Muscles

Anterior Deltoid - Page 45
(Organ: Lung)

Mid Deltoid - Page 46
(Organ: Lung)

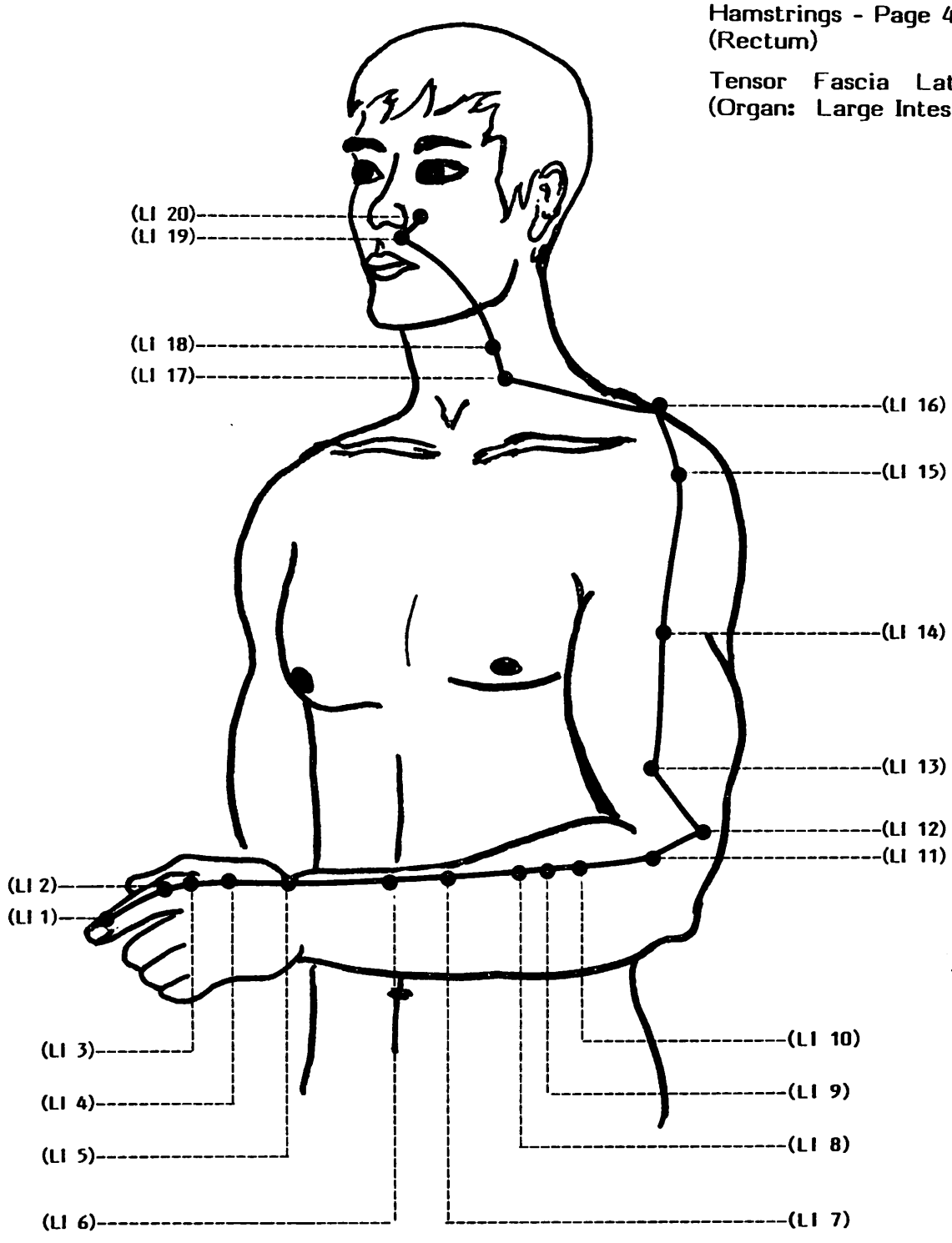
Levator Scapulae - Page 52
(Gland: Parathyroid)

LARGE INTESTINE MERIDIAN - LI

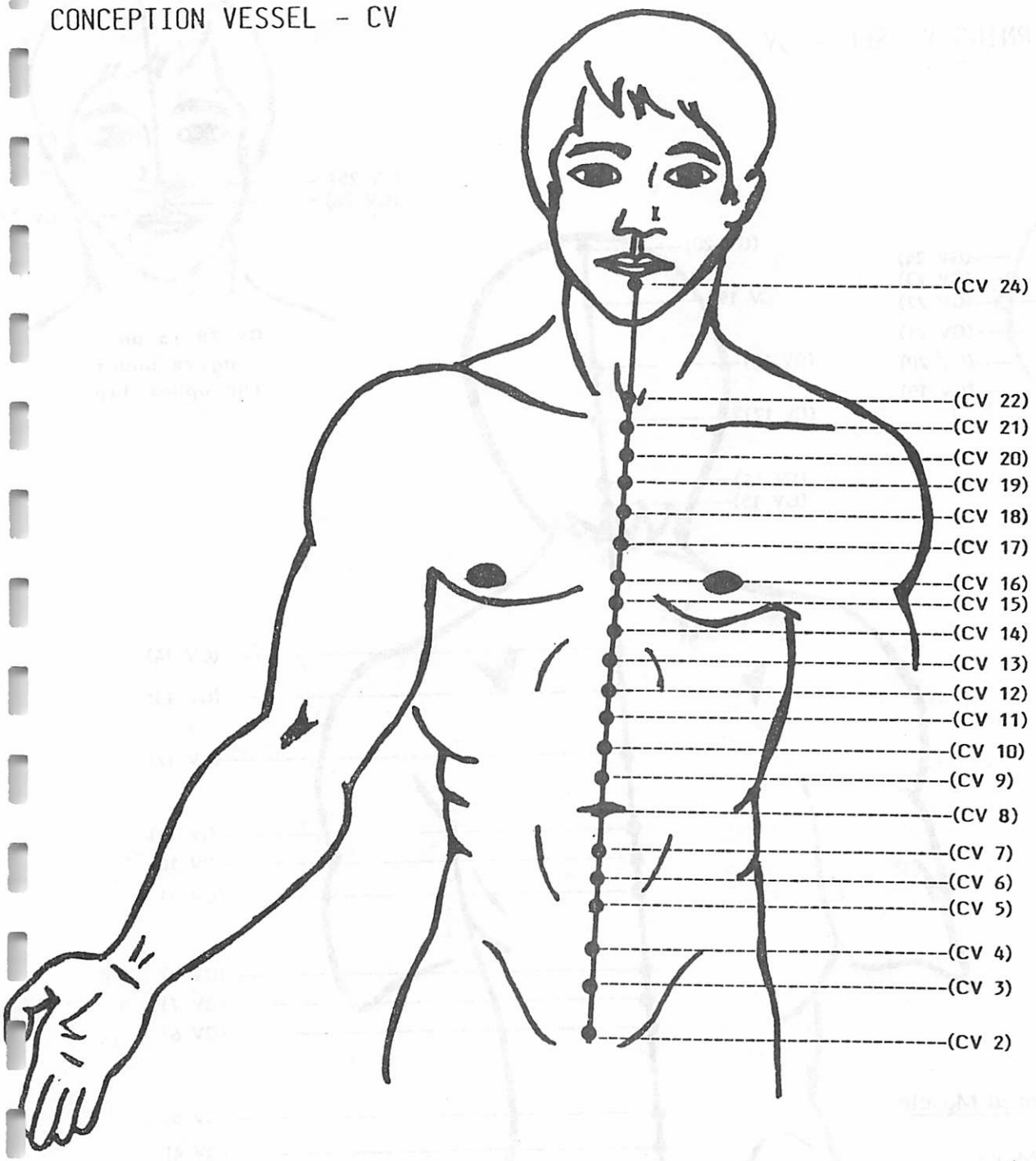
Associated Muscles

Hamstrings - Page 49
(Rectum)

Tensor Fascia Lata - Page 60
(Organ: Large Intestine)



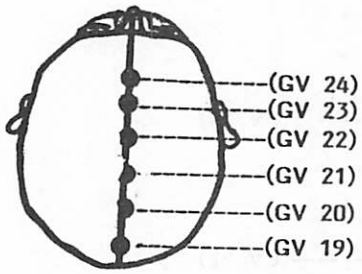
CONCEPTION VESSEL - CV

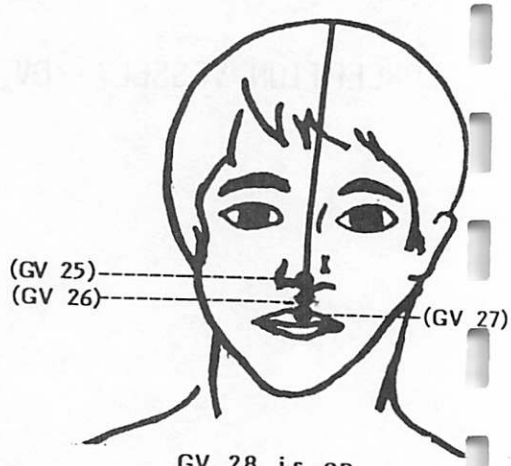


Associated Muscle

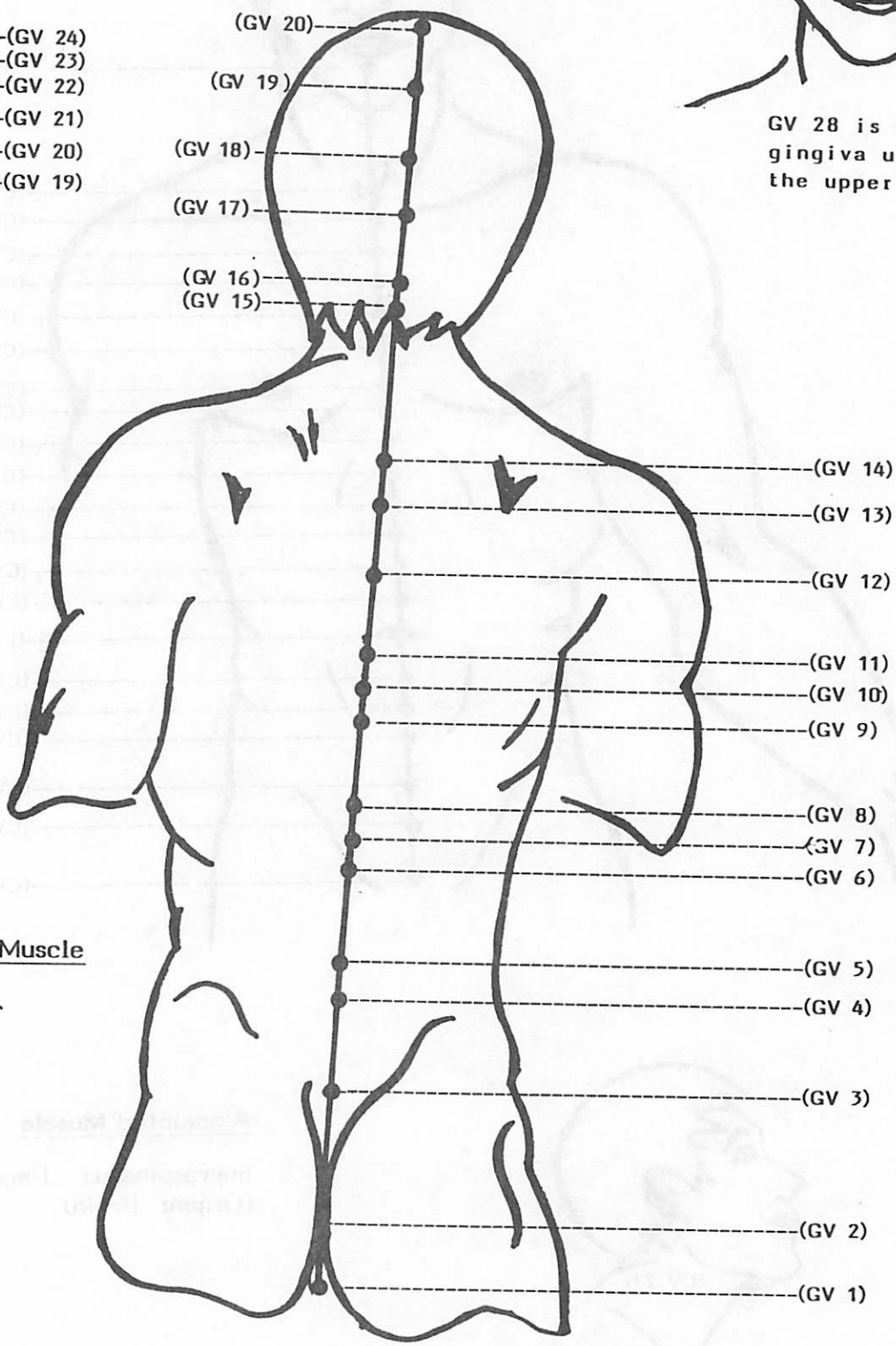
Supraspinatus - Page 65
(Organ: Brain)

GOVERNING VESSEL - GV





GV 28 is on gingiva under the upper lip



Associated Muscle

Teres Major
Page 67
(Spine)

Abdominal Muscles - Small Intestines

ORGAN: The small intestines average about 20 feet in length. It has a surface area about the size of a football field. The absorption of foods takes place mainly in the small intestines. The duodenal mucosa elaborates several hormones which play an important role in the activities of the pancreas, liver, gall bladder, and the stomach.

STRUCTURAL WEAKNESSES: Weak back, neck problems, shoulder problems, jammed sagittal suture (can cause abdominal muscles to weaken). These muscles need treatment especially during pregnancy due to the additional stress on the abdominal muscles.

INTERNAL WEAKNESSES: Respiratory, stomach pains, indigestion, gas

NUTRITION: Vitamin D, Lacto bacillus acidophilus and bulgaris, Natural glandular duodenum concentrates & extracts, Anti-gastrin powder (Standard Process), Vitamin E, Montmorillonite
Herbs: Comfrey-Pepsin (taken on empty stomach away from food)

MUSCLE ORIGIN: Attaches at surface of lower 8 ribs, inner surface of lower 6 ribs, the diaphragm, and back of hip

MUSCLE INSERTION: Upper edges of the pubic bone and hips and along the abdomen from the sternum to the pubic bone

SMALL INTESTINE MERIDIAN - YANG (Page 27)

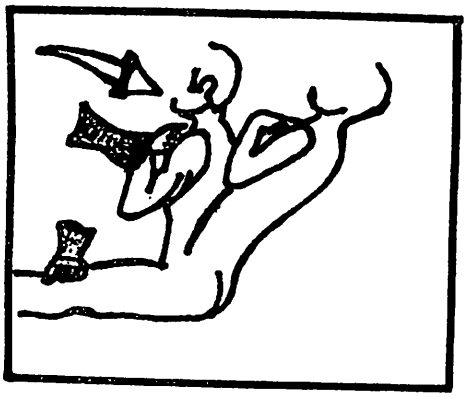
Energy Flow: Up the arms
Number of points on meridian: 19
Peak Hous: 1-3 PM

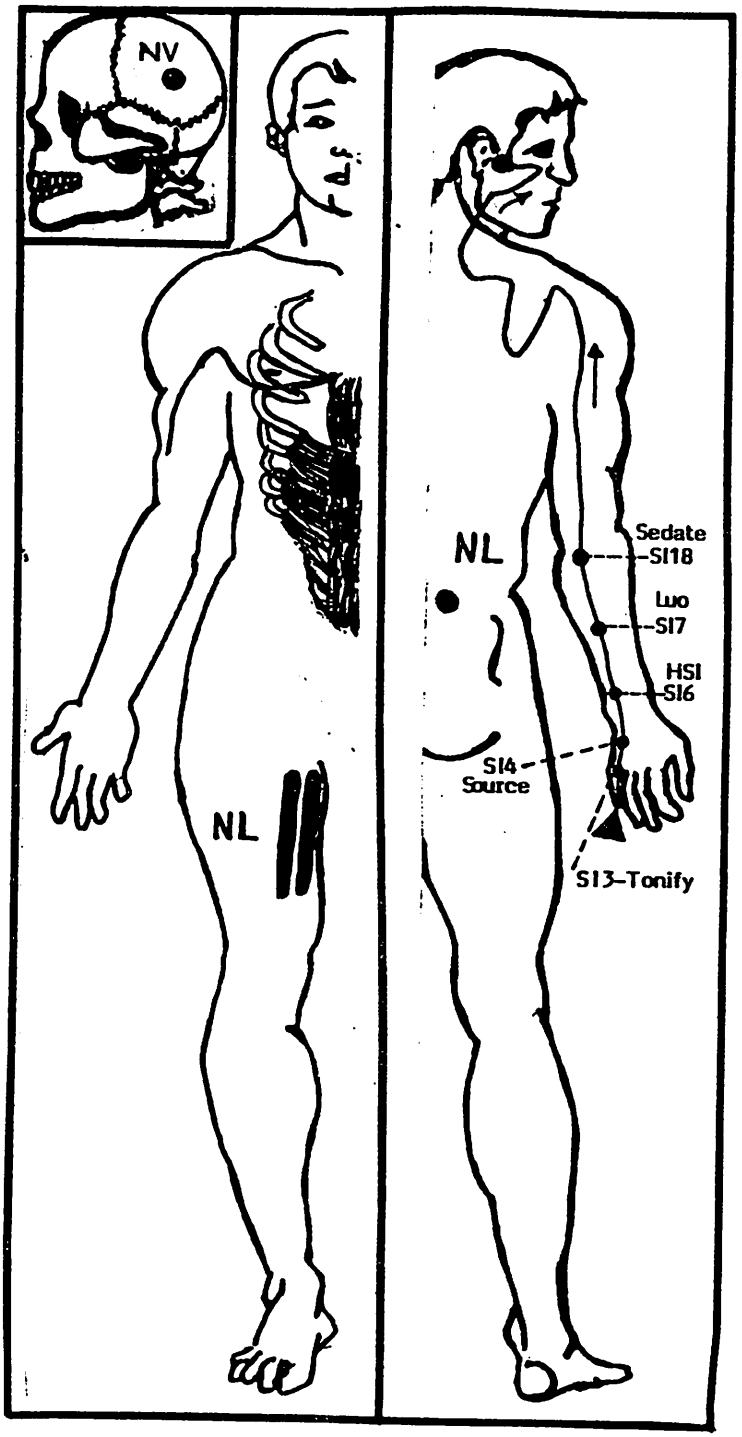
Neurolymphatics: (NL) Bilateral

Anterior: Upper third of inside thigh
Posterior: Protrusion of hip bones level with L-5

Neurovasculars: (NV) Directly above the ears on the ridge of the parietal bone, bilateral

Muscle Test: Sitting with spine at 60° to 75°, legs extended, arms crossed across chest, making a fist, stabilizing thighs
Motion: Pressure is directed against the upper chest in a backward motion





Alarm Point: CV 4
Associated Point: BL 27

Adductors

REPRODUCTIVE ORGANS & GLANDS:

Male: Testes are egg-shaped and located outside the body in a sac called the scrotum. Spermatozoa (mature sperm cells) and the hormone testosterone are produced here. Seminal vesicles are muscular tubes which produce a thick secretion that forms much of the volume of the ejaculated semen. The glucose and other substances in this secretion aid in nourishing the sperm cells. The Prostate produces secretions that maintain the motion of the sperm cells. The prostate also contracts to aid in ejaculation.

Female: Ovaries - two almond-shaped glands situated on either side of the uterus. The ovaries produce and mature the ova or egg (female reproductive cell) and then discharge them when they are fully formed into the two fallopian tubes which are attached to the uterus at it's upper angles. The fallopian tubes conduct the ova from the ovaries to the uterus. Fertilization, the union of the male and female reproductive cells, normally takes place in the fallopian tubes. The ovaries also produce hormones. The uterus is a hollow, pear-shaped, muscular organ situated in the pelvic cavity. The uterus is where the embryo develops and when fully developed, the contractions of the uterine wall expel the child. It also aids in hormonal production.

STRUCTURAL WEAKNESSES: Pelvic Tilt, bowed legs, elbow pain-tennis elbow, stiff shoulders

INTERNAL WEAKNESSES: Reproductive organ disorders, hormonal imbalances, menopausal & mammary problems

NUTRITION: Vitamin E, Selenium, Zinc, Vitamin A, Iodine, Natural glandular male or female endocrine extracts and concentrates, evening primrose oil

MUSCLE ORIGIN: Front surface of pubic bone

MUSCLE INSERTION: From the front of the thigh bone below the hip along the thigh to the inside of the knee and inside of the shin bone.

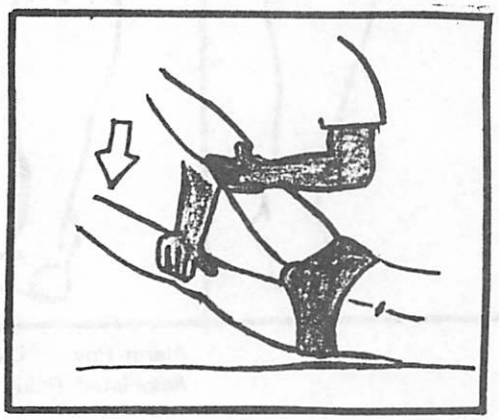
CIRCULATION SEX MERIDIAN - YIN (Page 32)

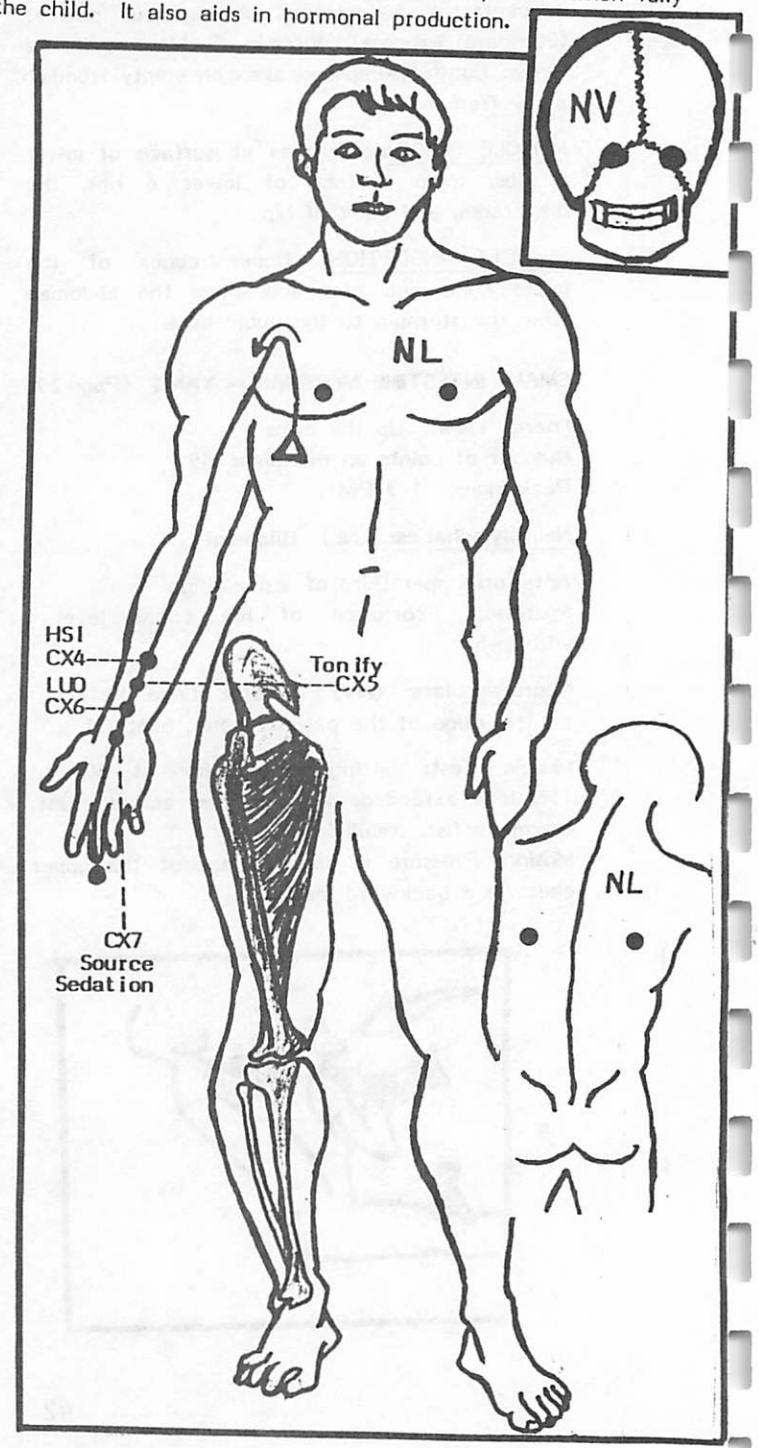
Energy Flow: Down the arms
Number of points on meridian: 9
Peak Hours: 7-9 PM

Neurolymphatics: (NL) **Bilateral**
Anterior: Behind nipple on chest
Posterior: Between 8th & 9th ribs just below the lowest part of the scapula

Neurovasculars: (NV) On lamboidal suture, 1" from center to each side

Muscle Test: Lying on side, raise and stabilize top leg enough to allow room to raise bottom leg.
Motion: Pressure is applied at the knee on bottom leg in a downward direction.





Alarm Point: CV 17
Associated Point: BL 14

Biceps - Brachii - Stomach

ORGAN: The stomach is a gourd shaped section of the alimentary tube. Both ends are guarded by valves which normally permit the passage of substances in only one direction. The stomach is a combination storage pouch and churn. It can hold 1/2 gallon of food and liquid. Gastric juices (hydrochloric acid & enzymes) help in protein digestion, calcium and iron digestion, and kill bacteria and thus destroys many potential disease producing agents. As one gets older the stomach produces less and less acid. Most people with stomach problems are producing too little and not too much acid. In these cases antacids give relief by the rebound effect; neutralizing the acid that is present thus making the situation worse. The body reacts to this even lower level of stomach acid by producing more acid.

STRUCTURAL WEAKNESSES: Shoulder problems

INTERNAL WEAKNESSES: Stomach disorders, indigestion, gas

NUTRITION: Betaine Hydrochloride, natural glandular stomach and/or duodenal concentrates and extracts, chlorophyll, B-complex, zinc

MUSCLE ORIGIN: Anterior outer edges of the scapula.

MUSCLE INSERTION: Upper anterior portion of the radius.

STOMACH MERIDIAN - YANG (Pages 22 & 23)

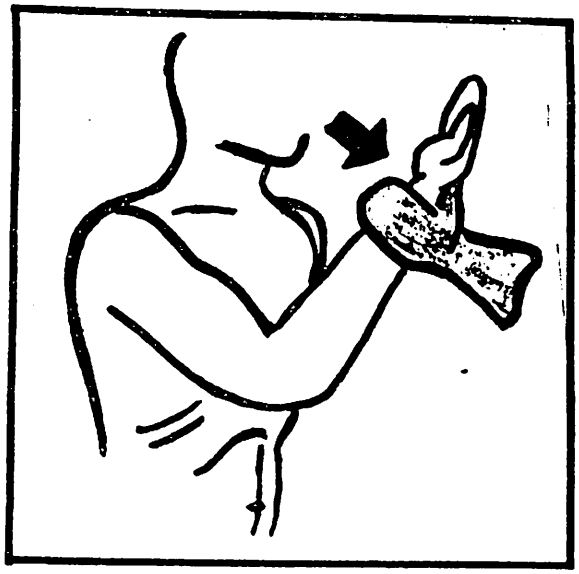
Energy Flow: Down the body & legs
Number of points on meridian: 45
Peak Hours: 7-9 AM

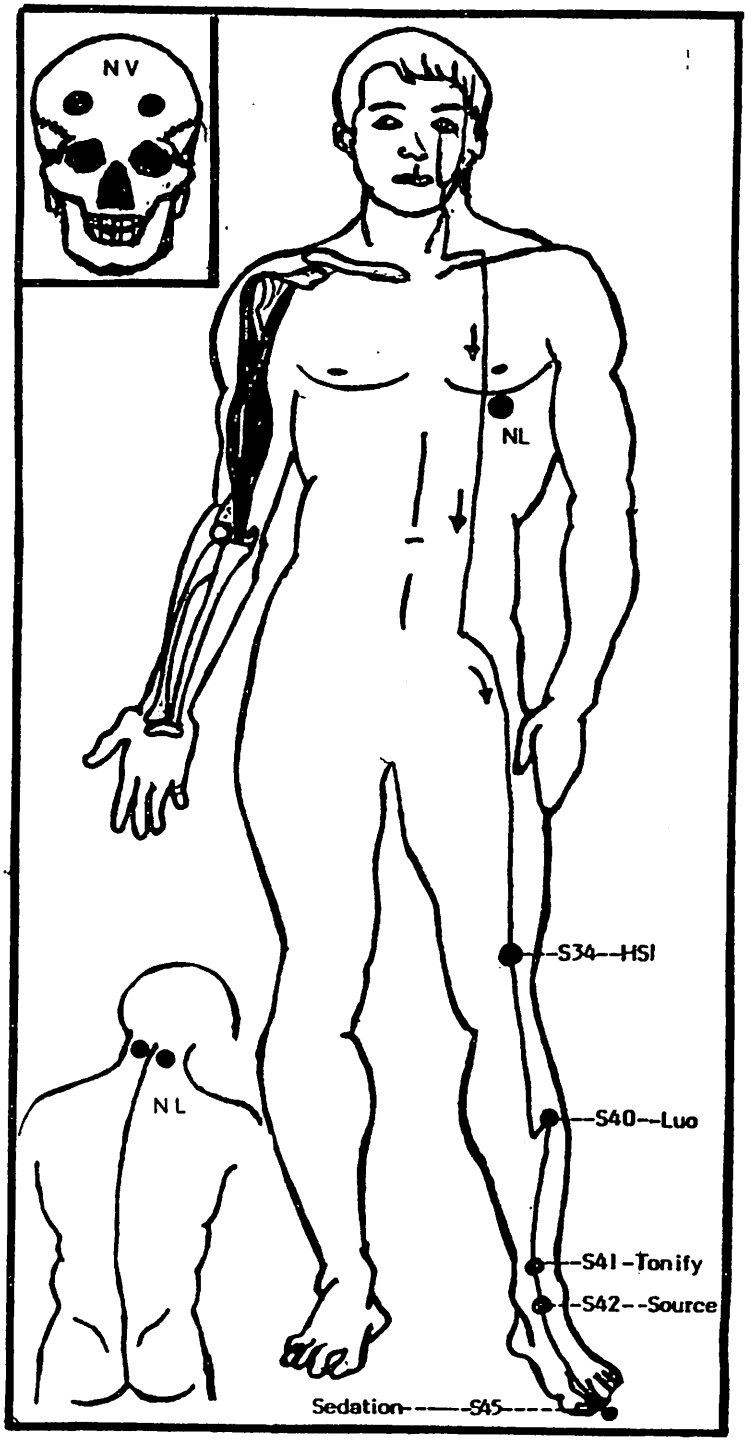
Neurolymphatics: (NL)

Anterior: Between 4th & 5th ribs on left 3" from the sternum.
Posterior: Second cervical vertebra

Neurovasculars: (NV) Frontal bone eminences

Muscle Test: Forearm brought to 75°, palm facing up, stabilizing elbow close to the body
Motion: Pressure against inside wrist to extend elbow.





Alarm Point: CV 12
Associated Point: BL 21

Anterior Deltoid – Lung

ORGAN: The lungs are the organs in which external respiration takes place; that is, where blood and air meet through the means of the very thin and delicate lung tissues. The purpose of respiration is to supply oxygen to the tissues and remove carbon dioxide. These gases are exchanged from the blood in the lungs. The adrenal glands affect the dilation of the lungs, thus many cases of asthma and bronchitis are directly related to weakened adrenals and should be treated as such.

STRUCTURAL WEAKNESSES: Shoulder problems, diaphragm problems

INTERNAL WEAKNESSES: Chest congestion, allergies, asthma, hiatel hernia

NUTRITION: Natural glandular lung extracts and concentrates, Vitamin A & C

MUSCLE ORIGIN: Attaches at outer 1/3 surface of the clavicle.

MUSCLE INSERTION: Upper anterior surface of the humerus.

LUNG MERIDIAN – YIN (Page 38)

Energy Flow: Down the arms
Number of points on meridian: 11
Peak Hours: 3-5 AM

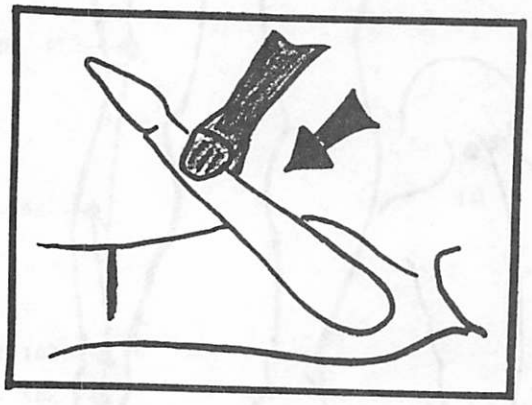
Neurolymphatics: (NL) Bilateral

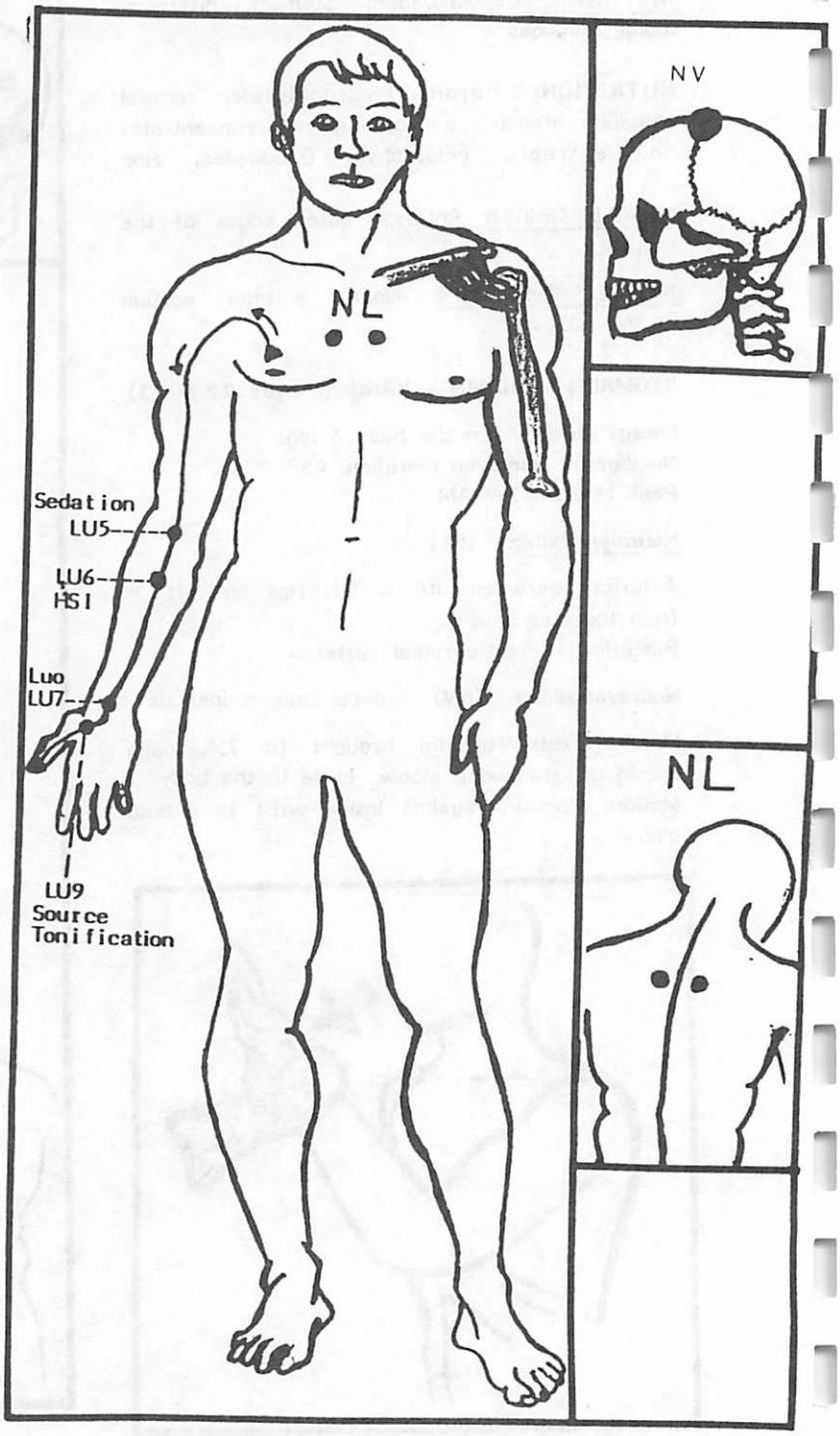
Anterior: Between 3rd & 4th rib near sternum
Posterior: Between T-3 & T-4

Neurovasculars: (NV)

Junction of coronal & sagittal sutures

Muscle Test: Supine position; arm raised at 45°, elbow straight.
Motion: Pressure against wrist to move arm in downward direction.





Alarm Point: LU 1

Mid Deltoid - Lung

ORGAN: The lungs are the organs in which external respiration takes place; that is, where blood and air meet through the means of the very thin and delicate lung tissues. The purpose of respiration is to supply oxygen to the tissues and remove carbon dioxide. These gases are exchanged from the blood in the lungs. The adrenal glands affect the dilation of the lungs, thus many cases of asthma and bronchitis are directly related to weakened adrenal glands and should be treated as such.

STRUCTURAL WEAKNESSES: Cramps in shoulders, inability to lift arm

INTERNAL WEAKNESSES: Flu or virus, bronchitis, pleurisy, pneumonia, congestion of chest, asthma

NUTRITION: Natural glandular Lung extracts and concentrates, Vitamin C & A

MUSCLE ORIGIN: One third of the frontal surface of the lateral clavicle all around to the ridge of the scapula

MUSCLE INSERTION: Attaches to outer surface of the humerus midway.

LUNG MERIDIAN - YIN (Page 38)

Energy Flow: From the chest down the arms
Number of points on meridian: 11
Peak Hours: 3-5 AM

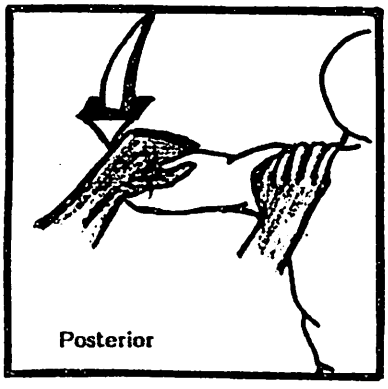
Neurolymphatics: (NL) Bilateral

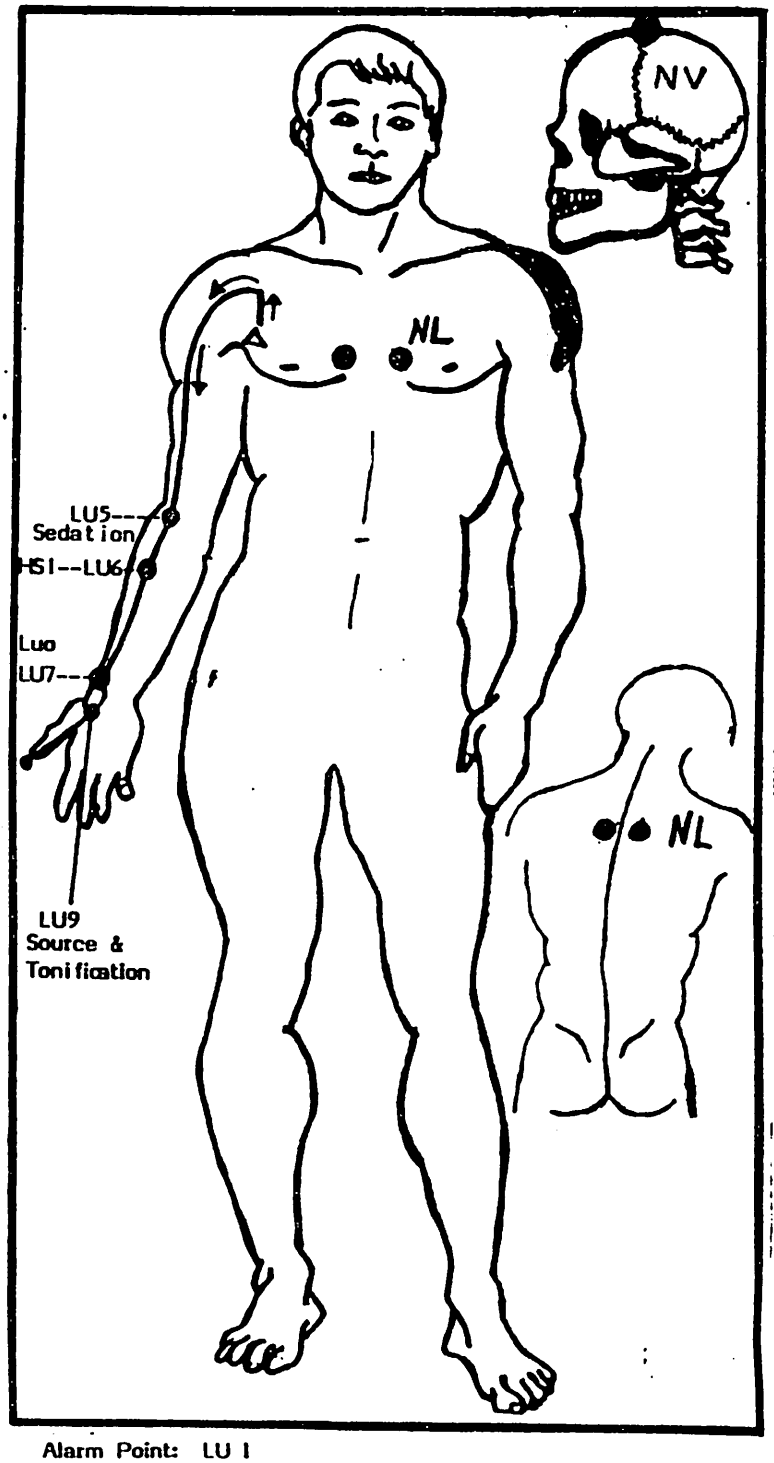
Anterior: Between 3rd & 4th ribs near sternum
Posterior: Between T3 & T4

Neurovasculars: (NV)

Junction of coronal and sagittal sutures

Muscle Test: Arm is held to side at 90° level with shoulder, elbow bent at 90°
Motion: Pressure is just above elbow in downward direction. Stabilization at opposite shoulder may be necessary.





Alarm Point: LU 1
Associated Point: BL 13

Gluteus Maximus

REPRODUCTIVE ORGANS & GLANDS:

Male: Testes are egg-shaped and located outside the body in a sac called the scrotum. Spermatozoa (mature sperm cells) and the hormone testosterone are produced here. Seminal vesicles are muscular tubes which produce a thick secretion that forms much of the volume of the ejaculated semen. The glucose and other substances in this secretion aid in nourishing the sperm cells. The Prostate produces secretions that maintain the motion of the sperm cells. The prostate also contracts to aid in ejaculation.

Female: Ovaries - two almond-shaped glands situated on either side of the uterus. The ovaries produce and mature the ova or egg (female reproductive cell) and then discharge them when they are fully formed into the two fallopian tubes which are attached to the uterus at it's upper angles. The fallopian tubes conduct the ova from the ovaries to the uterus. Fertilization, the union of the male and female reproductive cells, normally takes place in the fallopian tubes. The ovaries also produce hormones. The uterus is a hollow, pear-shaped, muscular organ situated in the pelvic cavity. The uterus is where the embryo develops and when fully developed, the contractions of the uterine wall expel the child. It also aids in hormonal production.

STRUCTURAL WEAKNESSES: Low back conditions, pelvic tilts or rotations, difficulty walking, difficulty in rising from seated position

INTERNAL WEAKNESSES: Menstrual disorders, prostate conditions, impotency, ovary problems, menopause symptoms

NUTRITION: Vitamin E, Selenium, Zinc, Vitamin A, Iodine, Natural glandular male or female endocrine extracts & concentrates, evening primrose oil

MUSCLE ORIGIN: Attaches to posterior surface of ilium, the tendon of the sacrospinalis, & surface of the sacrum & coccyx.

MUSCLE INSERTION: Upper posterior thigh bone

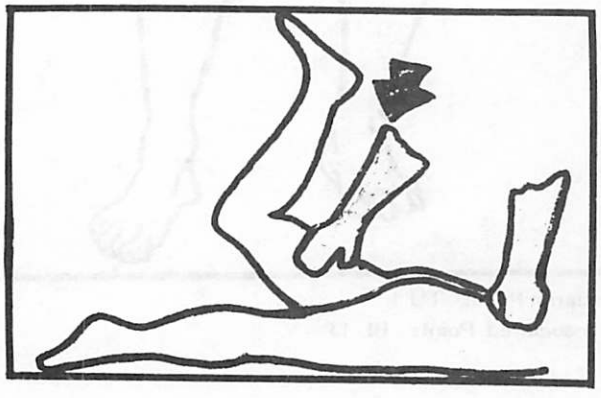
CIRCULATION SEX MERIDIAN - YIN **(Page 32)**

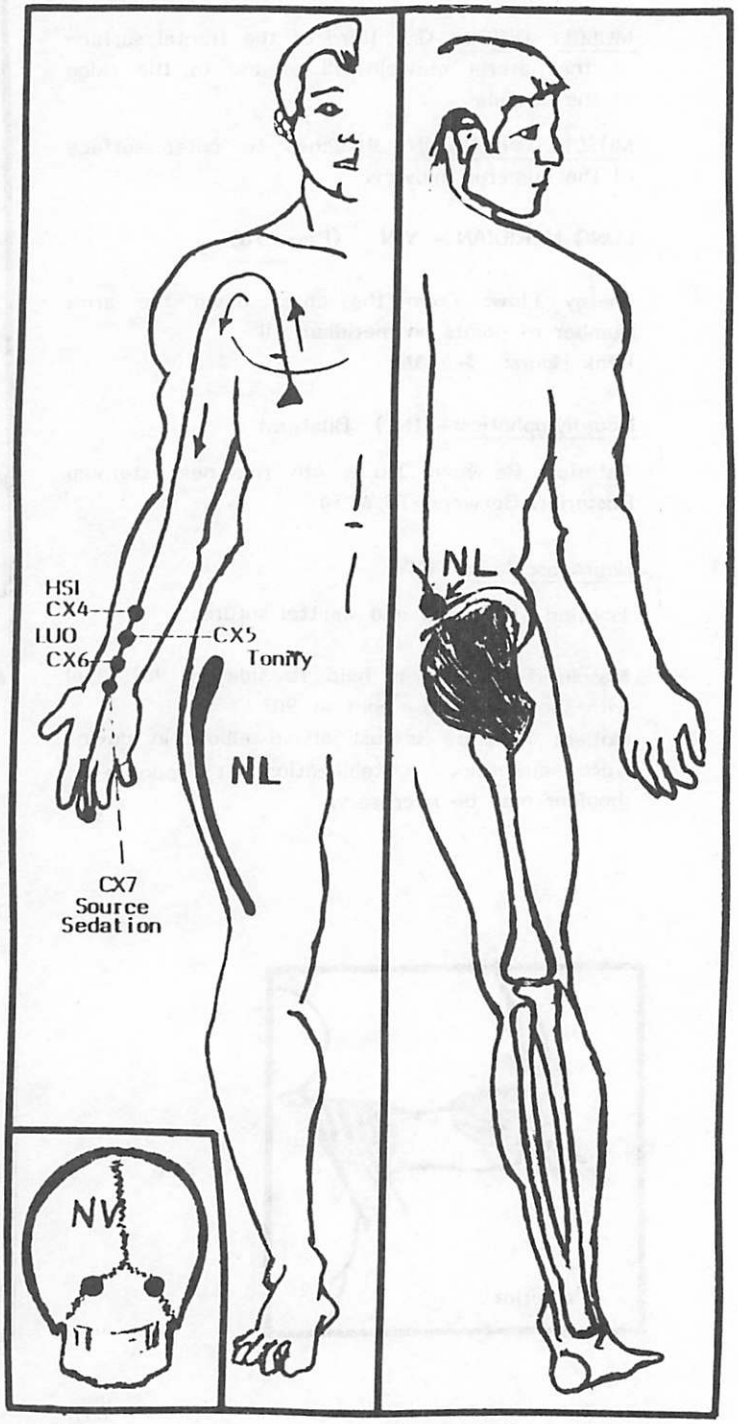
Energy Flow: Down the arms
Number of points on meridian: 9
Peak Hours: 7-9 PM

Neurolymphatics: (NL) Bilateral
Anterior: From the top of thigh to just above the knee, along the outer anterior surface of the thigh
Posterior: protrusion of hip level with L-5

Neurovasculars: (NV) On lamboidal suture 1" from center on each side

Muscle Test: Prone position, bend knee at 90° or more, leg is lifted to maximum point, stabilizing the pelvis.
Motion: Pressure is against the lower third of thigh in downward direction.





Alarm Point: CV 17

Gluteus Medius

REPRODUCTIVE ORGANS & GLANDS:

Male: Testes are egg-shaped and located outside the body in a sac called the scrotum. Spermatozoa (mature sperm cells) and the hormone testosterone are produced here. Seminal vesicles are muscular tubes which produce a thick secretion that form much of the volume of the ejaculated semen. The glucose and other substances in this secretion aid in nourishing the sperm cells. The Prostate produces secretions that maintain the motion of the sperm cells. The prostate also contracts to aid in ejaculation.

Female: Ovaries - two almond-shaped glands situated on either side of the uterus. The ovaries produce and mature the ova or egg (female reproductive cell) and then discharge them when they are fully formed into the two fallopian tubes which are attached to the uterus at it's upper angles. The fallopian tubes conduct the ova from the ovaries to the uterus. Fertilization, the union of the male and female reproductive cells, normally takes place in the fallopian tubes. The ovaries also produce hormones. The uterus is a hollow, pear-shaped, muscular organ situated in the pelvic cavity. The uterus is where the embryo develops and when fully developed, the contractions of the uterine wall expel the child. It also aids in hormonal production.

STRUCTURAL WEAKNESSES: High hip, high shoulder bowed legs, peculiar limp

INTERNAL WEAKNESSES: Menstrual disorders, prostate problems, impotency, breast soreness, infertility, menopausel problems.

NUTRITION: Vitamin E, Selenium, Zinc, Emulsified Vitamin A, Iodine, Natural Glandular male or female endocrine extracts & concentrates, evening primrose oil.

MUSCLE ORIGIN: Attaches to the outer surface of the hip bones

MUSCLE INSERTION: Lateral surface of the thigh bones

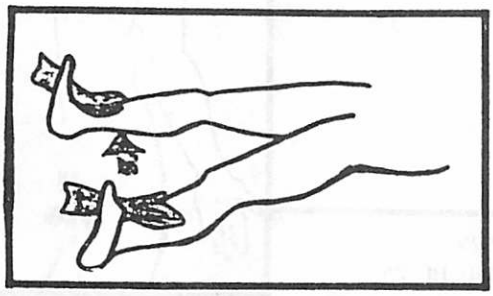
CIRCULATION SEX MERIDIAN - YIN (Page 32)

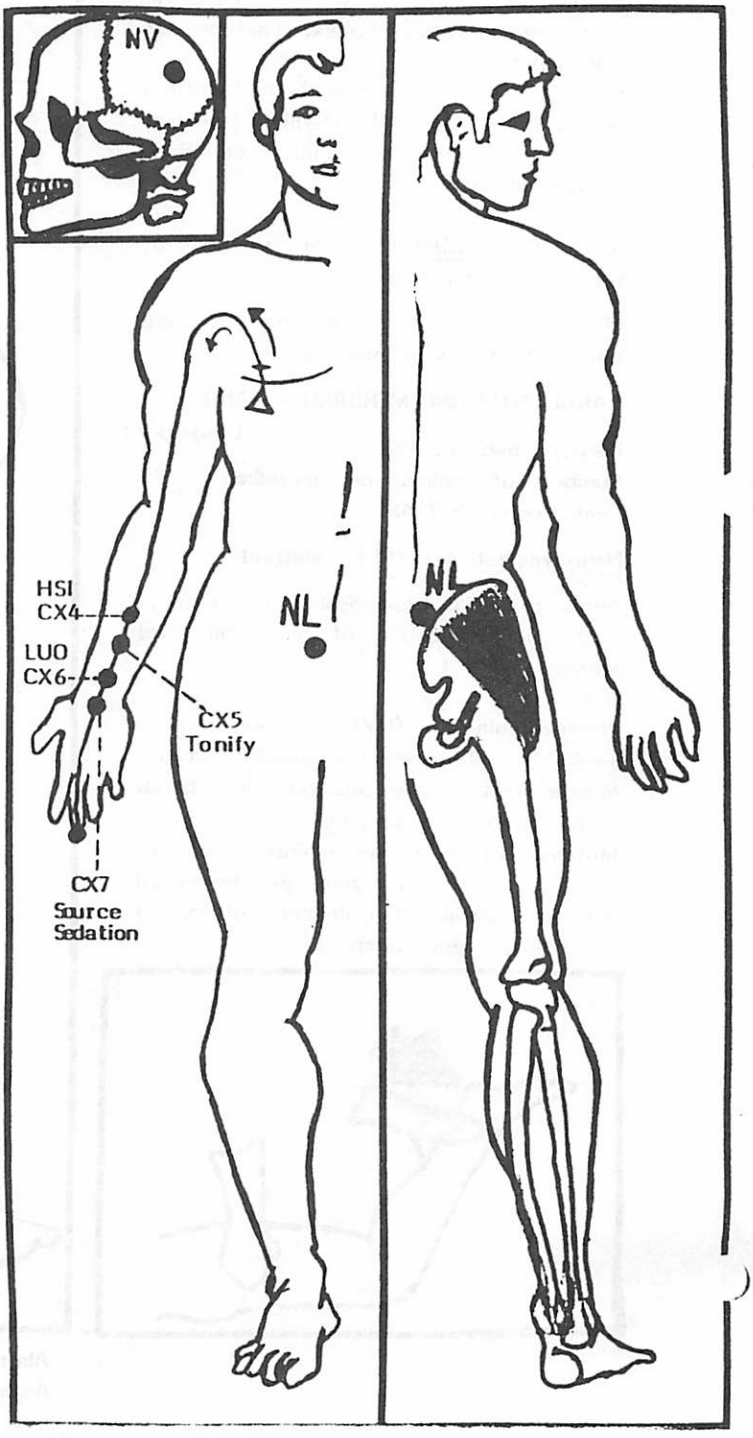
Energy Flow: Down the arms
Number of points on meridian: 9
Peak Hours: 7-9 PM

Neurolymphatics: **(NL) Bilateral**
Anterior: Upper edge of pubic bone
Posterior: The protrusion of the hip bones level with L5.

Neurovasculars: **(NV)** The posterior ridge of the parietal bone

Muscle Test: Supine position; while stabilizing one leg, the other leg is brought laterally away from the body.
Motion: Pressure is against the lateral leg just above the ankle bringing in toward other leg.





Hamstrings - Rectum

ORGAN: The five feet of the large intestine is divided into four parts; the cecum (where the appendix attaches), the colon, the rectum, and the anal canal. The colon is divided into three parts: (1) Ascending colon on the right where the food is still liquid, (2) Transverse colon - horizontal, across the abdomen, (3) Descending colon - on left side of abdomen. The large intestine does not produce digestive enzymes, but it does absorb water, vitamins and minerals which then begin to solidify the feces. The absorbed material travels to the liver through the portal vein.

STRUCTURAL WEAKNESSES: Low back problems, weakness of legs, knee problems, bowed legs, knocked knees

INTERNAL WEAKNESSES: Hemorrhoids, restlessness, fatigue, toxic headaches (behind the eyes), constipation, colitis

NUTRITION: Vitamin E, Wheat Germ, Betaine Hydrochloride and/or calcium if cramping of muscle, Chlorophyll, Lactic acid yeast, zymex, Lactobacillus acidophilus
Herbs & Foods: Cascara sagrada, Comfrey, Senna, Rhubarb Root, Psyllium powder, Celery powder, Prunes, Flax seed, Bran, Agar, Apple pectin

MUSCLE ORIGIN: Lowest surface of the posterior hip bone

MUSCLE INSERTION: Attaches to the top of the bones in lower leg

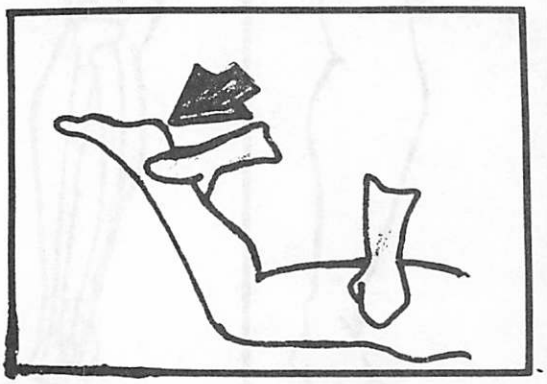
LARGE INTESTINE MERIDIAN - YANG (Page 39)

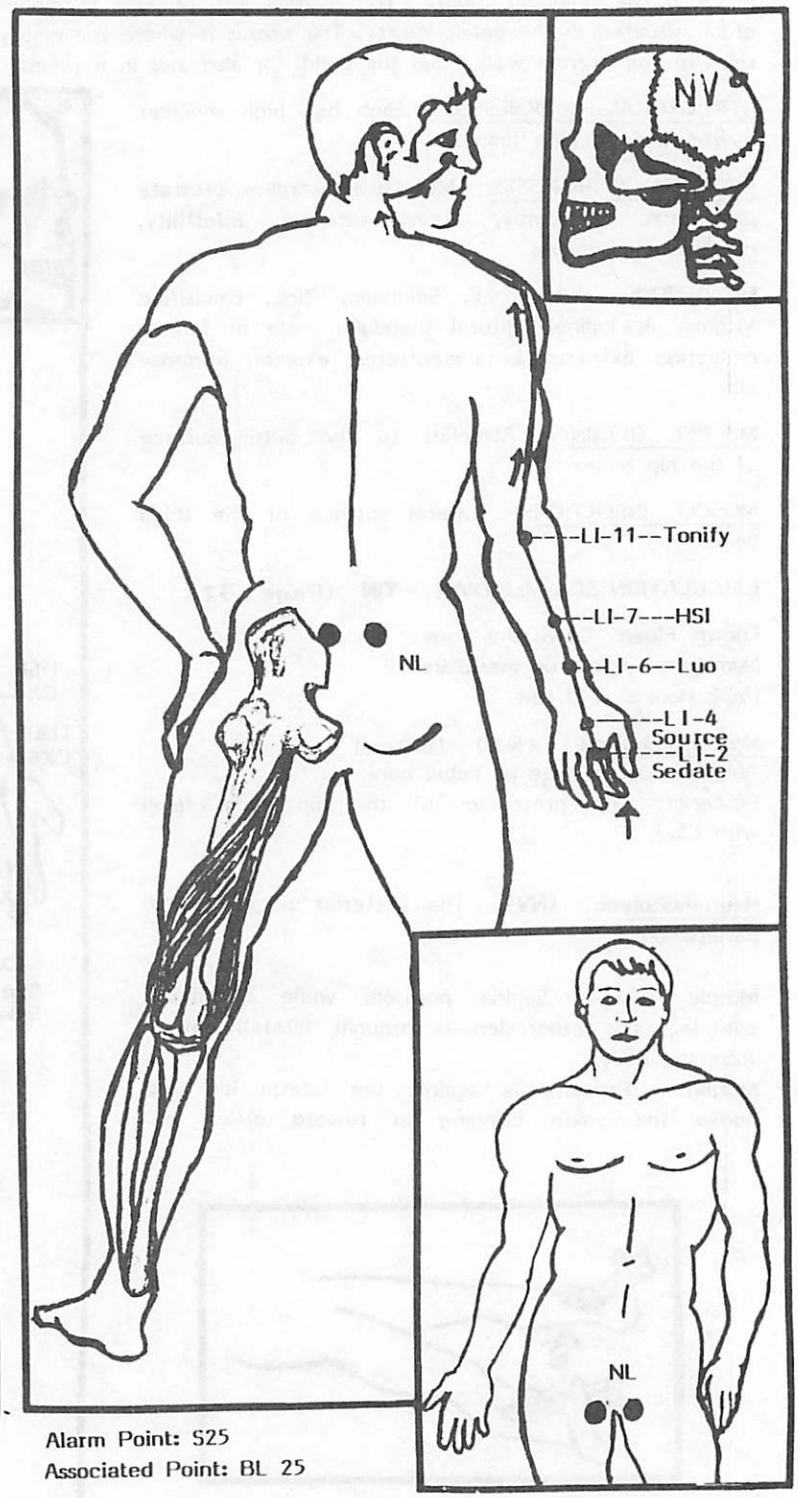
Energy Flow: Up the arms
Number of points on meridian: 20
Peak Hours: 5-7 AM

Neurolymphatics: **(NL) Bilateral**

Anterior: Inside uppermost part of thigh
Posterior: Protrustion of hip bone level with L-5

Neurovasculars: **(NV)** 1" above the lamboidal suture on the sagittal suture
Muscle Test: Prone position, knee bends to 60°, stabilizing the thigh
Motion: Pressure is against back of ankle to extend knee in downward motion. Stabilization in belly of muscle will help prevent cramping.





Alarm Point: S25
Associated Point: BL 25

Infraspinatus - Thymus

ORGAN: The thymus is located in the upper chest area adjacent to the breastbone above the heart. The thymus is the master gland of the immune system. There is a relationship between the thymus, the gonads, the adrenals and the thyroid glands. The thymus should be considered in any chronic or recurrent infections.

STUCTURAL WEAKNESSES: Elbow and wrist problems, shoul. er difficulties

INTERNAL WEAKNESSES: Infections

NUTRITION: Natural glandular thymus extracts and concentrates, Vitamin A & C

MUSCLE ORIGIN: Outer edge of scapula nearest the spine

MUSCLE INSERTION: Capsule of the shoulder joint

TRIPLE HEATER MERIDIAN - YANG (Page 33)

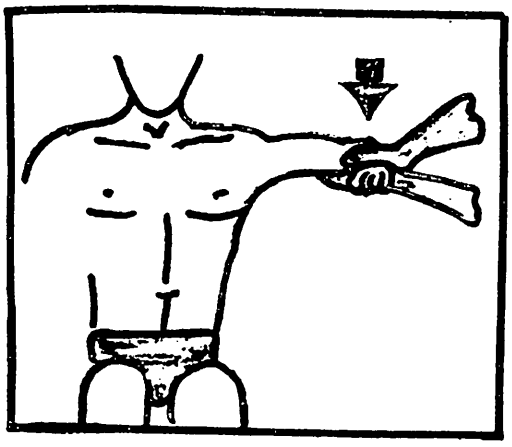
Energy Flow: Up the arms
Number of points on meridian: 23
Peak Hours: 9-11 PM

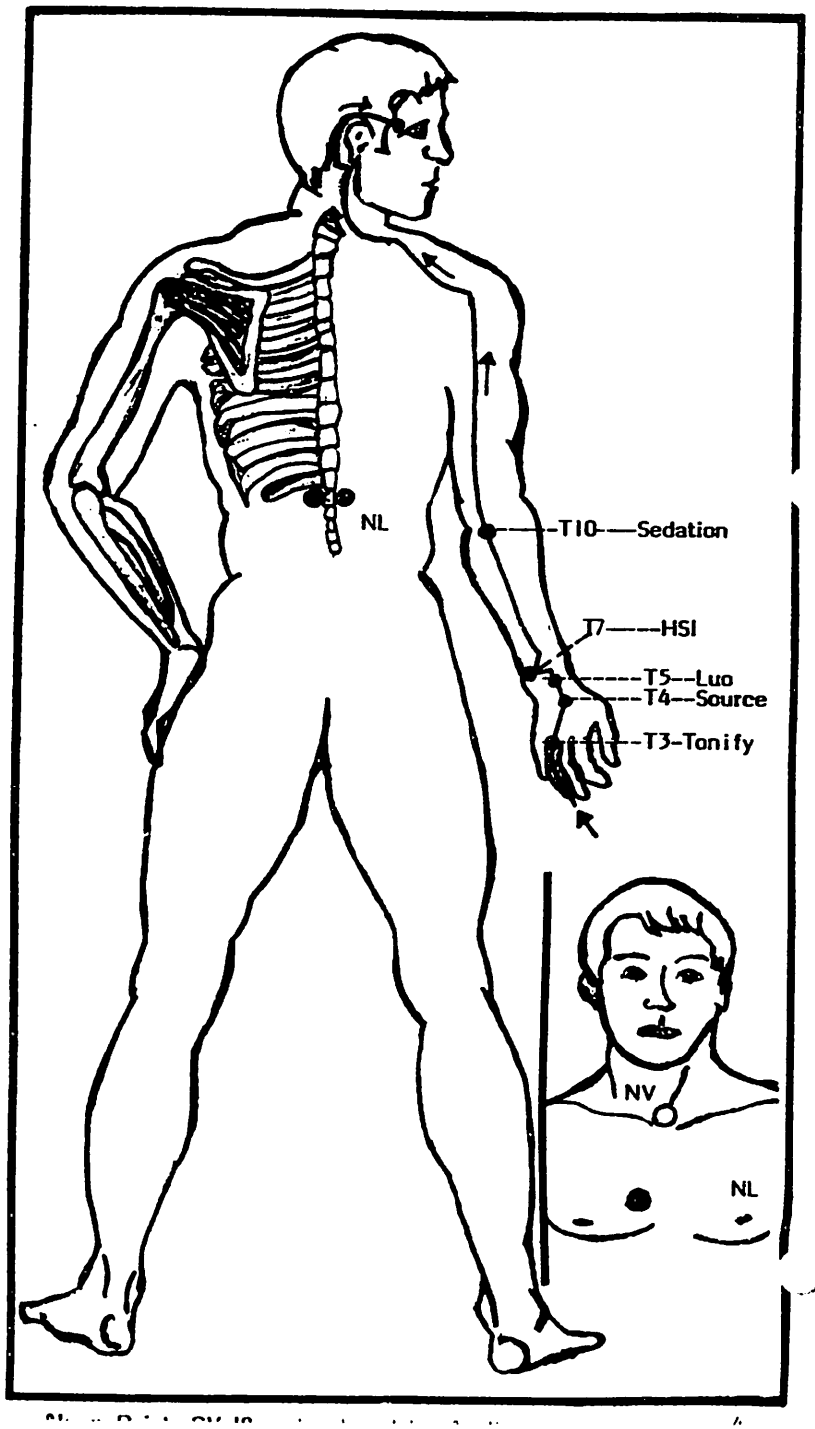
Neurolymphatics: (NL)

Anterior: At 5th rib on right near sternum
Posterior: At T-12 next to spine

Neurovasculars: (NV) Junction of 1st rib, clavicle and sternum

Muscle Test: Arm is raised laterally to 90° and elbow bent at 90°. Stabilization is just above the elbow.
Motion: Pressure is against the wrist to bring forearm down.





Latissimus Dorsi - Pancreas

ORGAN: The Pancreas is located below the liver and the stomach. It consists of two main parts, the head and the tail. The head secretes pancreatic juice which contain the following digestive enzymes: (1) Lipase for fat digestion, (2) Amylopsin - for starch digestion, (3) Trypsin - for protein digestion. The tail of the pancreas contains the Islets of Langerhans. The Islet cells secrete insulin and glycogen, hormones concerned with regulating blood sugar metabolism.

STRUCTURAL WEAKNESSES: Shoulder problems, low back conditions

INTERNAL WEAKNESSES: Diabetes, Hypoglycemia (Hyperinsulinism), allergies, digestive disturbances

NUTRITION: Natural Glandular Pancreas extracts and concentrates, Vitamin A, F, Betaine, Chromium, Pancreatic enzymes, B-Complex, Zinc, Glucose Tolerance Factor (GTF).
Herbs & Foods: Blueberry Leaves, Saw Palmetto Berries, Barberry Bark, Licorice Root, Molasses

MUSCLE ORIGIN: Attaches to the lower 6 thoracic vertebrae, all lumbar vertebrae, posterior crest of ilium, lower 3 or 4 ribs, & the tip of the scapula.

MUSCLE INSERTION: Twists and inserts into the groove of the humerus.

PANCREAS/SPLEEN MERIDIAN - YIN (Pages 24 & 25)

Energy Flow: Up the legs & body
Number of points on meridian: 21
Peak Hours: 9-11 AM

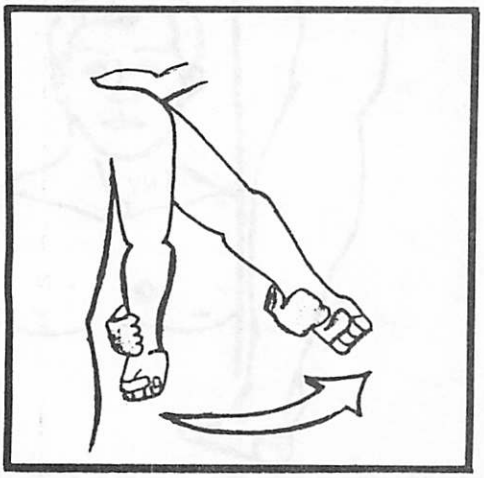
Neurolymphatics: (NL)

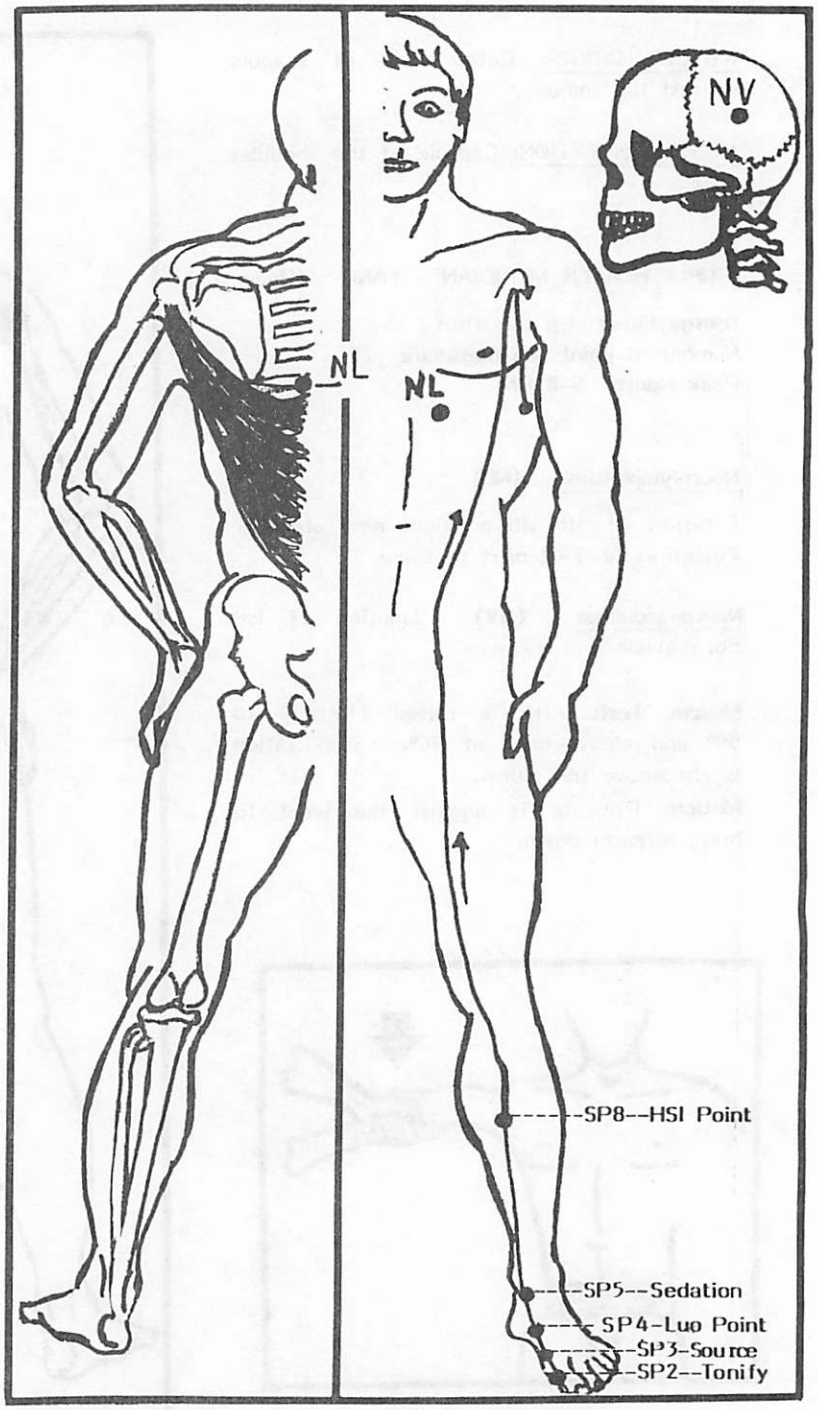
Anterior: Between 7th & 8th ribs on left where cartilage joins the ribs.
Posterior: Between T7 & T8 on left

Neurovasculars: (NV)

The posterior ridge of the parietal bone

Muscle Test: While seated, standing, or supine position, form fist with thumb in toward body, holding extended arm against body, stabilizing the shoulder.
Motion: Pressure against wrist to pull arm away from body making sure elbow doesn't flex.





Alarm Point: LV13
Associated Point: B20

Levator Scapulae - Parathyroid

GLAND: The parathyroid glands, usually four in number, lie within the capsule of the thyroid gland. These glands secrete the parathyroid hormone which is concerned primarily with metabolism of calcium and phosphorus. Under or over secretion results in changes in calcium-phosphorus ratio in the blood, with resulting disorders in the skeletal system and altered irritability of nervous and muscular tissues.

STRUCTURAL WEAKNESSES: Persistent neck and shoulder pains

INTERNAL WEAKNESSES: Nervousness, muscle spasms, irritability, difficulty going to sleep, poor tooth quality, thinning of bones, herpes virus

NUTRITION: Natural glandular parathyroid concentrates and extracts, calcium, magnesium

MUSCLE ORIGIN: Attaches to upper four cervical vertebrae, C-1 through C-4

MUSCLE INSERTION: Uppermost corner of scapula nearest spine

LUNG MERIDIAN - YIN **(Page 38)**

Energy Flow: From chest down the arms
Number of points on meridian: 11
Peak Hours: 3-5 AM

Neurolymphatics: **(NL) Bilateral**

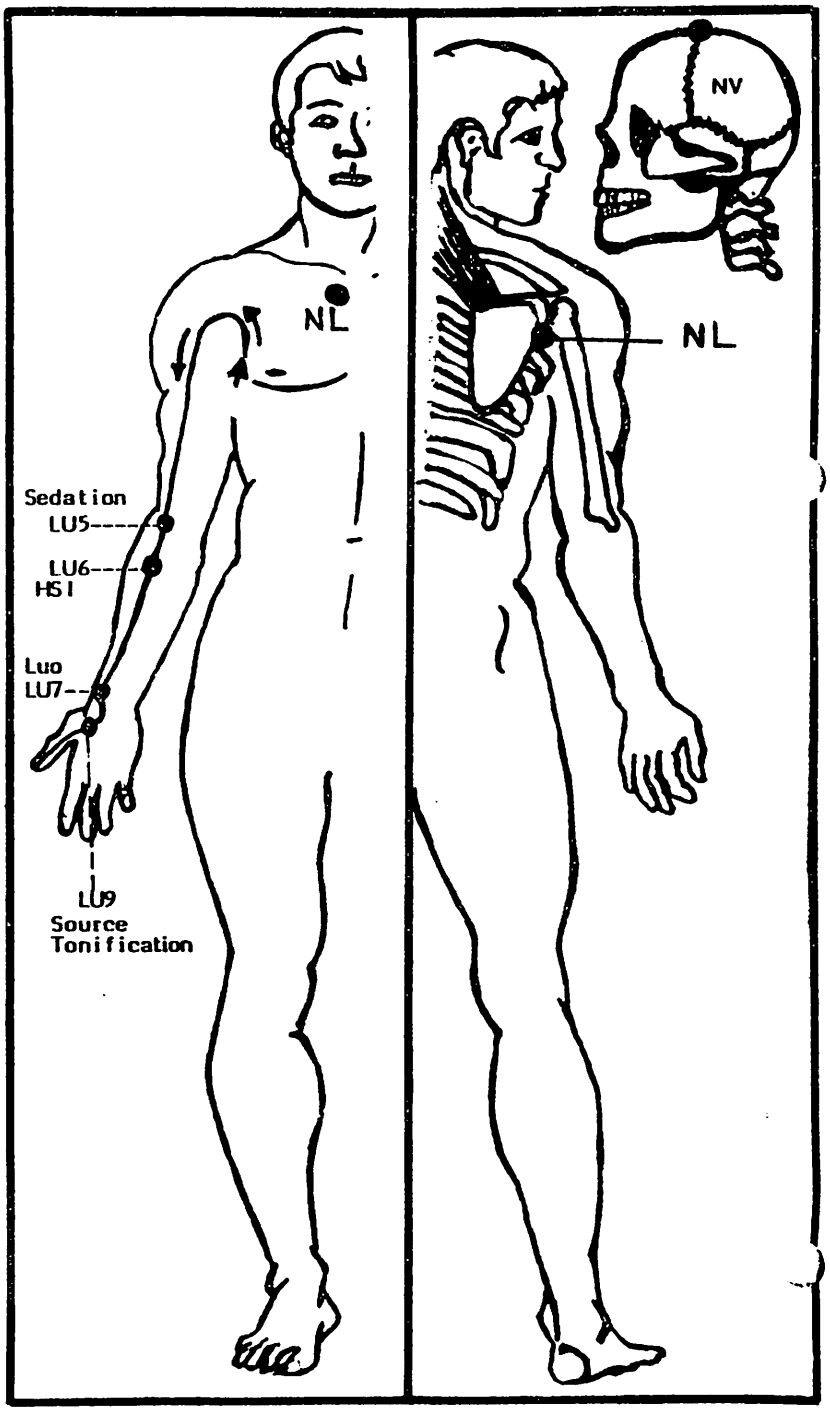
Anterior: Between 1st & 2nd ribs near sternum

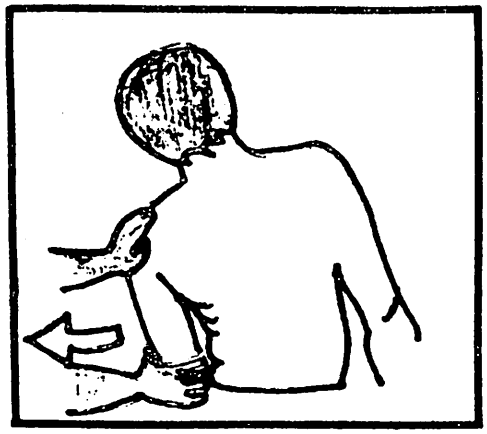
Posterior: The belly of the teres minor muscle

Neurovasculars: **(NV)**

Junction of coronal and sagittal sutures

Muscle Test: Seated position, elbow bent, shoulder dropped, bringing elbow to the hip; stabilize shoulder
Motion: Pressure is against inside of elbow to pull out to side





Neck Flexors - Sinuses

The air sinuses are cavities in certain parts of the skull bones. The sinuses are lined with a mucous membrane which is continuous with that of the nasal cavity. The sinuses lighten the skull, act as resonating chambers in voice production, and aid in moistening the nasal cavities. A large percentage of sinus problems can be caused by a toxic colon.

STRUCTURAL WEAKNESSES: Neck problems

INTERNAL WEAKNESSES: Sinusitis, headaches, vertigo, tinnitis, asthma, allergies, vision problems

NUTRITION: Niacin, niacinamide, iodine, Vitamin C & B , (Detoxify Colon)

Posterior:

MUSCLE ORIGIN: From the 7th cervical vertebra through the 6th thoracic vertebra

MUSCLE INSERTION: The temporal bone and upper 2nd & 3rd cervical vertebra

Anterior:

MUSCLE ORIGIN: Attaches from 2nd through 6th cervical vertebra

MUSCLE INSERTION: The inner surface of first rib and outer surface of 2nd rib

STOMACH MERIDIAN - YANG (Pages 22 & 23)

Energy Flow: Down the body & legs
Number of points on meridian: 45
Peak Hours: 7-9 AM

Neurolymphatics: (NL) Bilateral

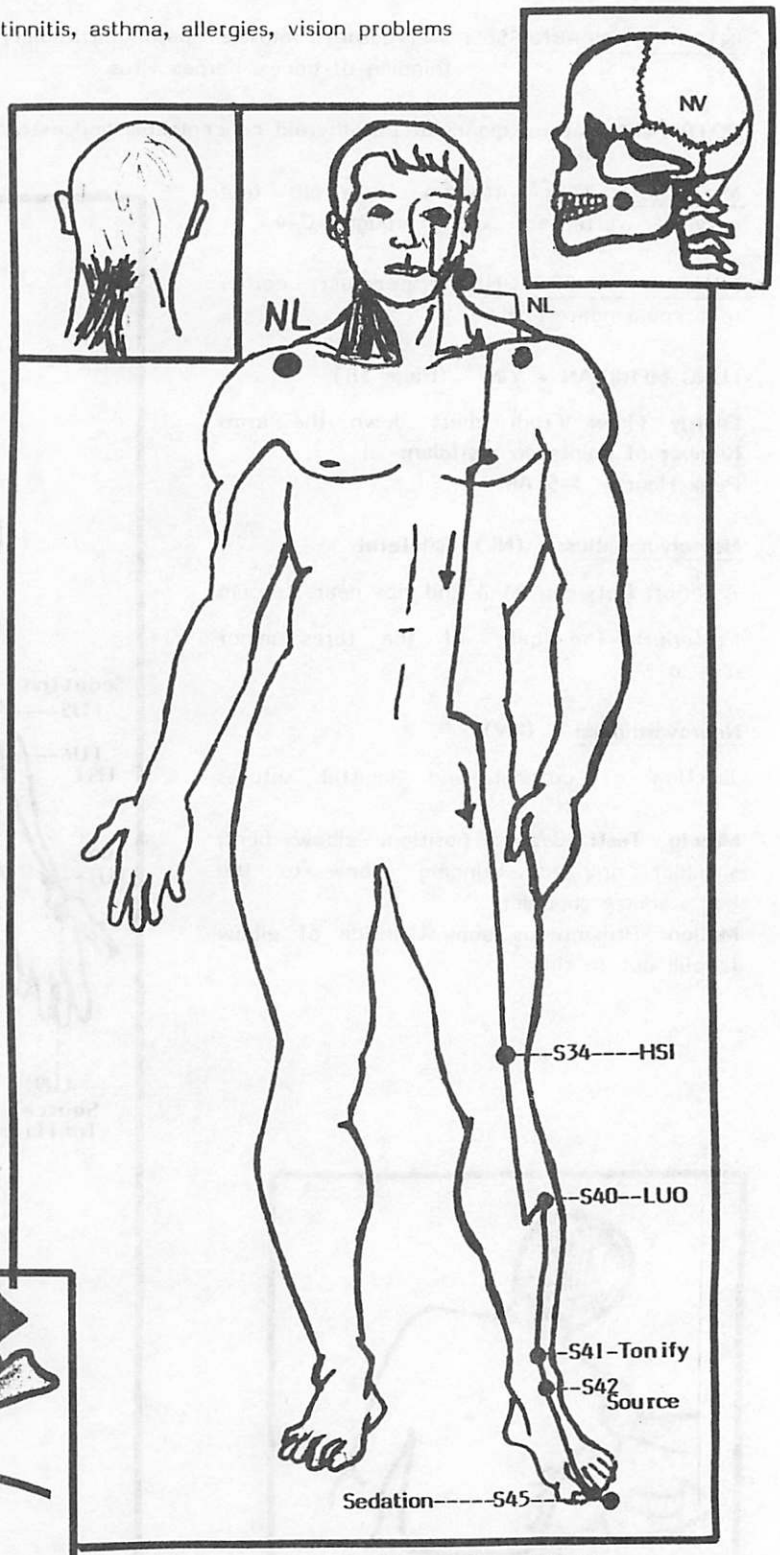
Anterior: Between 1st & 2nd rib, 3-1/2" from sternum
Posterior: 2nd cervical vertebra

Neurovasculars: (NV) Ramus of jaw bone

Muscle Test: Both arms raised over head

Posterior: Prone position, lifting head
Motion: Pressure is against back of head in downward direction.

Anterior: Supine position, lifting head
Motion: Pressure is against forehead in downward direction.



Alarm Point: CV 12
Associated Point: BL 21

Pectoralis Major Clavicular - Stomach

ORGAN: The stomach is a gourd shaped section of the alimentary tube. Both ends are guarded by valves which normally permit the passage of substances in only one direction. The stomach is a combination storage pouch and churn. It can hold 1/2 gallon of food and liquid. Gastric juices (hydrochloric acid & enzymes) help in protein digestion, calcium and iron digestion, and kill bacteria and thus destroys many potential disease producing agents. As one gets older the stomach produces less and less acid. Most people with stomach problems are producing too little and not too much acid. In these cases antacids give relief by the rebound effect; neutralizing the acid that is present thus making the situation worse. The body reacts to this even lower level of stomach acid by producing more acid.

STRUCTURAL WEAKNESSES: Shoulder problems, chest pains, bilateral weakness may indicate hydrochloric acid imbalance

INTERNAL WEAKNESSES: Digestive disturbances, halitosis, allergies, liver & gall bladder problems, ulcers, emotional problems.

NUTRITION: Natural glandular stomach extracts & concentrates, B-complex, Vitamin G, pepsin, papain, (bilateral-betaine hydrochloride *), zinc
If hydrochloric acid balance disturbed or nausea present, 1 tsp honey, 2 tsp apple cider vinegar in glass of warm water, sipped.
Herbs: Peppermint, golden seal

MUSCLE ORIGIN: Attaches to the sternal half of the clavicle & anterior surface of the sternum and cartilages of first three ribs.

MUSCLE INSERTION: Attaches at the front of the humerus, just below the shoulder.

STOMACH MERIDIAN - YANG (Pages 22 & 23)

Energy Flow: Down the body & legs
Number of points on meridian: 45
Peak Hours: 7-9 AM

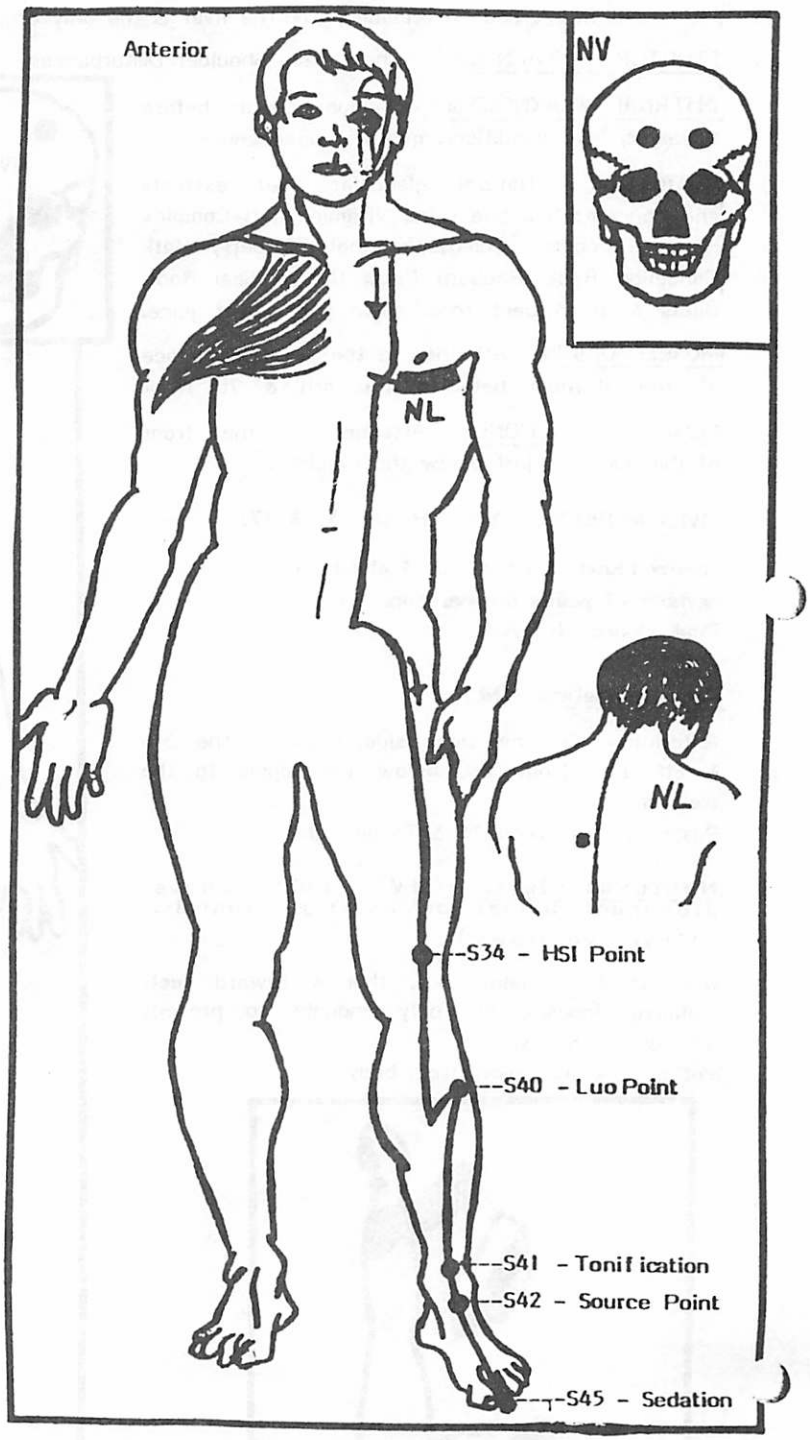
Neurolymphatics: (NL)

Anterior: On left side between 5th & 6th ribs, from just below the nipple to the sternum.
Posterior: Between T6 & T7 on left

Neurovasculars: Bilateral frontal bone eminences

Muscle Test: Arm held straight forward, level with shoulder, palms out, thumb toward feet, stabilizing opposite shoulder
Motion: Down and away from body

*Note: Betaine Hydrochloride not recommended when



Alarm Point: CV 12
Associated Point: BL 21

Pectoralis Major Sternal-Liver

ORGAN: The liver is located mainly in the right abdominal region and is a multi-function organ; (1) Manufactures bile (approximately 1 pint-1 quart per day) to assist in absorption and digestion of fats and also to assist the intestines in proper elimination, (2) Important role in metabolism of carbohydrates and proteins by manufacturing and storing glycogen which is synthesized from proteins and sugars and converts the glycogen into glucose to maintain a constant blood sugar level, (3) The liver stores Vitamin A along with Vitamin D, Iron, Copper, and other minerals, (4) The liver destroys and eliminates harmful substances. Some of these toxic substances are drugs, heavy metals, bacteria, toxic chemicals that form from improper digestion. The liver is able to remove these toxins from the blood as long as it hasn't been overloaded, (5) The liver is the only organ that can regenerate itself.

STUCTURAL WEAKNESSES: Chest Pain, Shoulder Disturbances

INTERNAL WEAKNESSES: Glaucoma, spots before the eyes, liver conditions, migraine headaches

NUTRITION: Natural glandular liver extracts and concentrates, bile salts, Vitamin A, B-Complex Herbs & Foods: Collinsonia Root, Barberry Bark Dandelion Root, Rhubarb Root, Golden Seal Root, Beets & green beet tops, apple juice, beet juice.

MUSCLE ORIGIN: Attaches to the anterior surface of the sternum between the 4th & 7th ribs.

MUSCLE INSERTION: Attaches at the front of the humerus, just below the shoulder.

LIVER MERIDIAN - YIN (Pages 36 & 37)

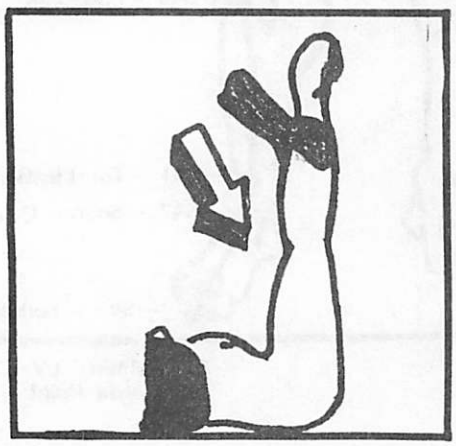
Energy Flow: Up the legs & abdomen
Number of points on meridian: 14
Peak Hours: 1-3 AM

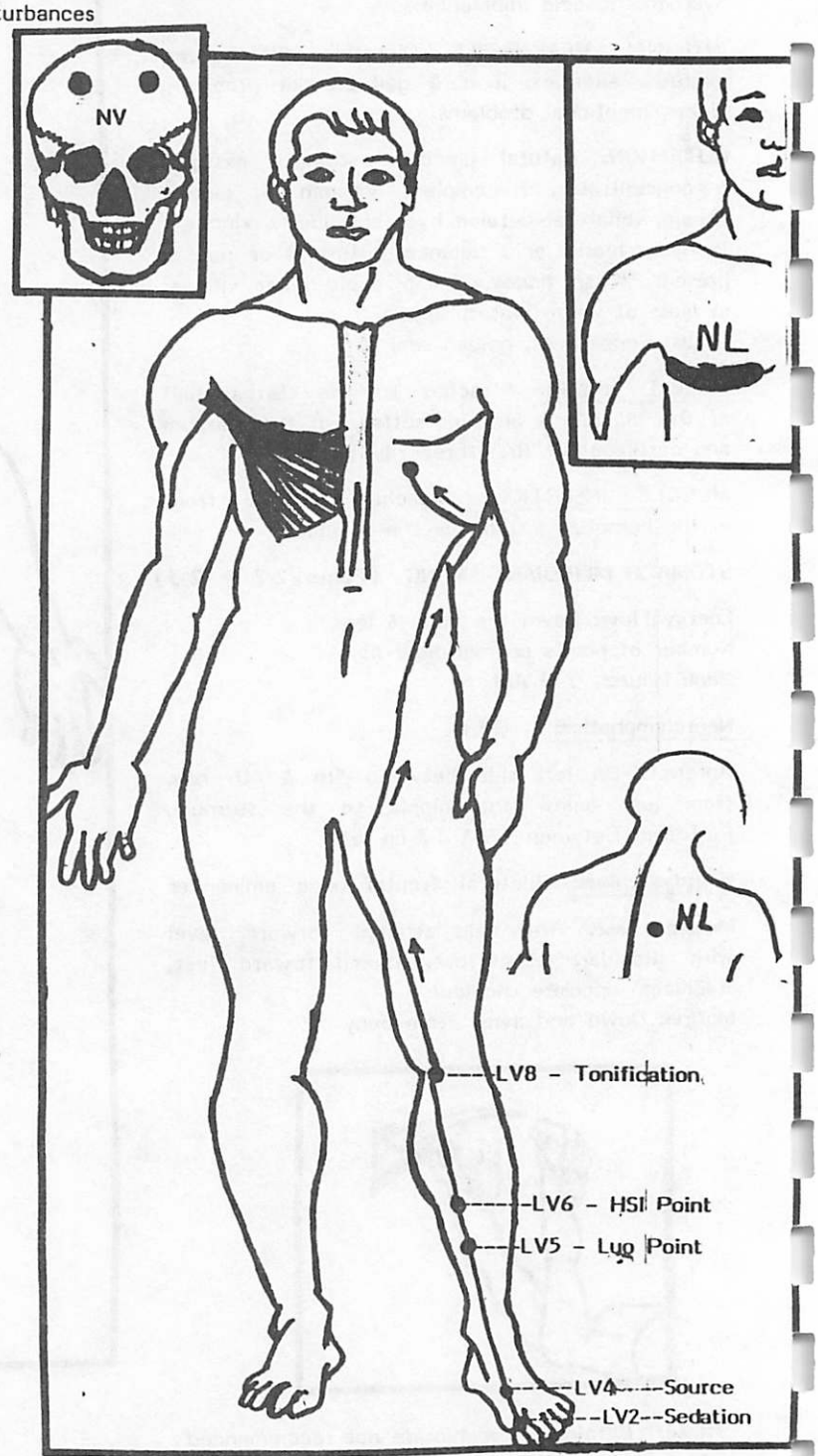
Neurolymphatics: (NL)

Anterior: On the right side between the 5th & 6th ribs from just below the nipple to the sternum.
Posterior: Between T5 & T6 on right

Neurovasculars: (NV) 1 1/2" above prominent bulges on anterior frontals. (Above eye brows.)

with shoulder, palms out, thumbs toward feet. Stabilize opposite hip only enought to prevent rotation of the axis.
Motion: Up and away from body





Alarm Point: LV 14
Associated Point: BL 18

Peroneus- Bladder

ORGAN: The bladder is located behind and just above the pubic bone. The bladder not only collects the urine excreted by the kidneys, but also serves in urine evacuation.

STRUCTURAL WEAKNESSES: Foot and gait problems, ankle problems

INTERNAL WEAKNESSES: Bladder problems - burning pain in bladder region sometimes accompanied by difficult and frequent urination, excessive thirst, urine may be cloudy or bloody

NUTRITION: Vitamin A, B, C, P, ascorbic acid
Herbs: Uva-ursi, couch grass, marshmallow root, buchu leaves, barberry bark, juniper berries

MUSCLE ORIGIN: Attaches to side of leg, adjacent to the knee

MUSCLE INSERTION: Across the top of the outer surface of the foot

BLADDER MERIDIAN - YANG (Pages 28 & 29)

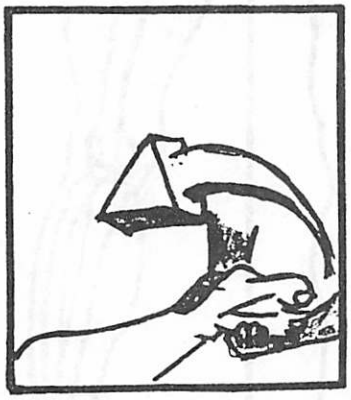
Energy Flow: Down the back & legs
Number of points on meridian: 67
Peak Hours: 3-5 PM

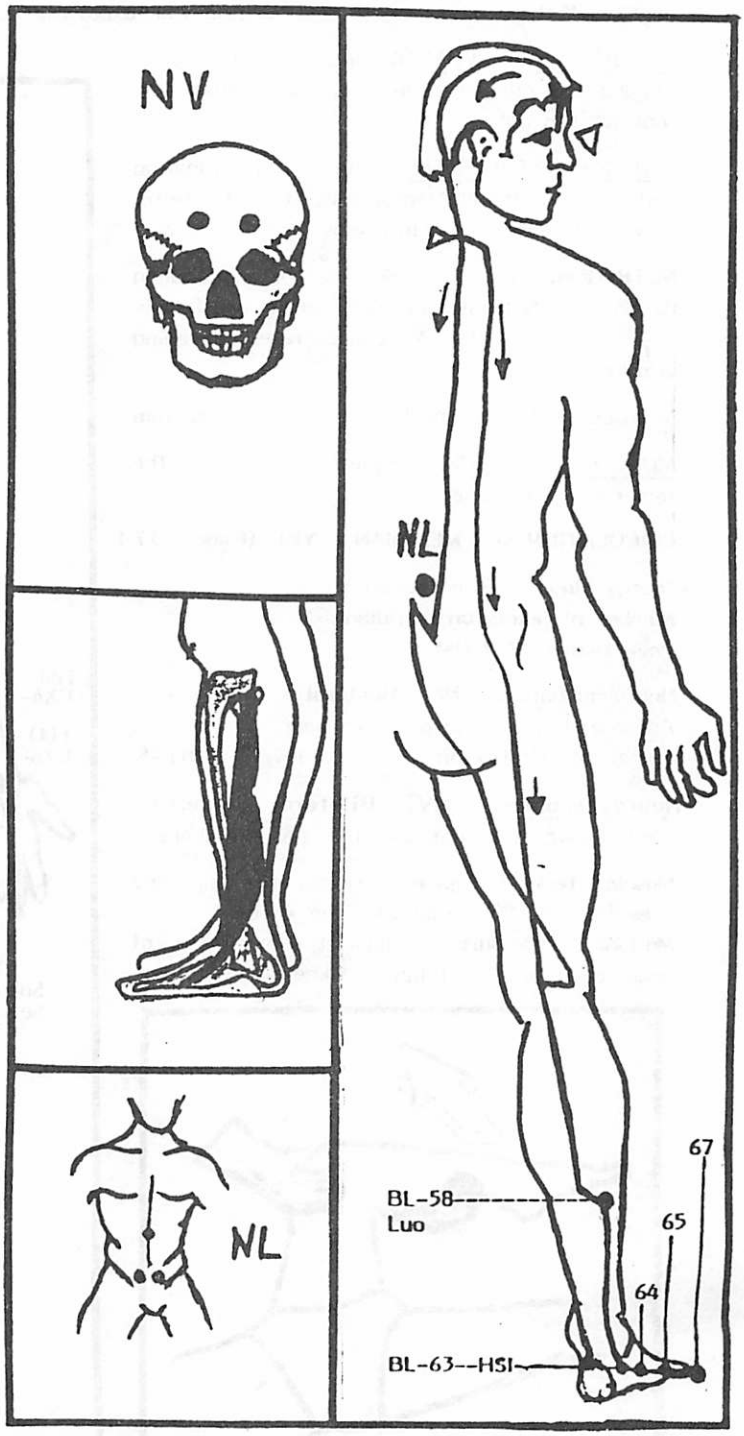
Neurolymphatics: (NL) Bilateral

Anterior: Inferior (ramus) of pubic bone and center of navel.
Posterior: Protrusion of hip bone at L-5.

Neurovasculars: (NV) Frontal bone eminences

Muscle Test: Holding heel in hand, foot turned out to side
Motion: Pressure is against outside of foot to bring in toward other foot





Alarm Point: CV 3

BL-64 - Source

Piriformis

REPRODUCTIVE ORGANS & GLANDS:

Male: Testes are egg-shaped and located outside the body in a sac called the scrotum. Spermatozoa (mature sperm cells) and the hormone testosterone are produced here. Seminal vesicles are muscular tubes which produce a thick secretion that forms much of the volume of the ejaculated semen. The glucose and other substances in this secretion aid in nourishing the sperm cells. The Prostate produces secretions that maintain the motion of the sperm cells. The prostate also contracts to aid in ejaculation.

Female: Ovaries - two almond-shaped glands situated on either side of the uterus. The ovaries produce and mature the ova or egg (female reproductive cell) and then discharge them when they are fully formed into the two fallopian tubes which are attached to the uterus at it's upper angles. The fallopian tubes conduct the ova from the ovaries to the uterus. Fertilization, the union of the male and female reproductive cells, normally takes place in the fallopian tubes. The ovaries also produce hormones. The uterus is a hollow, pear-shaped, muscular organ situated in the pelvic cavity. The uterus is where the embryo develops and when fully developed, the contractions of the uterine wall expel the child. It also aids in hormonal production.

STRUCTURAL WEAKNESSES: Sciatic pain, tingling or numbness in leg, can cause one foot to turn out

INTERNAL WEAKNESSES: Burning on urination and related bladder problems, tipped uterus, female or male sexual problems

NUTRITION: Vitamin E, Selenium, Zinc, Vitamin A, Iodine, Natural glandular male or female endocrine extracts & concentrates, evening primrose oil.

MUSCLE ORIGIN: Inside surface of sacrum

MUSCLE INSERTION: Highest point of the femur or thigh bone

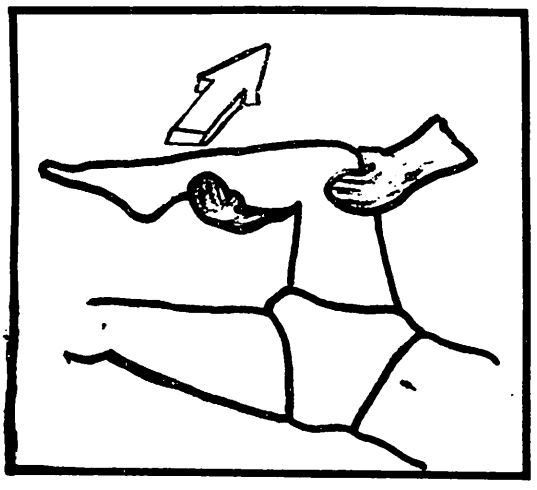
CIRCULATION SEX MERIDIAN - YIN (Page 37)

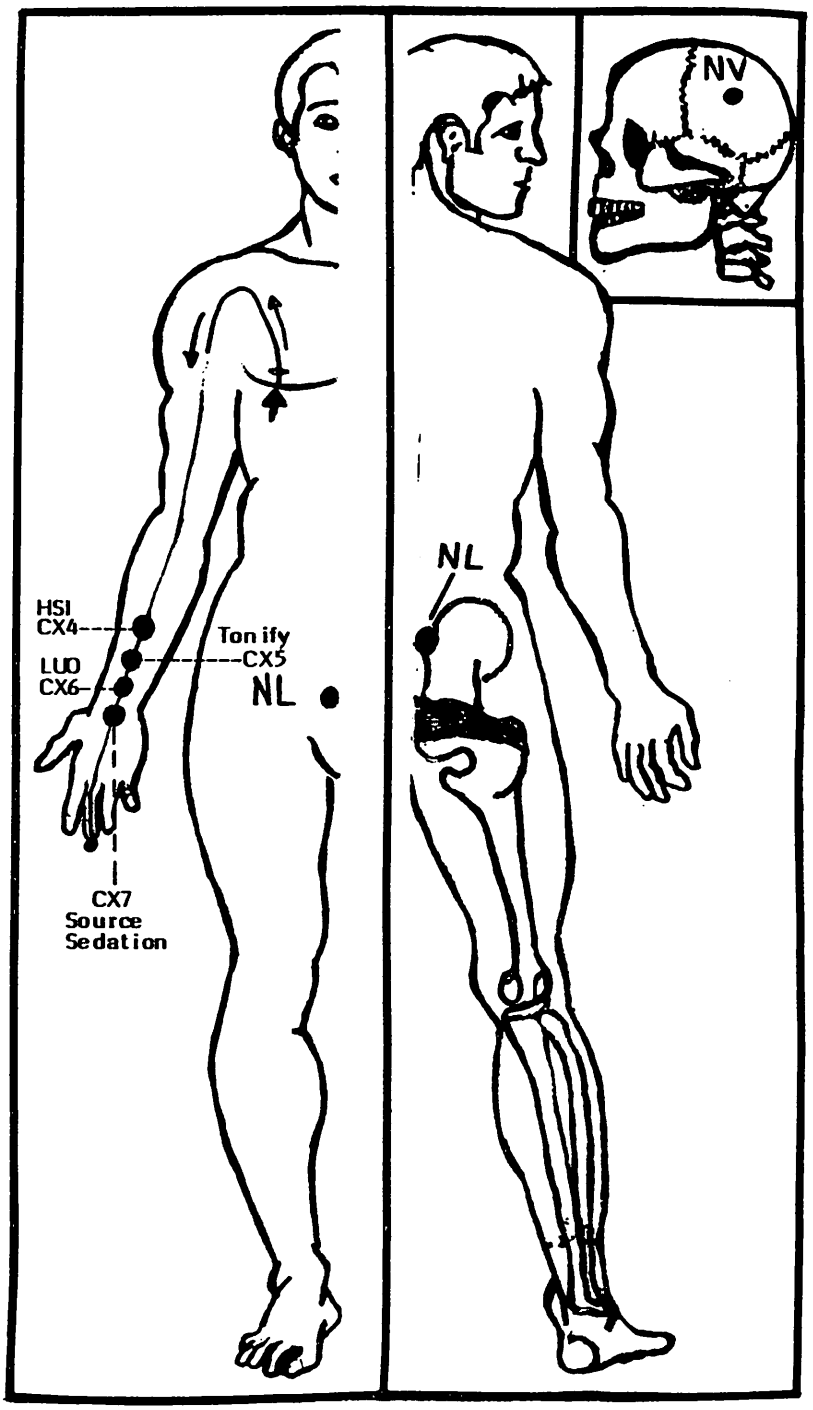
Energy Flow: Down the arms
Number of points on meridian: 9
Peak Hours: 7-9 PM

Neurolymphatics: (NL) Bilateral
Anterior: Upper edge of pubic bone
Posterior: Protrusion of hip level with L-5

Neurovasculars: (NV) Bilateral posterior ridge above the ear on the parietal bone.

Muscle Test: Supine position, the hip and knee bend at 90°, stabilizing the knee.
Motion: Pressure is against the inside of ankle to rotate the thigh and knee.





Alarm Point: CV 17

Popliteus - Gall Bladder

ORGAN: The gall bladder is located on the undersurface of the liver just below the ribs. It stores the majority of the bile secreted by the liver. When the bile is needed, the gall bladder expels it's contents into the small intestine through the cystic duct and the common bile duct. Bile contains bile salts, bile pigments, cholesterol, and water and is needed for Vitamin K absorption and other fat soluble vitamins. Bile is necessary for digestion and absorption of fats and helpful in alkalizing the digestive process in the intestinal tract. The bile is the route by which the liver detoxifies itself.

STRUCTURAL WEAKNESSES: Knee problems, including hyperextension of the knee

INTERNAL WEAKNESSES: Gall Bladder conditions, jaundice, shingles, one-sided headaches, constipation, drowsiness after eating fatty foods, bitter taste in mouth, brilliant, blinding flashes of light.

NUTRITION: Vitamin A, Vitamin F, Betaine, disodium phosphate, pepsin, lecithin, Bile salts, Herbs: Dandelion Root, Burdock Root, Parsley Root, Chaparral, Fennel, Barberry Bark, Peppermint, Chamomile

MUSCLE ORIGIN: Attaches on the outside of the knee at the lowest part of thigh bone

MUSCLE INSERTION: Attaches on back inside of the leg, below the knee

GALL BLADDER MERIDIAN - YANG (Pages 34 & 35)

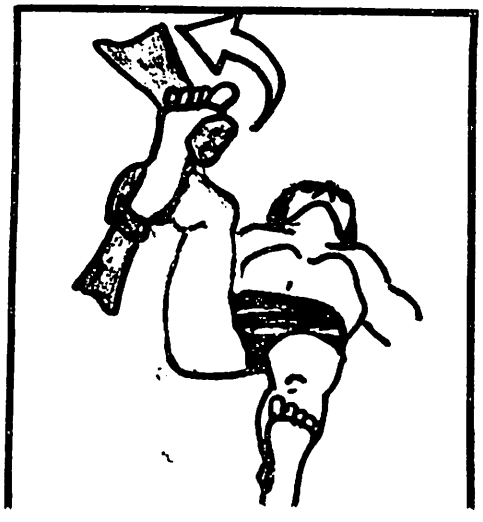
Energy Flow: Down the body & legs
Number of points on meridian: 44
Peak Hours: 11 PM - 1 AM

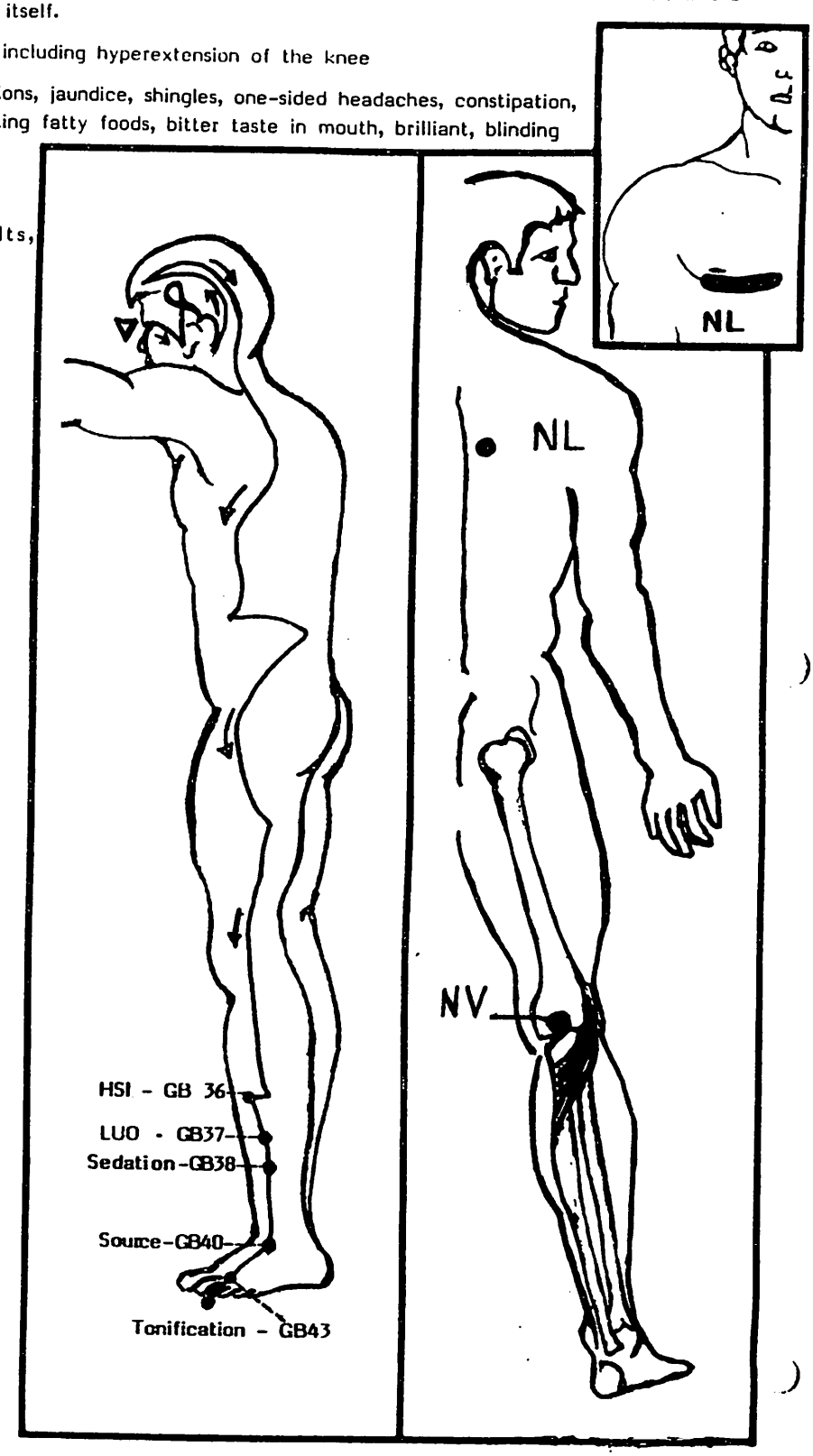
Neurolymphatics: (NL)

Anterior: On the right side between 5th & 6th ribs, from just below the nipple to the sternum.
Posterior: Between T5 & T6 on right

Neurovasculars: (NV) **Bilateral**
Mid back of knee

Muscle Test: Supine position; knee bent 90 degrees, foot turned in, stabilize ankle.
Motion: Pressure on inside ball of foot to straighten foot.





Alarm Point: GB 24
Associated Point: BL 19

Psoas Major - Kidney

ORGAN: The kidneys are two somewhat flattened organs, four inches longs, 2 inches wide, I inch thick, which lie against the muscles of the back in the upper abdomen. The kidneys have three main functions: (I) Excretion of waste products, (2) Maintenance of water balance in the body, (3) To aid in regulating the acid-base balance of the body.

STRUCTURAL WEAKNESSES: Low back pain, early morning backache, low hip in standing position

INTERNAL WEAKNESSES: Kidney infections, kidney disorders, skin conditions, heart conditions, restlessness, fluid retention (edema), high blood pressure

NUTRITION: Natural glandular kidney extracts and concentrates, Vitamin A, C, B6, Vitamin E, magnesium.
Herbs: Uva-Ursi, Couch Grass Root, Marshmellow Root, Buchu Leaves, Juniper Berries

MUSCLE ORIGIN: Anterior surface of T-I2 and all lumbar vertebrae and corresponding discs.

MUSCLE INSERTION: Upper inside part of the thigh bone level with pubic bone.

KIDNEY MERIDIAN - YIN **(Pages 30 & 31)**

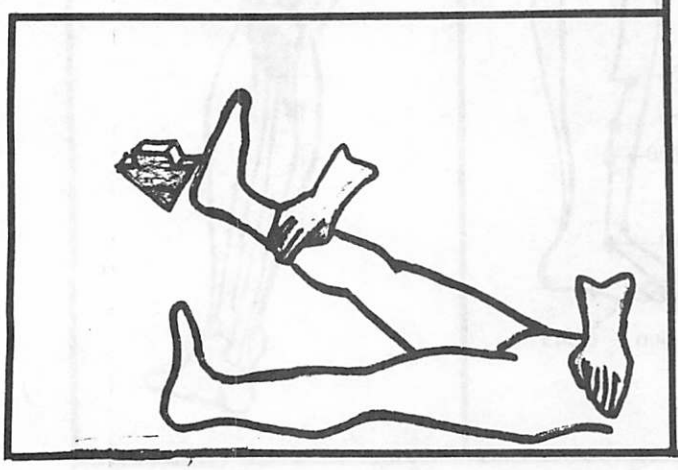
Energy Flow: Up leg, abdomen, & chest
Number of points on meridian: 27
Peak Hours: 5-7 PM

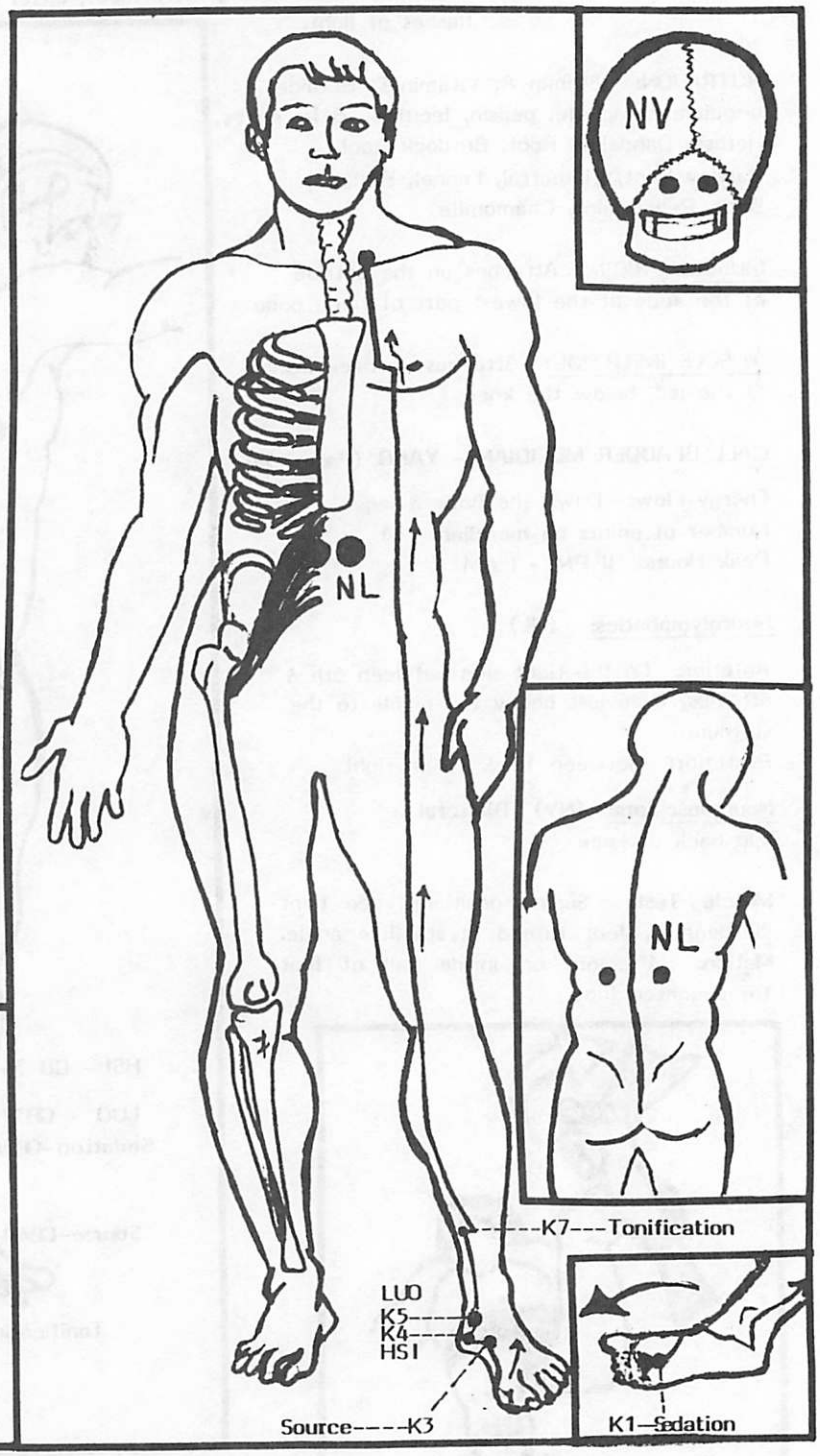
Neurolymphatics: (NL) Bilateral

Anterior: I" above the navel & I" to each side from middle
Posterior: Between T-I2 & L-I, below the level of last rib

Neurovasculars: (NV) Occipital protrusion near base of skull, I-1/2" to each side

Muscle Test: While stabilizing the opposite hip, leg should extend at 45° with foot turned outward.
Motion: Pressure is against either the ankle or the knee to direct down and outward.





Alarm Point: GB 25
Associated Point: BL 23

Quadriceps - Small Intestine

ORGAN: The small intestines averages about 20 feet in length. It has a surface area about the size of a football field. The absorption of foods takes place mainly in the small intestines. The duodenal mucosa elaborates several hormones which play an important role in the activities of the pancreas, liver, gallbladder and the stomach.

STRUCTURAL WEAKNESSES: Low back conditions, difficulty in climbing stairs or getting up from a seated position, pain in knee cap and other knee problems

INTERNAL WEAKNESSES: Indigestion, digestive difficulties, intestinal gas

NUTRITION: Vitamin D, Lacto bacillus acidophilus & bulgaris, Natural glandular concentrates & extracts of duodenum, Anti-gastrin powder (standard process), Vitamin E, Montmorillonite
Herbs: Comfrey-pepsin (taken on empty stomach away from food)

MUSCLE ORIGIN: This muscle group attaches at the upper section of thigh bone and the side of the hip bone

MUSCLE INSERTION: Attaches at the border of the knee cap, through the knee cap to the tibia or shin bone

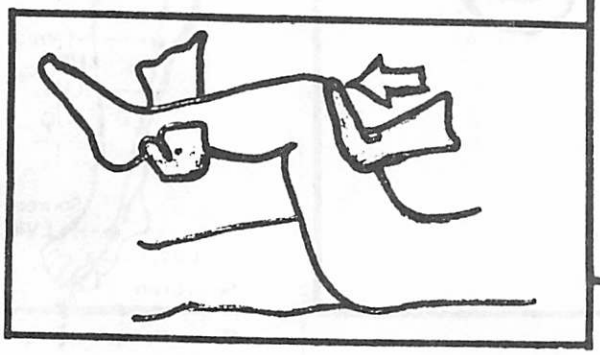
SMALL INTESTINE MERIDIAN - YANG (Page 27)

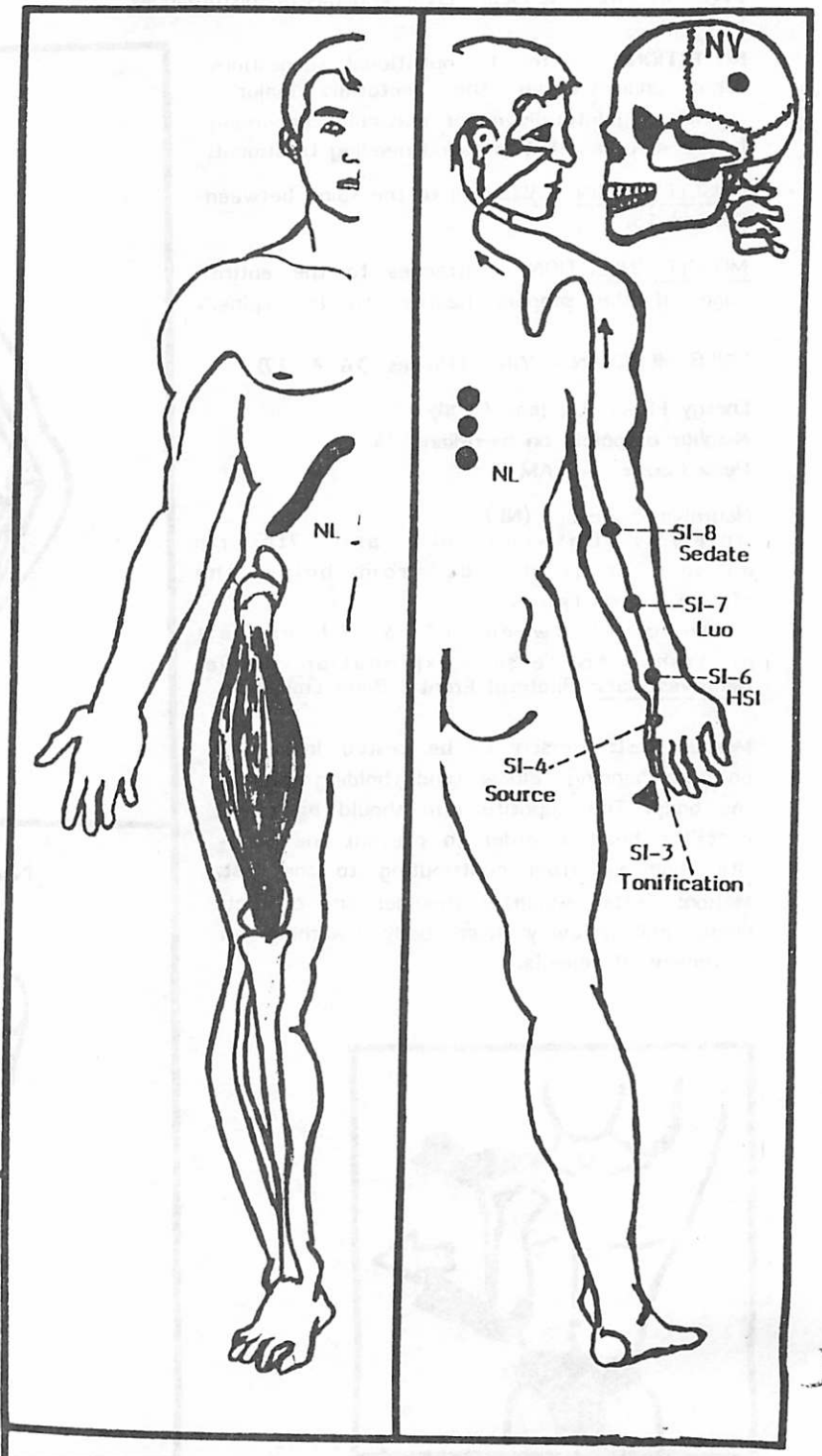
Energy Flow: Up the arm
Number of points on meridian: 19
Peak Hours: 1-3 PM

Neurolymphatics: (NL) Bilateral

Anterior: Junction of the 8th-11th ribs joined by cartilage
Posterior: Between T-8 & T-11
A significant amount of lymphatic congestion is often involved with the small intestine. The neurolymphatics may need to be stimulated frequently.

Neurovasculars: (NV) Bilateral
Posterior parietal ridge
Muscle Test: Supine position, the hip and knee bend at approximately 75°, no rotation.
Motion: Pressure is applied just above the knee to extend the hip, keeping the knee bent.





Alarm Point: CV 4
Associated Point: BL 27

Rhomboids – Liver

The muscle-organ association of the Rhomboid muscles has been connected to the liver and liver meridian, but has also been associated with the stomach and stomach meridian according to Dr. Goodheart.[5] It seems that the rhomboid muscles respond to the neurolymphatic and neurovascular reflexes of both the stomach and the liver. It is possibly because of the closeness of these reflexes. There seems to be some influence between these reflexes, muscles, and organs. Therapy localization provides the ability to find which meridian is involved.

STRUCTURAL WEAKNESSES: Shoulder problems, tension and aching between shoulder blades

INTERNAL WEAKNESSES: Liver and gastric disturbances

NUTRITION: Refer to nutritional suggestions listed under either the pectoralis major sternal or pectoralis major clavicular according to the meridian that is found needing treatment.

MUSCLE ORIGIN: Attaches to the spine between C7 and T5.

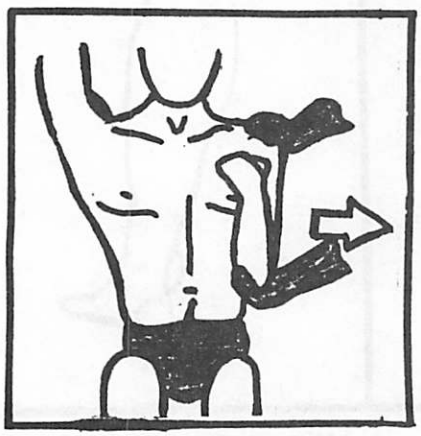
MUSCLE INSERTION: Attaches to the entire edge of the scapula nearest to the spine.

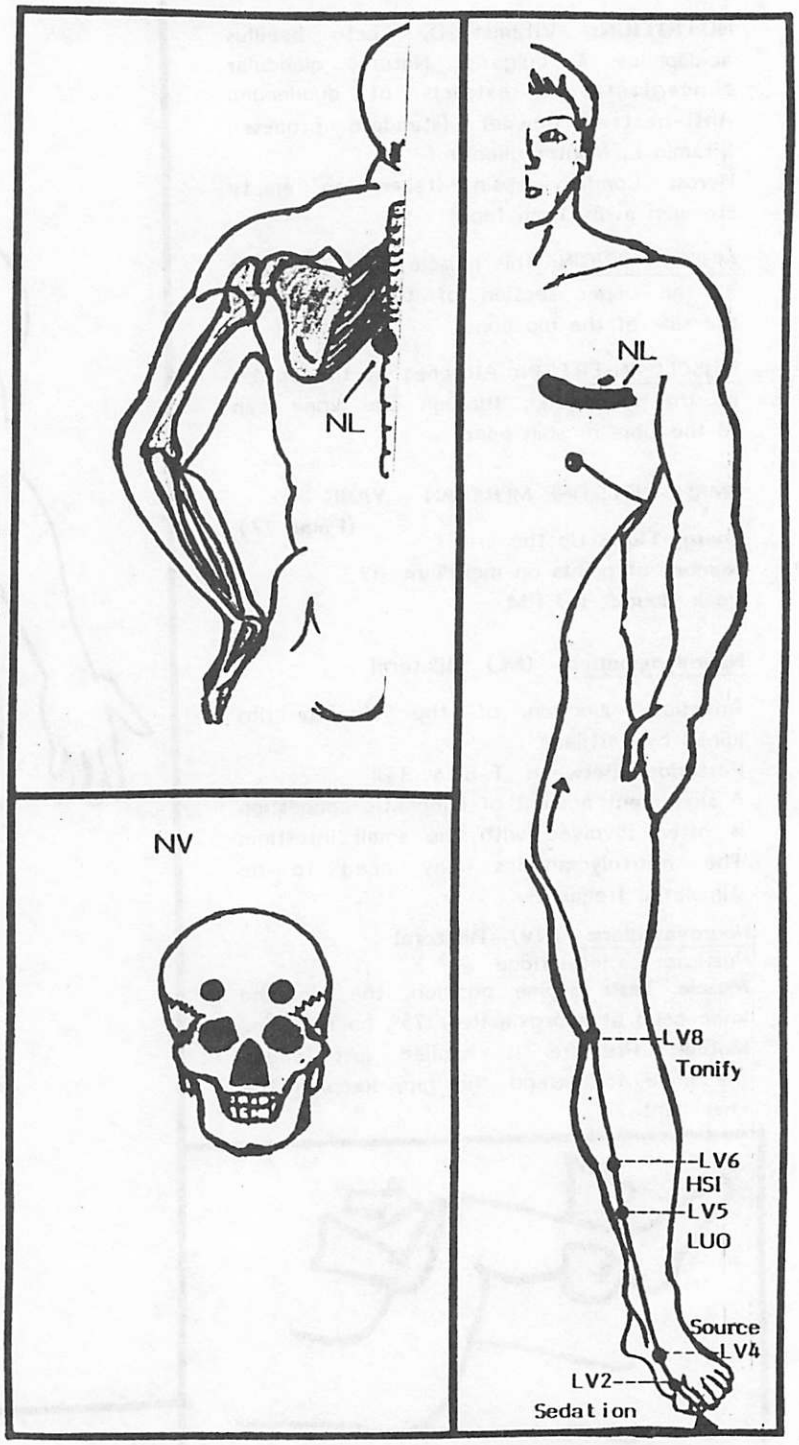
LIVER MERIDIAN - YIN (Pages 36 & 37)

Energy Flow: Up legs & body
Number of points on meridian: 14
Peak Hours: 1-3 AM

Neurolymphatics: (NL)
Anterior: Between 6th and 7th rib on left or right side from below the nipple to sternum.
Posterior: Between T6 & T7 on left or right. *Note-see explanation above.
Neurovasculars: Bilateral Frontal Bone Eminences

Muscle Test: Person to be tested in seated position bending elbow and holding against the body. The opposite arm should be raised over the head in order to prevent the opposite rhomboid from contributing to the test.
Motion: Tester stabilizes shoulder and contacts elbow pulling away from body watching for movement of scapula.





Alarm Point: LV 14
Associated Point: B-18

Sacrospinalis - Bladder

ORGAN: The bladder is located behind and just above the pubic bone. The bladder not only collects the urine excreted by the kidneys, but also serves in urine evacuation.

STRUCTURAL WEAKNESSES: Arthritis, rheumatism, shoulder and elbow pain or restricted movement, one-sided weakness can result in scoliosis

INTERNAL WEAKNESSES: Bladder disturbances, emotional strain

NUTRITION: Vitamin A, B, C, P, ascorbic acid, calcium
Herbs: Uva ursi, couch grass, marshmallow root, buchu leaves, barberry bark, juniper berries

MUSCLE ORIGIN: Seperate muscles attach to the sacrum and crest of the hip bones, all along the spine and posterior ribs

MUSCLE INSERTION: Attaches to the ribs, along the spine and the base of the skull

BLADDER MERIDIAN - YANG (Pages 28 & 29)

Energy Flow: Down the back & legs
Number of points on meridian
Peak Hours: 3-5 PM

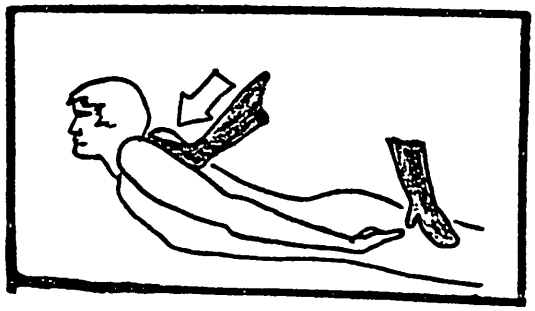
Neurolymphatics: (NL) **Bilateral**

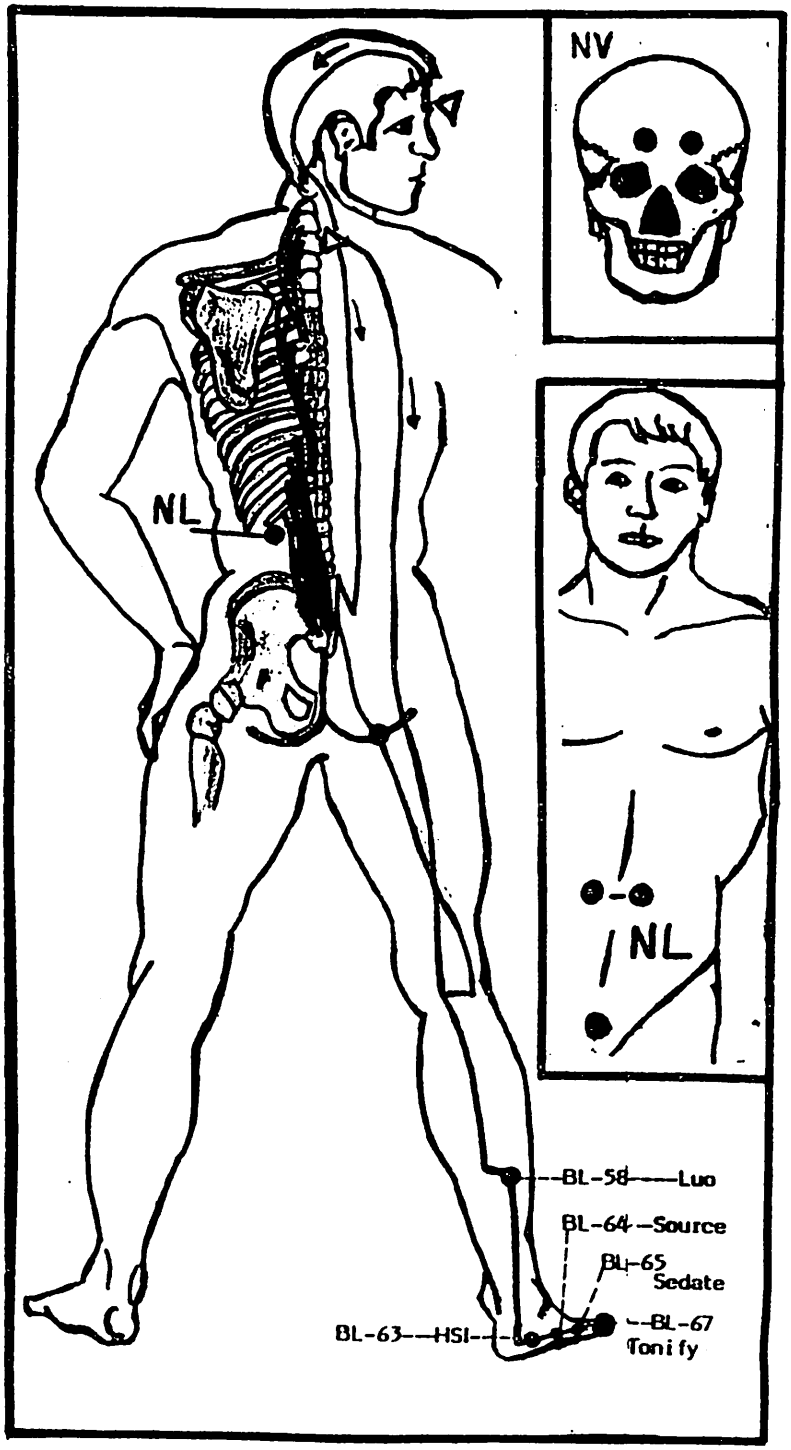
Anterior: Upper edge of pubic bone and on each side of the navel
Posterior: 2nd lumbar vertebra

Neurovasculars: (NV) Bilateral frontal bone eminences

Muscle Test: Prone position, arms extended to side of body, back is arched, bringing shoulders up, stabilizing the pelvis

Motion: Pressure is applied in the area between the shoulders





Alarm Point: CV 3
Associated Point: BL 28

Sartorius - Adrenals

ORGAN: The adrenals or suprarenals are two small glands, each one situated above a kidney. These glands are involved with handling the mental/emotional, chemical, physical and thermal stresses in our lives. They also help raise blood pressure when we stand up, keep the pupils constricted in bright light, convert stored sugar in the liver into blood sugar, increase blood pressure and heartbeat, dilate the bronchiales in the lungs, affect sodium reabsorption, potassium excretion, aids in metabolism of proteins, carbohydrates, and fats; affect muscular vigor. These functions are controlled via the hormones produced by the adrenals: epinephrine, adrenaline, norepinephrine, aldosterone, cortisol, adrenosterone. It should be noted that the hypothalamus via the pituitary, has a large controlling effect on the adrenals.

STRUCTURAL WEAKNESSES: Knee pain, inability to hold hip in place, knocked knees, short leg in supine position becomes long in prone position.

INTERNAL WEAKNESSES: Fatigue, hypoglycemia, allergies, hives, asthma, infections, joint pain, inhibited calcium absorption, dizziness upon standing, sensitivity to bright light.

NUTRITION: Natural glandular Adrenal extracts and concentrates, Vitamin C, Bioflavonoid complex, Pantothentic acid, choline, Vitamin B-complex, magnesium, L-tryptophan, calcium Herbs: Licorice Root, Valerian

MUSCLE ORIGIN: Outer anterior edge of hip bones

MUSCLE INSERTION: Inside surface of the tibia just below the knee.

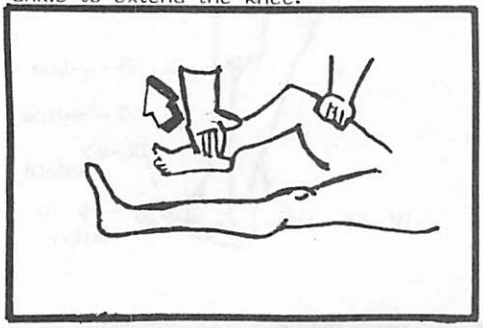
CIRCULATION SEX MERIDIAN - YIN (Page 32)

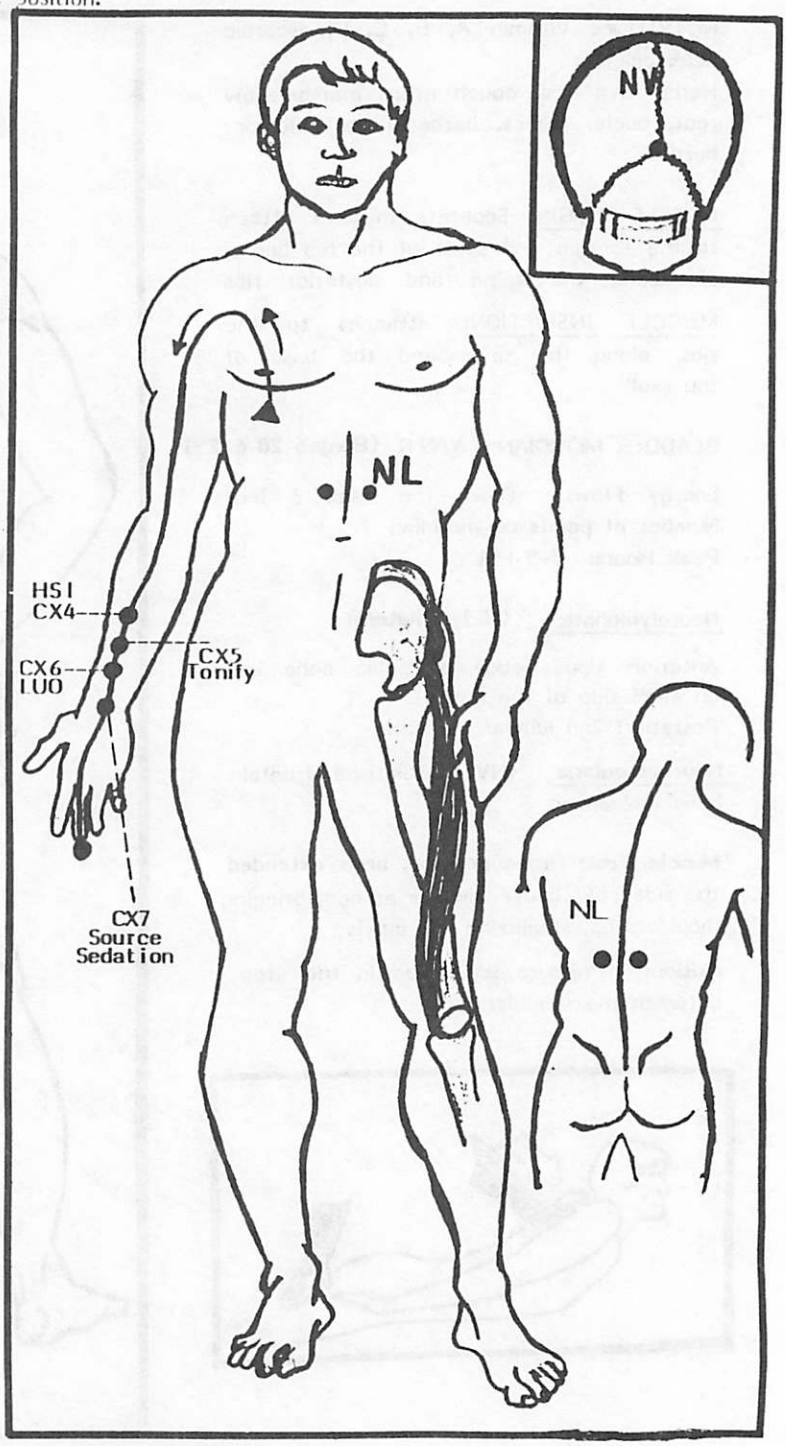
Energy Flow: Down the arms
Number of points on meridian: 9
Peak Hours: 7-9 PM
*Occasional Triple Heater meridian involvement. Therapy localization of corresponding points will determine the correct treatment.

Neurolymphatics: (NL) Bilateral
Anterior: 2" above navel, 1" to each side
Posterior: Between TII & TI2

Neurovasculars: (NV) Junction of sagittal and lamboidal sutures

Muscle Test: Supine position, slight bending of hip & knee with thigh rotating to side.
Motion: With one hand, pressure is against knee to rotate thigh toward middle and other hand applies pressure to posterior ankle to extend the knee.





Alarm Point: CV 17
Associated Point: BL 14

Subscapularis - Heart

ORGAN: The heart maintains the circulation of the blood and is divided into four cavities--2 atria and 2 ventricles. The left atrium receives oxygenated blood from the lungs. The blood then passes to the left ventricle, which forces it via the aorta through the arteries to supply the tissues of the body. The right atrium receives the blood after it has passed through the capillaries and given up much of it's oxygen. The blood then passes to the right ventricles and then to the lungs to be oxygenated.

STRUCTURAL WEAKNESSES: Chest pains or tightness in chest, shoulder problems

INTERNAL WEAKNESSES: Palpitations, dizziness, bleeding gums, difficulty swallowing

NUTRITION: Natural glandular heart extracts and concentrates, Vitamin E, Selenium, Calcium, Magnesium, Chromium, Vitamin B & C
Herbs: Hawthorne Berries, Cayenne

MUSCLE ORIGIN: Inside surface of the scapulae or shoulder blade

MUSCLE INSERTION: Anterior surface at the top of the shoulder joint

HEART MERIDIAN - YIN (Page 26)

Energy Flow: Down inside of arm
Number of points of meridian: 9
Peak Hours: IIAM-IPM

* The heart meridian should never be sedated. Stimulation of the small intestine has been found to be calming to the heart.

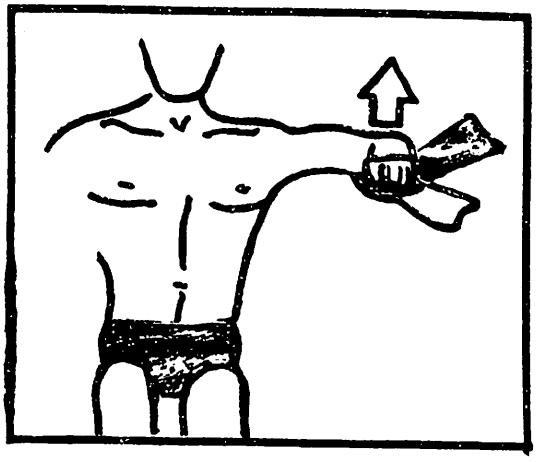
Neurolymphatics: (NL) Bilateral

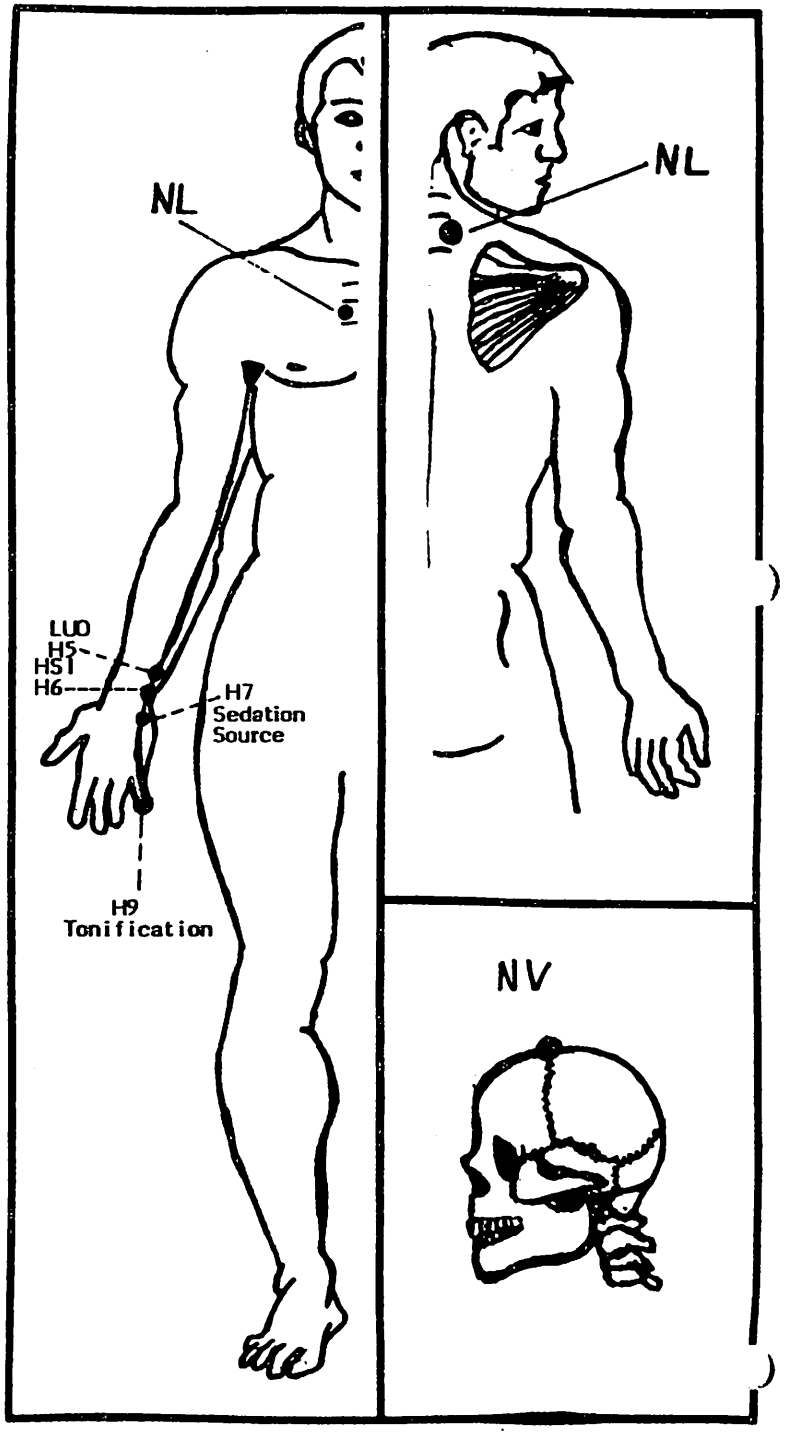
Anterior: Between the 2nd & 3rd ribs near the sternum
Posterior: One inch to each side of spine between T-2 & T-3

Neurovasculars: (NV) Bilateral

Junction of the coronal & sagittal sutures

Muscle Test: With arm out to side, elbow bends and is level with the shoulder, with fist also level with shoulder.
Motion: Stabilizing the elbow, pressure is against the wrist upward.





Alarm Point: CVI4
Associated Point: BI5

Supraspinatus - Brain

ORGAN: The brain is that part of the central nervous system lying within the cranial cavity. In general, the brain serves as: (1) a regulatory center, (2) the seat of sensations, (3) the source of voluntary acts, (4) The seat of emotions, (5) the seat of higher mental processes such as reasoning, memory and learning.

STRUCTURAL WEAKNESSES: Shoulder problems

INTERNAL WEAKNESSES: Anxiety, emotional stress, mental fatigue, learning problems in children

NUTRITION: RNA, Natural glandular brain extracts and concentrates, Choline
Herbs: Gota Kula, Periwinkle herb

MUSCLE ORIGIN: Top inner edge of the scapula

MUSCLE INSERTION: Top of the humerus and the shoulder joint capsule

CONCEPTION VESSEL MERIDIAN **(Page 40)**

Energy Flow: Down center of body
Number of points on meridian: 24

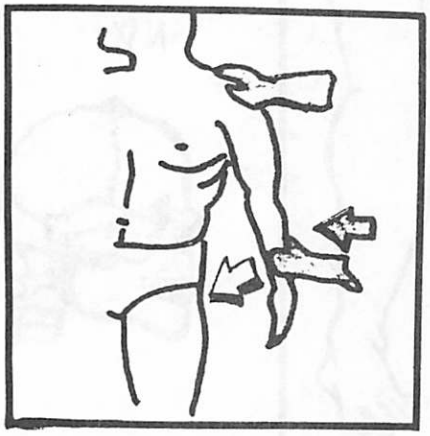
Neurolymphatics: (NL) Bilateral

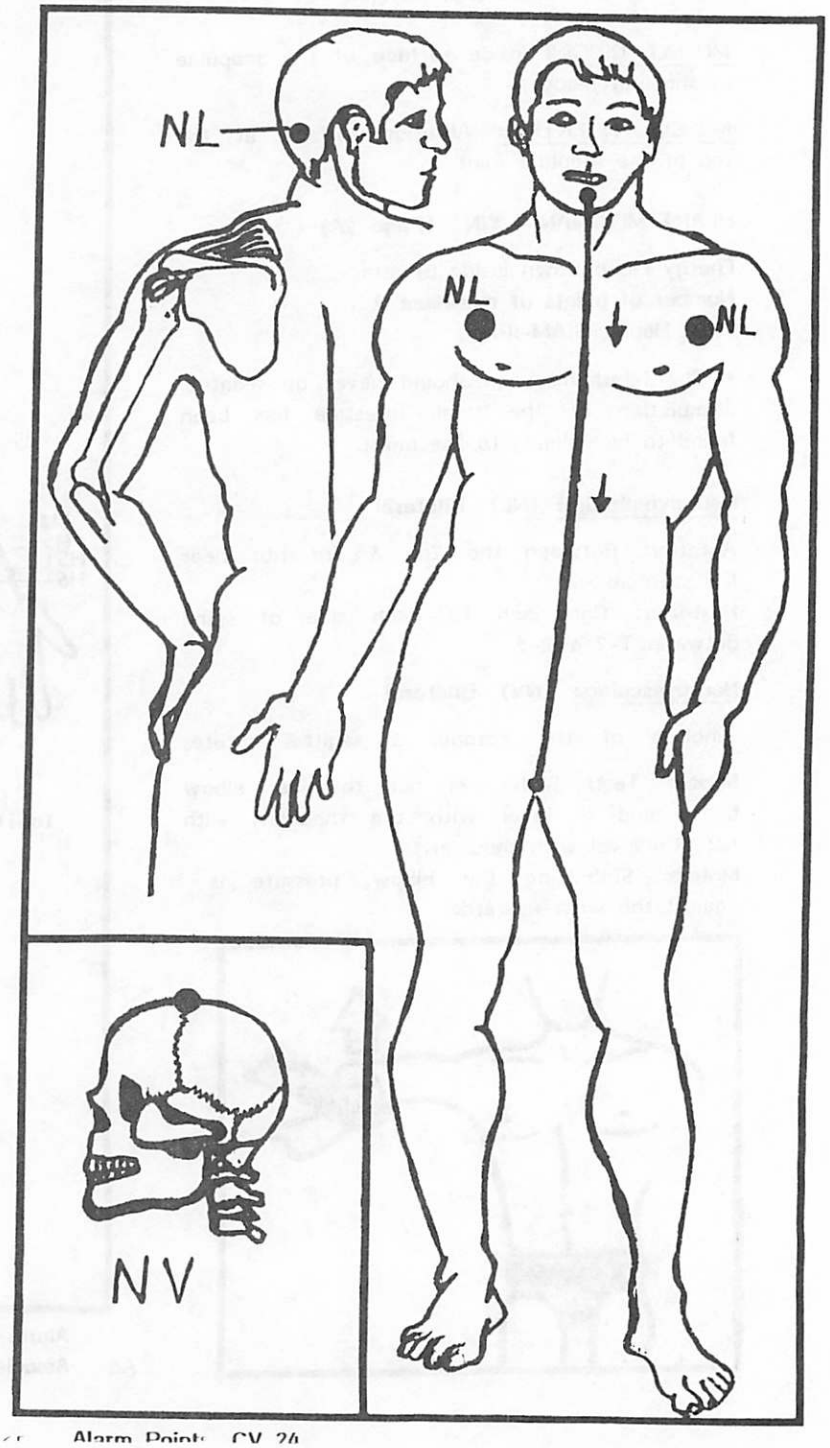
Anterior: Directly below the clavicle just inside the shoulder joint
Posterior: Directly below the skull where it joins the neck or the atlas, bilateral

Neurovasculars: (NV)

Junction of the coronal & sagittal sutures

Muscle Test: Arm is extended 15° to side with elbow straight, stabilizing shoulder. Head should be turned away from side being tested to relax upper and middle trapezius.
Motion: Pressure is against wrist with movement toward body.





Alarm Point: CV 24

Tensor Fascia Lata - Large Intestine

ORGAN: The five feet of the large intestine is divided into four parts; the cecum (where the appendix attaches), the colon, the rectum, and the anal canal. The colon is divided into three parts: (1) Ascending Colon on the right where the food is still liquid, (2) Transverse - horizontal, across the abdomen, (3) Descending- on left side of abdomen. The large intestine does not produce digestive enzymes, but it does absorb water, vitamins and minerals which then begin to solidify the feces. The absorbed material travels to the liver through the portal vein.

STRUCTURAL WEAKNESSES: Low back conditions, sciatica, knee problems, bowed legs tendency

INTERNAL WEAKNESSES: Constipation, colitis, spastic colon, diarrhea, menstrual problems, breast soreness during menstruation, headaches

NUTRITION: Chlorophyll, lactic acid yeast zymex, lactobacillus acidophilus, intestinal enzymes, (if bilateral - iron).
Herbs & Foods: Psyllium powder, celery powder, cascara sagrada, comfrey, senna, rhubarb root, prunes, flax seed, bran, agar, apple pectin.

MUSCLE ORIGIN: Attaches to the anterior outer edge of the hip bone.

MUSCLE INSERTION: Attaches to middle thigh one third way down from hip.

LARGE INTESTINE MERIDIAN - YANG (Page 39)

Energy Flow: Up the arms
Number of Points on Meridian: 20
Peak Hours: 5-7 AM

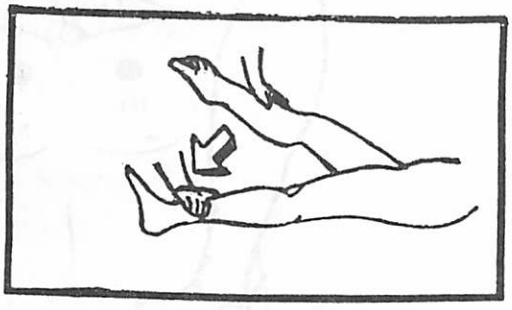
Neurolymphatics: (NL) Bilateral

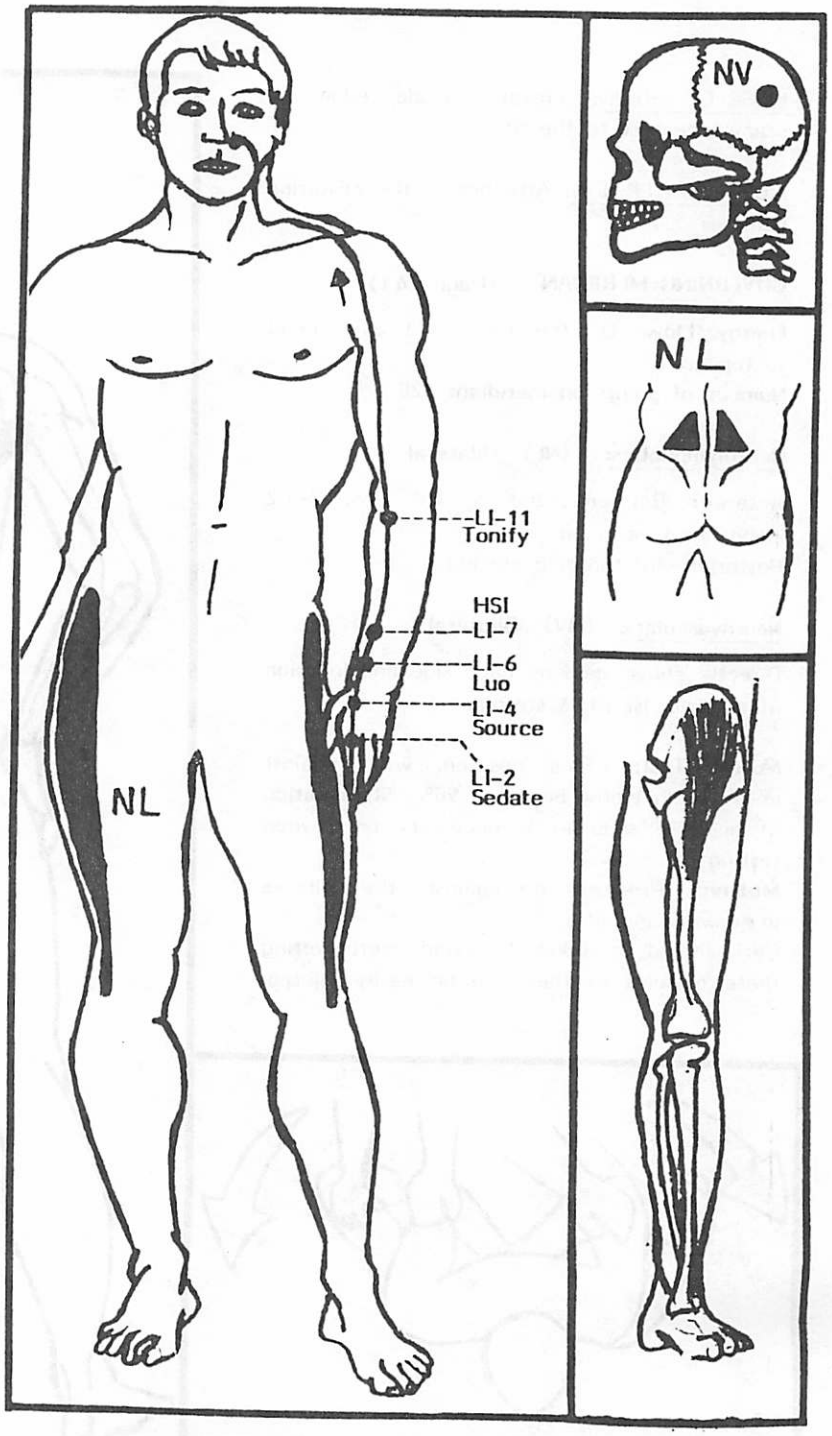
Lateral: Along the outside of legs from top of thigh bone to knee.
Posterior: The triangular area from L-2 to the middle of the posterior edge of the hip bone to L-4.

Neurovasculars: (NV) Bilateral

Posterior ridge on the parietal bone

Muscle Test: Lying face up, leg should be raised 15° and out to side, knee straight with foot turned in.
Motion: Pressure on outside of ankle bringing in toward other leg.





Alarm Point: S 25
Associated Point: BL 25

Teres Major - Spine

ORGAN: The structural integrity and proper alignment of the spinal vertebrae is important to health. Structural distortions in the spine can affect the glands, organs and functions of the body.

STRUCTURAL WEAKNESSES: Shoulder problems, mid back pains

INTERNAL WEAKNESSES: Acid-Alkaline balance, muscle cramps, glucose metabolism disorders

NUTRITION: When excessive perspiration, kelp and/or organic minerals; when difficulty in tasting food, zinc, raw bone meal

MUSCLE ORIGIN: Lower outside edge of scapula nearest to the arm

MUSCLE INSERTION: Attaches to the posterior humerus

GOVERNING MERIDIAN **(Page 41)**

Energy Flow: Up the back and over head to top lip
Number of points on meridian: 28

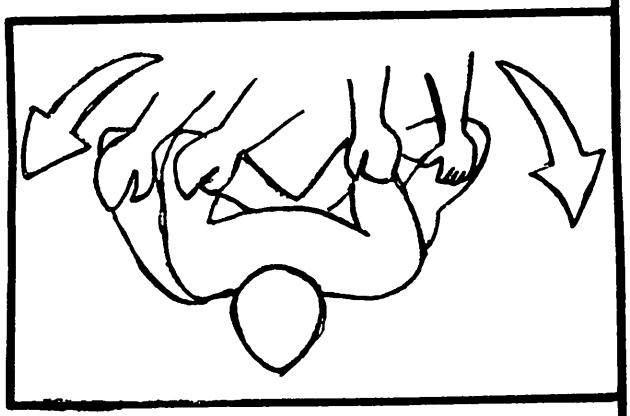
Neurolymphatics: (NL) Bilateral

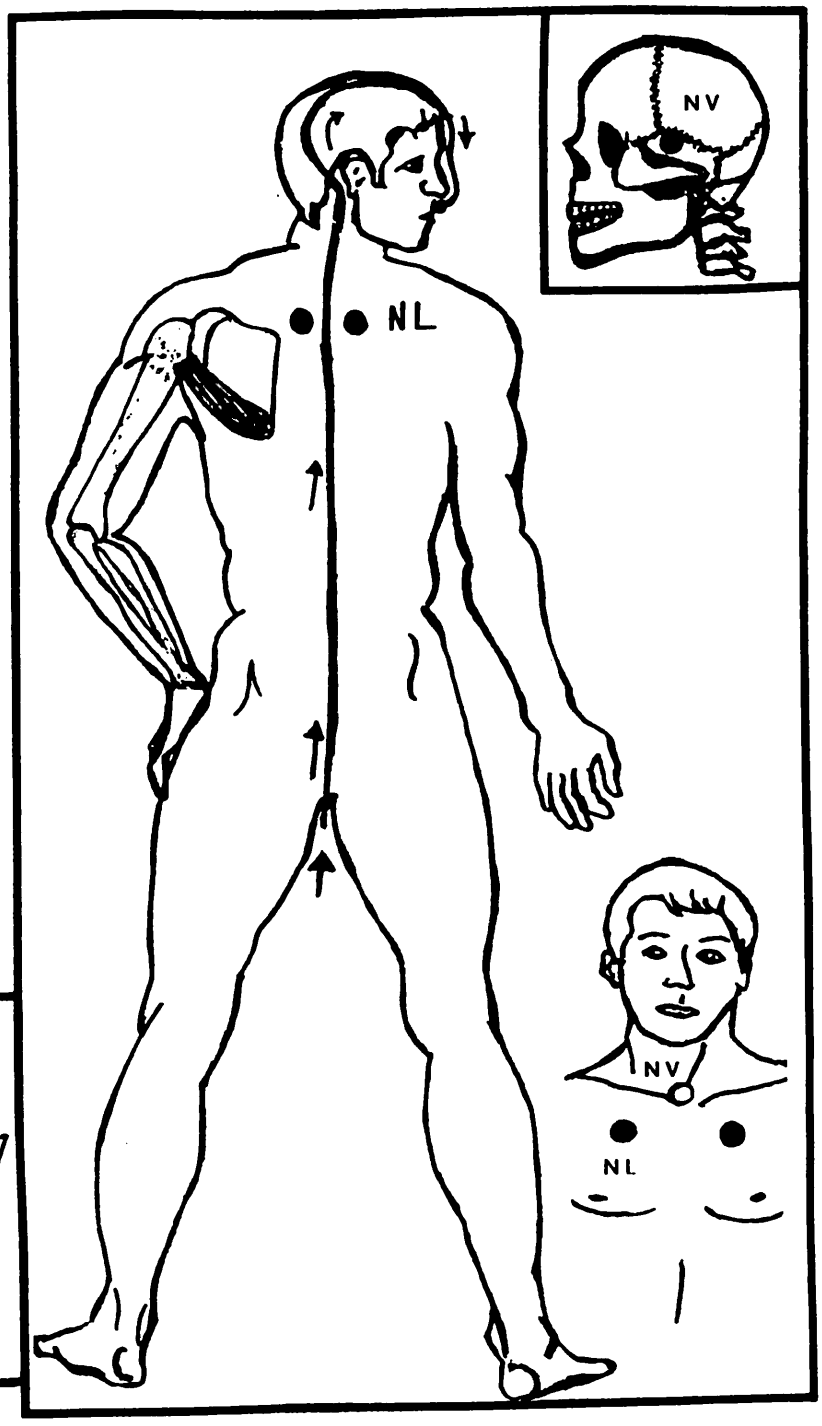
Anterior: Between 2nd & 3rd ribs, 2-1/2 inches from sternum
Posterior: 3rd thoracic vertebra

Neurovasculars: (NV) Bilateral

Directly above ears on each side and junction of clavicle, 1st rib & sternum

Muscle Test: Prone position, wrist against lower back, elbow bends at 90°. Stabilization of opposite shoulder is necessary only when testing one side.
Motion: Pressure is against the elbows in forward motion
Care should be taken to avoid overpowering these muscles as they can be easily injured.





Alarm Point: GV I

Teres Minor - Thyroid

ORGAN: The thyroid is the largest hormonal gland. It is located in the neck. The gland produces thyroxine. The thyroid gland regulates the body's basal metabolism, that is, the rate of cellular oxidation and heat production. The thyroid also influences general body growth, ossification of bones, the development of teeth, muscle tone, body temperature, mental development, and the gonads and adrenals. The pituitary produces a thyroid-stimulating hormone (TSH) which affects the thyroid.

STRUCTURAL WEAKNESSES: Elbow and wrist problems, shoulder problems, teres minor appears weak if trapezius or rhomboids are weak

INTERNAL WEAKNESSES: Thyroid conditions, digestive disturbances, infections, weight changes, unexplainable crying, chilled, female hormonal problems, skin and/or hair problems, depression, hypoglycemia (low blood sugar), high cholesterol or triglycerides, infertility, arthritis

NUTRITION: Natural glandular thyroid extracts and concentrates, Iodine, Tyrosine, Vitamin F, RNA, Manganese, Vitamin B-12
Herbs: Bladderwrack, Irish Moss, Aventa Sativa, Prickly Ash Bark

MUSCLE ORIGIN: The middle outer edge of the scapula nearest the arm

MUSCLE INSERTION: Attaches to the posterior humerus directly below the shoulder joint

TRIPLE HEATER MERIDIAN - YANG (Page 33)

Energy Flow: Up the arms
Number of points on meridian: 23
Peak Hours: 9-11 PM

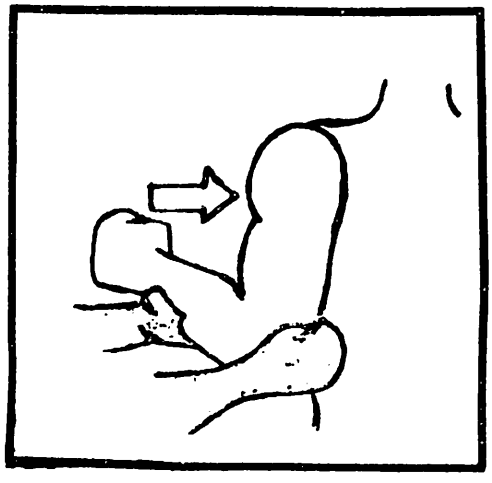
Neurolymphatics: (NL) Bilateral

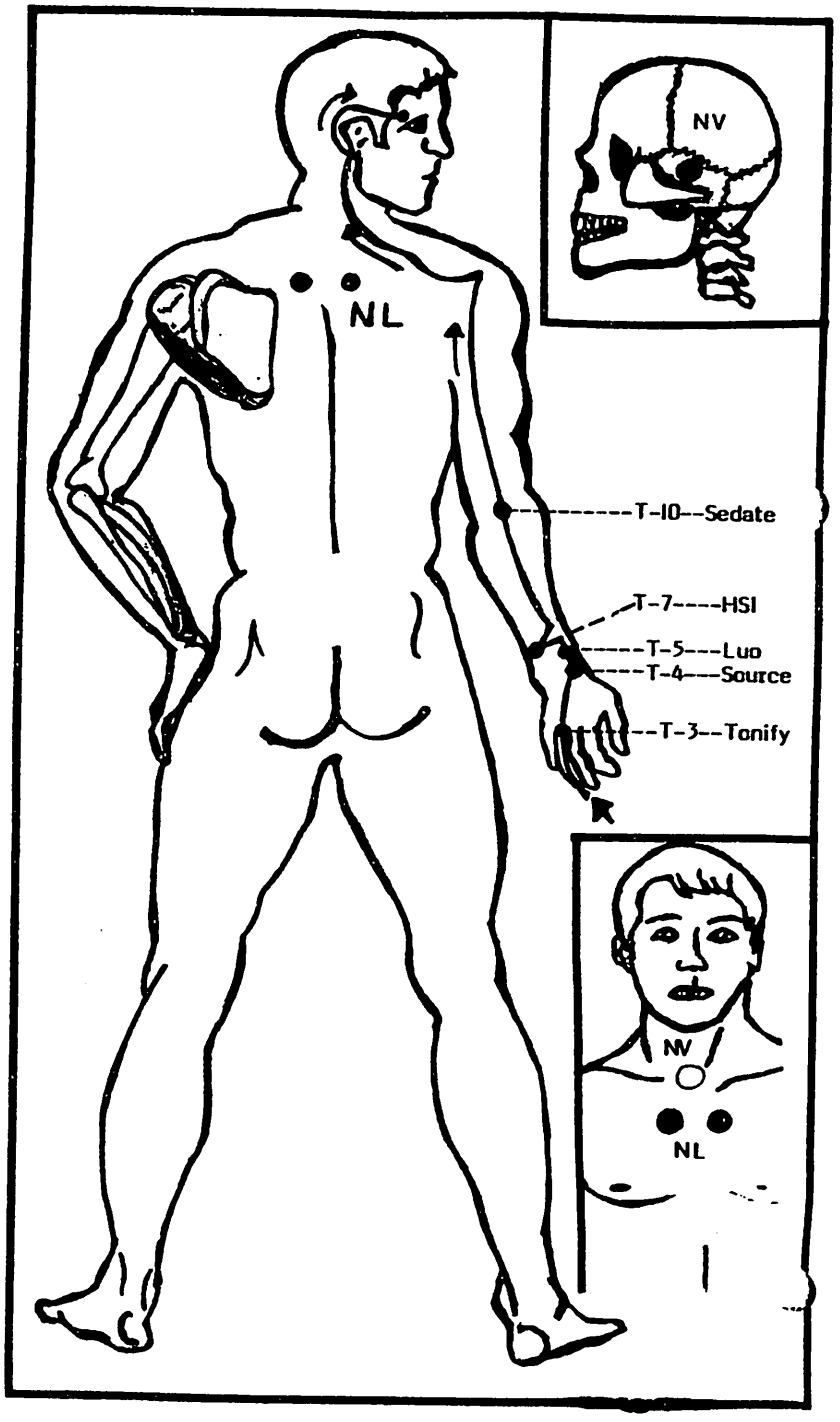
Anterior: Between 2nd & 3rd rib near sternum
Posterior: 3rd thoracic vertebra

Neurovasculars: (NV) Bilateral

Directly above ears on each side and junction of clavicle, 1st rib & sternum

Muscle Test: Elbow bends at 90° holding against body, stabilizing elbow
Motion: Pressure is against wrist with hand flat against wrist, toward body





SIMPLE HEALTH TEST MAY CHANGE YOUR LIFE

Dr. Broda Barnes, a medical physician and thyroid physiologist, believes that over 40% of all Americans have sluggish thyroid glands.

The thyroid gland is the largest hormonal gland in the body. Thyroid hormones act as a cellular carburetor to control the rate at which cells burn energy. An underactive thyroid, therefore, can reduce energy metabolism all over the body. Since all of our cells are affected, the symptoms of low thyroid can occur anywhere in the body. Fatigue, chilling easily, unhealthy skin, recurrent infections, heat loss, depression, menstrual disorders, infertility, constipation and headaches are just a few of the most common imbalances which can be due totally or in part to an underactive thyroid.

Dr. Barnes claims that the standard thyroid blood tests routinely given by medical physicians and relied upon as the main tool to check for underactive thyroid are inadequate. Dr. Barnes suggests a simple morning resting temperature test instead, which is a much more sensitive indicator of underactive thyroid than the blood test. This test is easy to perform. At night, before going to bed, simply shake down a regular oral thermometer. Upon awakening in the morning, place the thermometer snugly under either arm and leave it there for ten minutes. Your temperature reading should be between 97.8F and 98.2F. If your thermometer reads below 97.8F and if you have suffered from any chronic health complaint, you should see a doctor trained in natural health care. The use of drugless glandular therapy usually can normalize a sluggish thyroid within a short period of time.

The most common complaint of a person with a sluggish thyroid is fatigue. Often, depression is also found with fatigue. In such a case an unfortunate situation which commonly occurs is a physician prescribing an anti-depressant or tranquilizer instead of treating the underlying thyroid imbalance. These drugs may further weaken an already hypofunctioning thyroid.

Skin problems such as acne and allergic eczema often respond miraculously to natural therapy for thyroid. With a sluggish thyroid, the blood supply to the skin can be reduced 75%. This reduction in blood causes dry skin and a general inability of the sebaceous glands to function properly. The sebum contained in these glands provides a breeding ground for bacteria which overgrow and result in the formation of acne pustules. Acne generally will be resolved in 30 to 45 days following the introduction of an optimal diet and natural thyroid glandular therapy.

Some people have had eczema so bad their skin would bleed on their arms and legs just from moving. These people are now leading a normal life because their low thyroid condition was corrected. Anemia can also be caused by a below par thyroid. The bone marrow is underactive and cannot manufacture the quantity and quality of red blood cells needed.

Most people will respond favorably to natural therapies and drugless approaches and rarely will the use of prescription thyroid medications be needed. The natural therapies get the thyroid to begin manufacturing, on its own, the proper level of hormone, whereas the commonly used thyroid drugs make the body dependent on the medication.

Tibials - Bladder

ORGAN: The bladder is located behind and just above the pubic bone. The bladder not only collects the urine excreted by the kidneys, but also serves in urine evacuation.

STRUCTURAL WEAKNESSES: Flat foot or fallen arches, bunions

INTERNAL WEAKNESSES: Rectal problems, bladder problems

NUTRITION: Vitamin A, B, C, P, ascorbic acid

Herbs: Uva-ursi, couch grass, marshmallow root, buchu leaves, barberry bark, juniper berries

MUSCLE ORIGIN: Lateral side of lower leg directly below the knee.

MUSCLE INSERTION: Inside of the foot 2" up from big toe midway.

BLADDER MERIDIAN - YANG (28 & 29)

Energy Flow: Down the back & legs
Number of points on meridian: 67
Peak Hours: 3-5 PM

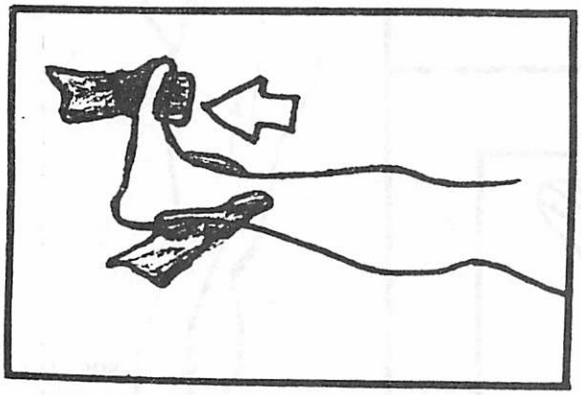
Neurolymphatics: (NL) Bilateral

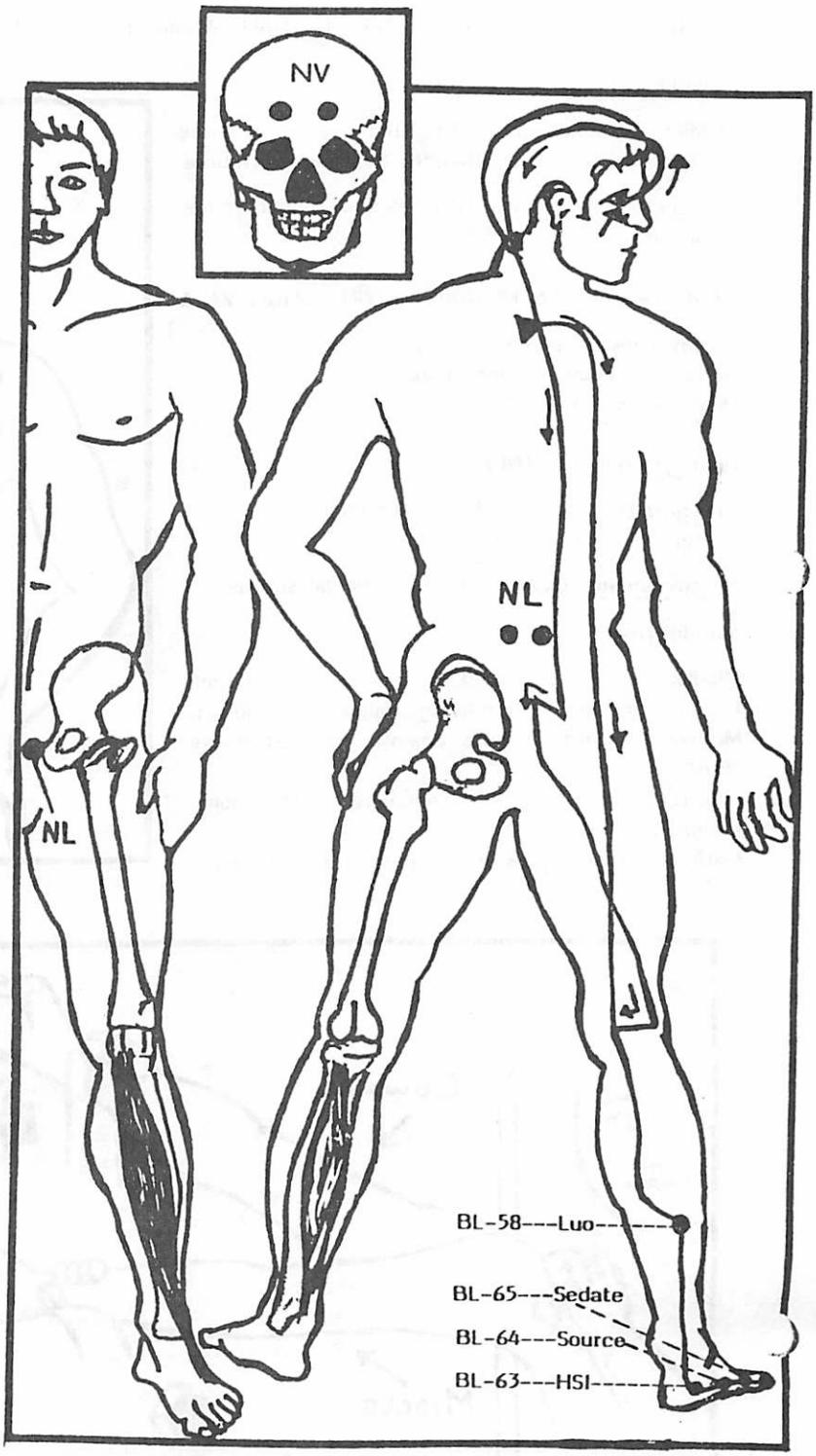
Anterior: 3/4" above pubic bone
Posterior: 2nd lumbar vertebra

Neurovasculars: Bilateral frontal bone eminences

Muscle Test: Supine position

Motion: Stabilizing below the ankle, pressure is against the top of foot directing down





Alarm Point: CV 3

Mid & Lower Trapezius - Spleen

ORGAN: The spleen is a soft, purplish organ located in the upper quadrant of the abdomen. It is about six inches long and 3 inches wide, and has the following functions: (1) to destroy worn-out red blood cells and return some of the products of this decomposition to the liver; the liver uses this to help make bile. (2) to produce white blood cells (lymphocytes & monocytes) - part of the body's natural immune system, (3) To aid in removing various kinds of foreign and undesirable matter from the tissues and destroying bacteria, (4) to produce antibodies which help immunity, (5) removes iron from hemoglobin and directs it for reuse by bone marrow in making new red blood cells.

STRUCTURAL WEAKNESSES: Upper and/or mid back pain

INTERNAL WEAKNESSES: Infections, sore throats, hearing loss, anemia, high fever

NUTRITION: Natural glandular Spleen extracts & concentrates, Vitamin A, C, Calcium

MUSCLE ORIGIN:

Middle: Attaches to the 1st-5th thoracic vertebrae
Lower: Attaches to 6th-12th thoracic vertebrae

MUSCLE INSERTION: Attaches to upper edge of scapula.

PANCREAS/SPLEEN MERIDIAN - YIN (Pages 24 & 25)

Energy Flow: Up legs & body
Number of points on meridian: 21
Peak Hours: 9-11 AM

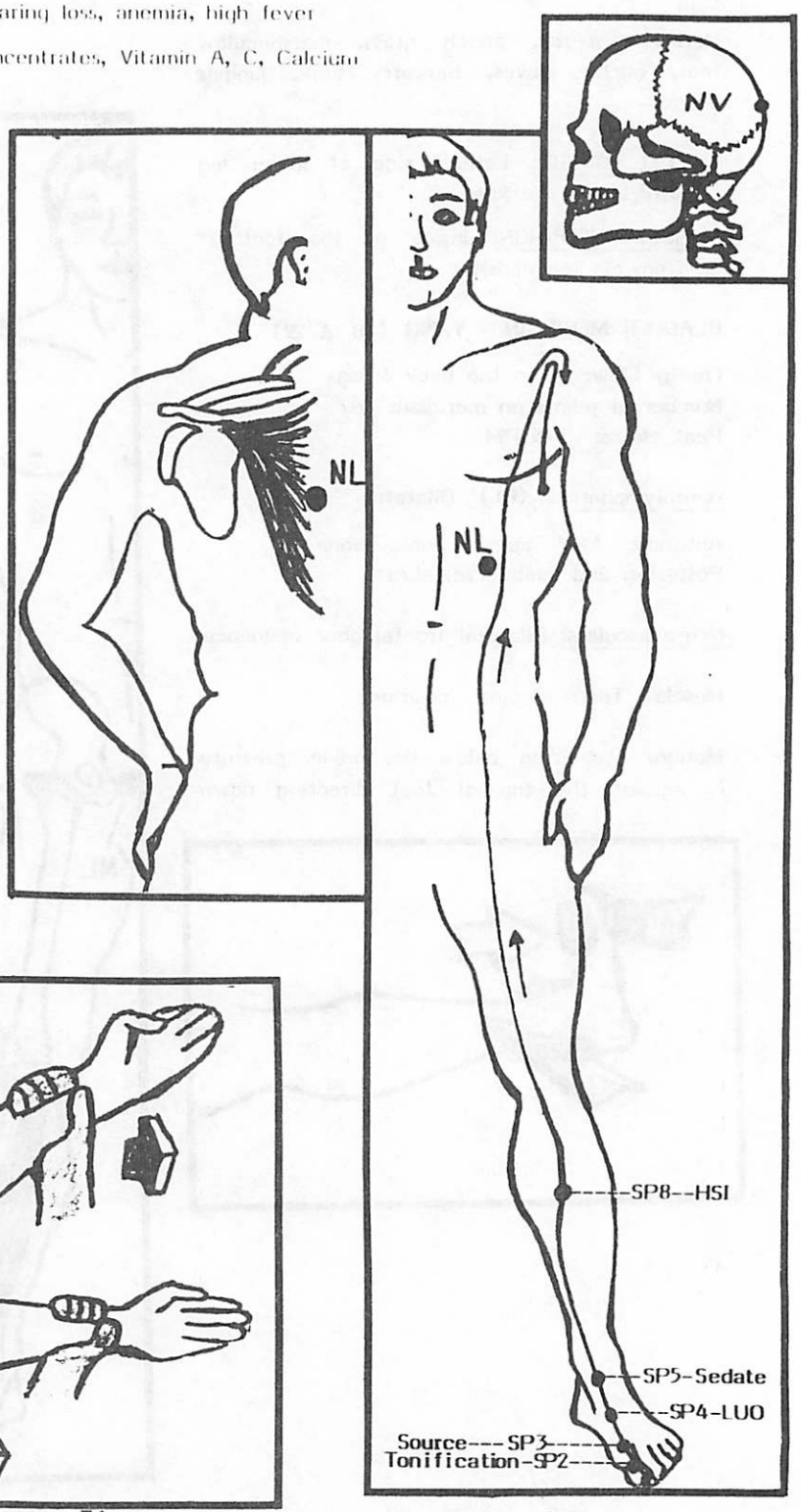
Neurolymphatics: (NL)

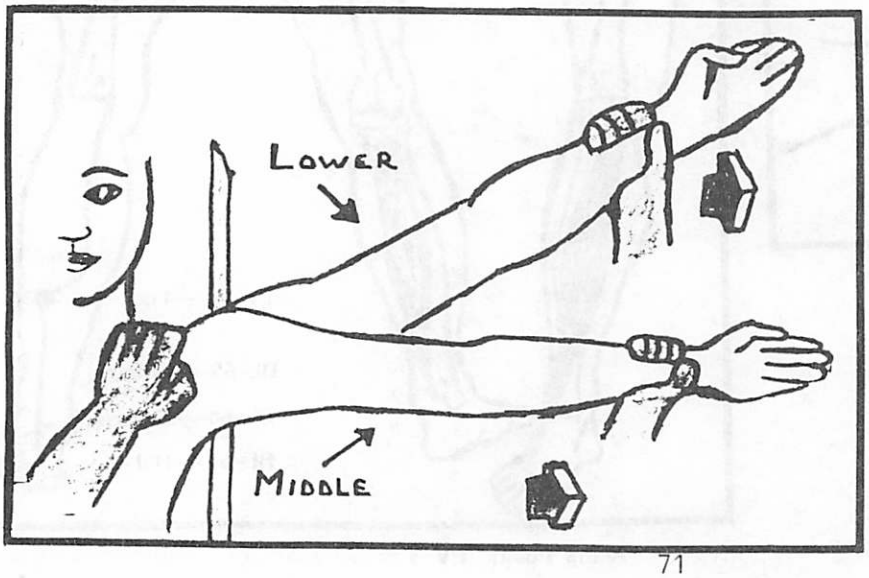
Anterior: Between 7th & 8th ribs on left
Posterior: Between T7 & T8 on left

Neurovasculars: (NV) 1" above lamboidal suture

Muscle Test:

Middle: Arm is extended to side at 90°, thumb toward ceiling, stabilizing opposite shoulder.
Motion: Forward pressure against arm just above wrist.
Lower: Arm extended diagonally 150°, thumb toward ceiling.
Motion: Forward pressure against arm just above wrist.





Alarm Point: LV13
Associated Point: B20

Upper Trapezius - Eye & Ear

ORGAN: The eye is a mechanism in which receptors are stimulated by light energy, as a result of which nerve impulses are sent to the brain, where they give the sensation of sight. The ear is a combination sensory organ, related to both hearing and equilibrium. Hearing is the process by which the energy of sound waves is transmitted to the brain producing the sensation of sound. The semicircular ducts, utricle and saccule are the sense organs of equilibrium and position.

STRUCTURAL WEAKNESSES: Low shoulder on side of weakness, neck and upper shoulder pain or stiffness

INTERNAL WEAKNESSES: Eye problems, hearing loss, otitis media, conjunctivitis, night blindness

NUTRITION: Natural glandular eye extracts and concentrates, calcium, Vitamin A, F, Rutin, Hesperidin
Herbs: Eyebright

MUSCLE ORIGIN: From the occipital protrusion to C-7 along the spine

MUSCLE INSERTION: Lateral third of the clavicle and the spine of the scapula

KIDNEY MERIDIAN - YIN (Pages 30 & 31)

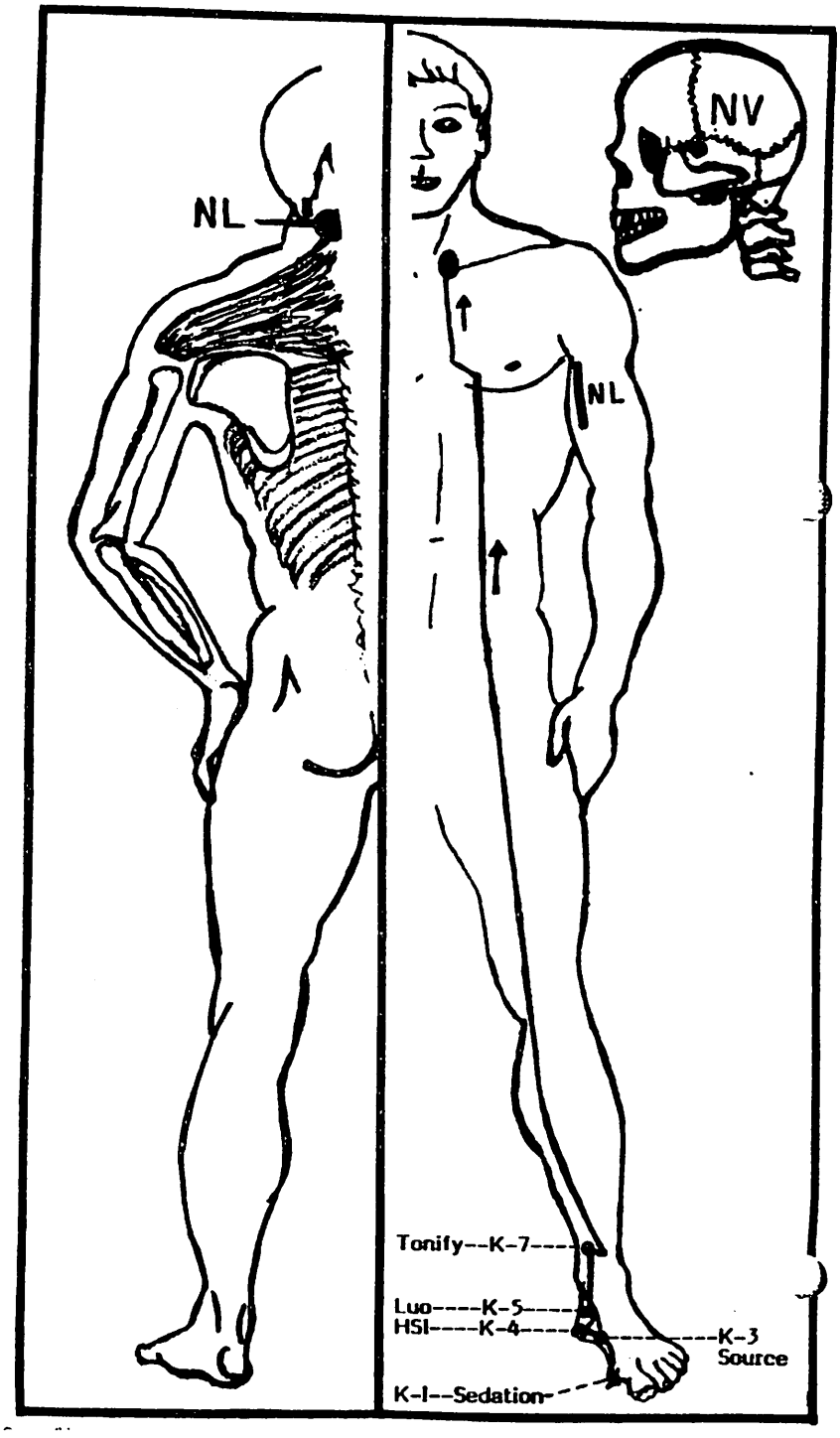
Energy Flow: Up the leg, abdomen, & chest
Number of points on meridian: 27
Peak Hours: 5-7 PM

Neurolymphatics: (NL) Bilateral

Anterior: 3" section of anterior upper arm
Posterior: Base of skull 1-1/2" to each side

Neurovasculars: (NV) On temporal sphenoidal suture; on side of head just next to eye

Muscle Test: Shoulder elevated; neck and head moves laterally to shoulder
Motion: One hand on shoulder and the other hand on head to pull apart



Triceps Brachii – Pancreas

ORGAN: The pancreas is located below the liver and the stomach. It consists of two main parts, the head and the tail. The head secretes pancreatic juices which contain the following digestive enzymes: (1) Lipase for fat digestion, (2) Amylopsin - for starch digestion, (3) Trypsin - for protein digestion. The tail of the pancreas contains the Islets of Langerhans. The Islet cells secrete insulin and glycogen, hormones concerned with regulating blood sugar metabolism.

STRUCTURAL WEAKNESSES: Elbow and shoulder problems

INTERNAL WEAKNESSES: Carbohydrate sensitivity, diabetes, hypoglycemia (hyperinsulinism), allergies, digestive disturbances

NUTRITION: Natural glandular pancreas extracts and concentrates, Vitamin A, F, betaine, chromium, pancreatic enzymes, B-complex, zinc, glucose tolerance factor (GTF)
Herbs & Foods: Blueberry leaves, Saw palmetto berries, barberry bark, licorice root, molasses

MUSCLE ORIGIN: Posterior surface of the upper arm & outer tip of scapula

MUSCLE INSERTION: Posterior surface of the forearm just below the elbow

PANCREAS/SPLEEN MERIDIAN - YIN (Pages 24 & 25)

Energy Flow: Up the legs & body
Number of points on meridian: 21
Peak Hours: 9-11 AM

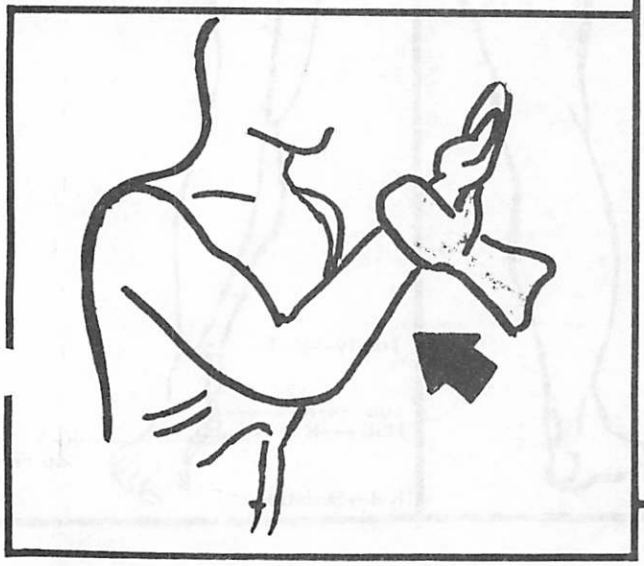
Neurolymphatics: (NL)

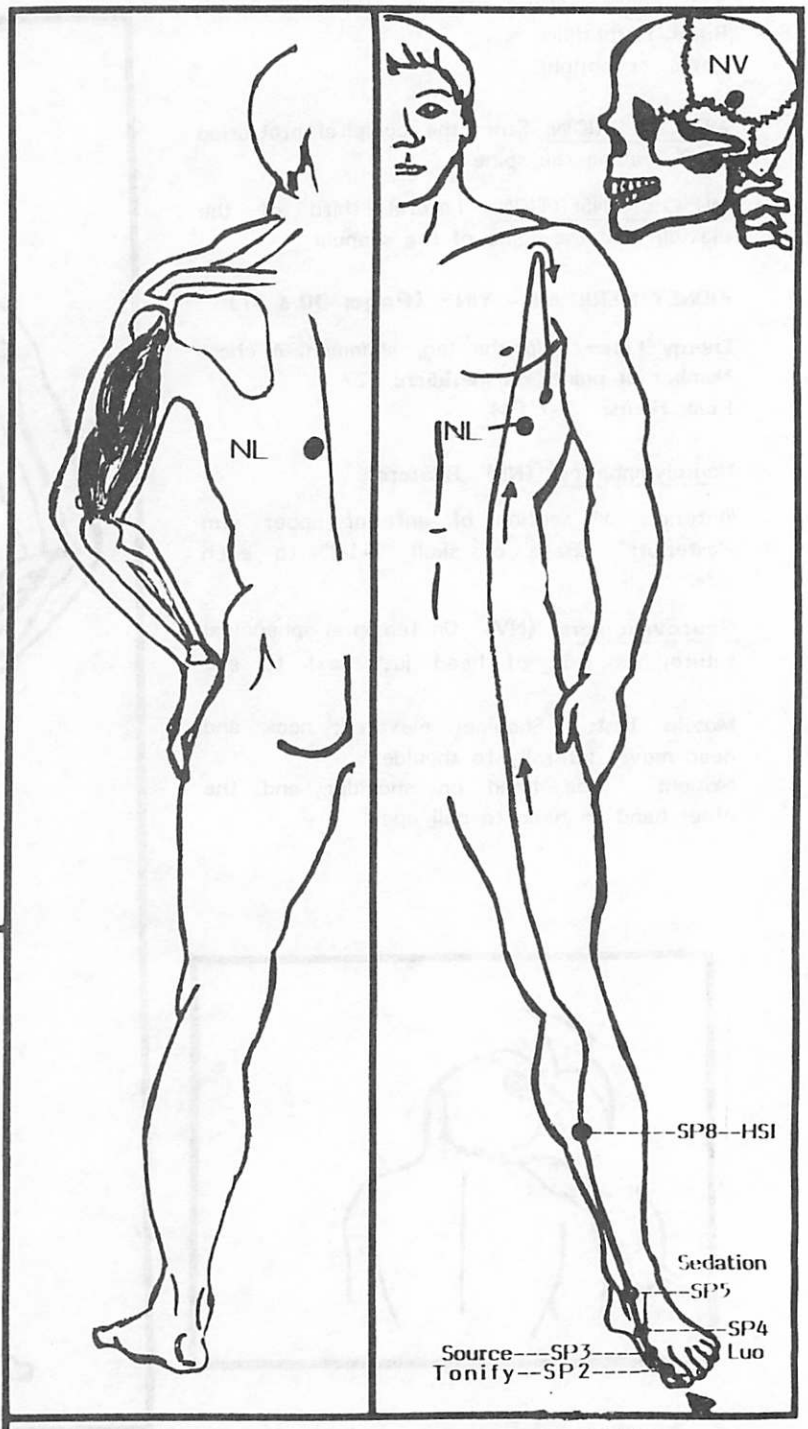
Anterior: Between 7th & 8th ribs on left at junction of cartilage
Posterior: Between T-7 & T-8 on left

Neurovasculars: (NV) Bilateral - Just above the temporal bone slightly posterior to the ear

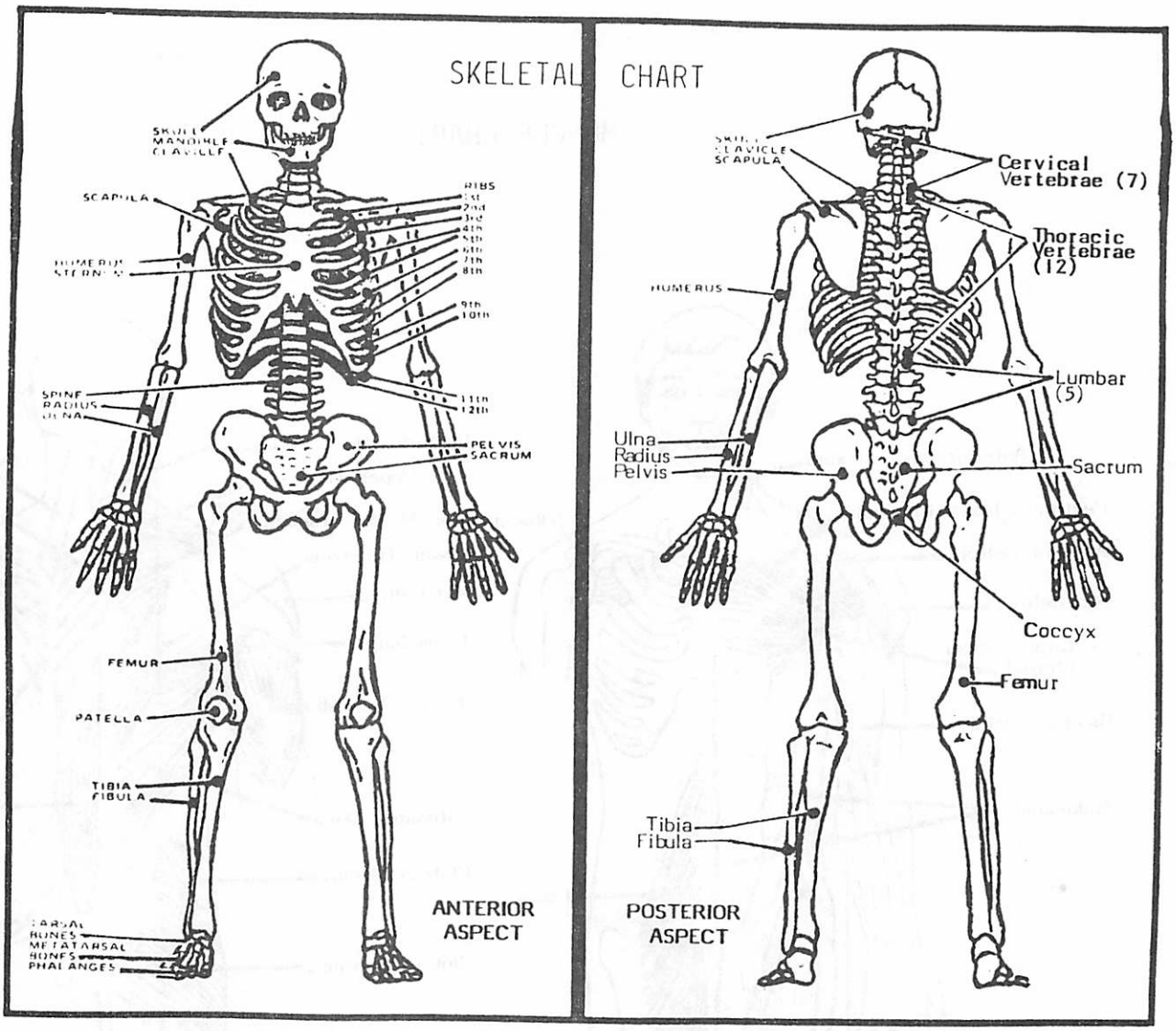
Muscle Test: Elbow bends to approximately 45°, palms up, stabilization of upper arm may be necessary

Motion: Pressure is against wrist directing toward shoulder





Alarm Point: LV 13
Associated Point: BL 20


SKELETAL CHART
SKULL
MANDIBLE
CLAVICLE
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1st
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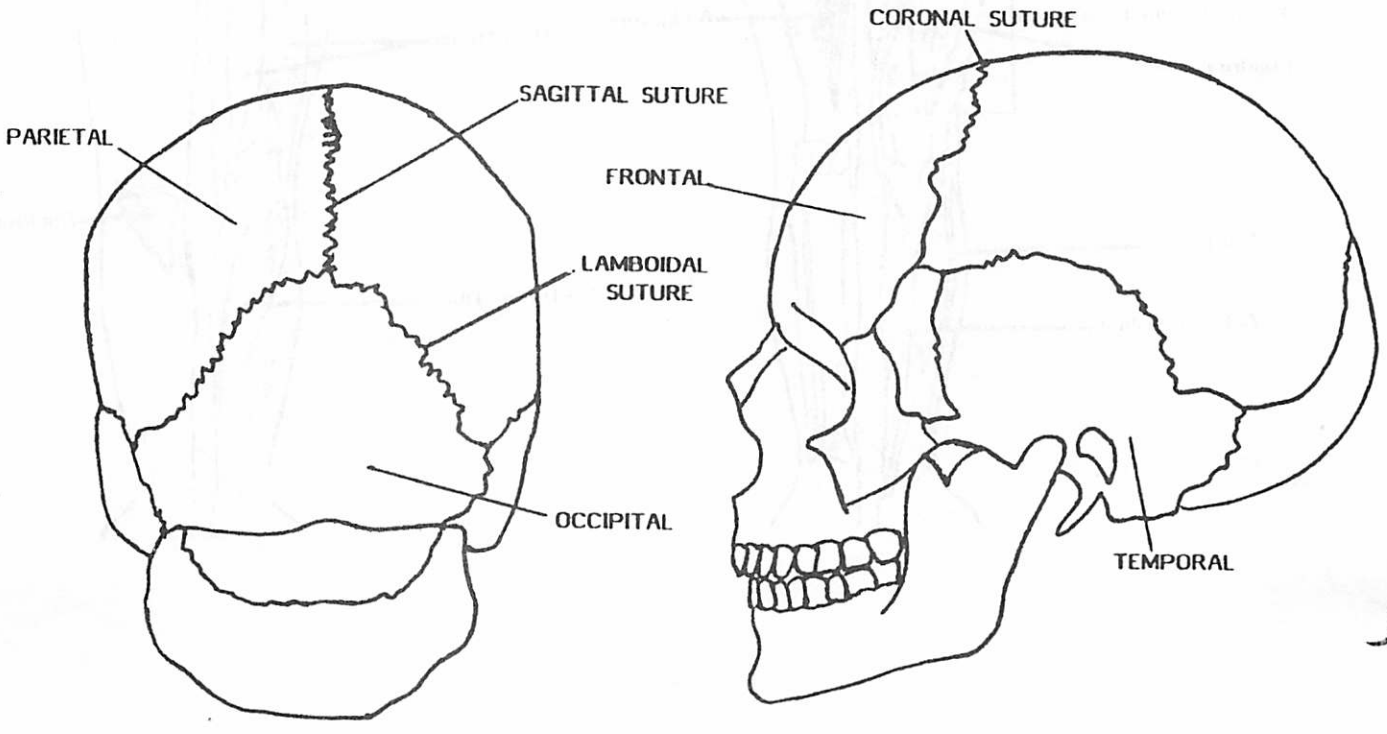
11th
12th
SPINE
RADIUS
ULNA
PELVIS
SACRUM
FEMUR
PATELLA
TIBIA
FIBULA
TARSAL BONES
METATARSAL BONES
PHALANGES
ANTERIOR ASPECT
SKULL
CLAVICLE
SCAPULA
Cervical Vertebrae (7)
Thoracic Vertebrae (12)
HUMERUS
Lumbar (5)
Ulna
Radius
Pelvis
Sacrum
Coccyx
Femur
Tibia
Fibula
POSTERIOR ASPECT


PARIETAL
SAGITTAL SUTURE
LAMBOIDAL SUTURE
OCCIPITAL
POSTERIOR
CORONAL SUTURE
FRONTAL
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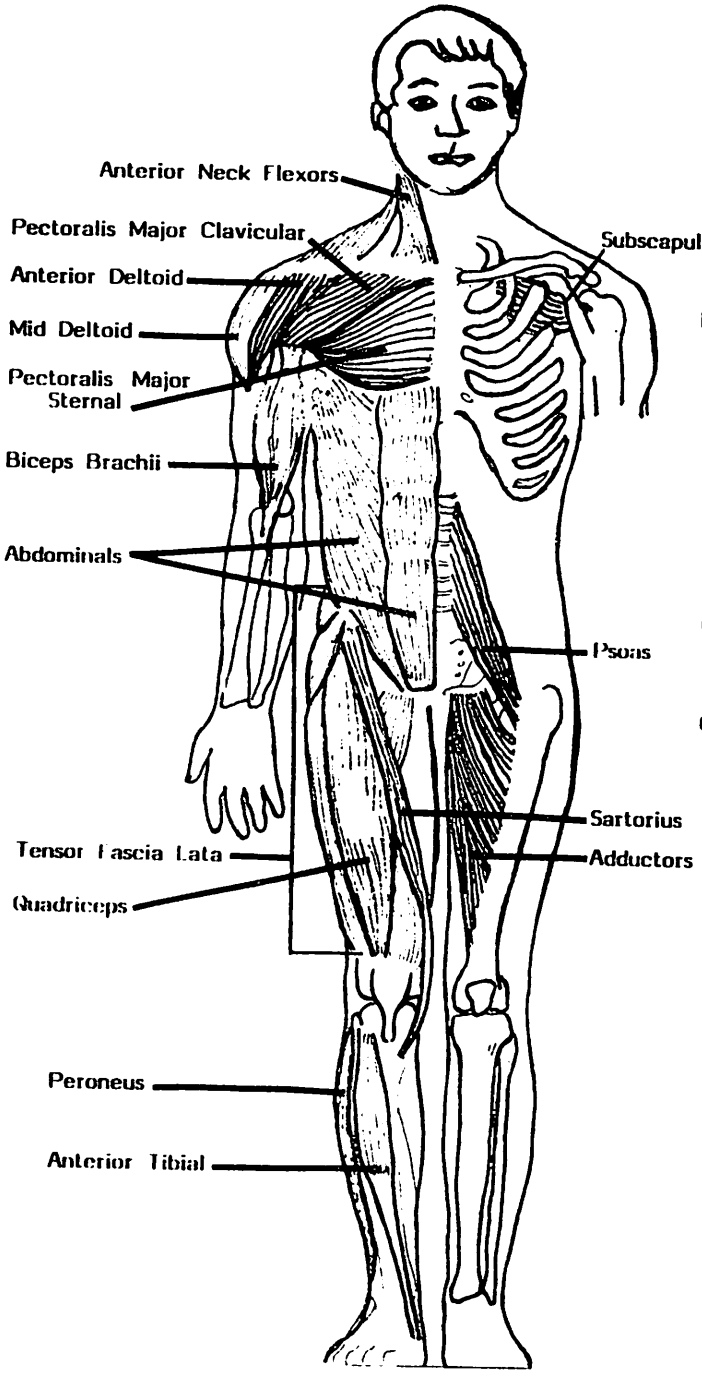
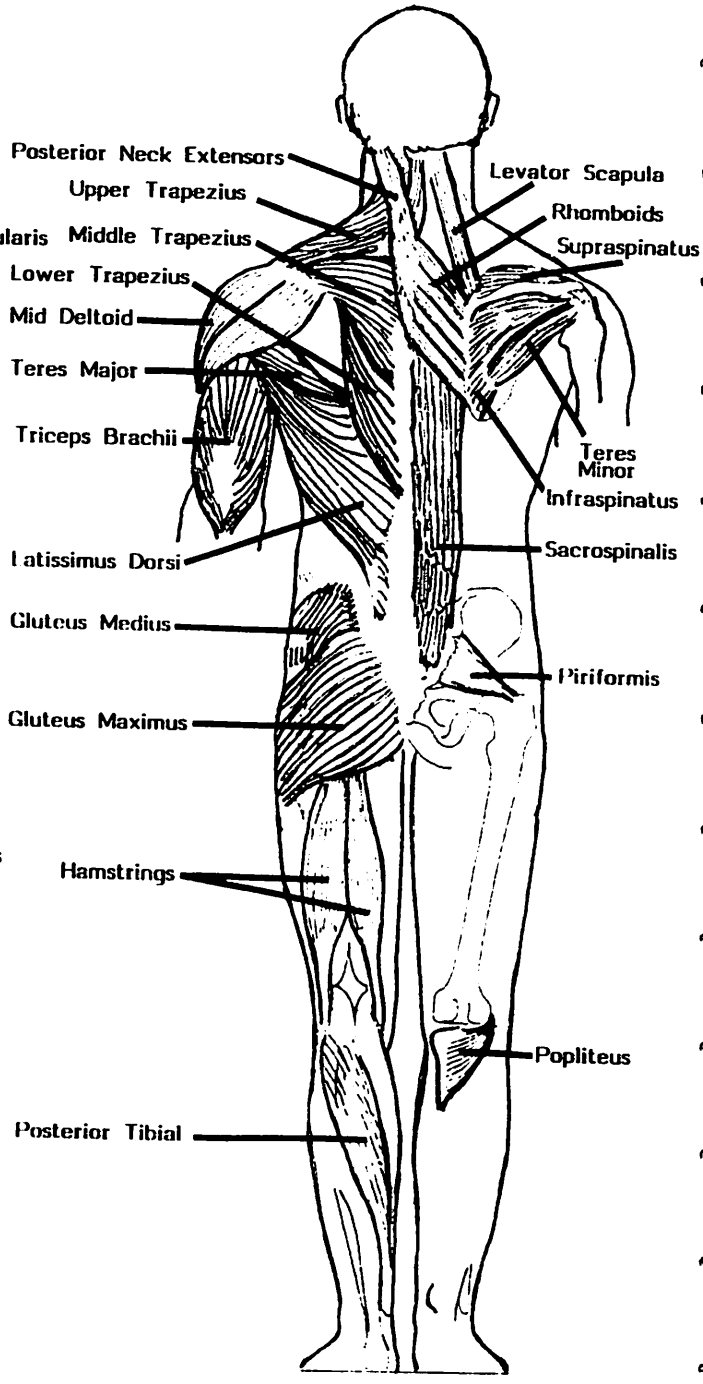
LATERAL

MUSCLE CHART



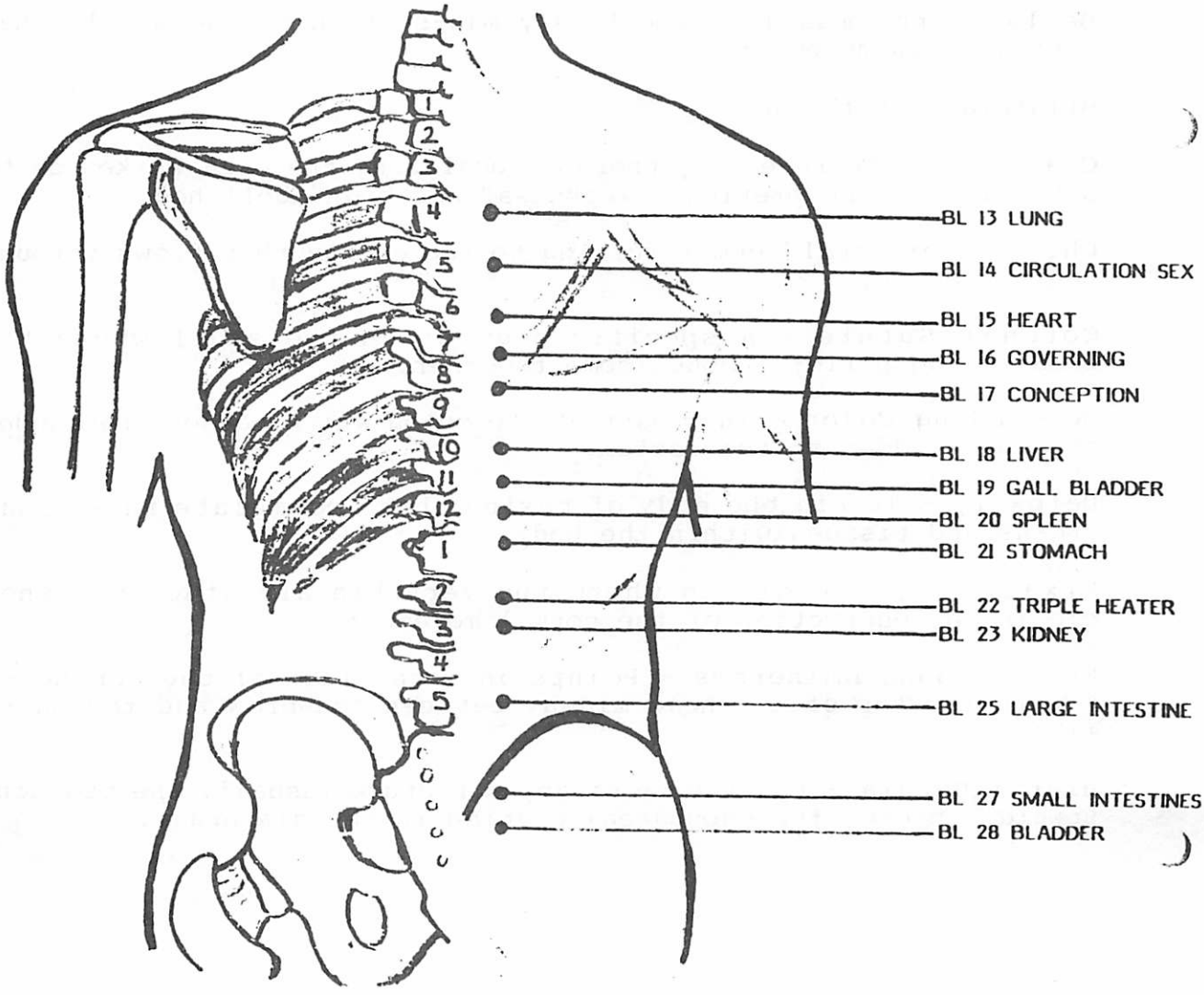


Associated Points

Located along the spine on the bladder meridian are the **associated points.** Each of the 12 meridians and the conception vessel and governing vessel have an associated point that represents it. According to classic acupuncture, these associated points are called reflex points.

By stimulating the associated point, the bladder meridian or the meridian which it is associated with, will be affected, depending on which one is deficient.

Goodheart found that every time a meridian is disturbed there is always a subluxation present at the associated point level. Sometimes adjustment of the vertebra adjacent to the associated point by a qualified chiropractor is necessary in treating a meridian.



GLOSSARY OF TERMS

Alarm Points - Specific areas on the meridian system in the body which are used to locate imbalances in the meridians.

Allopath - Traditional medical physician.

Anterior - Front

Applied Kinesiology - The science of muscle activation using muscle testing techniques to determine imbalances in the body and the method of treatment to correct the imbalances.

Ascending Colon - That part of the colon which passes from the ileocecal valve area to underneath the liver.

Associated Points - A series of acupuncture points located along the spine and the bladder meridian which can be stimulated with acupressure when a meridian corresponding to one of the points is out of balance. A vertebral subluxation may also be present at that level.

Belly of the muscle - The fleshy mid-section of the muscle that contracts in movement.

Bilateral - Both sides

Challenge - To retest by therapy localizing the area worked on to determine if the previous "weakness" has been abolished.

Chi - An oriental term referring to the energy that flows through the meridians.

Coronal Suture - A specific segment on the skull where the frontal and parietal bones come together.

Descending Colon - That part of the colon which passes from under the Spleen down to the rectum.

Detoxify - To rid the body of toxins that accumulate in various organs and tissues within the body.

Fixation - A condition where the vertebra are stuck together causing a restriction of the normal movement.

Frontal Bone Eminences - Points on both sides of the forehead, toward the top of the head midway between the brow and the hair-line.

Hiatal Hernia - Protrusion of any structure (usually the stomach) upward, through the esophageal opening in the diaphragm.

GLOSSARY OF TERMS

Hyperextension - Extreme or excessive extension of a limb or joint.

Imbalances - A disturbance in the normal function of the body.

Indicator Muscle - Any strong muscle used to test the status of specific areas of the body. If an area of the body is touched that is out of balance and a previously strong muscle is tested, it will now test weak "indicating" a weakness in the area touched.

Lamboidal Suture - A specific segment on the skull where the occipital and parietal bones come together.

Lateral - Side.

Meridian - Pathway which energy or "chi" flows throughout the body.

Meridian Therapy - More appropriate name for acupuncture.

Muscle Insertion - Point where a muscle attaches to another muscle or bone.

Muscle Origin - Point where a muscle attaches to the bone in a spread-out fashion. The origin of the muscle is relatively stationary.

Neurolymphatic - Specific points located throughout the body which when stimulated encourage lymphatic drainage.

Neurovascular - These points influence circulatory function in various areas of the body and increase the blood supply to those areas which assist the body in the healing process.

Occipital protrusion - A "bump" on the lower, rear part of the skull where the skull meets the spinal column.

Palpation - To feel for any tight or tender areas on the body.

Posterior - Back.

Prone position - Laying in a face down position.

Ramus (of the jaw bone) - A point on the skull from below the ear to the curvature of the jaw.

Sagittal Suture - A specific segment on the skull where the frontal and parietal bones come together.

GLOSSARY OF TERMS

Sciatic Pain - Inflammation or irritation of the sciatic nerve which may produce pain in the low back, the leg and down into the foot.

Sublingual - Beneath the tongue.

Subluxation - Vertebral misalignment which interferes with the nerve impulses that go out from the spinal cord and back into it. This condition is usually corrected by a chiropractic adjustment.

Supine position - Laying in a face up position.

Therapy Localization - A testing procedure involving touching specific areas on the body to determine imbalances. When a person touches a part of the body that is not functioning properly, their strong indicator muscle weakens.

Transverse Colon - That part of the colon which passes from underneath the liver across to the Spleen.

Triad of Health - The relationship between the chemical, structural and mental or emotional aspects of an individual. Each aspect is interrelated and an imbalance in any one will affect the others.

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PRELIMINARY REPORT

RESIDUAL TENSION OF THE MUSCLES OF MASTICATION: A POSSIBLE METHOD FOR THE DIAGNOSIS OF MUSCULAR HYPERTONICITY?

by

Joseph Shafer, D.C.

IN THE COLLECTED PAPERS OF THE MEMBERS OF ICAK (SPRING, 1984) I PRESENTED AN ARGUMENT FOR AND A DISCUSSION OF THE POSSIBLE DIAGNOSIS OF MERIDIAN OVER-ENERGY AND WITH IT MUSCULAR HYPERTONICITY. THE PAPER BEGAN AS A SEARCH FOR A REASONABLE ANSWER TO THE LONG-STANDING CONTROVERSY ON MERIDIAN OVER-ENERGY DIAGNOSIS AS FOUND IN UTILIZING APPLIED KINESIOLOGY (A-K) TECHNIQUES. A CRITICAL EXAMINATION OF EXISTING THEORIES LEAD TO THE DEVELOPMENT OF A NOVEL APPROACH TO THE ANALYSIS OF THE MERIDIAN IN EXCESS.

AS AN OUTGROWTH OF THE RESEARCH, IT WAS DEDUCED THAT A MORE IMPORTANT RESULT OF THESE FINDINGS MIGHT BE THE ABILITY TO MEASURE THE HYPERTONICITY OF MUSCLES AS OPPOSED TO THE HYPOTONICITY. A MORE ACCURATE DESCRIPTION MIGHT BE THE ABILITY TO MEASURE WHEN A NEUROMUSCULAR COMPLEX IS IN A STATE OF OVER-ADAPTION AS OPPOSED TO A STATE OF LACK OF ADAPTION. IF ONE ACCEPTS AS TRUE THE THEORY THAT MERIDIANS IN EXCESS ARE CHARACTERIZED BY A HYPERTONIC (OVER-ADAPTED) ASSOCIATED MUSCLE, THEN IT MAY BE POSSIBLE TO TEST FOR THIS EXCESS TENSION BY APPLYING THE SAME APPROACH. A BRIEF EXPLANATION OF THE PROCEDURE WILL BE DISCUSSED BELOW, HOWEVER A LENGTHIER, MORE PRECISE DESCRIPTION MAY BE FOUND IN THE PREVIOUS PAPER.

IT WAS OBSERVED THAT THE POINT KIDNEY 27 (K-27) COULD BE USED AS A TYPE OF BIO-ELECTRIC CIRCUIT BREAKER FOR MERIDIAN OVER-ENERGY DIAGNOSIS. THOSE MUSCLES ASSOCIATED WITH THE EXCESS MERIDIAN, WHEN TESTED WHILE THE PATIENT THERAPY LOCALIZES (TL) THE K-27 ON THE SAME (IPSILATERAL) SIDE OF THE BODY, WOULD WEAKEN DRAMATICALLY. WHAT MAKES THE FINDING INTRIGUING AND

SPECIAL IS THAT SHOULD THE PATIENT TL TO THE OPPOSITE OR CONTRALATERAL K-27, NO WEAKENING WILL OCCUR. FURTHER, IF ANY OTHER MUSCLE ON THE SAME SIDE OF THE BODY AND NOT ASSOCIATED TO THE SUSPECTED MERIDIAN, IS TESTED AGAINST THE K-27, NO WEAKENING SHOULD RESULT. IF WEAKENING IS NOTED IN ANY OF THE OTHERS TESTS, IT INDICATES A SWITCHING PROBLEM RATHER THAN AN OVER-ENERGY STATE. IN OTHER WORDS, THE ONLY REACTION WHICH SHOULD OCCUR IS THE IPSILATERAL K-27/ASSOCIATED MUSCLE COMBINATION AND NO OTHER.

THE AUTHOR BELIEVES THAT THE REASON FOR THE WEAKENING IS THAT THE BODY REACTS AS WOULD AN ELECTRICAL SAFETY SWITCH TO A SUDDEN SURGE IN POWER. WHEN THE CORRECT CIRCUITRY IS COUPLED TOGETHER AND A TOO HIGH ENERGY EXISTS, THE BODY TRIPS-THE-FUSE. THIS REACTION SEEMS TO CORRELATE WELL WITH THE EXCESS MERIDIANS FOUND IN A-K ANALYSIS AND WITH EXCESS ENERGIES CREATED BY ELECTRICAL STIMULATION OF THE TONIFICATION POINTS IN AN OTHERWISE NORMAL MERIDIAN.

ONE OF THE CONSISTANT CONCERNS OF THE AUTHOR HAS BEEN THE PERSISTANT TENSION AND PAIN TO PALPATION OF THE MUSCLES OF MASTICATION IN CERTAIN PATIENTS. OFTEN IT WAS NOTED THAT AFTER ALL BALANCING HAD BEEN ACCOMPLISHED, THERE REMAINED AN UNEXPLAINED TENSION AND PALPITORY PAIN IN PATIENTS EXPERIENCING HEAD, NECK, AND TEMPOROMANDIBULAR DYSFUNCTION. UNDER NORMAL CIRCUMSTANCES ONE WOULD IMAGINE THAT TL TO THE TEMPOROMANDIBULAR AREA WOULD PRODUCE A REACTION OF SOME KIND. IN FACT THE REVERSE IS THE CASE. THE RESIDUAL TONICITY FOUND IN THESE PATIENTS IS NOT AMENABLE TO ANY OF THE OTHER (OPENNING, CLOSING, LATERALIZATION, WAGGING, AEROBIC, POSTURAL/GAIT, ETC.) DIAGNOSTIC

TESTING MODES USED IN APPLIED KINESIOLOGY.

SINCE OBSERVING THE RESULTS OF THE EXCESS ENERGY TECNIQUE, THE AUTHOR HAS ATTEMPTED TO APPLY THE SAME PRINCIPLES TO THE TEMPOROMANDIBULAR AREA. YET A DOUBLE THERAPY LOCALIZATION TO THE BELLY OF THE BUCCINATOR/MASSETER AND THE IPSILATERAL K-27 BROUGHT NO POSITIVE REACTION OF A STRONG INDICATOR MUSCLE. IF THEN THE PATIENT IS INSTRUCTED TO CONTRACT (BITE TOGETHER) THESE MUSCLES, WHILE MAINTAINING THE SAME TWO CONTACTS, A WEAKENING WILL RESULT. OF COURSE, AS HAS BEEN RELATED EARLIER, PRIOR TO THIS TEST, NEITHER TL SHOULD REACT AS A SINGLE CONTACT IN THE CLEAR OR BITING DOWN OR IN ANY ONE OF THE OTHER SPECIAL MODES. FURTHER, A CONTRALATERAL K-27 CONTACT AS THE PATIENT BITES AND HOLDS THE TEMPOROMANDIBULAR AREA SHOULD BE EQUALLY AS NEGATIVE.

LOGICALLY, IN ORDER TO TEST THE EXTERNAL OR INTERNAL PTERYGOIDS WITH THE SAME PROCEDURE IT BECOMES NECESSARY FOR THE PATIENT TO OPEN THE MOUTH TO ACHIEVE CONTRACTION. ON OCCASSION IT BECOMES IMPORTANT TO LATERALLY FLEX THE JAW IN ORDER TO GET AN ADEQUATE RESPONSE TO THE DOUBLE THERAPY LOCALIZATION. THE DIVISIONS OF THE TEMPORALIS SEEM TO REACT POSITIVE DURING OCCLUSION WHEN THEY ARE INVOLVED.

THE REACTION DOES NOT SEEM TO BE RELATED TO THE MUSCLE SPINDLE CELL MALFUNCTION WHICH REQUIRES 'SETTING DOWN' IN ORDER TO NORMALIZE THE RESPONSE. FASCIAL FLUSHING, STRETCH AND SPRAY, AND ATTEMPTS AT STRAIN-COUNTERSTRAIN THERAPY PRODUCE NEGATIVE RESULTS. SOMETIMES THE TREATMENT WOULD TEND TO CONFUSE THE INTIAL TL REACTION FROM A FEW SECONDS UP TO A MINUTE OR SO.

HOWEVER, IT WOULD INVARIABLY RETURN AFTER A SUFFICIENT PERIOD OF NORMALIZATION.

IT HAS BEEN FOUND, THROUGH TRIAL AND ERROR, THAT THE CONDITION RESPONDS QUITE WELL TO SOME FORM OF UPPER CERVICAL MANIPULATION. WHEN ONLY A UNILATERAL NEED IS LOCATED BY TL, IT INVOLVES USUALLY SOME SINGLE OVERSEEN CERVICAL MANIPULATIVE NEED BY THE DOCTOR. IT CAN BE AS LITTLE AS AN ATLAS ROTATION TO THE NEED FOR SOME PRY-T TREATMENT, AMONG OTHERS. IT HAS BEEN FOUND, THOUGH LESS OFTEN, TO BE RELATED TO SOME PELVIC OR LOWER EXTREMITY DYSFUNCTION CAUSING A SECONDARY UPPER CERVICAL REACTION.

THE BILATERAL POSITIVE TL, ON THE OTHER HAND, IS NOT RELATED TO ANY OF THE MORE COMMON UPPER CERVICAL LISTINGS. THEREFORE IT SEEMS TO BE FOUND MORE OFTEN. IF THE DOCTOR COMPLETES A WORKUP AND TREATMENT PRIOR TO TESTING FOR THIS CONDITION, THE BILATERAL TL, IF ANY AT ALL, IS MOST LIKELY TO REMAIN; AT LEAST IN THIS AUTHOR'S EXPERIENCE. THE INITIAL TREATMENT WILL HAVE MOST LIKELY CLEARED THE UNILATERAL TENSION DURING THE NORMAL STRUCTURAL BALANCING PROCEDURE. WHEN THE HEAD IS LEVEL THERE IS LESS TENDENCY FOR THE UNILATERAL FINDING AND HENCE THE TENDENCY TO FIND THE BILATERAL REACTION MORE COMMONLY.

THE BILATERAL TL SEEMS TO BE RELATED MOST OFTEN TO AN ANTERIOR SLIPPAGE OF PRIMARILY C_3, BUT ALSO CAN BE C_4. THIS SLIPPAGE IS REMINISCENT OF THE HIDDEN CERVICAL DISC SYNDROME IN THAT IT IS CHARACTERIZED BY AN EXQUISITELY TENDER SPINOUS PROCESS AND THE CORRECTION IS ACCOMPLISHED IN MUCH THE SAME MANNER AS DESCRIBED BY GOODHEART. WHAT USUALLY DIFFERS FROM THE HIDDEN CERVICAL DISC IS THAT CAUDAL PRESSURE ON THE VERTEX

OF THE HEAD IS NOT NEEDED IN ORDER TO ELICIT A RESPONSE. THE ANTERIOR SLIPPAGE DOES NOT SEEM TO CAUSE ANY HEAD TILT. RATHER, IT TENDS TO PRODUCE A FORWARD PROJECTION OF THE HEAD ON THE BODY. IN THIS WAY ONE CAN BALANCE THE PELVIS, SHOULDERS, AND HEAD AND STILL RETAIN THE PALPITORY PAIN AND TENSION IN THE JAW MUSCULATURE.

GOODHEART'S MORE RECENT COMMENTS IN THE MONTHLY TAPES ON THE DECEREBRATE, DELABYRINTHECTOMIZED CAT STUDIES SEEMS TO LEND MORE CREDENCE TO THE FINDINGS. IT APPEARS AS IF THERE IS A TENDENCY FOR THE TONIC NECK REFLEXES TO OVERSTIMULATE THE MUSCLES IN THE JAW. NEVERTHELESS, WHEN THE CORRECTION IS MADE THE PALPITORY FINDINGS ARE MARKEDLY REDUCED OR TOTALLY GONE.

PROVING THERAPY LOCALIZATION BY USE OF DOUBLE BLIND STUDIES

by PAUL T. SPRIESER, B.S., D.C.

Abstract: The consideration of double blind studies in proving the phenomena of Therapy Localization.

This paper was brought about by a question posed to me by Dr. L. John Faye of Ottawa, Canada.

Dr. Faye phoned me after my article, "Pathways of Therapy Localization" appeared in The Digest of Chiropractic Economics, Nov/Dec. 1983, issue. He asked me some very pointed and serious questions pertaining to the phenomena of therapy localization, saying that he would play the "devil's advocate" and that the phenomena of therapy localization does not work, or even exist.

Dr. Faye suggested that if therapy localization does exist and work, that we in Applied Kinesiology should put it to the test in a double blind study using some know disease, such as cirrhosis.

I told Dr. Faye that therapy localization does work, but that I did not know of any specific double blind studies to prove it, and that I was planning some studies that should meet this criteria.

The more I pondered this question of double blind studies in proving therapy localization and Applied Kinesiology, the more I felt that we in this field are being judged on the entire content of the science of Applied Kinesiology by only one part of the science.

As in the geometric theorem, "The sum of the parts is equal to the whole", we are being judged on one part of the technique of Applied Kinesiology, as though the whole mass of knowledge was dependent upon just the one part. This type of thinking is wrong, especially in the scientific world.

1. Therapy localization, as we know, tells us where something is wrong, not what is wrong.

2. It is a diagnostic tool-not the entire diagnostic procedure.

3. The findings that are derived from this procedure are combined with many other test procedures in order to make a definitive diagnosis.

The other test procedures that we will use to correlate the therapy localization findings are:

a. Consultation

b. X-rays

c. Palpation both static and motion

d. Laboratory tests (SMAC, urine analysis, etc.)

e. Physical, orthopedic and neurological examination and testing.

g. Muscle testing and its relationship to the Five Factors of the I.V.F.

I realized that though double blind studies are an accepted scientific measure in proving or disproving certain scientific ideas, they are not the only method that is used in the scientific community.

Not all studies using therapy localization will lend themselves to the double blind study, but obviously some will.

My last paper, "The Negative Therapy Localization in Glacomitous Patients", presented in San Diego, CA., in Dec., 1983, showed forty-seven cases of known glaucoma in patients that did not therapy localize to the involved eye or eyes. As I explained in that paper, it is as though the nervous system turned off the neural flow from the affected area to the brain and "forgot" to turn it back on. Thus, if this occurs, "The Healer Within" would not know that the patient has glaucoma, and, therefore, how could this condition ever heal? In this paper I mentioned many methods I have available to bring out therapy localization that does not show up under normal

(in the clear) situations. These methods are listed as follows:

1. Temporal tap
2. R.N.A (Riboneucleic Acid)
3. Cerebella Therapy Localization
4. E.I.D. (eyes into distortion)
5. Challenge
6. Spinal Gate (Pinch-Scratch)
7. Cerebella Challenge
8. Right and Left Brain Activity
9. Front and Hind Brain Activity
10. Enhancement techniques of double hand therapy localization over the area in question.
11. High Gain finger position for T.L.
12. Palmar or Dorsal surface for therapy localization
13. Respiratory challenge or assist
14. In the case of pulse diagnosis, cessation of breathing during therapy localization to pulse points.
15. Wetting the finger or cleaning the skin
16. Computer utilization through Clinical Kinesiology Techniques

These are only some of the techniques that must be known by the doctor using a double blind study to prove the phenomena of therapy localization. These are not excuses for the lack of these types of studies, but rather an explanation of why double blinding is not always practical for every aspect of therapy localization or other applied kinesiological techniques.

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LEARNING DISABILITIES

by PAUL T. SPRIESER, B.S., D.C.

Abstract: The clinical observations of a new cranial fault and other factors that relate to learning disabilities.

Any parent, teacher, or doctor who has had the opportunity of dealing with a child with learning disabilities knows the frustration of all involved, especially that of the child.

Having a brother with a very definite perceptual problem and a child with a slight one, I have a great interest in this area. Over the last few years I have treated over one hundred children with this problem. It appears as though learning disabilities are becoming increasingly common, or certainly we are now more cognizant of this condition.

Learning disabilities can be classified into various categories, such as:

1. Visual perception
2. Auditory perception
3. Verbal and Written
4. Mathematical
5. Dyslyexia (reading)
6. General Organization
7. Hyperactivity (that may be a component in any of the above.)

These children show many common predictable characteristics, leading me to believe there may be a number of common denominators in the formation of this problem. Could the causes involve neurotransmitters (such as catecholamine, dopamine and serotonin), allergy, etc., or perhaps a structural transmission problem in the brain such as the corpus callosum, dural tension, or CSF flow rate?

It should be stated here a perceptual problem or learning disability is not due to organic brain dysfunction, but rather the ability of the brain and nervous system to integrate, transmit or receive; it is thus hampered and does not function properly due to some unknown reason.

Let us now examine the function of the right and left brain hemispheres as taken from Robert E. Ornstein's The Psychology of Consciousness:[1]

LEFT	RIGHT
1. Analytic	1. Holistic mentation
2. Logical Thinking	2. Orientation in space
3. Verbal	3. Artistic endeavors
4. Mathematical functions	4. Crafts
5. Linear time	5. Body image
6. Process information sequentially	6. Recognition of faces
7. More predominantly analytic and sequential in its operation mass	7. Process information diffusely
8. Singular and concentrated	8. Responsibilities demand a ready integration of many inputs at once
	9. More simultaneous in mode of operation

Dr. Goodheart Describes the function of the right and left hemispheres in The 1980 Workshop Manual[2] as follows:

LEFT	RIGHT
1. Logical	1. Non-Logical
2. Rational	2. Non-Sensible
3. Reasonable	3. Non-practical
4. Sensible	4. Non-predictable
5. Practical	5. Under certain conditions can be Clairvoyant, Clairaudient, Intuitive and Tonal
6. Predictable	

In examining the allergy, or "chemical" aspect of this problem, I referred to Mental and Elemental Nutrients by Dr. Carl C. Pfeiffer, Ph.D., M.D.,[3] in which he shows a possible allergic and chemical connection for learning disabilities. These might possibley fit our present electron poising theory; the following is taken from the section titled "Cerebral Allergy".

Medical workers have long known that the obviously allergic child can have an allergy-tension-fatigue syndrome which results in disinterest in learning and thus decreases learning ability. When they are tested and the offending allergen is removed, these young patients improve remarkabley in respect of all their symptoms, which can range from hyperactivity to somnolence, with headaches and bellyaches in between. The foods that may most commonly precipitate symptoms are milk, wheat, beef, bananas, chocolate and sugar.

The symptoms shown by the child may be those that would previously have produced a diagnosis of minimal brain dysfunction, Namely:

1. Specific learning disability: Not reading at his age level, poor spelling, difficulty with arithmetic or abstractions, poor visual-motor coordination, metally dormant.
2. Perecptual-motor deficits: Poor painting, writing or drawing; poor copying of simple designs.
3. General coordination deficits: Clumsiness or awkwardness.
4. Hyperkinesis: Constantly active, flitting from on object or activity to another, restless and fidgety, voluble unihibited speech, disorganized thinking.
5. Impulsivity: Unrestrained in touching objects, especially in a new environment, unrestrained speech (even to being insulting), antisocial behavior and nonconformity with school, family, society.

6. Emotional lability: Irritable and aggressive with rapid swings from temper displays to passivity, easily panicked by minimal stress.
7. Short attention span on any object or subject, and ease of distraction, especially from a subject that does not arouse great interest.
8. Equivocal neurological sings: Transient eye muscle paralysis, poor finger coordination, mixed and confused laterality, slow speech development or speech defect.
9. Abnormal electroencephalogram.

Fortunately each child does not show all these symptoms or findings, but any one finding may be allergic in origin. Since the allergen may be either of the inhalant or food type, considerable testing may be necessary before the culpable agent is found. If the child is allergic to all things tested, as is frequently the case, then adequate nutrition with trace elements and vitamins may be helpful".

Other studies that point to allergies and nutrition in connection with learning disabilities that deserve mentioning are the following: "School Problems and Allergies", Janice Havard, M.S.,[4] Journal of Learning Disabilities. This study points out that children labeled in school as "hyperactive", "language or Learning disabled", "lazy", "minimally brain injured", or "emotionally disturbed" may in fact have a health problem. Symptoms may be manifestations of allergic conditions; allergies should be considered in children who are not succeeding in school or in interpersonal relations.

"Nutrition, Metabolism, Brain Function and Learning" by Robert E. Buckley, M.D.,[5] Academic Therapy states that many conditions that are named "neurological handicap", "learning disorder", "minimal brain dysfunction" are in fact disturbances

found in allergic disorders while other have their cause in the metabolizing glucose. A Florida study of maladapting children found that forty percent of them had a flat oral glucose tolerance test, with hypoglycemic reactions during the test.

In Dr. Feingold's study, "Hyperkinesis and Learning Disabilities Linked to the Ingestion of Artifical Color and Flavors",[6] he showed the connection between food additives and their effects on learning in the hyperkinetic and perceptually impaired children. Dr. Feingold's findings showed improvement in school performance when these substances were eliminated from the child's diet.

Let us now look at the structural aspects that may play a part in learning disabilities. As a chiropractor, I am fully aware that structure and function go hand in hand. In neurologic science it is seen that the structure of the nervous system does dictate the way it will or should work.

In Applied Kinesiology we are all aware of cranial faults, but could there be a fault or faults that have evaded our discovery? This certainly seems to be a possibility.

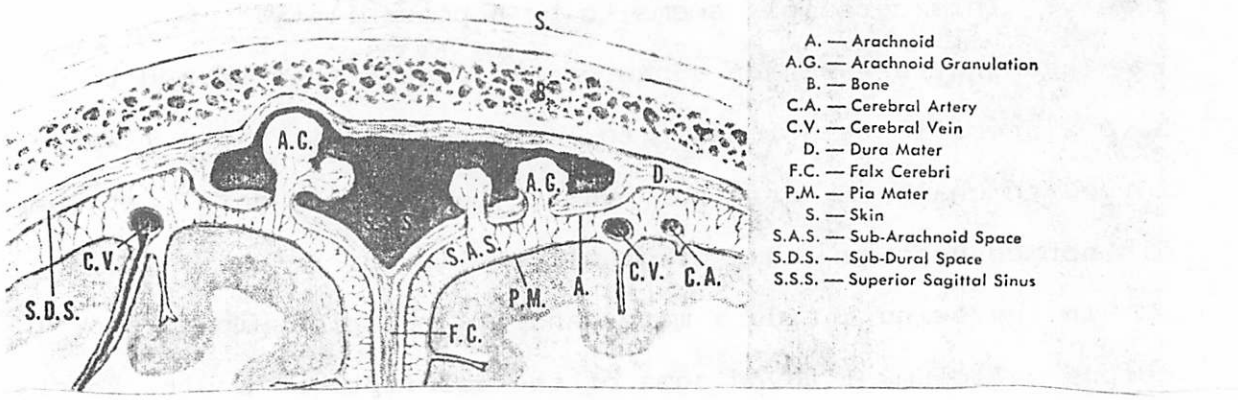
In doing research on a new cranial fault that seemed to have a specific relationship to learning disabilities, I was forced to change my original premise because the dural attachments did not connect as I had originally believed.

In reviewing the dura mater and its relationship to the corpus callosum, I found some of the descriptions a bit sketchy and difficult to follow. I felt that it would be important to understand this anatomical entity better, however, because of our use of the reciprocal membrane tension in making cranial fault corrections.

My particular interest was drawn to the Falx Cerebri because of its location between the right and left cerebral hemispheres. I felt that it might have an effect upon the Corpus Callosum, the connection bridge of fifty million nerve cells that link the right and left sides of the brain. Since we have been very familiar with left and right brain activity in Applied Kinesiology and the characteristic of each side, it seemed a good place to begin my search.

I thought that if there were to be a mechanical tension change, or perhaps a laxity in the Falx Cerebri, it could change the transmission of information between the right and left hemispheres. This could be causing the learning disability or perceptual problems which we see so frequently today.

If this fault did exist, it could be used as an early screening test for pre-school children in order to get them early help which is so vital.



The figure shows very clearly a connection by way of the arachnoid trabecula to the pia mater which attached and adheres to all the brain surfaces and goes into the fissures.

Quoting from Fundementals of Neurology by Gardner, "Just [7]

internal to the dura is a thin membrane of raticular fibers, the arachnoid, the outer and inner aspects of which are lined by flat and oval cells. The potential space between the arachnoid and the dura mater is termed the subdural space. Around the brain, a delicate network of connective tissue trabeculae connects the arachnoid to the innermost meningeal layer, the pia mater. The pia mater is a delicate membrane of reticular and elastic fiber that is closely applied to the brain and spinal cord. The outer part of the pia mater consists of loosely arranged connective tissue."

Correlative Neuroanatomy[8] states that the Falx Cerebri, a crescent-shaped extension of the dura mater, projects into the longitudinal cerebral fissure.

Cerebrospinal fluid is formed by the choroid plexus starting in the lateral ventrical. The roof of these ventricles is formed by the corpus callosum. So change of the internal pressure might interfere with the integration of information in the learning disabled child. There is also the possibility this slight stricture at the interventricular foramena of Monroe could cause a daming up of the CSF and change the neural conductivity of the corpus callosum.

From the Ciba Collection The Nervous System:[9] Arachnoidal villi (pacchionian Bodies), cluster-like projection of dura, protrude in the superior saggital or transverse sinus. These appear about the age of seven and increase in number and size until adult life. They push their way into the sinus, thin out the dura and inner table of the skull. Their mesothelium serves as the pathway for the fluid into the venous system. The pia mater, a very fine membrane rich in minute blood plexuses and

hemispheres. It is attached laterally and posteriorly to the transverse sinus. Anteriorly it is attached along the superior border of the petrous portion of the temporal bone and to the posterior clinoid process of the sphenoid bone, leaving a narrow space for the superior petrosal sinus. It slopes upward toward the midline where it is continuous with the falx cerebri and then forms the straight sinus. Its free border extends from the junction with the free border of the falx cerebri to the anterior clinoid process.

The falx cerebelli is a small triangle process of dura which is attached to the lower division of the ventricles crest on the inner surface of the occipital bone with its free border projecting into the posterior cerebella notch between the two cerebella hemispheres.

The diaphragma sellae connects the clinoid attachments of the two sides of the tentorium cerebelli. It forms a roof over the hypophysis lying in the sella turcica. A circular opening in the center which allows passage of the infundibulum, is surrounded by the circular or intercavernous sinus".

From Guytons Physiology[11], "Cerebrospinal Fluid": The entire cavity enclosing the brain and spinal cord has a volume of approximately 1650 ml., and about 135 ml. of this volume is occupied by cerebrospinal fluid. Fluid surrounds the brain and spinal cord and pressure of the fluid is regulated at a constant level.

The major function of the cerebrospinal fluid is to cushion the brain within its solid vault. The brain and the cerebrospinal fluid have approximately the same specific gravity, so that the brain simply floats in the fluid.

mesothelium cells, is associated with the arachnoid and covers the brain intimately, following the invaginations of all sulci and conformations of the gyri.

By its various invaginations it helps form the tela choroidea, the chorid plexuses of the lateral third and fourth ventricles.

The arachnoid granulation reabsorption of CSF into the venous return could be hampered by change of tension of the falx cerebi which contain the superior saggital sinus in which the arachnoid granulation are contained, and could change the flow rate at this region.

Quoting from Gray's Anatomy[10]: "The cisterna venae magnae cerebrioccupus the interval between the splenium of the corpus callosum and the superior surface of the cerebellum. It reaches in between the layers of the tela choroidea of the third ventricle and the superior surface of the cerebellum. It reaches in between the layers of the tela choroidea of the third ventricle and contains the great cerebral vein of Galen.

The falx cerebri is a strong membrane extending down into the longitudinal fissure between the two cerebral hemispheres. It is attached to the skull bone along the midline of the inner surface of the cranial vault from the christa galli to the internal occipital protuberance where it becomes continuous with the tentorium cerebelli. At this attachment it is separated from the outer layer of dura, leaving space for the superior saggital sinus. The inner free margin of the falx contains the inferior saggital sinus.

The tentorium cerebelli is a transverse shelf of dura mater seperating the cerebellum from the occipital part of the cerebral

Cerebrospinal fluid continually exudes from the surface of the choroid plexus and is not exactly extracellular fluid.

The cuboidal cells of the chorid plexus actively secrete Na ions,positive charge to the CSF which pulls the Cl- into the CSF, thus creating an osmotic pressure in the ventricles of 160 mm Hg greater than that of the plasma, which causes the flow into the ventricles.

The normal CSF pressure lying in a horizontal position is 130 mm of water, or 10 mm of Hg. It could also be as low as 70 mm or as high as 180 mm and be considered normal.

The presence of cranial faults could alter the osmotic pressure slightly and cause a slower or greater flow rate at the ventricles. This in turn could effect neural transmission between the right and left hemispheres over the corpus callosum, because as little as 3 mm of Hg pressure have been showen to change the neural transmission rate in the foramen compression studies.

In Craniosacral Therapy, By John E. Upledger, D.O.,[12] he describes what sparked his interest in the cranial plate and dural movement. "Our own interest in the craniosacral concept came about quite by chance. I (Upledger) first became involved during surgical procedure in 1971. I was assisting a neurosurgeon in the removal of an extradural calcification from the posterior aspect of the dural tube in the mid-cervical region. Our goal was to remove the calcified plaque without incising or disrupting the integrity of the dura mater. My task was to hold the dural membrane still with two pairs of forceps while the neurosurgeon removed the plaque without cutting or damaging the underlying

dural membrane. But the membrane would not hold still. I was embarrassed because I could not carry out such a simple task. The fully anesthetized patient was in a sitting position. I had no difficulty in reaching or seeing the operative field. There was no excuse.

I became apparent that the movement of the dural membrane was rhythmical at about 8 cycle per minute. This rhythmic activity was independent of the patients breathing and cardiac rhythms. It was another physiological rhythm. It appeared to be an ebb and flow of the fluid which is contained within the dural membrane. Neither the neurogurgeon, the anesthesiologist, nor I had ever observed this phenomenon before. My curiosity was piqued. I could find no information in conventional medical or physiology literature".

From this same text, Dr. Upledger states:[13] "You can use the vertical falx and dural tube system to influence the straight sinus system, which, in turn, exerts an influence upon the leaves of the tentorium cerebelli, and of course, converse is true; you can use the cerebella tent to influence the vertical dural membrane system. As you will note in the following illustration, the falx cerebri attach at the glabella and the frontal and ethmoid bones, and posterior attachments at the straight sinus and the internal occipital protuberance, as well as the inferior attachment around the foramen magnum, then attaches at C2-C3 and free dural tube till it reaches the second sacral section.

The two following illustrations were taken from Dr. Upledger's text Craniosacral Therapy.

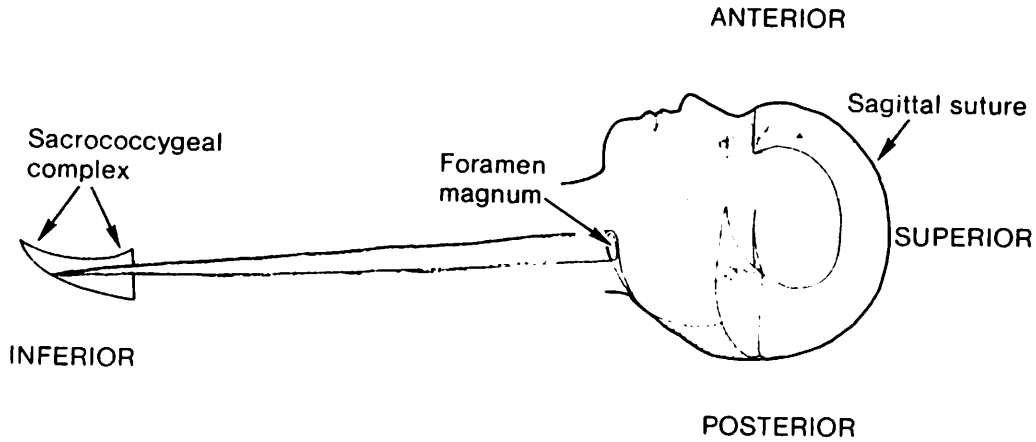


Illustration 6-13
Anterior-Posterior and Superior-Inferior Axes of the Dural Membrane System

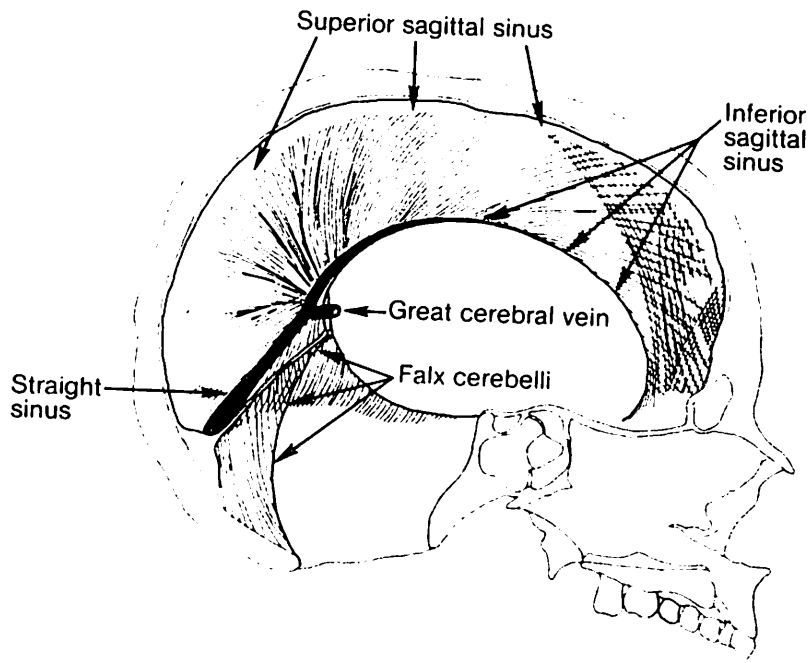


Illustration 6-8
Venous Sinuses within Falx Cerebri

The Structures of Cranial Bone Sutures, Dr. Ernest W. Relzlaff, Ph.D[14] : The general pattern of the suture was similar to that reported by Pritchard et al. In each of the samples studied the sutures displayed five distinct layers of cells and fibers between the articulating edges of the bones. The outermost layer is a zone of connective tissue which bridges the suture and is designated, "the sutural ligament". These two layers appear to be continuous with that of the periosteum of the skull bones. This modified periosteal layer, the sutural ligament, is found on both the outer and inner surfaces of the suture. The space between the ligaments is loosely filled with fibrous connective tissues.

The reticular connective tissue portion is seen in the space with extension into the sutural ligament. This may provide an inner and outer binding structure which serves to hold the sutures but still permits some movement of the skull bones.

In addition to the connective tissue seen in the central space, blood vessels and nerve fibers are evident. The function of the nerve fibers is not known but it is possible that they may be involved in the physiological effects of cranial therapy.

Examination of the Cranial Rhythm in Long-Standing Coma and Chronic Neurologic Cases[15], Z. Karni, J.E. Upledger, D.O. : The hydraulic contents are subjected to the pulsatory motion of the arterial system, the venous system and the pulmonary system which transmits its effects to the dura mater through the vertbral connections along the cervical section of the spinal column. The lateral displacements, which all these systems induce upon motion, the nature of which depends upon the fluid properties

and on the mechanical behavior of the container.

Using a dial gauge measurements which, with the tips of the gauges tightly compressed against the parietal bones, yield values of 10-25 microns side displacement of the bones.

The normal range of frequency of the cranial rhythm is 6-12 cycles per minute (cpm). This rate is slower than the respiratory rate in the relaxed state by almost a third. The normal amplitude, identified with the lateral displacement of the parietal bone, may reach 1-1½ mm. Of the various techniques, strain plethysmography by means of high-extension, electrical resistance strain-gauges proved more sensitive and effective.

In the study, Diagnosis and Treatment of Temporparietal Suture Head Pain, John E. Upledger, D.O., Ernest W. Retzolff, Ph.D, Jon D. Vredevoogd M.F.A. [16] : By the use of modified staining Techniques, the authors have been able to demostrate the presence of viable myelinated and unmyelinated nerve fibers, nerve receptors endings, a potentially functional vascular network, and collagen elastic fiber complexes with the adult human cranial suture. We have demonstrated that these structures frequently penetrate the sutural bone margins and traverse from the diploe into the suture and vice versa. There is also evidence to suggest that some of the intrasutural vascular and neural structures may arise from the intercranial meninges.

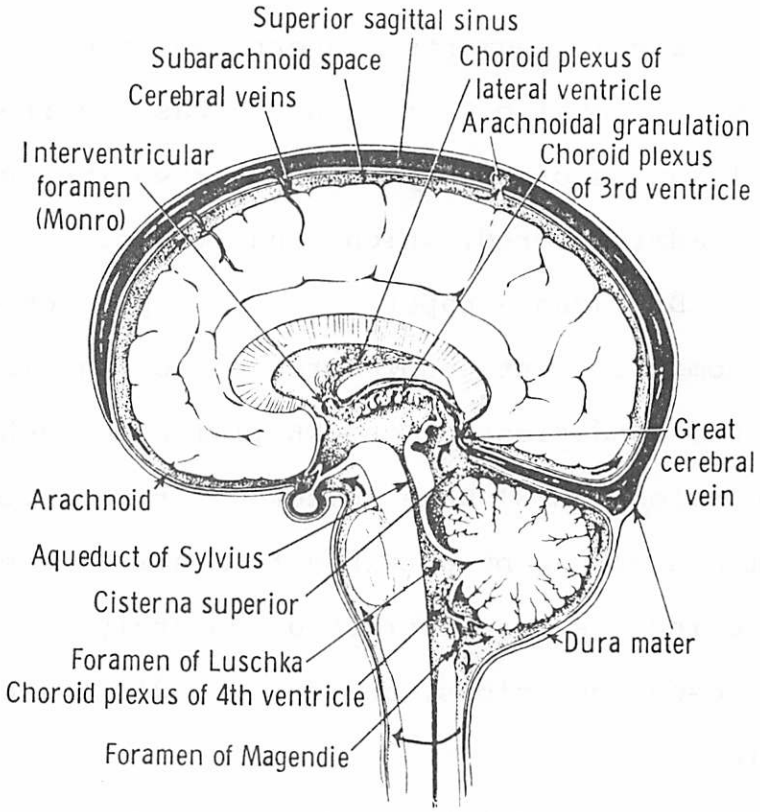
The significance of these findings is simply that now the human cranial suture may be (and, in fact, must be) considered as a functional anatomical complex capable, therefore, of dysfunction resultant to various imbalances, stress and trauma.

The specimen studies were taken from living adult skulls at the time of neurosurgical craniotomy. Hence, these tissues

studies resemble more closely the in vivo circumstance.

The presence of nerve endings in the sutural tissues may act as a monitor for the meningeal cycle of 6-12 cpm. This cycle is probably due to the increased production of CSF which in turn causes slight expansion of the sutures. This then causes a neural signal to the chorid plexus to slow the CSF production till the arachnoid granulation can reabsorb it into the venous return.

This would account for the meningeal movement observed by Dr. Upledger and would also account for the presence of nerve endings in the sutures.



Circulation of Cerebrospinal Fluid. (Redrawn from original drawings by Frank H. Netter, M.D., which first appeared in Ciba Clinical Symposia, copyright 1950. Reproduced with permission.)

While reading, The Brain-The Last Frontier, By Richard M. Restak, M.D.,[17] I read about a study done by Dr. E. Roy John, Ph.D, a researcher at New York University Medical School. Dr. Restak stated the Dr. John found, by using evoked potential studies of

learning disabled children, that abnormalities were noted in the right brain for children with math deficiencies, and abnormalities in the left brain for verbal and language. I wondered why math, a left side function, showed abnormalities on the right, so I read Dr. E. Roy John's paper, "Neurometrics".

I will use selected portions of this paper from "Neurometric Identification and Classification of Learing Disabled Children".[18] The study consisted of 118 children tentatively preclassified as "normal" and 57 preclassified as "learning disabled" based on school performance and opinion of the referral sources. The age of these male children ranged from 7.8 to 10.4 years. Testing was divided into several segments, interruped at will for rest periods or meals. A total of 1 to 2 hours was required, depending on the restlessness of the child. An extensive psychometric battery was also administered, which usually occupied a full day.

A heading in Dr. John's paper titled,"Comparison of Neurometric and Psychometric Test, showed the following findings: Only the first two conditions of the NB (1 minute each of eyes open and of eyes closed EEG) were selected for this comparison because these measures can be obtained from almost every subject.

Neurometric indices were extracted seprately for the eyes open and eyes closed conditions, and for the differences between the two conditions.

The initial discriminant accuracy was 93 percent for the neurometric and 76 percent for the psychometric indices.

Aside from their bias with respect to age, IQ, culture, and relation between these psychometric measures and brain dysfunction may merely reflect the fact that performance on these tasks is heavily dependent upon skills which are difficult for the learning

disabled child to acquire.

Only 5.5 percent of the learning disabled group showed this pattern of dysfunction; 77.3 percent of the learning disabled group, but 0 percent of the normal group, showed dysfunctions in more than one anatomical derivation, with 50.8 percent of the learning disabled children displaying dysfunctions in every anatomical region.

The major clusters contained over 64.3 percent of the learning disabled children by only 20 percent of the normal children, thus replicating our original finding that normal and learning disabled children differ markedly with respect to certain neurometric EEG indices. Note that 87.5 percent of the learning disabled children, but only 8 percent of the normal children, displayed abnormal EEG or AER asymmetry, or both , with 71 percent of learning disabled children, but 0 percent of normals, showing AER asymmetry consistent with our finding of marked AER asymmetry.

<u>The most striking feature of the results is the high percentage of learning disabled children who displayed mutiple types of dysfunction in multiple regions.</u>

Differential Neurometric Profiles of Specific Learning Disabilities: Using the concept of the "learning quotient" first put foward by Myklebust which evaluates the academic achievment of a child relative to his mental age, chronological age, and grade level seprately for different skills. In a study conducted the analysis of 20 children, ten children with defective language but normal arithmetic skills (verbal underachiever, or VUA), ten children with defective arithmetic but normal language skills (arithmetic underachiever, or AUA), and ten children with both defective language and arithmetic skills (mixed underachievers,

or MUA), selected from the subgroup of children 9 years old in our inital study. By means of ANOVA, the AER's of the normal children were compared to those of (LD), the VUA, AUA, and MUA groups, separately for all left-hemisphere and right-hemisphere placements for each of the 11 NB conditions for which the overall normal versus LD differences.

When the learning disabled group is compared to the normal group, no clear hemispheric pattern emerges.

The data for normal versus VUA shows that differences between these two groups are primarily found on the left hemisphere, mostly between 300 to 450 m/sec. The data for normal versus AUA shows a pattern which is very different and remarkably consistent, with significant F ratio in 300 to 350 m/sec. latency domain on the right hemisphere for all 11 conditions. The data for normal versus MUA shows significant F ratio almost exclusively restricted to the 225 to 250 m/sec. domain on the left hemisphere for all 11 conditions.

Thus, the three different types of underachievers display three radically and replicably different patterns of deviation from the AER morphology observed in children with normal learning quotients

A remarkable feature of these findings is that information processing in children with a particular type of learning disability seems to reflect a general operational defect, independent of the specific information content of the imput revealed as a distinctive spatiotemporal pattern.

This study that I happened upon will again emphasize the need for chiropractic care in the newborn and infants, particularly those chiropractors versed in Applied Kinesiology. The

study is titled, "Diagnosis of Vestibular Disorders in the Learning Disabled"[19], Julio B. De Quiros, M.D., Ph.D . Due to the lenght of this study I will try to use only the highlights in this paper.

Children with vestibular disorders and related postural disturbances constitute a large segment of the population described as learning disabled. Vestibular disorders indentified in newborn infants can be substantiated in children and adults. Early identification of vestibular disorders could alert physician, clinicians, and educators to the need for modifications in the child's learning environment. Appropriate modifications could help to negate the influence of postural disturbances on the development of efficient functional systems.

Vestibular disorders can be diagnosed medically within hours after birth. But the learning disabilities associated with vestibular disturbances frequently are not identified until "soft signs" lead to a diagnosis of "minimal brain dysfunction" when the child starts school. The need for a definitive medical diagnosis at an early age led me, in 1958, to begin to study postural disturbances of newborn infants and then to follow the subsequent development of these infants.

The first series of experiments was performed at the Children's Hospital of Buenos Aires (1958-1961); the second at the Centenario Hospital, Rosario (1962-1965); and the third series in different schools in Buenos Aires for both normal and exceptional children. The fourth series is now underway in our Research Medical Center at the University of the Museum in Buenos Aires. Between 1958 and 1967, 1,902 children were examined.

In the first series of studies, neurolabyrinthine assesment

of 68 newborn infants led to the conclusion that just as there are children who are born deaf, so also there are cases in which vestibular deficiencies and proprioceptive disburbances can be observed at birth. This study was reported by Quiros, Coriat, and Benasayag in 1961.

In the second series of experiments, the development of 77 vestibular disabled infants and 83 infants considered to be vestibular normal was followed. The diagnosis was made between 95 minutes and 7 hours after birth. The neurological development, physical growth, and the communication skills for both groups were recorded annually until each child reached the age of three.

The data indicated the existence of a syndrome, the main characteristics of which were: (1) vestibular areflexia in response to the caloric test (irrigation of the ear with cold or warm water, which is able to elicit a vestibular oculomotor reflex called "provoked nystagmus" rapid and slow movements of the eyes), (2) delay of motor development; (3) walking instability; and (4) speech dealy.

The next study, which consisted of 52 out of the 63 learning disabled children and abnormal vestibular disorder at the primary school level, was characterized by (1) caloric hyporeflexia, (2) restlessness (from internal stimuli, as opposed to hyperactivity in motor problems) in reference to reading and writing and (4) loss of interest in school learning (Quiros 1971-1973).

The conclusions of the studies were: vestibular disorders (and postural disturbances) can produce learning disabilities associated with motor skills, the acquisition of language, and

the development of normal competencies in reading-writing. When vestibular disorders are identified during infancy, parents, physicians, clinicians, and educators are alerted to the need for an early interventions program.

Appropriate modifications in the environment of the child can help to negate the influence of postural disturbances on the developing functional system. Thus, many learning disabilities could be avoided. The medical profession can contribute to a clarification in this area and provide useful data for the early identification of vestibular disorders, a condition present in many learing disabled children.

Another study that we in Applied Kinesiology are very familiar with is the work of John Ott and the effect of light on health titled, "Influence of Fluroescent Lights on Hyperactivity and Learning Disabilities"[20].

During the first five months of 1973, a pilot project was conducted by the Enviromental Health and Light Research Institute in four first grade windowless classrooms of a school in Sarasota, Florida. In two of the rooms, the standard cool-white fluorescent tubes and fixtures with solid plastic diffusers remained unchanged. In the other two rooms, the cool-white tubes were replaced with full-spectrum fluorescent tubes that more closely duplicate natural daylight. Lead foil shields were wrapped around each end of the tubes where the cathodes are located. Aluminum "egg crate" diffusers with an additional grounded aluminum screen grid replaced the solid plastic diffusers in these latter rooms. A dramatic improvement in behavior was demonstrated in hyperactive children.

METHOD:

When I first started my search, I felt that the most logical place to begin was at the crossroad of the right and left cerebral hemispheres, the corpus callosum. The nearest point to this I could reach was at the palate.

The next step was to be able to identify this fault, if it did indeed exist. As we know the sphenobasilar faults were identified with therapy localization of both thumbs on the cruciate suture of the hard palate.[21]

I found a fault that therapy localized with both index fingers in the mid-plate over the cruciate suture (only simultaneously); it also T.L. to the two ring finders, not to the others. It would would be negative to T.L. if the index fingers were placed on the opposite side of the hard palate over the cruciate suture. In other words the right index finger placed on the left side of the cruciate suture and visa versa.

This fault did not negate to any respiratory pattern but did require inspiratory assist to correct.

Notation: I did come across an occasional fault found in the same way that the learning disability fault was therapy localized, but this one did negate to inspiration. I carefully questioned these three patients, none of whom had any disability in learning that they were aware of. The significance of this other fault is not known at the present time.

FINDINGS:

My study consisted of 42 patients, 34 males ranging in ages from 8 to 25 years, and 8 females,9 to 18 years of age. All were classified and known to have learning disabilities or

perceptual problems.

My control group consisted of 250 patients, 175 males-ages 8 to 31 years, and 75 females, 10 to 22 years of age. This group did not show this specific fault. The control group were questioned carefully to determine that none had any type of learning problems.

PROCEDURES AND CORRECTION:

The learning disability group was checked for all known cranial faults. These were recorded and then correction was made for these faults. I then rechecked by therapy localization with both index fingers against the roof of the mouth over the cruciate suture. I still found positive localization causing a strong indicator muscle (Tensor Fascia Lata) to weaken.

The one unique feature of this fault was that a respiratory assist is required for correction, but does not negate the positive therapy localization.

The correction is done directly over the cruciate suture in the midline of the plate using the index finger. Pressure is directed toward the Bregma. The other hand exerts pressure from the Bregma and anterior part of the saggital suture down towards the cruciate suture. This is done on inspiration using 3 to 4 pounds of pressure repeated 4 to 5 times, rechecked with therapy localization to see if the correction has negated the positive findings. The saggital suture is rechecked to make certain it is not jammed during the correction.

DISCUSSION:

I have tried to verify whether this correction would improve learning performance in children with learning disabilities, how-

ever this is a very difficult task because there are many variables that I cannot account for in seeing an improvement:

1. Length of time the learning disability has been present.
2. The amount of school work that the child has fallen behind in, which in many cases is in terms of years.
3. The motivation of the child to want to learn.
4. The length of time before the school's "child study team" diagnosed the learning disability.
5. Parental support, or lack of it.
6. Remediation program in the school and in the home environment.

These are just some of the factors that make assessing the results very difficult.

I have written to both Drs. E. Roy John and John E. Upledger for any other ideas on varification of the fault with learning disabilities and correction to improve learning performance.

Dr. John never answered my request for assistance. Dr. Upledger however suggested that I treat only one group and keep one group untreated as a control and observe the results.

As I have mentioned, there are many variables that make this imperical method ineffective in both diagnosing the need and observing the results.

Dr. E. Roy John's evoked potential method seemed to me more objective in its findings as a method of diagnosing the presence of a learning disability and comparing the presence of this specific cranial fault to that abnormality in the evoked potential. This method could also prove whether ornot the correction to this fault would change this evoked potential abnormality.

I am planning further studies in this area, both using

double blind methods to see if I can diagnose the learning disability without any prior knowledge of the students being tested. I will report my findings at a later date.

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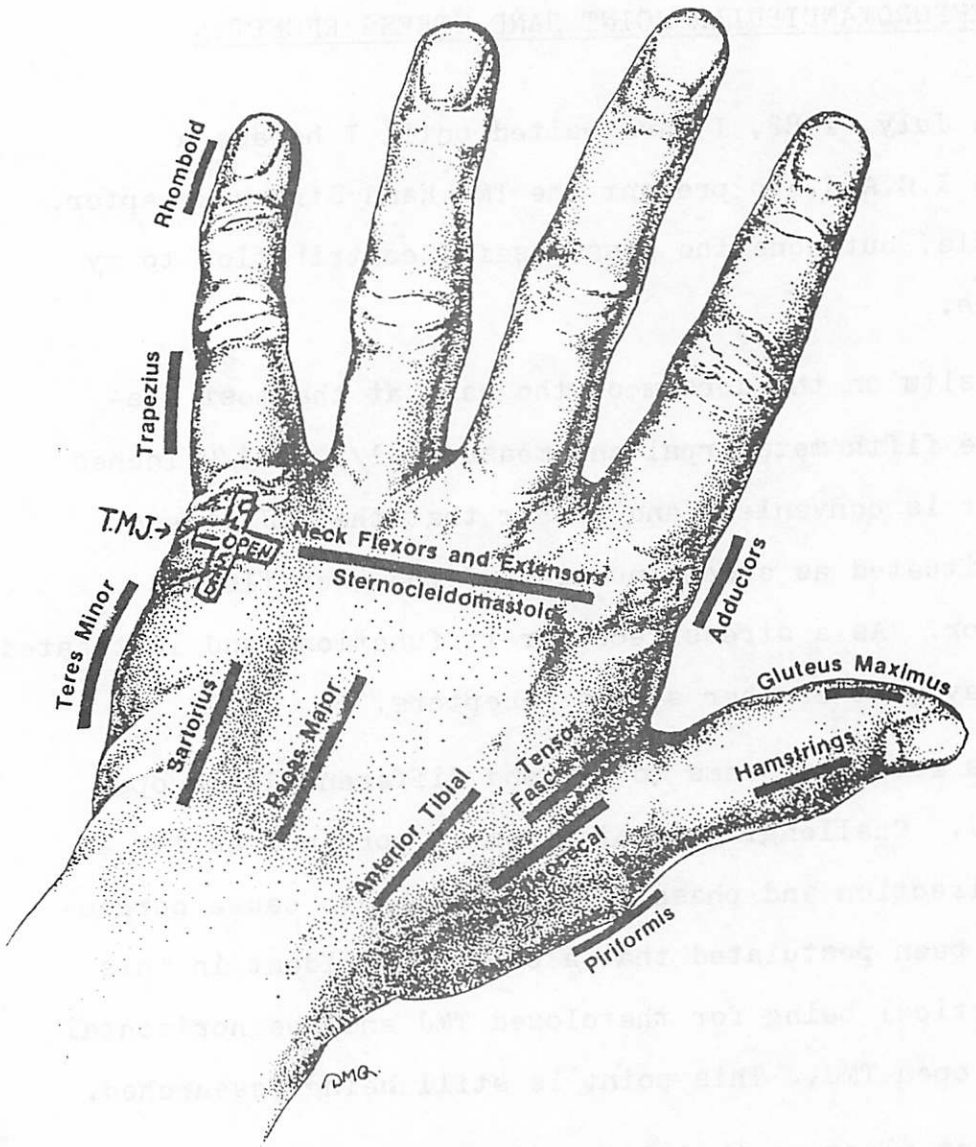
THE TEMPOROMANDIBULAR JOINT HAND STRESS RECEPTOR

Discovered in July, 1982, I have waited until I became a member of the I.C.A.K. to present the TMJ Hand Stress Receptor. It is my little, but none the less, useful contribution to my new allegiance.

The receptor sits on the dorsum of the hand at the most distal end of the fifth metacarpal and measures 1/2 to 3/4 inches in length. It is convenient and proper that the TMJ stress receptor is situated as a continuation of the neck flexors stress receptor. As a stress receptor it functions and is treated in the same way as the other stress receptors.

The TMJ stress receptor seems to respond differenctly to open and closed TMJ. Challenging is of utmost importance as far as determining direction and phase of respiration.to cause correction. It has been postulated that a cross is evident in this area. The vertical being for the closed TMJ and the horizontal being for the open TMJ. This point is still being researched.

It is with great pleasure that I contribute to I.C.A.K.



12—10. Dorsal surface.

Basic diagram from Applied Kinesiology, Volume 1 (Pueblo, CO: Systems DC, 1981), with permission.

TEACHING MANUAL FOR APPLIED KINESIOLOGY

David S. Walther, D.C.

ABSTRACT:

A teaching manual set for basic applied kinesiology has been prepared in a narrative style as recommended by educational consultants to the ICAK. Presented here is the introduction to Module 1 on Basic Applied Kinesiology. This teaching syllabus is available through the ICAK to teaching diplomates.

INTRODUCTION - MODULE 1

These teaching manuals for five weekend sessions make up Module 1, which is a basic introduction to applied kinesiology procedures. The manuals were prepared by the International College of Applied Kinesiology's ad hoc committee on an applied kinesiology teaching syllabus, the Education Committee, and in consultation with professional educators who have evaluated previous classes in applied kinesiology.

The material in the teaching manuals is designed to establish a format for teaching applied kinesiology. Although the manuals are written in a narrative style, instructors are not expected to follow them exactly. The instructor is encouraged to become familiar with the material and then present it in his/her own style. The manuals represent the material which should be covered in each session. Topics are presented in the manuals in

the manner generally accepted by diplomates of the ICAK. As the certified teachers of applied kinesiology's Validation Committee of the ICAK continue to review and establish procedures acceptable in ICAK, material will be added, modified, or deleted. Modifications to the teaching manuals will be sent to registered owners; these should be integrated with your manual as they are received.

A suggested outline and time schedule are included with each manual. These are recommended times for each subject, determined from the experience of individuals who have previously taught sessions 1-5 of Module 1. You may find it advisable to modify the time schedule for your own teaching techniques.

The outline and presentation in the teaching manuals have variations of teaching a muscle, demonstrating it, and then doing practical application, as opposed to teaching a couple of muscles, demonstrating them, and having practical application on all the material presented at that section. There are advantages to both systems. The individual presentation, demonstration, and practical application leave the material fresher in the participant's mind to do practical application. The group presentation saves time inasmuch as the participants do not have to change from a writing and observation position to a practical application position as frequently. The amount of material to be covered and the individual instructor's preference can be considered to modify the approach presented here.

It is the policy of the ICAK that a weekend session be taught in two days, with provision to teach on a different schedule in geographical regions where the instructor must travel

great distances, such as an American diplomate teaching in Europe.

Practical application time is included in the time schedule for hands-on experience in applied kinesiology education. The ICAK has established the policy that all applied kinesiology material requiring skill in application will be taught by a combination of lecture, demonstration performed by the instructor, and practical application done by the students.

It is strongly recommended that workbooks be provided for the students. The workbooks should include basic concepts of applied kinesiology, illustrations of the procedures being taught, and adequate space for the students to keep notes on the lecture and demonstration presentation.

The ICAK certified teacher can develop his/her own workbooks or slides to complement the teaching manuals. Systems DC of Pueblo, Colorado, sells workbooks, summary cards, and slides to illustrate the presentations as outlined in these manuals.

In the right margin there is a description and number of the slide provided by Systems DC. The slide number consists of the first three numbers, which are a group such as shoulder muscles, and the second three numbers which give the unique number for each slide. The complete set of slides includes both the overview slides and progressive disclosure slides. The progressive disclosure slides are indicated by an asterisk after the six-digit slide number. If you are using progressive disclosure slides, begin with the first asterisk slide and do not use the overview slide. Likewise, the **ADVANCE SLIDE PROJECTOR** note is marked with

an asterisk if the slide is progressive disclosure. Systems DC sells the group of slides at a greatly reduced cost to teaching diplomates of the ICAK. The slide group for the total syllabus is sold only to teaching diplomates and colleges teaching applied kinesiology. The slides are available to the general public on an individual basis at an increased price.

The notation at the top of the page is interpreted as follows:

TM1-2/10.A

TM1= Teaching Manual, Module 1 (this module)

-2 = Session 2 (#2 of these 5 sessions)

/10= Section 10 (subject 10 of session 2)

.A = Additional subjects prepared by the Education Committee and CTAK after these manuals were released.

Each section begins on the right page. This allows the printed material of each section to be independent, permitting the instructor to change the order of presentation within the manual. Each section's independence also allows for the section to be replaced by updated versions, which are developed by the Education Committee and CTAK.

Following are notes on adult learning principles prepared by Randy O'Neill, a consultant in the preparation of these manuals.

1. Adults like to know what is expected of them. For that reason there is a statement of objectives included at the beginning of most topics.
2. Adults like to know how what they learn affects them. For that reason there are statements of relevance woven throughout the sessions.

3. Adults like closure. For that reason there should be a summary to each topic.
4. It takes time to shift from a listening to a speaking position. To allow for this, pause after asking questions, or asking for questions. This allows the participants the time required to think of the answer or think of the question.
5. Adults like "hands on" without interference. There are practical applications for most topics. You should circulate, observe, and answer questions. Do not interrupt the practical session. If you see something is wrong, tell the participants something is wrong and let them determine what. They learn more, and the learning lasts longer.
6. Adults judge adult speakers on three factors: visual, verbal, and content. In the beginning of the course, the primary decision being made by the participants is whether or not you are worth listening to. If you do not have a reputation sufficient to allow you to "get away with anything," they will base 93% of the judgment on how you present yourself and your material, not on content. If you are nervous at the beginning of the session, stand in one place (and stand still); keep your arms and hands free to gesture spontaneously; maintain eye contact with the participants and breathe completely enough to be able to use your voice.

BE PREPARED so that you do not have to spend a great deal of time looking at your notes. Adults do not like being read to (unless you are Orson Welles).

DO NOT TALK TO THE SCREEN. You have a copy of

everything on the screen in this manual. Be familiar with the organization of the visual presentation so that you will know what slide is coming next, and what points to make on its content.

DEMONSTRATE RESPECT for the experience and knowledge of the participants in the group. This includes those times when someone asks you a question you think any ten-year-old should know the answer to - the participants wouldn't ask if they knew, and they wouldn't be in the room if they didn't want to know.

Don't be afraid to PAUSE WHEN SPEAKING. You do not have to fill the space with constant non-words.

SUMMARY

Presented has been an introduction to the Module I teaching syllabus for basic applied kinesiology. It is expected that teaching diplomates of the ICAK will contribute changes and additions to continue developing a standard approach to teaching applied kinesiology that is sponsored by ICAK.

****INDEX****

Abstract, 27
Applied Kinesiology, 295

B Vitamins, 91
Body Chemistry Imbalance, 121

Calcaneal Elevation, 77
Cervical Adjusting, 23
Cervical Disc, 11
Clavicle, 73
Cranial Injury, 49

Dorsolumbar Fixation, 143
Double Blind Studies, 261

Electrical Stimulation, 153
Essential Fatty Acids, 91

Food Allergies, 153
Form That Works, 81

Hand Stress Receptor, 293
Hidden Problems, 70

Idopathic Scoliosis, 53
Insurance Report, 1

Learning Disabilities, 265

Manual Muscle Testing, 1
Muscles of mastication, 255

Natural Health Care, 165

Oral & Low Frequency, 153

Peripheral Muscle Strenth, 77
P.M.S., 87
Postural Cervical, 23
Pre-Stressing, 70

Residual Tension, 255

Sacral, 79
Scoliosis, 17
Stress Receptor, 79
Structural Faults, 121
Subluxation, 73

Teaching Manual, 295
Techniques Class, 165
Temporomandibular Joint, 293
Therapy Localization, 261

Vitamins A and D, 143

Yaw # 1 Fault, 91