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INTRODUCTION

By

Sheldon C. Deal, D.C., N.D.

Chairman

This seventh collection of papers by the members of the International College of Applied Kinesiology represents 32 papers written by 27 authors from the membership.

These papers will be presented by their authors to the general membership at the Winter Meeting to be held in Houston, Texas on December 7, 8 and 9, 1978. The author welcomes comments and further ideas on their findings, either in Houston or you may write them directly as their addresses are included in the Table of Contents.

This particular edition of collected papers contains a long needed "Index to Date" of all collected papers ever written. It should prove invaluable to those of us writing future research papers, as we are expected to review all existing material on any given topic that we might choose to write upon.

These papers do not represent the official educational material of the International College of Applied Kinesiology, but rather areas of interest to the individual members which have been under research. The papers are presented in an unedited form. It is through our critical examination of these new ideas that we grow in strength and add to our armamentarium of healing abilities which in turn can benefit all mankind.

SOME NEW FIXATIONS

by

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

ABSTRACT: The purpose of this paper is to show four new fixation possibilities. When testing the piriformis, quadraceps, tensor fascia lata and sartorius muscles bilaterally, a hypotonicity indicates a fixation between L2,3,4; C3,4,5; T11,12,L1; and an exception to the rule, the TMJ, respectively.

INTRODUCTION: The application of a black cloth to the open eyes of the patient has been shown to elicit fixations in the body.(1) Upon investigation into this subject, a lengthy examination was conducted to see if any fixations existed in the body other than the ones already established. The results of preliminary testing indicated that all fixations had been categorized. Through clinical experience, several more fixation locations were found nevertheless, and the importance of the black cloth began to diminish, in the opinion of several doctors.

An explanation of the reason for the added fixations not showing up previously was given in a paper entitled, Body Priorities as Demonstrated by a Dental Splint. (2) Respect for the Blindfold Test (3) was re-established subsequently.

The fixations had been "covered" by the body because they were being pursued out of sequence; something else had to be done first. Once the system was cleared in the proper sequence, the following fixations became apparent and correctable.

PROCEDURE:

A. PIRIFORMIS - L2,3,4 FIXATION

It has been documented several times by the members of the ICAK that certain bilateral muscle weaknesses indicate a specific osseus fixation.

In general practice, it is not unusual to see people with low-back pain, men with prostatitis, and women with menstrual disorders. Oftentimes, fertility problems may be a reason for a man or a woman to seek Chiropractic care. The symptoms may be present even on subsequent visits after Applied Kinesiology techniques, as an adjunct to manipulation, have been investigated. Therapy localization reveals nothing unusual and everything which was located and corrected previously, has remained corrected.

Upon testing the piriformis muscle bilaterally and finding both hypotonic, it is well to think in terms of the second, third, and fourth lumbar nerves. Since the third lumbar nerve is the main nervous supply to the sex organs (4), and the piriformis muscles lie on the pericardium meridian, it seemed logical to check the vertebra associated with the specific nerve to the organ's muscle. A positive correlation has been found to exist in 30 out of 38 patients tested. Also, the correlation seems to be found more often in women than men.

The next step is to challenge the vertebrae to find the direction of correction and to manipulate accordingly. Go back and recheck the piriformis muscles after correction. This is a very important step because several times one piriformis muscle will remain hypotonic, indicating the need for nutritional supplementation.

If the bilateral piriformis weakness is not found in the clear, check the priority mechanism presented by Sheldon Deal (5). It is possible that the eight cases where the bilateral muscle hypotonicity was not found were due to them being "covered" by a more primary problem someplace else. At the time of the initial examination, the priority mechanism was not investigated.

B. QUADRACEPS FEMORIS - C3,4,5 FIXATION

Upon testing the patient's quadraceps femoris (rectus division) in the supine position, a bilateral muscle weakness may be indicative of a fixation between the third, fourth, and fifth cervical vertebrae. This fixation may be a contributing factor to symptoms of migraine headaches, sore throats, chronic knee problems and a few other areas of structural relationship.

The proper procedure of testing, challenging, correcting, and rechecking should all be followed strictly and special attention should be paid, again, to the priority mechanism.

This finding is relatively new and, consequently, only 7 cases have been found and studied with relief of symptoms after correction in 6.

C. TENSOR FASCIA LATA - T11,12,L1 FIXATION

One of the foremost steps in obtaining health is a clean colon. If the organ is sluggishly working and congested, it cannot possibly work at its optimal level of performance and an accumulation of toxicity results. An open iliocecal valve and constipation are also results of a hypokinetic colon.

A bilaterally hypotonic tensor fascia lata indicates a fixation between the eleventh and twelfth thorasic and first lumbar vertebrae. The same investigative and manipulative procedures should be followed

in this case as in the cases above, for correction.

In the twelve cases studied, all responded immediately to the correction of the fixation and to date, only one needed to be done a second time. (This was probably due to its being corrected out of sequence.) As in the case of the piriformis, the tensor fascia lata sometimes shows a unilateral weakness after correction or on subsequent visits; this indicates nutritional supplementation. Having the normal nervous function re-established, the colon can function more properly and balance can be restored to the pelvic structure.

D. SARTORIUS - TEMPROMANDIBULAR JOINT DYSFUNCTION SYNDROME

Until recently, a bilateral sartorius muscle hypotonicity indicated adrenal malfunction. The usual methods of neurolymphatic, neurovascular, acupuncture, nutrition, etc., were all of supportive value but many times the patient experiences no amelioration of symptoms. The TMJ is a joint of primary importance (6) and has received much more recognition as such recently - exemplified by the interest given to it by dentists using Applied Kinesiology.

It has been noted that after manipulation of the muscle spindle fibers in the external pterygoideus muscles and a strong bilateral sartorius results, the TMJ remains corrected upon subsequent visits but the patient has also been instructed to follow the "rule of thumb" to avoid repeated strain of the TMJ musculature.

As stated in the abstract, this is the exception to the rule on fixations for two reasons. First, it indicates a fixation in something other than a vertebral level and, second, the correction is of a soft-tissue type rather than an osseus type.

In Dr. Deal's paper, the results of the application of a

removable dental splint are presented. This muscle test presents an indicator for the possible need of a tempromandibular splint, the application of which is outlined in the above mentioned paper.

CONCLUSION: The Blindfold test is still valid as an indicator of fixations in the body and importance has been added to it with the demonstration of body priorities. The muscle tests indicated herein will add to the doctor's armamentarium for treatment by giving more balance to the structure in a shorter period of time.

It may be well to check the TMJ by way of the bilateral sartorius muscle test along with the centering mechanism and switching at the outset of treatment to see if it should be corrected at that point. Its correction at first may be significant since it could alleviate compensatory muscle weaknesses initially, thereby showing primary weaknesses only.

It should always be remembered that it is of utmost importance that the priority mechanism be followed precisely for correct interpretation of results and lasting treatment.

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3. Diamond, Spring 1977
4. Chiropractic Principles and Technique, Janse, Pg. 161-162, 1947.
5. Deal, Spring 1978
6. Deal, Spring 1978

STIMULATION THROUGH MANIPULATION

by

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

ABSTRACT: A Chiropractic manipulation may supply the stimulus to correct neurolymphatic, neurovascular, acupuncture points, and even correct cranial bones through GV20.

INTRODUCTION: While reading Chiropractic Principles and Technique by Joseph Janse, D.C., the idea of using a Chiropractic manipulation, the result of which is unique to the body, to stimulate acupuncture points, correct muscle spindle fibers, correct golgi tendon organs and correct cranial bones through GV20, became more and more interesting.

PROCEDURE: In his book, Dr. Janse states that, "The immediate, though temporary, effect of the application of the Chiropractic thrust is its stimulating action on the nerve centers." (1) Not only is this osseus or soft-tissue manipulation a stimulation to the nerve centers of the body, but also to every organ and muscle in the body. The Applied Kinesiologist already knows this to be true, but further application only increases its value.

Felix Mann mentions that "Directly under the skin is a widespread network of nerves (part of the autonomic nervous system) which recieve and pass on the impulses that come from the deeper parts of the body - the organs, brain, bones, muscles, etc. When an impulse arrives from a diseased organ an alarm is sounded at the nerve endings in the skin." (2)

Dr. Mann goes on to explain that the malfunctioning point tends to become sensitive to the touch. "A fine needle is put into the sensitive spot. The nerve fibers of the autonomic nervous system are stimulated; the impulse goes to the lower centers of the brain, and then back again to the diseased organ, which is restored to its normal balance (Vorgralik)."

Through the years, we have seen that acupuncture can be done with the fingertips to accomplish the same result received with needles. This is because of the vast supply of nerve energy found at the hand area, as seen on the homunculus. Patients sometimes exclaim that they can "feel the energy run to their fingertips" after a cervical adjustment.

Since the above is true, it would seem that since the Chiropractic manipulation is a stimulation (however brief it may be) the same result could be had with therapy localization of any area (a neurolymphatic, neurovascular, acupuncture point, iliocecal valve, etc.) and a simultaneous manipulation of any indicated osseus structure.

The impulse from the manipulation stimulates the whole body as explained by Janse, "...each cell virtually is a battery composed of ions in definite relationship to each other. When the cell is deprived of its requisite blood supply, there develops a lack of cohesion of the elements composing it. As a result of the consussion of forces incident to the application of the thrust, there is a condensation of the ions composing the cell, in consequence of which it functions more actively. In other words, the cell generates impulses as a result of the stimulant it has received in the form of a thrust." (4)

The instantaneous stimulation from the manipulation travels to the hands and - since the hands are contacting the body - through the tissues to the point of contact - whatever it is.

This line of reasoning can be followed to include the cranial bones which were mentioned earlier. When GV20 is therapy localized and a previously strong indicator muscle weakens, this shows that one or more cranial bones are subluxated. (5) The approach is then to go to each one of the cranial bones and find which are the offenders.

The next step is to correct each one individually and go back to recheck them all. This proceedure used to take up much time in the office; after the discovery of the body's priority mechanisms it is even more lengthy and involved.

If the patient simply contacts GV20 with two fingers of both hands and the doctor simultaneously manipulates the cervical spine, the stimulus from the adjustment travels down the arms to the hands and to GV20 to stimulate the cranial bones with "inate intelligence."

Upon re-examination of GV20 with therapy localization, it is found that all previous cranial bone subluxations have now cleared.

To go one step further, let us go along the reasoning of rubbing the neurolymphatic and holding the neurovascular points simultaneously for correction of a hypotonic muscle - which several doctors do in their practice. The thinking is that while one hand is stimulating the neurolymphatic reflex with a vigorous rubbing pressure, the other hand is acting as a "jumper cable" stimulating the neurovascular reflex with a light touch. Each one stimulates the other in the same way the cells of the body are stimulated by the manipulation as explained above by Dr. Janse. This technique works very well and effectively.

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2. Acupuncture - Its Origin and Physiological Basis, Felix Mann, Pg. 9.
3. Ibid.
4. Janse, Pg. 56.
5. Phenomenology with Kinesiology, Sal Cedaro, Collected Papers of the Members of the ICAK, Spring, 1977.

HERPES ZOSTER

ABSTRACT: Herpes Zoster is also known as shingles. In areas with a predominant population of senior citizens, one is bound to be confronted with this condition. Traditional medical treatment is not very successful. The following treatment has been very successful in our office.

PATHOLOGICAL CONSIDERATIONS:

Herpes Zoster, commonly known as shingles, is an acute infection of the central nervous system involving the posterior root ganglia of a few segments of the spinal or cranial nerves. Usually unilateral a painful eruption occurs on the skin along the course of the peripheral sensory nerves arising in the affected root ganglia. The area of eruption may be small to covering nearly one half of the body.

PHYSIOLOGICAL CONSIDERATIONS:

Herpes Zoster is caused by the varicella-zoster virus. This condition is usually seen in persons over 50 years of age. One attack usually confers immunity and most persons recover without residual complications, although post-herpetic neuralgia may persist for months or years.

TREATMENT:

(1) Examine and correct all phases of the five elements. It is not uncommon to find a severe lesion above a spinal segment that needs to be corrected.

(2) Use an electric hair dryer directly on all erupted lesions three to four times per day. The blowing heat applied directly to the lesions seems to relieve the pain which allows the patient to function without constant pain.

(3) Apply Tocophoderm (Nutri-dyn) four times per day directly to all erupted lesions. Lesions will begin to disappear without scaring within 36-72 hours.

(4) Supplements to be used:

(a) Thymotrophic Concentrate 3-6 per/day.
This promotes lymphatic drainage and phagocytosis and often causes immediate relief from pain in acute cases.

(b) Myleotrophic Concentrate 3 per/day
Promotes growth and repair in the central nervous system.

(c) B-Complex 3 per/day
Essential for tissue healing.

(d) Livatrophic Concentrate 3 per/day
Supports the liver and gall bladder.
Supports total body detoxification.

(e) Stereotrophic Concentrate 3-6 per/day
Supports anti-stress factors.

CONCLUSION:

This approach has been most satisfying to both patient and doctor in that it succeeds where other forms of treatment have failed.

REFERENCE:

"Nutritional Therapy, A Clinical Presentation"
by Victor H. Bagnall, D.O.

MYOMERE

A PILOT STUDY

By Alan G. Beardall, D.C.

Assisted by
Kim Christensen, D.C.
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ABSTRACT

This is a pilot study of the myomere relationship between the spine and skeletal muscles. Myomere levels for muscles found to be weak by regular kinesiological methods were elicited and located using a modification of Dr. Goodheart's "Scratch test".[1] Of the 444 times checked the myomere phenomenon was elicited at a predominant location 392 times and at a subdominant position 52 times. Preliminary investigation suggests that there may be a specific predominant myomere level for each muscle division and that this level coincides with the same side of the body as the muscle being checked.

DISCUSSION

It is an observable phenomenon that vertebral subluxation levels related to muscle weakness and located by present Applied Kinesiology methods (such as TS line,[2, 3] therapy localization of spine, etc.) do not correspond to spinal motor innervation (myomere) levels for the involved muscles. A look at these myomere levels as presented in orthopedic, neurological or muscle testing texts such as Kendall & Kendall,[4] Chusid[5] or Stoner[6] will indicate different spinal levels than most Applied Kinesiologists would find involved with a specific muscle weakness problem.

A presentation by Dr. G. J. Goodheart in Salt Lake City on May 13, 1978, demonstrated that this spinal "neuromere" or "myomere" level could be elicited in relation to a particular muscle by scratching over the related vertebral neuromere level.[7] A previous negative therapy localization of the neuromere levels then elicited a positive response. We feel this "neuromere" concept would be more correctly termed "myomere" or "myotome"* and will refer to it as such in the rest of this paper to designate our use of Dr. Goodheart's technique with some modification.

At present, methods for determination of myomere levels for a muscle are somewhat cumbersome and require a time-consuming amount of work in order to determine the relationships. For instance, according to Kendall and Wadsworth's compilation of spinal segment levels (myomere) for a muscle, splenius capitus could have innervation anywhere from C_1 through C_7.[8] These myomere levels, if found to be consistently more specific for a muscle, could be listed and located quickly and in a manner similar to therapy localization of known points, such as neurolymphatic and neurovascular, thus saving time for the patient and the doctor.

We propose a research of this phenomenon to determine if there is a consistent dominant myomere* level for each muscle tested by kinesiological methods. We have undertaken a pilot study of this phenomenon based upon the hypothesis that there is a dominant myomere level for each muscle.

METHODS

Muscles were tested and found weak by regular kinesiological methods, paying attention to priorities, such as inspiration assist, testing weak in the clear and therapy localization of the IVF factors. Spinal levels therapy localized for that muscle were located and noted. The muscle was "tapped" several times to bring up any "soft tissue memory," then myomere levels (vertebral spinal levels) as determined according to Kendall and Wadsworth's compilation[9] were scratched, then therapy localized using an intact muscle to determine if a response were elicited.

Double therapy localization of myomere level and involved muscle was used to confirm if that myomere level affected the appropriate muscle division being checked. The myomere level was then counted by palpation procedure and recorded as to level of location. The side of involvement was also noted. Because the

*Myomere or myotome: 2) A group of muscles innervated from a single spinal segment. 3) The muscle plate or portion of a somite that develops into voluntary muscle. Dorland's Medical Dictionary, 25th Edition.

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response seemed to be elicited from the intervertebral area between the vertebrae, the levels were recorded according to the lower segment of the two involved vertebrae, i.e., the segment which removed the myomere response when challenged by regular methods.

Data was collected in chart form to show which muscle was being checked and the location of its myomere.

RESULTS

June 9, 1978 through July 26, 1978:

Total no. of times checked	444
Total no. of times located at a dominant myomere level	392
Total no. of times located at one segment deviation	52
Total no. of times located at two segment deviations	0
Total no. of times located on same side as muscle check	444
% of variation from a particular level	11.58%

Results on selected muscles:

MUSCLE	MYOMERE LEVEL (Kendall and Wadsworth)	TIMES CHECKED	LOCATION
Upper trapezius	Cr XI, C2, C3, C4	10	C2(9)C3(1)
Splenius capitus	C1, C2, C3, C4, C5, C6, C7, C8	7	C2(7)
Iliocostalis lumborum	L1, L2, L3, L4, L5, S1, S2, S3	18	L2(2)L3(16)
Biceps femoris, short head	L4, L5, S1, S2	8	S1(8)
Bic. fem., long hd., tib. div.	L5, S1, S2, S3	12	S1(1)S2(11)
Bic. fem., long hd., fib. div.	L5, S1, S2, S3	15	S1(2)S2(13)
Rectus femoris, straight head	L2, L3, L4, L5	10	L4(10)
Vastus lateralis, lower div.	L2, L3, L4	16	L2(15L3(1)
Gluteus maximus, sacral	L5, S1, S2, S3	10	S2(3)S3(7)

DISCUSSION AND INTERPRETATION

The results obtained up to this time seem to point out certain findings; 1) there may be a single dominant level for a muscle, 2) the specific myomere level for a muscle may vary slightly between individuals and 3) the myomere

response is on the same side of the body as the muscle being checked. For instance, if a muscle on the right side of the body was checked, the positive myomere therapy localization occurred on the right side of the spine.

We recognize that this is only a pilot study with limitations of data and methodology which need to be overcome in order to represent a more reliable research. In order to improve upon the methodology we would suggest that further research in this area should include:

1. Greater objectivity of methods...this should include a double blind study to confirm or deny findings.

2. Improved data gathering techniques

   a. At present the spinal palpation is subject to too much individual interpretation and would be more reliable if a standardized method of locating the level of the IVF were used. A method such as that used by the Gonstead Clinic for correlating spinal palpation level and IVF level would afford more consistency in results.

   b. A greater number of tests should be performed to obtain an improved statistical analysis and to determine if data are statistically significant.

3. An improved method of testing for the neuromere would be helpful also. At present the indicator from scratching the vertebral level only lasts for a short time (five to fifteen seconds, perhaps). It would be desirable to develop a methodology that would hold the indicator "in suspension" indefinitely and at will in order to facilitate the double blind type of study.

SUMMARY

Initial investigation seems to point out that there may be a dominant myomere level for each skeletal muscle division tested by kinesiological methods; however, final conclusions cannot be reached without further research in isolating the present variables.

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7. Seminar notes, Salt Lake City, May 13, 1978.

8. Kendall, Kendall & Wadsworth, op. cit., pp. 41-45.

9. Ibid.

HERBAL AIDS IN RELATION TO 12 MERIDIANS

by Wm. R. Borrmann

ABSTRACT: Chinese medicine consists of three main categories; herbology, acupuncture and massage. Chinese herbology uses thousands of derivatives from barks, roots, leaves, herbs, animal parts and minerals. Each item has its own healing function. In this paper we are discussing herbs and their relation to specific merdians. In most instances, the Chinese imploy five to ten items in a dose (a dose meaning a combination of five to ten herbs mixed together). The herbs are prepared as an infusion by pouring boiling water over them as in the use of seeds and leaves or as a decoction (boiling roots, seeds and bark in boiling water for 30 minutes). It is a well-known fact in Chinese herbology as well as in modern day herbology that a mixture of some herbs does have far more beneficial effects than a specific single herb. Wherever possible, use a mixture of several different herbs to balance meridian energy. The majority of herbs listed may be used in either hyper or hypo meridian conditions except where specifically listed.

Where listed, use the organ concentrate with the herb to assist herbal function.

BAYBERRY
Sinus - Mucous Membranes

BLACK COHOSH - Lungs
Bronchitis

BLESSED THISTLE - Lungs

BRIGHAM TEA
Sinus

CAMOMILE
Bronchitis

CATNIP
Bronchitis

CAYENNE
Bronchitis - Pleurisy

CHICKWEED - Lungs
Bronchitis

COMFREY - Lungs
Bronchitis - Emphysema

DANDELION
Bronchitis

EUCALYPTUS - Lungs
Bronchitis

FENNEL
Emphysema

FENUGREEK - Lungs
Emphysema

GARLIC
Emphysema - Sinus
Acts as a natural antibiotic and destroys only harmful bacteria.

GINGER
Bronchitis - pneumonia - sinus
3-4 tablespoons to bath water; assists in opening skin pores.

GINSENG - Lungs

GOLDEN SEAL
Bronchitis - Sinus

HORSERADISH - Lungs
Sinus

HYSSOP - Lungs
Sinus

IRISH MOSS
Pneumonia

LICORICE ROOT - Lungs
Bronchitis - Emphysema

LOBELIA - Lungs
Bronchitis - Pleurisy - Asthma
Note: Will cause vomiting in large doses.

MARSHMALLOW
Asthma - Emphysema - Pneumonia

MULLEIN - Lungs
Asthma - Bronchitis - Hemorrhage of lungs - Sinus - Pleurisy - Pneumonia

MYRRH - Lungs
Asthma

OAT STRAW - Lungs

PARSLEY
Asthma

PENNYROYAL - Lungs

PEPPERMINT
Bronchitis

PLANTAIN - Lungs

PLEURISY ROOT - Lungs
Bronchitis - Asthma - Pleurisy - Pneumonia

ROSE HIPS
Emphysema

SAFFRON - SAFFLOWERS
Bronchitis

SAGE - Lungs
Sore throat - Bronchitis

SAW PALMETTO
Bronchitis - Asthma

SHEPHERD'S PURSE
Helps stop bleeding from lungs and bronchial tubes.

SLIPPERY ELM - Lungs
Asthma - Bronchitis

ST. JOHNSWORT - Lungs

THYME - Lungs
Asthma

UVA URSI
Bronchitis

WOOD BETONY
Asthma

YARROW - Lungs
Pleurisy

YERBA SAMTA
Asthma - Bronchitis

LARGE INTESTINE

BAY BERRY - Colon
Diarrhea

BLACK COHOSH
Diarrhea

BLACK WALNUT
Diarrhea

CAMOMILE
Colitis

CASEARA SAGRADA - Colon

CATNIP
Ciarrhea

CHICKWEED - Colon

COMFREY - Colon
Colitis - Diarrhea

GARLIC
Diarrhea

GINGER
Colon spasms - Colitis - diarrhea - colon gas

GOLDEN SEAL
Colitis

HORSERADISH
Digestion

HYSSOP
Diarrhea

KELP
Colitis

MULLEIN
Diarrhea - hemorrhages - bowel

MYRRH - Colon
Colitis

PAPPERMINT
Colitis - Diarrhea

PLANTAIN
Diarrhea

PSYLLIUM - Colon
Colitis - Constipation - Diverticulitis

RASPBERRY LEAVES
Diarrhea

SAGE
Diarrhea - gas

SLIPPERY ELM - Colon
Colitis - Constipation - Diarrhea - Dysentery

ST. JOHNSWORT
Diarrhea

THYME
Diarrhea

UVA URSI
Dysentery

WOOD BETONY
Diarrhea

ALFALFA
Digestion

BARBERRY
Heart burn

BLESSED THISTLE
Indigestion

BURDOCK - Stomach

CAMOMILE - Stomach
Useful in drug withdrawal

CAYENNE - Stomach
Digestion - Indigestion

CHICKWEED - Stomach

CALAMUS
Heart burn

Comfrey - Stomach

FENNEL
Normalizes appetite. Helps decrease excessive appetite. Increase appetite if none present.

FENUGREEK - Stomach
Heart burn

GARLIC - Stomach

GINGER
Stomach spasms

GINSENG - Stomach

GOLDEN SEAL - Stomach

JUNIPER - Stomach

LICORICE ROOT - Stomach

LOBELIA
Indigestion

MYRRH - Stomach

NETTLE - Stomach

PEPPERMINT
Heart burn - Stomach cramps

PLANTAIN - Stomach

RASPBERRY LEAVES - Stomach

RUE - Stomach

SAFFRON - SAFFLOWERS
Heart burn - Digestion - gas - Appetite

SAGE - Stomach
Digestion

SARSAPARILLA
Heart burn

SCULLCAP
Indigestion

SLIPPERY ELM - Stomach
Digestion - Indigestion

THYME - Stomach
Heart burn - digestion

VALERIAN ROOT - Stomach
Heart burn - gas - stomach

YILD YAM - Stomach

WOOD BETONY
Heart burn - Indigestion

YARROW
Appetite

SPLEEN - PANCREAS

BUCHU - Pancreas

CAMOMILE - Spleen

CASCARA SAGRADA - Spleen

CATNIP - Pancreas
Hypoglycemia

CAYENNE - Pancreas and spleen

COMFREY - Pancreas

DANDELION - Pancreas

ECHINACEA
Lymphatic system

GOLDEN SEAL - Pancreas and spleen
Should not be used by persons with low blood sugar. It tends to lower blood sugar - therefore, use Myrrh in case of low blood sugar (Hypoglycemia).

JUNIPER - Pancreas and adrenal
Hypoglycemia - low blood sugar.
Excellent for prevention of disease.

LICORICE ROOT
Hypoglycemia - Low blood sugar

LOBELIA
Hypoglycemia

MULLEIN
Swollen glands

MYRRH
Will help heal and prevent infections.

PAPAYA - Stomach
Digestion - indigestion

PARSLEY - Spleen

RUE
Hypoglycemia

SAFFRON - Safflowers
Useful to hypoglycemies - to relieve fatigue and muscle cramps after excercising.

SCULLCAP
Hypoglycemia

UVA URSI - Pancreas and spleen

VERVAIN - Spleen

YARROW - Spleen

YELLOW DOCK - Spleen

BAYBERRY

BLACK COHOSH

GOLDEN SEAL

IRISH MOSS

KELP

LOBELIA
Hyperactivity

MYRRH

PARSLEY

POKE WEED (Green)

WHITE OAK BARK

CIRCULATION - (PERICARDIUM) - MALE

ALFALFA - Pituitary

CHAPPARAL - Prostate

CHICKWEED
Impotency

DAMIANA - Prostate

ECHINACEA - Prostate

GARLIC - Prostate

GINSENG - Prostate
Regulates hormones when used with Sasaparilla.

GOLDEN SEAL - Prostate

GOTU KOLA - Pituitary
Senility - Brain food

JUNIPER - Prostate

KELP - Prostate, adrenal, pituitary

LICORICE ROOT
Sex Stimulant

PARSLEY - Prostate

WILLOW
Sex depressant

YELLOW DOCK - Pituitary

ALFALFA
Morning sickness - pituitary

BAYBERRY
Miscarriage - Prolapsed uterus - Leucorrhea - douche

BISTORT
Menstration - vagina as a douche - bleeding from vagina.

BLACK COHOSH - Uterus
Hormone balance - Supplies natural estrogen - menaopause - menstration - hot flashes.

BLACK WALNUT
Leucorrhea (douche) vagina (douche) Lactation.

BLESSED THISTLE
Leucorrhea (douche) - increased milk production, makes it richer. Hormone balance.

BLUE COHOSH
Dilates cervix - menstration - leucorrhea (douche)

BRIGHAM TEA
Menstration

CAMOMILE
Menstration

CATNIP - Uterus
Menstration - miscarriage - morning sickness

CAYENNE
Vagina (douche)

CHICKWEEK
Impotency

COMFREY
Leucorrhea (douche) - menstration

DAMIANA
Female problems - frigidity - hot flashes Hormone balance - menopause - sex stimulant.

FALSE UNICORN - Uterus
Leucorrhea (douche) - menstration - miscarriage - prolapsed uterus - sterility - vagina - Strengthens muscles of the uterus.

FENNEL
Menstration - Useful to produce rich milk.

FENUGREEK
Frigidity - vagina (douche)

GARLIC
Vagina (douche) - Yeast infections (one clove of garlic in one pint of water or two capsules of garlic and cayenne to one quart of water - strain - then use as a douche. For any problen in uterus or vagina.

GINGER
Menstration - morning sickness - vagina (douche)

GINSENG
Frigidity

GOLDEN SEAL - Uterus
Menstration - morning sickness - urethra - vagina (douche)

GOTU KOLA
Menopause - brain food

HAWTHORN
Menopause - (may produce dizziness in too large a dose)

HOPS
Menstration - morning sickness - sex desire.

KELP
Pituitary - pregnancy - menopause - morning sickness - hot flashes - child birth - adrenal - birth defects.

LICORICE ROOT
Hormone balance - menopause - sex stimulant

LOBELIA
Miscarriage

MAGNOLIA
Vagina

MARSHMALLOW
Lactation - vaginal irritation - produces rich milk.

MYRRH - Uterus
Leucorrhea (vaginal douche) - menstration

PAPAYA
Papaya can be mixed with cows milk to resemble breast milk.

PARSLEY
Menstration - pituitary - Will dry up mothers milk after birth.

PEACH
Morning sickness

PENNYROYAL
Menstration - Should not be used during early pregnancy.

PEPPERMINT
Menstration - morning sickness

PLANTAIN
Frigidity - menstration - vagina leucorrhea (douche)

PLEURISY ROOT
Menstration

POKE WEED ROOT
Caked breasts (use as a poultice)

QUEEN OF MEADOW - Uterus
Vagina

RASPBERRY LEAVES - Uterus
After birth pains - birth defects - child-birth (eases) - Lactation - leucorrhea Menstration - morning sickness - pregnancy.

RUE
Menstration - heart palpitations in women during menopause
Note: Do not use during pregnancy. Take between meals.

SAFFRON - SAFFLOWERS
Frigidity - menstration

SAGE
Menstration - morning sickness - sex desire - will dry up milk.

SARSAPARILLA (Jamaica Root best) - Ovaries - Adrenal
Natural progesterone - necessary for development of mammary and genital organs - Aids the condition of uterus - Prevents miscarriage - Eases uterine pain after childbirth - Hot flashes - Use with Ginseng - It also contains Cortin an adrenal hormone that assists in preventing infectious diseases, nervous depression and fatigue.

SAW PALMETTO
Breasts - Useful in developing small breasts - frigidity.

SCULLCAP
Sex desire

SHEPHERD'S PURSE - Uterus
Menopause - menstration - vagina

SLIPPERY ELM - Uterus
Leucorrhea (douche) - Ovaries - sex stimulant - vagina (douche)

SQUAW VINE
Childbirth - menstration

ST. JOHNSWORT
Menstration - after childbirth pains.

THYME
Menstration

UVA URSI - Uterus
Female problems - leucorrhea - menstration - vagina

VALERIAN ROOT
Menstration - After childbirth pains.

VERVAIN
Menstration

WHITE OAK BARK - Uterus
Leucorrhea (douche) - Menstration - Vagina

WILD YAM
Menstration - morning sickness.

WILLOW
Sex depressant

WOOD BETONY
Menstration

YARROW - Uterus
Menstration

YELLOW DOCK
Pituitary

TEETHING
Use Lobelia ticture on gums.

DIARRHEA
½ teaspoon Slippery Elm to one cup of distilled water in an enema or 1 teaspoon of carob powder of 1 teaspoon Slippery Elm to 1 cup boiled milk.

DIAPER RASH
Slippery Elm paste of crushed Mullein paste.

CONSTIPATION
Raw Honey - Sorghum - Licorice Root tea.

COLIC
Fennel - pappermint - catnip tea - raw honey - sorghum

FEVER
Raspberry leaf tea or catnip tea (enema)

LOSS OF APPETITE
Fennel tea or camomile tea

PINWORMS
Camomile tea

ROUNDWORMS
Fig tea

RESTLESS
Hops tea - use 1 teaspoon in one cup of boiling water, let steep 5-10 minutes. Cool and strain. Add honey or sorghum for taste. 1 teaspoon tincture of Lobelia rubbed on baby's spine.

Powdered herbs may be put in honey, molases, apple sauce, prune or grape juice, honey.

PREGNANCY
Best herbs are: Kelp, alfalfa, raspberry leaves, wheat germ oil, brewers yeast and cod liver oil. If these are taken throughout pregnancy it lessens the possibility of birth defects and miscarriage. They also aid in labor and delivery processes. They supply all the vitamins and minerals that the body needs.

PREGNANCY (Cont'd.)
May use squaw vine, false unicorn, black cohosh, lobelia. Add to the above herbs to help strengthen uterus and make delivery easier and often eliminates stitches.
AVOID any laxative herbs during the pregnancy - rue, pennyroyal.

CAMOMILE
Diverticulitis - Indigestion

CASCARA SAGRADA - Small Intestines
Indigestion - digestion

COMFREY
Indigestion

DANDELION
Indigestion

FENNEL
Indigestion

FENUGREEK
Digestion

GARLIC
Indigestion - diverticulitis

GINGER
Digestion

GINSENG
Digestion

GOLDEN SEAL
Indigestion

HOPS
Indigestion

LOBELIA
Digestion

MYRRH
Indigestion

PAPAYA
Diverticulitis

PEPPERMINT
Diverticulitis

UVA URSI
Digestion

BARBERRY
Dilates blood vessels - (High blood pressure)

BLACK COHOSH
High blood pressure - strengthens pulse and slows pulse rate.

BLUE COHOSH - Heart
Blood pressure

BRIGHAM TEA
Blood pressure

CAYENNE - Heart
Blood pressure - regulates heart
Strengthens pulse - Increases pulse
Cleanses circulatory system
Arteriosclerosis

CHICKWEED
Circulation

DANDELION
Low blood pressure

GARLIC - Heart
High blood pressure - arteriosclerosis

GOLDEN SEAL - Heart
Circulation

GOTU KOLA - Brain
High blood pressure

HAWTHORN - Heart
Arteriosclerosis - High blood pressure
Low blood pressure

HORSERADISH
Circulation

HORSETAIL - Heart

HYSSOP
Blood pressure - circulation

LOBELIA
Heart palpitations

OAT STRAW - Heart

PASSION FLOWER
High blood pressure

PLEURISY ROOT
Circulation (Used to relax capillaries)

ROSE HIPS - Heart
Circulation - arteriosclerosis

ROSEMARY
Blood pressure

RUE
Arteriosclerosis - Blood pressure

SAFFRON - SAFFLOWERS - Heart

SCULLCAP
Blood pressure

SHEPHERD'S PURSE - Heart
Arteriosclerosis - Blood pressure
Constricts blood vessels
Raises blood pressure
Normalizes either high or low blood pressure because it contracts small intestines.
Normalizes heart action.

ST. JOHNSWORT - Heart
Blood pressure

WOOD BETANY - Heart

BUCKTHORN - Liver
Constipation - hemorrhoids

BARBERRY
Blood purifier - varicose veins

BLACK COHOSH - Liver
Blood purifier

BLUE COHOSH
Blood purifier

BRIGHAM TEA
Blood purifier

BURDOCK - Liver
Hemorrhoids - Reduces swelling and deposits in joints.

CAMOMILE
Blood purifier - hemorrhoids - Jaundice (Use in drug withdrawal)

CASCARA SAGRADA - Liver
Jaundice - constipation - hemorrhoids

CAYENNE
Janudice varicose veins

CHAPARRAL
Blood purifier

CHICKWEED
Hemorrhoids - constipation - blood purifier

COMFREY
Blood purifier

DANDELION - Liver
Blood purifier - anemia - constipation - jaundice - high in calcium and organic sodium.

ECHINACEA
Blood purifier

FENNEL
Jaundice

GARLIC - Liver

GENTAIN - Liver

GINGER
Constipation

GINSENG
Constipation

GOLDEN SEAL - Liver
Constipation - hemorrhoids

HOPS - Liver
Jaundice

HORSETAIL - Liver
Jaundice

HYSSOP - Liver
Blood purifier

IRISH MOSS
Jaundice

KELP
Anemia - Weight distribution

LICORICE
Blood purifier - constipation - Assists in drug withdrawal.

LOBELIA - Liver
Jaundice - *Note: Will cause vomiting in large doses.*

MULLEIN
Constipation

OAT STRAW - Liver
Jaundice

PARSLEY - Liver

PEACH
Constipation

PAPPERMINT - Liver
Dizziness

PLANTIAN
Hemorrhoids

POKE WEED - Liver
Hamorrhoids - constipation

PSYLLIUM
Hamorrhoids

RASPBERRY LEAVES
Constipation

RED CLOVER
Blood purifier

ROSE HIPS
Jaundice

RUE
Gout

SAGE
Dizziness

SARSAPARILLA
Gout - Blood purifier

SAW PALMETTO
Alcholism - Helps underweight people to gain weight.

SCULLCAP
Alcholism

SENNA - Liver
Jaundice - laxative - Can cause griping, use in combination with other herbs.
Soak raisins in Senna Tea for worms.

SHEPHERD'S PURSE
Hemorrhoids - Helpful in difficult bowel movements.

ST. JOHNSWORT
Anemia - jaundice

UVA URSI - Liver
Piles

VALERIAN ROOT
Hypoglycemia - Low blood sugar

WHITE OAK BARK - Liver
Hemorrhoids - jaundice - varicose veins - Tea applied to cloth then to varicose veins
Also used internally

WOOD BETANY
Varicose veins

YARROW - Liver
Blood purifier - hemorrhoids - jaundice - piles

BARBERRY
Gall stones - Promotes bile secretion.

BLESSED THISTLE

BUCKTHORN
Gall stones

BURDOCK - Gall bladder
Gall stones

CASCARA SAGRADA
Gall stones

COMFREY - Gall bladder

DANDELION - Gall bladder
Gall stones

FENNEL - Gall bladder

GARLIC - Gall bladder

GOLDEN SEAL - Gall bladder

HYSSOP - Gall bladder
Gall stones

MANDRAKE - Gall bladder
Gall stones

OAT STRAW - Gall bladder

PARSLEY - Gall bladder
Gall stones

PEPPERMINT - Gall bladder

VERVAIN
Gall stones

WHITE OAK BARK - Gall bladder

WILLOW - Gall stones

YELLOW DOCK - Gall bladder

ALFALFA - Kidney

BLESSED THISTLE - Kidney

BLUE COHOSH - Kidney
Diuretic

BRIGHAM TEA - Kidney
Kidney disorders

BURDOCK - Kidney

CAMOMILE - Kidney

CAT NIP
Kidney stones - urination
Useful as enema in relieving fevers.

CAYENNE - Kidney

CHAPARRAL - Kidney

COMFREY - Kidney

DANDELION - Kidney

FENNEL
Urination

FENUGREEK
Water retention

GOLDEN SEAL - Kidney
Water retention

HOPS
Water retention

HORSERADISH
Water retention

HORSETAIL
Diuretic. Has high silica content.
Excellent for finger nails and split hair ends.

HYSSOP - Kidney

JUNIPER - Kidney
Diuretic - water retention

KELP - Kidney

MARSHMALLOW - Kidney

NETTLE
Urinary tract

OAT STRAW - Kidney
Bedwetting

PARSLEY - Kidney
Bedwetting - gout - water retention

PEACH
Water retention

PENNYROYAL
Gout

PLANTAIN - Kidney

PLEURISY ROOT
Water retention

QUEEN OF MEADOW - Kidney
Gravel - urination - water retention

ROSE HIPS - Kidney

SAFFRON - SAFFLOWERS
Gout - diuretic - water retention

SHEPHERD'S PURSE - Kidney

SLIPPERY ELM
Cystitis - diuretic - urination

SQUAW VINE
Gravel - urination

ST. JOHNSWORT
Gout - urination - bed wetting

UVA URSI - Kidney
Bed wetting - cystitis

WHITE OAK BARK - Kidney
Urination

WILLOW
Gout

WOOD BETONY - Kidney
Bed wetting - gout

YARROW - Kidney
Urination

BLUE COHOSH
Bladder infection

BUCHU
Bladder weakness - gravel - uretheral irritation

BURDOCK - Bladder

CAMOMILE - Bladder

COMFREY - Bladder

ECHINACEA
Bladder infection

GOLDEN SEAL - Bladder

HORSERADISH - Bladder

HYSSOP - Bladder

JUNIPER - Bladder

MARSHMALLOW - Bladder
Urinary bleeding - bed wetting

OAT STRAW - Bladder
Gravel - gout

PEACH - Bladder

PLANTAIN - Bladder

SAW PALMETTO - Bladder

UVA URSI
Bed wetting

WHITE OAK BARK - Bladder

WOOD BETONY - Blatter

YARROW - Bladder
Good for mucous discharge from bladder

YELLOW DOCK - Bladder

YERBA SANTA - Bladder

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OBSERVATIONS UPON TEACHING A.K.

The authors have taught three classes of the basic 100 hour course and offer these suggestions to fellow teachers.

This December, we will have completed our third 100 hour basic course in Applied Kinesiology as perscribed by the Education Committee of I.C.A.K.. During this time period, as well as our own education in applied kinesiology, we have had an opportunity to talk to students who have been taught by other Diplomates and some who weren't Diplomates. We have also been able to assess our own educational techniques and offer the following suggestions and ideas:

1. Standardization between all teaching diplomates is a must.
   a. Terminology for the different techniques or conditions needs to be uniform.
   b. Standard muscle tests must be taught by all instructors.
2. Periodic testing of the students must be performed. Remember the enlightened educational concept: it is the teacher who fails not the student.
3. Helpful teaching aids:
   a. Slides as prepared by David Walther, D.C..
   b. Additional slides for explanations not adequately covered by (a.). hese are easily taken from self made drawings and textbooks.
   c. An overhead projector with prepared transparencies is a valuable aid.
   d. Useful handouts to make the transition of the doctor to A.K. easier. or example, a progressive examination sheet with only those muscles or conditions that have been taught up to that session is given to each doctor so that when he returns to his office he is less confussed. This is updated at each class.
4. Time should be spent at each class for the students to treat each other with the information presented up to that class.
5. Videotape is a useful tool to demonstrate proper and improper muscle tests as well as patient handling procedures using the class participants.
6. A logical and systematic muscle testing sequence should be taught.
7. Mere passing out of the workbooks without proper exposure should not be a substitute for having taken the session.

8. In order to stimulate doctors who have attended some A.K. workshops in the past to take and complete the 100 hour syllabus, advanced courses should be limited to those doctors who have completed the beginning series. This would in and of itself insure that an advanced class is not held back by one person who doesn't know what therapy localization is.

9. Every effort should be made to induce the doctor to complete the basic course or a comparable syllabus before introducing advanced techniques. Showing a doctor how to change vision when he doesn't know how to fix an internal frontal fault or what a sphenobasilar extension fault is is shere lunacy.

David W. Leaf

John Campbell

An Alternative Verbal Response To Facilitate Therapy Localization

By

Dr. Gerald Deutsch

Abstract:

We will describe in this short text, an alternate method of determining whether brain activity is reflexly changing therapy localization. We will be using a method different from those used to describe the right and left brain activity.{1} {2}

The methods described by Diamond and Hammer referring to left brain and right brain activities, further enhanced by Dr. Goodheart, led to a way to further expedite methods of determining different levels of therapy localization that could not otherwise be found using the normal means. The normal means used in the past was therapy localization in the clear. In Dr. Goodheart's previous papers, methods to improve and uncover various levels of hidden therapy localization factors, describes the Melzak Wall Theory. One of the methods he described, was that of the "Ouch" Technique. This phenomenon occurred when a patient placed their hand on an area that was suspected to be a problem, and normal therapy localization did not react as we expected it should. However, when the patient said "Ouch" and we tested a muscle, the tested muscle would weaken if there were a problem under the area of therapy localization. Another method mentioned by Dr. Goodheart in his papers, was the "Pinch" Test. In this test, the patient was pinched and then an appropriate muscle tested. While therapy localizing the area, the same phenomenon would occur; a tested muscle would weaken. The scratch over the specific dermatome would cause a tested muscle to weaken if the vertebra were subluxated, and this was another way to determine whether deeper neurological levels of the body were in fact, being screened out by the body's compensating mechanism.

Diamond and Hammer described a certain left and right brain activity. This technique, also enhanced by Dr. Goodheart in the diagnostic sense, showed the linear character of the left brain using such as the multiplication or addition and also the tonal character of the right brain activity.

The factor we found was done on a random basis with about 300 patients, and it was found to be present sometimes with left brain activity, sometimes with right brain activity, and sometimes by itself. It has nothing to do with left brain activity or right brain activity or some of the factors

with the Melzak Wall theory; {3} although it was present in random cases with all of these factors. It was present with some of the factors and was present alone. This factor is laughing, or even relating the words "Ha, Ha, Ha". Laughing? Strange as it may seem, it seemed to be that laughing did not have any left or right brain activity or seem to be related specifically to either left brain or right brain activity. As near as I could understand, I found that laughing comes from the Hypothalmic-Limbic area. I have not found any references actually relating to laughing. I feel that laughing, however, is probably one of the most primative mechanisms, other than the left brain and right brain activity. Therefore, if it is the Hypothalmic area, we might be dealing with some sort of central brain pathway activity that does not really relate to the alternate hemispheres, but orientates left and right hemispheric activity. The key here then, is that I feel this is just another aspect of a way to trigger a therapy localization and to determine if there is a lesser or more primative reflex left so that we can further enhance our therapy.

We have been utilizing this in our office for approximately six months; more so since we discovered factors of left and right brain activity. Laughing seems to supplement the challenge mechanism of the body in addition to left and right brain activity. Try it, see if it works. Even if it doesn't, your office will be a happier place.

References:

{1} DR. JOHN DIAMOND
COLLECTED PAPERS OF THE ICAK 1978

{2} DR. WARREN HAMMER
COLLECTED PAPERS OF THE ICAK 1978

{3} GEORGE GOODHEART TAPE NUMBER 44
{Privately Published}

August 1978

A BROADER UNDERSTANDING

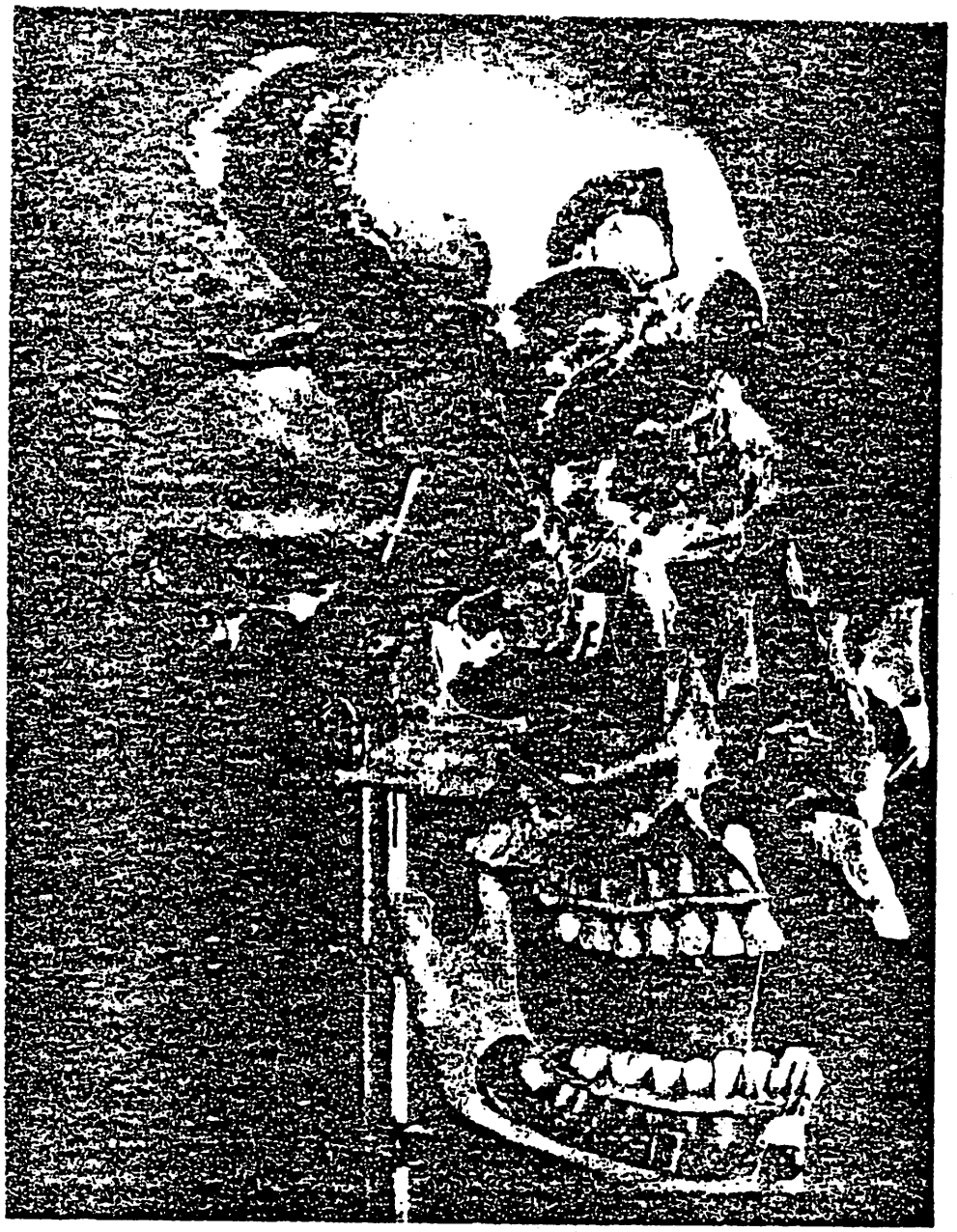
OF

CRANIAL MANIPULATION

By

Dr, Frederick J. Dieterle
Diplomate I.C.A.K.

Dr. Dave Funk P.C.C.



MOUNTED DISARTICULATED SKULL.

The bones are mounted in proper relationship but not position.

This is to give a brief and simple understanding of the greatness of the primary respiratory mechanism so you may better function as a doctor working in the cranial field.

The Cranial Field

ACKNOWLEDGMENTS

The credit for this work must rightly be given to the man who had the genius to develop the physiology of the cranium and spent his lifes effort to do it, WILLIAM G. SUTHERLAND. To him stems the origin of all cranial physiology and cranial adjusting. Men such as Goodheart and DeJarnette have played a role in our current knowledge also by adding to Sutherlands work in the relm of clinical findings to monitor the cranium and added adjustive proceedures to correct the problems located. This paper is to bring together all sources into one concise understandable summary. May it provide you with aid in your role as a doctor.

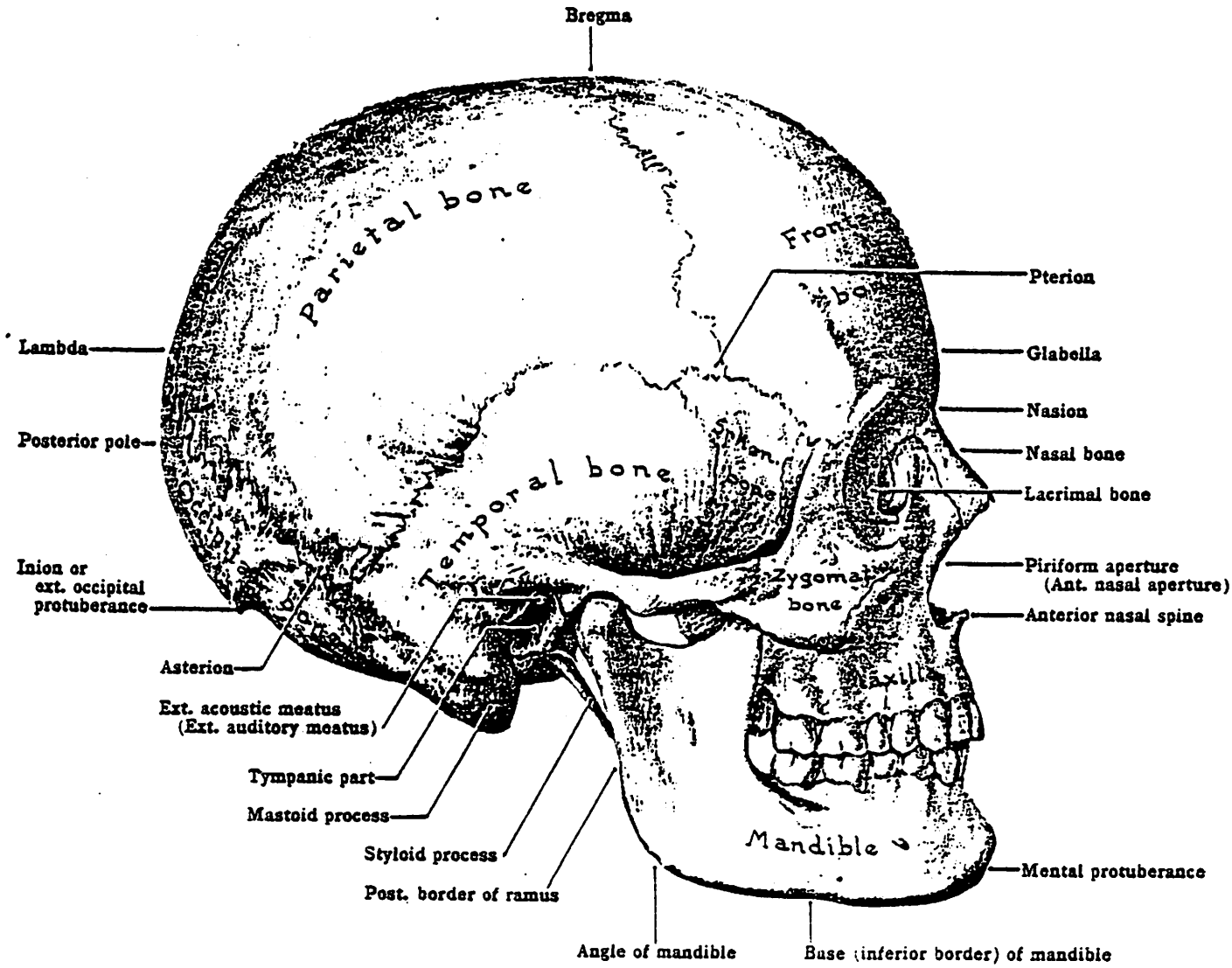
We are very grateful for the incorporation of cranial adjustment into the body language framework of muscle testing and also for the refinments and innovations that have been made by Dr. George Goodheart.

This paper was done in cooperation with Dr. Dave Funk with whom I have shared the perspective of cranial analysis and manipulation of applied kinesiology. His scrupulous research and tenacity is greatly appreciated.

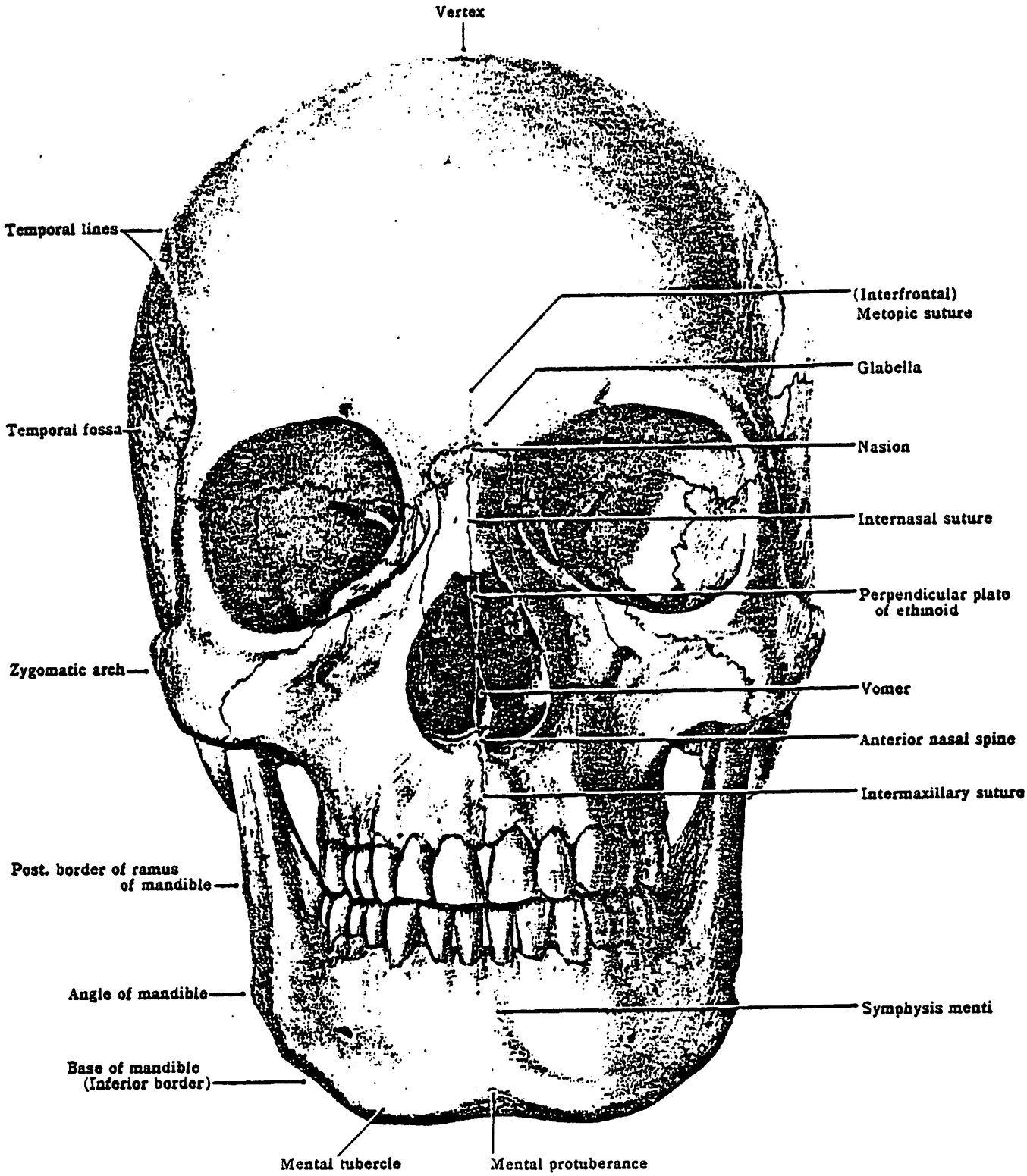
I- Introduction-

50 A study of cranial work requires a through understanding of Chiropractic applied to the cephalic region. Within the intervening connective tissue of the sutures of each cranial bone are found the same sensory nerve supply for proprioception as in any mobile joint in the body. Why the proprioceptors and intricate suture design if not needed to allow *for* motion? Motion is a basic part of life from the atomic level to the galactic level. Motion is manifested in all organs in the body and the calvarium is not any exception. The body is a total moving unit and problems in the spine affects the cranium and cranial problems affects the spine.

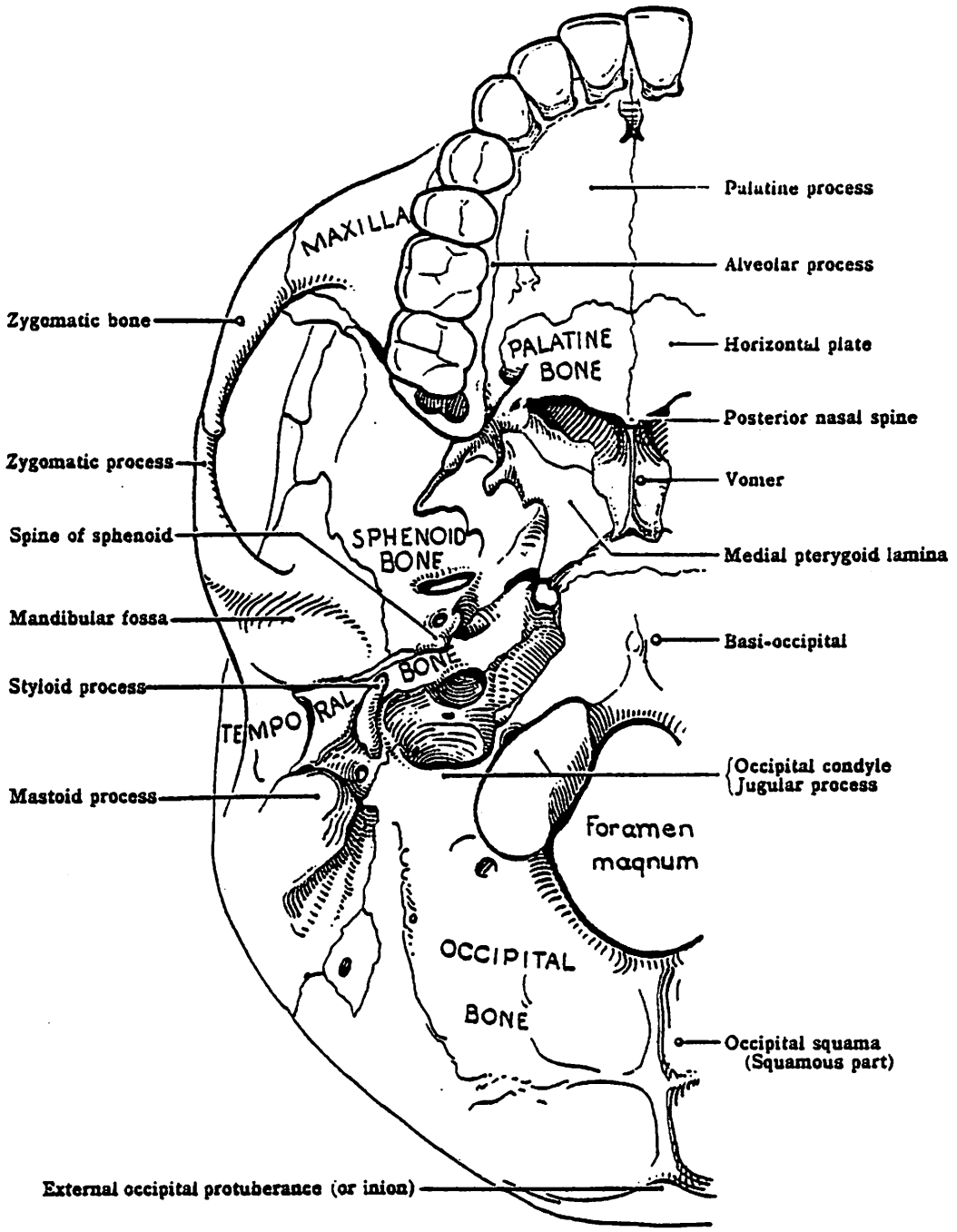
II- Osteology-



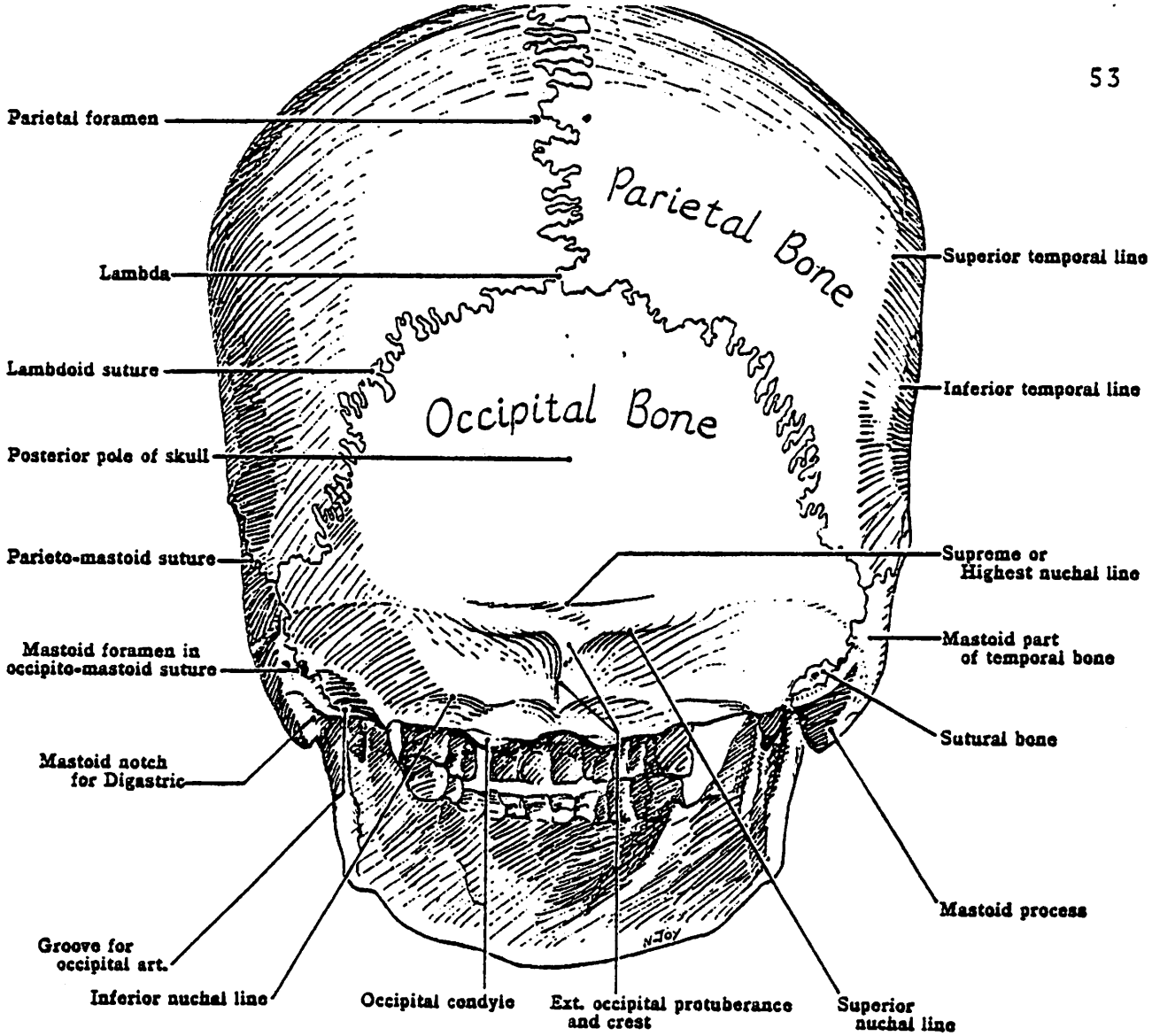
Skull, from the side



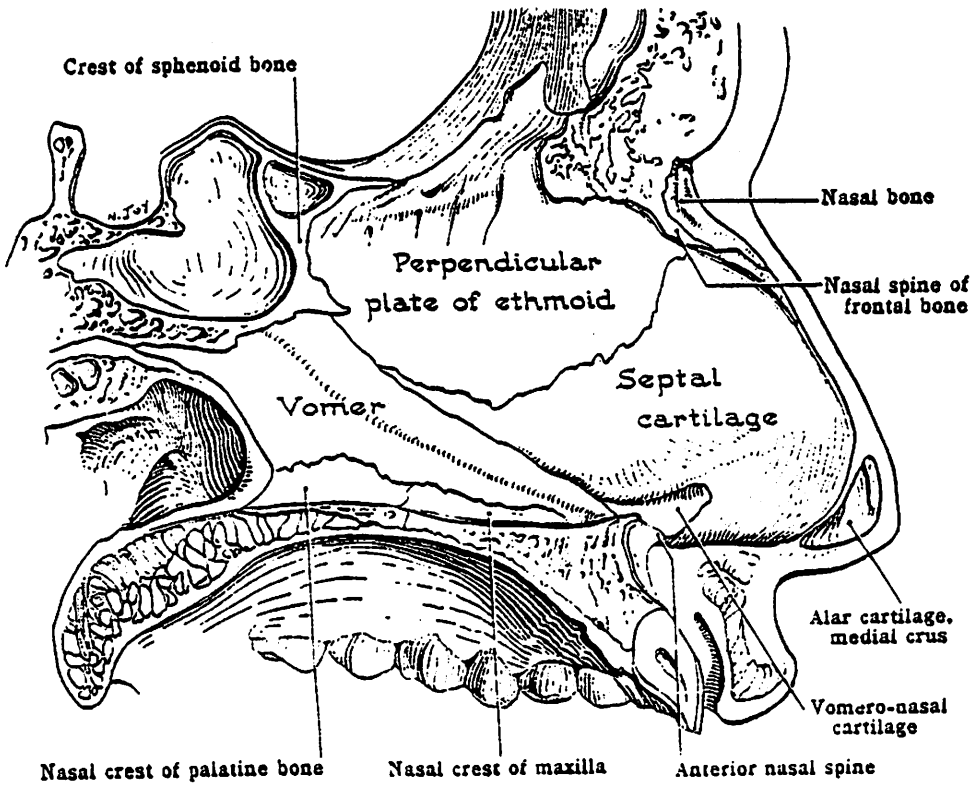
Skull, front view



Bones of the Exterior of the Base of the Skull



Skull from behind



Septum of Nose

7

III- Arthrology-

54 This is a list of the type of suture at each junction between two individual cranial bones.

Temporal and	Occiput	Synchondrosis	
	Parietal	Squamoserrate	
	Sphenoid	"	
	Zygomae	Serrate	
	Mandible	Diarthosis	
Frontal and	Parietals	Squamoserrate	
	Sphenoid	"	
	Ethmoid	Harmonic	
	Lacrimals	Squamous	
	Maxilla	Serrate	
	Nasals	"	
	Zygomae	"	
Frontal spine & Nasal Crest		Harmonic	
Parietal and	Parietal	Serrate	
	Frontal	Squamoserrate	
	Occiput	"	
	Sphenoid	Squamous	
	Temporals	Squamoserrate	
Zygomae and	Frontal	Serrate	
	Temporal	"	
	Sphenoid	"	
Maxillae and	Frontals	Serrate	
	Nasals	Squamous	
	Lacrimals	Harmonic	
	Ethmoid	"	
	Palatines	Harmonic	(orbital process)
		Serrate	(horizontal plate)
	Vomer	Harmonic	
	Maxillae	Serrate	
Sphenoid and	Occiput	Synchrondrosis	(until age 25)
	Petrous Ridge	Syndesmosis	
	Temporal	Squamoserrate	
	Parietal	Squamous	
	Frontal	Serrate	
	Ethmoid	Gomphosis	(cribriform plate)
		Harmonic	(perpendicular plate)
		Harmonic	(lateral masses)
	Palatines	Harmonic	(orbital process)
		"	(sphenoid process)
		"	(perpendicular plate)
		"	(pyramidal process)
	Vomer	Harmonic	
	Zygomae	Serrate	

IV- Cranial Meninges-

A- Dura Mater-

Cranial portion is composed of 2 distinct but closely associated layers. The innermost layer forms the dural folds. Following is a list of the dural folds with their points of attachment: the FALX CEREBRI attached anteriorly to the crista galli and posteriorly to the straight sinus. FALX CEREBELLI apex is attached to formen magnum and the base to the straight sinus. TENTORIUM CEREBELLI attached laterally to the posterior clinoid processes, petrous ridge, mastoid portion of the temporal. Attachments at the anterior are to the anterior clinoid processes, and to the posterior are to the angle of the parietals & transerve ridge of the occiput. It connects with the other folds at the straight sinus. DIAPHRAGMA SELLAE attached to the six clinoid processes.

Important structures within the dural sinus are (1) Meckel's cave for the 5th cranial nerve ganglion -Trigeminal- (2) Endolymphatic Sac which is part of the fluid sac for the membranous labyrinth. (3) Nerves suppling the meninges. (4) Terminal branches of the internal & external carotid arteries called the meningeal vessels. (5) Venous sinuses which drain blood from the cranium.

Spinal portion is made of 1 layer that is continuous with the cranial dura to form a connecting core between the sacrum and the cranium. It attaches at the foramen magnum rim, posterior aspect of 2nd & 3rd cervical vertebra and 2nd sacral segment, the remaining dura is not directly attached to the bone of the spinal column.

B- Arachnoid Mater-

Cranial portion is a layer which contains the subarachnoid cisterns or "water beds" of the brain. This layer elaborates into the pacchionian villi or bodies in the longitudinal fissure and into the pacchionian granulations along the spinal regions. The primary function of the pacchionian structures is to allow C.S.F. to enter venous drainage at the respective locations.

56 C- Pia Mater-

A thin membrane which adheres to the C.N.S., it is highly vascular in nature and forms the innermost sheath of the nerve roots and the spinal nerves. It elaborates into the choroid plexuses of the cranium and the denticulate ligments and filum terminale in the spinal canal.

V- Physiology of C.S.F.-

"The cerebrospinal fluid is the highest known element in the human body" Sutherland. C.S.F. is produced from the choroid plexuses (Pia Mater) and escapes from the pacchonian villi (Arachnoid Mater) located in the cranium and spinal cord,from the perivascular spaces, perineural spaces, and through the hollow collagen fibers of the fascia(into the lymphatic system). Tissue respiration is an important function of the C.S.F. , tissue respiration is the exchange of respiratory gases between the tissue cells and their fluid environment. By the influence of C.S.F. circulation every cell recieves whatever it requires to maintain a high level of well being.

VI- Venous Sinuses-

The venous drainage from within the cranium is via vessels contained in the walls of the dural folds. The vessels or veins are devoid of elastic tissue, of muscular tissue, and valves which are common to all veins except thoses of the cranium & abdomen. 95 % of all the blood leaving the cranium leaves via the jugular foramen.

Following is a list of the vessels draining the cranium:

1- Superior Sagittal
2- Inferior Sagittal
3- Straight Sinus
4- Occipital
5- Circular
6- Basiliar Plexus
7&8- Transverse
9&10- Superior Petrosal
11&12- Inferior Petrosal
13&14- Cavernous

VII- Primary Respiratory Mechanism-

A- Inherent Motility of the Brain & Spinal Cord-

Every organ in the human body exhibits the phenomenon of pulsation or rhythmic movement and the human brain not any exception. The 4 definite motions of the brain are:

1- A synchronous pulsation with cardiac contractions.
2- A pulsation coinciding with respiratory contractions.
3- An undulating pulsation thought to be C.S.F. fluctuation
4- A wave like pulsation thought to be the coiling and uncoiling of the brain in a rhythmical fashion.

Life means motion as well in the brain as in any other tissue,

thus it is considered to be a fundamental physiological action motivating the mobility of the entire mechanism of fluid, membranous, nervous, and osseous tissues.

B- Fluctuation of the C.S.F.-

A fluctuation of C.S.F. within its natural cavity exists at a rate of 8-12 per minute. Bowsher says,"Many factors concerned with the maintenance, fluctuation, and purpose of C.S.F. pressure are ill understood but that this pressure exerted is of basic importance in the physiology and pathology of the central nervous system. Since the dural envelope is inelastic and virtually inexpansible, the cerebrospinal fluid pressure varies directly as the venous pressure because the C.S.F. containing system is partially vented by the venous system, converging as it does, upon the internal jugular veins for 95 % of the drainage. Certain disease processes the essential change is in the C.S.F. chemical constituents. Since the nervous tissue is more sensitive than any other to its ambient environment, any alteration in the composition of the C.S.F. would be reflected in alteration of nervous function".

The fluctuation of C.S.F. has two essential characteristics:

(1) A physical potency or energy which is a hydrodynamic mechanism working throughout the body via perivascular spaces, perineural spaces, nerve fibers, and hollow collagen fibers.

(2) An electrical potential acting in positive and negitive phases. Hyden said," The brain is ceaselessly traversed by electrical impulses and that the rich electrical activity of the nervous system is paralleled by an equally rich chemical activity. The brain exhibits interchanges of two types; chemical substance and electrical impulses with the remainder of the animal". Proper functioning of this sort depends upon the correct chemical composition of the cerebrospinal fluid environment.

C- Mobility of the Intracranial and Intraspinal Membranes-

This is called the reciprocal tension membrane due to it action and function in the cranium. The falx cerebri and tentorium cerebelli should be thought of as three sickle-shaped agencies, all of which arise from a common origin at the straight sinus and have their secondary insertion into the various bones of the cranium. The falx cerebelli extends caudally from the straight sinus and makes a connection with the intraspinal membrane to form a core link between them. Within the skull the dura mater, with its prolongations, form a support for the brain also at the various foramina at the base

58 of the skull, the dura becomes continuous with the extracranial fascia and may thus become involved in tensions arising from without the skull. Traction may be produced by tensions upon the sheaths surrounding the blood vessels and nerves as they enter or leave the skull. Tension of the latter variety may be produced by abnormal pull upon muscles attached to the base of the skull. There is a direct continuity of the fascia from the apex of the diaphragm to the base of the skull. This continuity extends not only to the outer surface of the sphenoid, occiput, and temporal bones but proceeds furthur through the foramina of the skull base via the vessels and nerves to join the dura in the cranial vault. The straight sinus functions as the fulcrum in this mechanism, a suspended balance point that can automatically shift to meet the changes taking place. The fulcrum is the point of rest on which the membranes move and get their power.

D- Articular Mobility of the Cranial Bones-

The only plausible explanation for such conformity in suture design and lack of ankylosis from smooth edged plates of membrane and cartilage in the newborn to well developed integrated sutures of the 6 year old is that every suture evolves in relation to and in proportion to the slight but purposeful motion normally present throughout life within the cranium. Within the intervening connective tissues of the sutures in the skull are found the same sensory nerve supply as in any mobile joint of the body. Articular mobility does exist and can be picked up and recorded electronically.

E- Involuntary Mobility of the Sacrum-

One must visualize the movement of the sacrum as having two distinct features (1) Postural Movement and (2) Involuntary respiratory movement, these two different movements of the same structure are allowed by the divergence of the articular faces in two planes. One articular face for postural motion and another for respiratory motion.

VIII- Events On Inspiration In The Primary Respiratory Mechanism-

This following list is not a step by step series of events but a flowing pattern broken down for better understand of the pattern.

* Neural tube shaped like a ram's horn uncoils so the cerebral hemispheres move laterally and slightly upward.
* Ventricular capacity increases so a fluctuation of C.S.F. results and an increased exchange from the blood via the choroid plexuses into the C.S.F. takes place.
* The movement of the cerebral hemispheres tractions upward on the

pituitary gland and the diaphragma selle restricts this upward motion so the result is a milking effect on the pituitary gland causing a release of pituitary hormones.

* Movement of the cerebral hemispheres shifts the fulcrum (straight sinus)
* Fulcrum causes Falx Cerebri to move anteriorward in an arc, ethmoid is influenced due to attachment at the crista galli.
* Fulcrum shifts Tentorium Cerebelli anterior and superior influencing the sphenoid, temporals, and occiput into motion.
* This movement in the meninges changes the V shaped bend in the venous drainage to a more ovoid contour allowing more effective venous drainage from the cranium.
* Movement of all the cranial bones are limited by the reciprocal tension membrane.
* Reciprocal tension membrane movement causes a upward traction of the meninges in the spinal column therefore the sacrum goes into flexion with the base moving upward & posteriorward and the sacral apex moves forward.
* All midline bones are now in flexion and all peripheral bones are now in external rotation.

IX- Physiological Movements Of The Cranial Bones-

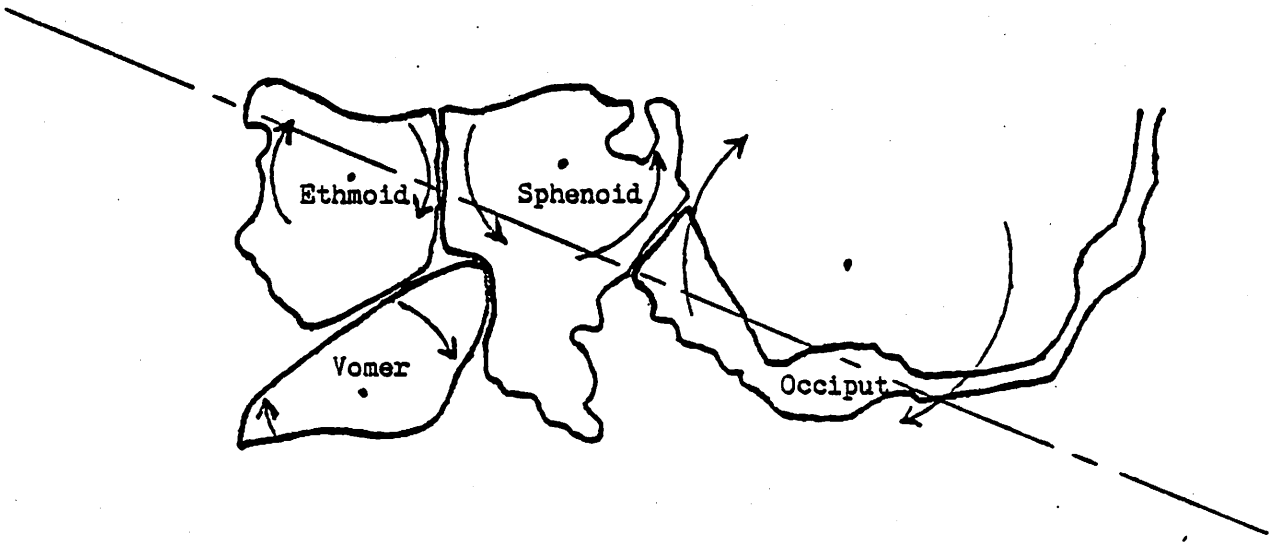
The sphenoid is the key bone in the control of the movements of the Frontals, Zygomatic, Maxilla, and all other facial bones. The occiput is the key bone in the control of motion of the Temporals & Parietals. Following is a list of the motions of each cranial bone on Flexion/ External Rotation/ Inspiration.

Sphenoid-	greater wing	anteroinferiorly
	sella turcica	anterosuperiorly
Frontal-	glabella	posterosuperiorly
	lateral angle	anterolaterally
	coronal aspect	anterolaterally
Zygomatic-	frontal process	anteriorly
	orbital rim	everts
	temporal process	anterolaterally
Maxilla-	intermaxillary suture	posteroinferiorly
	alveolar process	laterally
	zygomatic process	anterosuperiorly
Occiput-	basiocciput	Anterosuperiorly
	squama	anteroinferiorly
Temporal-	squama	anterolaterally
	mastoid tip	posteromedially
	zygomatic process	anterolaterally
Parietal-	bregma	anterolaterally
	lamda	anterolaterally
	sagittal suture	spreads apart

X- Distortions Of The Sphenobasiliar Mechanism-

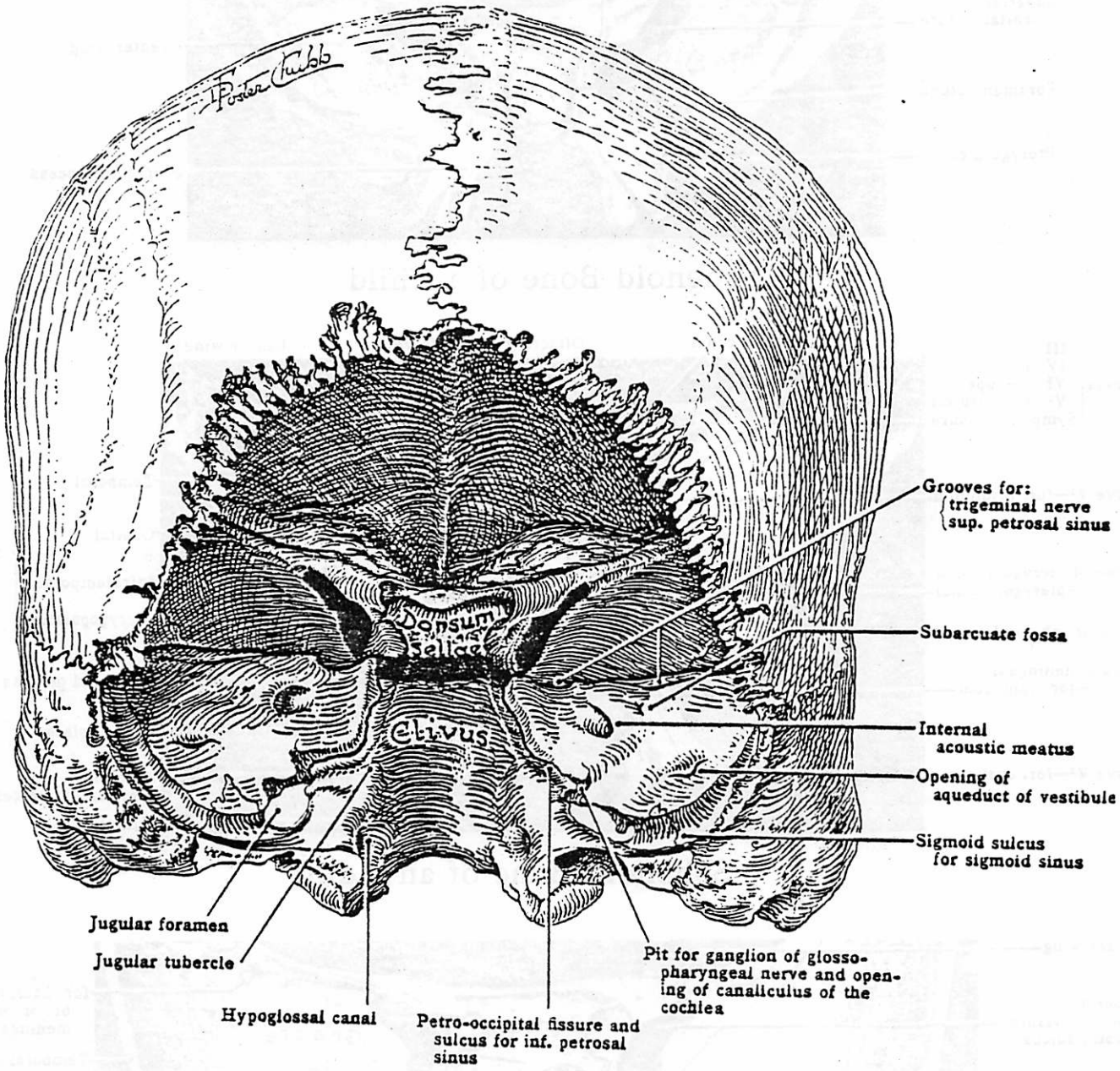
60 Distortions in the cranium fall into 4 main patterns, each will be listed later. The key to the distortion is the change at the sphenobasiliar suture which it turn produces distortion throughout the cranium because the occiput and sphenoid are the two key bones controlling all actions of the other bones. The interrelationship of the cranial bones makes it possible for a restriction or malalignment to alter the normal function of all related bones, even to the point of locking the entire skull. these restrictions can be from external forces such as muscle tension, fascia tension, postural tension, trauma, reflex contractions of soft tissue from toxemia, etc.; or from internal forces producing stress on the reciprocal tension membranes of the brain or spinal cord. These forces cause the following distortion patterns, note <u>any</u> variance to the total physiology picture of the following patterns suggests trauma as the cause. Only trauma will cause a pattern out of harmony with the 4 listed here. Below is a illustration of the midline bones showing motions on flexion of the sphenobasiliar suture on inspiration. Keep in mind the sphenobasiliar suture is the site of the distortion patterns.

Midline Bones

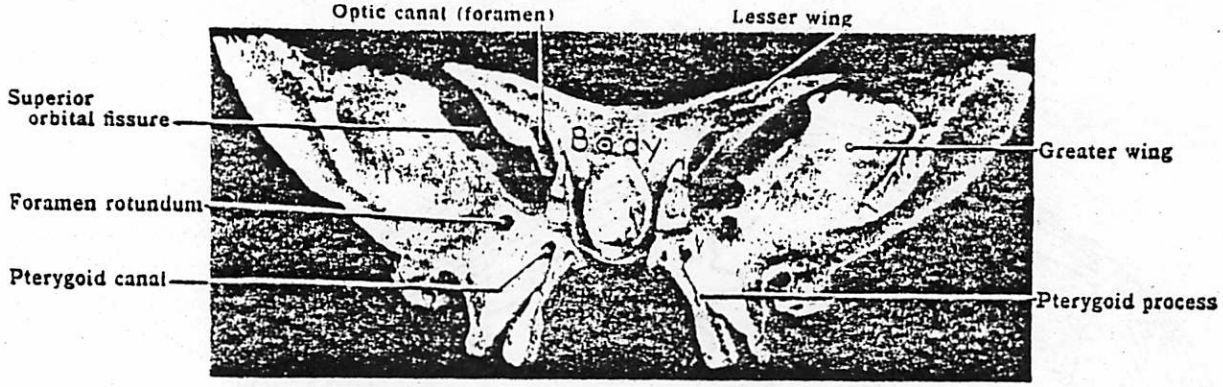


Drawings shows the centers of rotation for eacn of the midline bones and the directions they move on inspiration. This is view for flexion and extension of the sphenobasiliar suture.

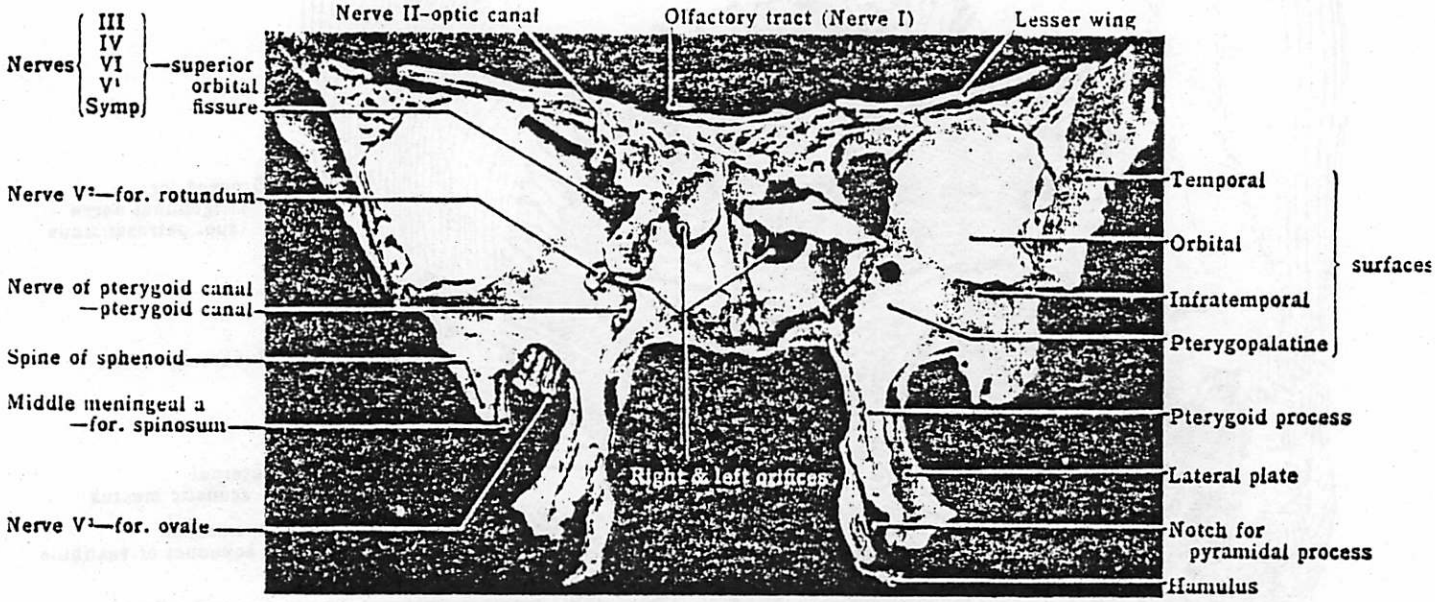
The following page show an illustration of the sphenobasiliar suture from the posterior with a cut away of the occiput. This is the view to visualize the torsion and sidebending rotation patterns of the sphenobasiliar suture.



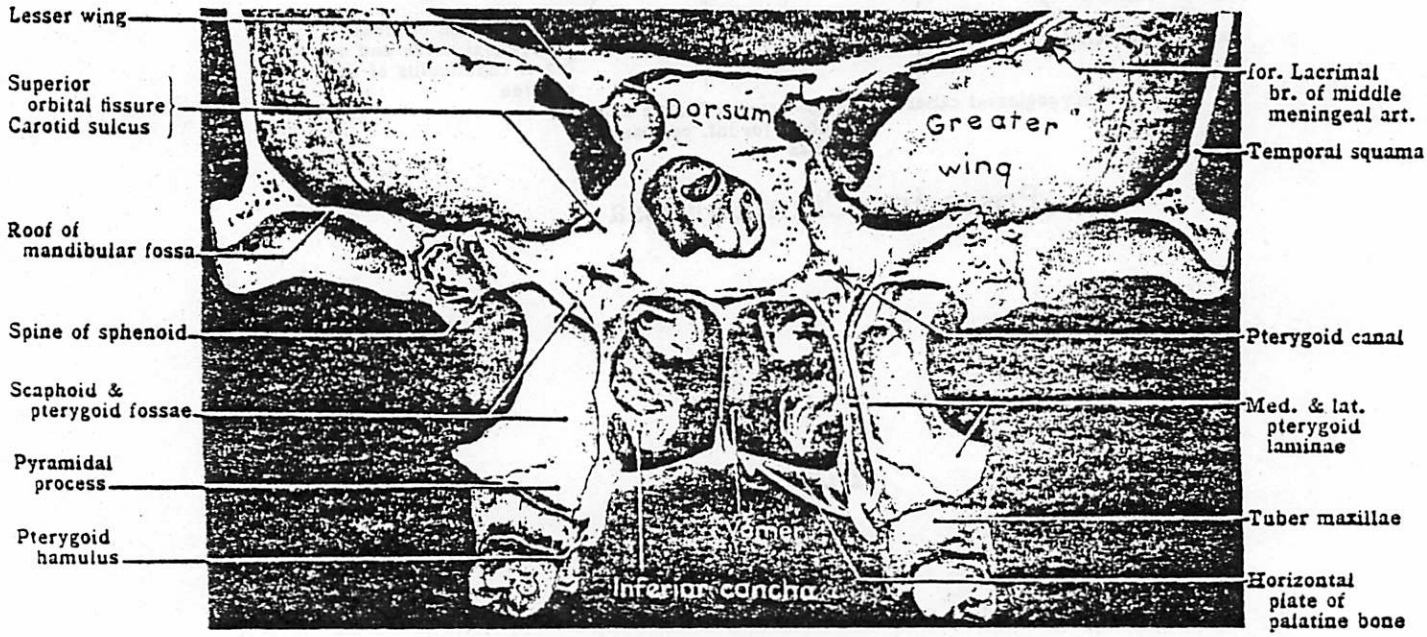
Posterior Cranial Fossa



Sphenoid Bone of a Child



Sphenoid Bone of an Adult



A Coronal Section of the Skull

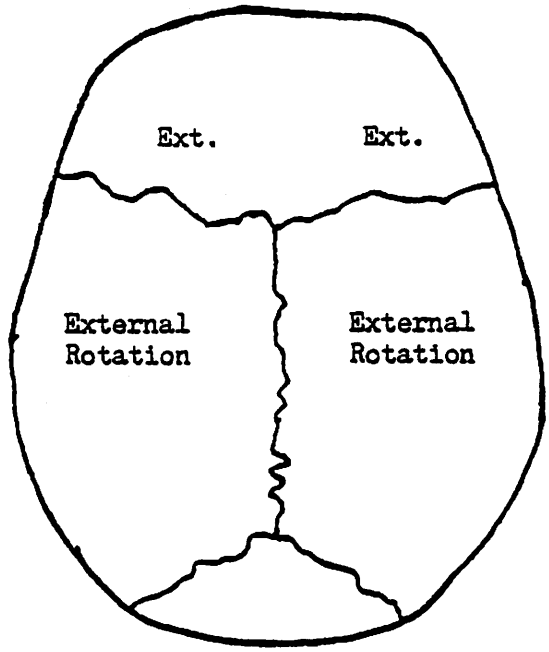
A- Flexion Of The Sphenobasiliar Suture-

DISTORTION- Sphenoid and Occiput are in flexion, all peripheral bones are in external rotation, and sacral apex is anterior. Flexion distortions of the sphenobasiliar mechanism are not very common.

PATTERN- All four quadrants are in external rotation.

GENERAL CONTOURS-

* Vault elevated
* Lateral diameter increased
* A-P diameter decreased
* All quadrants in External Rotation



SPECIFIC FINDINGS-

Sphenoid- (flexion)
* Eyeball prominent on both sides
* Pterygoid process is posterolateral
* Shallow temporal fossa
* Intraocular pressure increased
* Superomedial-inferolateral orbital diameter increased
* Lowering & widening of the palatine arch posteriorly

Occiput- (flexion)

Temporal- (ext.rot.)
* Retrusion of the lower jaw
* Ears low & protuding out from head
* Mastoid tips posteromedial

Parietal- (ext.rot.)
* Sagittal suture separated
* Parietal eminences prominent

Frontal- (ext.rot.)
* Lateral angles anterior & lateral
* Diminished supranasal vertical fold
* Receded frontal eminences giving a ski slope forehead

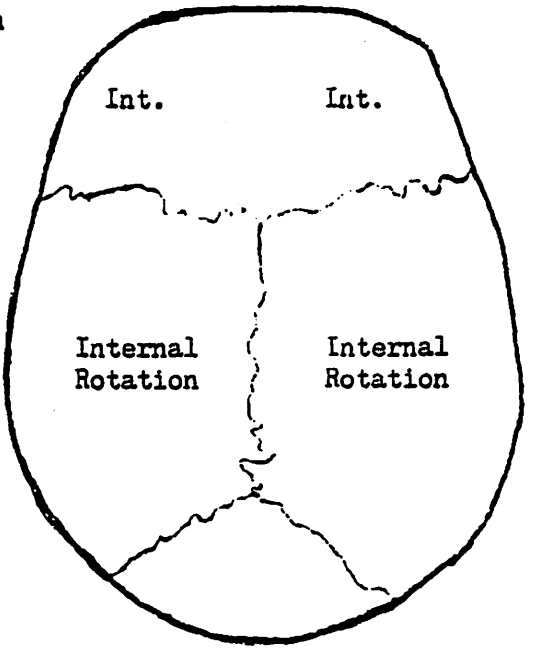
Zygomatic-(ext.rot.)
* Inferior orbital rims everted
* Large ocular orbits
* Tuberosity flattened (cheek bone)

Maxillae- (ext.rot.)
* Nasolabial creases more prominent
* Wide transverse diameter nares
* Upper incisors posteriorly and slopes laterally
* Upper premolars & molars slope laterally

B- Extension Of The Sphenobasiliar Suture-

DISTORTION- Sphenoid and Occiput are in extension, all peripheral bones are in internal rotation, and sacral apex is posteriorward.

PATTERN- All four quadrants are in internal rotation.



GENERAL CONTOURS-

* Vault lowered
* Lateral diameter decreased
* A-P Diameter increased
* All quadrants in Internal Rotation

SPECIFIC FINDINGS-

Sphenoid-	(Extension)	* Eyeballs receded on both sides * Pterygoid process is anterior * Deep temporal fossa's * Intraocular pressure normal * Superomedial-inferolateral orbital diameter decreased * Raised & narrow palatine arch posteriorly
Occiput-	(Extension)	*
Temporal-	(Int.Rot.)	* Protrusion of the lower jaw * Ears high & flattened against head * Mastoid tips anterolateral
Parietal-	(Int.Rot.)	* Sagittal suture ridged & raised * Parietal eminences flattened
Frontal-	(Int.Rot.)	* Lateral angles posterior * Pronounced supranasal vertical folds * Prominent frontal eminences giving a ski jump forehead
Zygomatic-	(Int.Rot.)	* Inferior orbital rims inverted * Small ocular orbits * Tuberosity prominent
Maxillae-	(Int.Rot.)	* Nasolabial creases shallow * Narrow transverse diameter nares * Upper incisors anteriorly and slopes medially

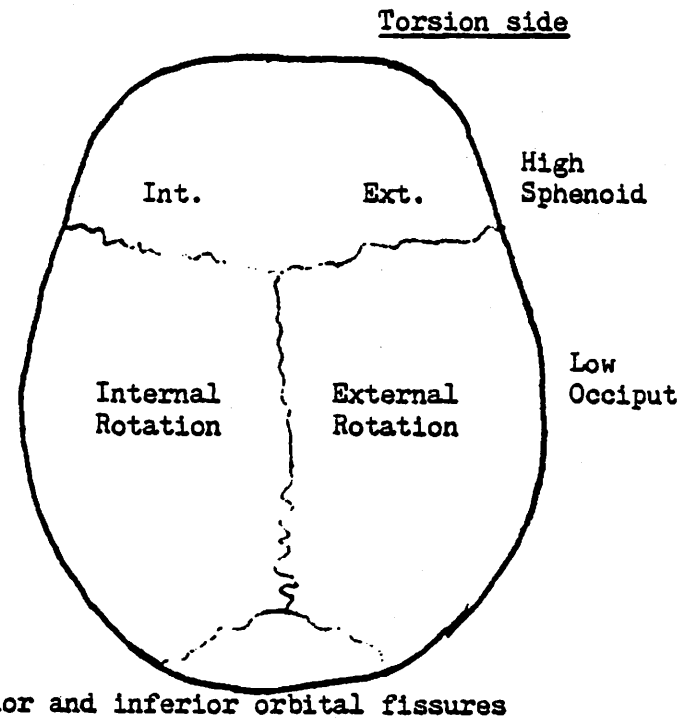
C- Torsion Of The Sphenobasiliar Suture-

DISTORTION- Sphenoid wing high with occiput low on the same side; torsion side of head is in external rotation, sacrum is posterior at the base and apex. Description for torsion side only.

PATTERN- See illustration

GENERAL CONTOURS-

* A-P diameter on both sides equal
* Torsion side in External Rotation
* Torsion side sacrum is posterior and slightly inferior producing a C curve in the spine.



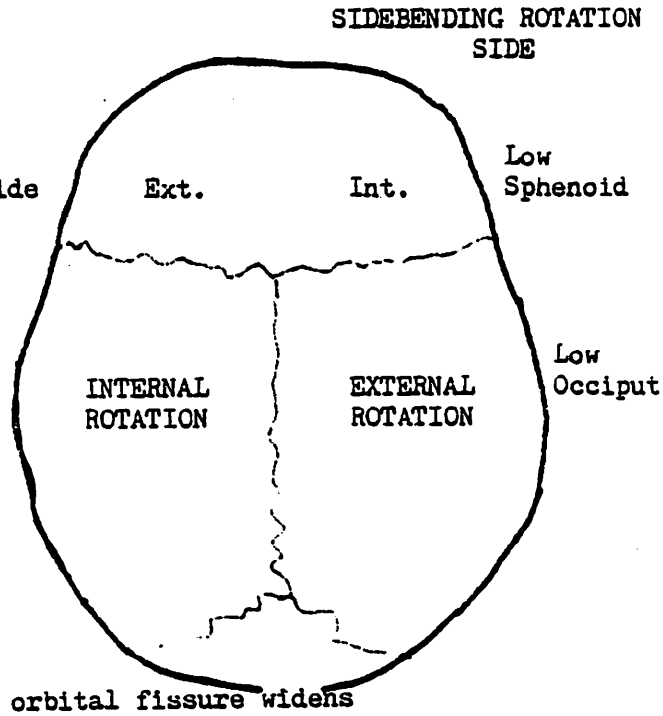
SPECIFIC FINDINGS-

Sphenoid-	(Flexion)	* Superior and inferior orbital fissures widen * Eyeball becomes prominent and tends to become the dominant eye * Pterygoid process is superolateral * Superomedial-inferolateral orbital diameter is increased * Shallow temporal fossa * Low, wide palatine arch posteriorly * Intraocular pressure increased * Vomer and Ethmoid tend to incline away from torsion side to give a wide nasal fossa on torsion side * Sphenoparietal suture compressed by greater wing overriding parietal
Occiput-	(Extension)	* Head tilted on atlas, atlas laterality on OPPOSITE side of torsion
Temporal-	(Ext.Rot.)	* Lower midincisal line shifted toward torsion * Ear low and protuding out from head * Mastoid tip posteromedial
Parietal-	(Ext.Rot.)	* Sagittal suture deviates toward torsion side at the occiput * Parietal eminence prominent
Frontal-	(Ext.Rot.)	* Lateral angle anterolateral * Diminished supranasal vertical fold * Receded frontal eminences (ski slope forehead)
Zygomatic-	(Ext.Rot.)	* Inferior orbital rims everted * Large ocular orbits * Tuberosity flattened (cheek bone)
Maxillae-	(Ext.Rot.)	* See list under flexion pattern

D- Sidebending Rotation Of The Sphenobasiliar Suture-

DISTORTION- Sphenoid and Occiput are low on the same side and rotated away from each other to produce a convexity. Sacrum is anterior and inferior at the base and posterior at the apex. Description is for sidebending rotation side only.

PATTERN- See illustration



GENERAL CONTOURS-

* A-P diameter is lengthened on convex side
* Temporal area is bulged on convex side
* Parietal is dropped on OPPOSITE side
* Sacrum is anterior and inferior at the base

SPECIFIC FINDINGS-

Sphenoid-	(Extension)	* Superior orbital fissure widens * Inferior orbital fissure narrows * Eyeball receded and tends to atrophy * Pterygoid process is inferomedial * Optic foramen moves medial * Superomedial-inferolateral diameter is decreased * Deep temporal fossa * Vomer and Ethmoid (perpendicular plate) tends to incline toward sidebending rot. to give narrow nasal fossa
SN:(note low and forward tilt both cause extension)		
Occiput-	(Flexion)	* Head tilt on atlas, atlas laterality is OPPOSITE sidebending rotation side
Temporal-	(Ext.Rot.)	* Lower midincisal line shifted toward side of sidebending rotation * Ear is low and protuding out from head * Mastoid tip is posteromedial
Parietal-	(Ext.Rot.)	* Sagittal suture deviates toward sidebending rotation side at the occiput * Parietal eminence is prominent
Frontal-	(Int.Rot.)	* Lateral angle is posterior * Moved anterior to increase A-P length * Prominent frontal eminence (ski jump forehead)
Zygomatic-	(Int.Rot.)	* Inferior rim inverts * Small ocular orbits * Tuberosity prominent (cheek bone)
Maxillae-	(Int.Rot.)	* Nasolabial crease shallow * Narrow transverse diameter nare

NOTE: The vault bones namely frontal, parietal, and temporal accommodate to sphenobasiliar distortions by the following types of motions:

(1) Separation along an entire suture

(2) Approximation along an entire suture

(3) Rotation about the point of beveled change in the suture

(4) Sidebending about the point of beveled change in the suture

All cranial adjusting of the vault bones fall in the catagory of correction for one of these four problems.

XI- Analysis of Cranial Distortions-

A- History-

Perinatal period, Delivery, Trauma, Etc.

B- Observations-

These observations are listed under specific finding for each pattern of distortion and under the bone making the distortion observable.

C- Palpation-

"The Human hand is the greatest single diagnostic instrument known to man", William G. Sutherland. There are four methods to use in palpation of the cranium; (1) General contours, (2) Sutural disturbances, (3) Individual sutures, (4) Motion.

D- Challenge-

Move any cranial bone in the direction you want to check and is if it has gone. If it is misaligned the additional trauma of moving it more will cause the muscle test to go weak. Correction of the cranial distortion can be accomplished in several way as listed in XIII Choice of Correction.

XII- Purposes Of Treatment-

A- Normalize Neural Function-

Nerves are subject to irritation in a variety of ways; impeded blood supply, pressure of venous congestion, lymphatic stasis and edema, disturbed C.S.F. fluctuations, dural tension, bony impingement, fascial traction, muscle tension, and the like. Such influences are most serious on non-medulated fibers such as the sympathetic system. Nerve ganglia are especially vulnerable to noxious influences of carbon dioxide or excessive alkalinity if the are in a state of diminished functioning from anoxia. Cranial adjusting can normalize neural neural functioning by removing the above causes.

B- Counteract Stress Producing Areas-

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Localized irration or injury to nervous tissue from mechanical or chemical effects of impinging adnexa leads to anatomical stress where the nerve is continually in or bordering on a state of alarm or facilitation.

C- Normalize Cerebrospinal Fluid Fluctuation-

Should any part of the craniosacral mechanism fail to function normally, the accompanying C.S.F. Fluid stasis leads to chemical change, accumulation of metabolities and the perversion of pathology called disease.

D- Correct Cranial Articular Subluxations-

Rather conclusive evidence that bony misalignment affects soft tissue such as membranes, venous sinuses, C.S.F., pituitary gland, C.N.S., is that an area of restricted motion consistantly brings about dysfunction.

E- Modify Structural Patterns-

Probably the most common facilitating factor in the production of disease is the force of gravity. Man's response to the upright position is a continuous postural stress factor which is the common demoninator of many disease processes. The postural stress factor is a neurological lens, facilitating focusing and magnifying the irritation in the involved area of the nervous system. Since the C.N.S. plays a dominant part in all coordination of body functions correction directed to the facilitated somatic component can improve structure and chemistry of the whole organism. The force of gravity acts on the whole craniosacral mechanism; it is opposed by the long muscle and fascial levers, which in turn, influence the shorter dural levers of the spine and cranium. They all work together as a continuous, never ending unit. Damage or alteration of any single part causes the process of accommodation to achieve a new artificial norm. The body is supported by the pelvis but is hung from the base of the skull. Chronic postural tension can be a major factor in the maintenance or recurrence of cranial distortions, it is equally true that falty cranial mechanics can adversely influence all the structures below.

F- Release Membranous Tension-

Dural membranes are always taut and vary little in their normal tension but they function in a delicate state of balance and equalibrium which may be thrown out of balance. There is no stop or

start to the connective tissue system. Fascia consists of a number of cells (cells are collagen and ground substance) and lots of intercellular substance which is mostly collagen fiber, hyaluronic acid and ground substance. Tendons are the same materials but less intercellular substance. Cartilage differs only by fewer cells and less intercellular substance than in tendons. Bone is essentially cartilage except it has calcium deposits in the intercellular substance. Fascia then may follow a nerve or muscle, then become tendon, then subtly merge to cartilage and finally bone. Hence where do you draw the line between bone, fascia or muscle sheaths? Hence any connective tissue disturbance can cause problems locally or through tension to a distal site.

C- Eliminate Circulatory Stasis-

The human brain makes up 2% of the adult body weight but it recieves 17-34% of the cardiac output. Due to the segriegated distribution of blood vessels each part is vulnerable to stasis of blood flow if its one suppling vessel is impeded. The arteries are firm walled vessels but the veins lack elastic and muscular tissue and are without valves which typical veins have. This predisposes the veins to tension or torque in the menings causing circulatory stasis.

XIII- Choice Of Correction-

In talking about a topic it depends on your terminology and frame of reference as to what your meaning is. For example a posterior inferior ilium becomes an anterior superior ilium if we use the symphysis pubis for our reference instead of the P.S.S. as commonly used. Whether cranial bones rebound or not falls into this exact type of thing, your particular terminology. The important thing is to understand the following ways of correcting the same problem and you call it whatever you want. This way you, the doctor, can choose the best way for each patients problem.

A- Exaggeration-

Important not to be used on infants under 4 or in cases of trauma or acute problems. This method increases the direction the cranial bone has misaligned to a point of balanced membranous tension to take advantage of the recipical tension membrane system helping to restore the cranial bone to its proper alignment; via its recoil tension. Can also use additional physiological forces to aid tension membranes such as respiration. To use exaggeration challenge bone to find problem, then find phase of respiration which negates challenge and adjust in same direction as challenge on phase which cancels challenge.

70 B- Direct Action-

This method is to be used on all acute problems, trauma or infants. This method is directly repositioning the misaligned cranial bone toward its proper position. To use direct action challenge bone to find problem and correct it by adjusting opposite the direction of challenge.

C- Disengagement-

This is used to separate any impacted osseous structure before correction is attempted. This frees cranial bones so correction can be done afterward. This method is accomplished by moving 2 bones apart from each other before moving them into proper position. To use this method, challenge traumatic indicated areas or compressed areas by pushing two bones together more and strong indicator muscle will show weakness, then disengage articular surfaces to begin correction, finish with direct action or exaggeration.

D- Opposing Motions-

This method is a combination of exaggeration and direct action used together. It is to be tried only by the experienced doctor.

E- Molding-

This method is mainly applicable to infants and is actually a rubbing and caressing of the cranium aimed at balancing the cranial contours in a newborn infant. Just mold like clay to a well balanced shape.

XIV- Correction Using Inborn Physiological Forces-

A- C.S.F. Fluctuation-

The fact that the C.S.F. fluctuation can be directed from one side of the head to the other makes this energy or potency available as a means to aid in correction of cranial misalignment. After you achieve a point of balanced membranous tension this transference of energy is initiated with a gentle touch on the bone across the contralateral diameter from the problem site. This will direct the C.S.F. fluctuation to the area to aid in correction. Its effectiveness may be enhanced and magnified by using other physiological forces such as respiratory cooperation plus muscle and fascia tension. C.S.F. fluctuation directed to a normal unrestricted articulation finds a free and easy passage to cause motion, but to a restricted or fixed articulation it is slowed with a bounce back of the fluctuation to the directing contact point unless release occurs.

After release there is no bounce back of the fluctuation. If a correction takes place there will be a change towards normal and the fluctuation will calm to an even and regular cadence at the corrected articulation and finally to a short, rhythmic cadence.

B- Respiratory Cooperation-

Contraction of skeletal muscle is one of the basic essentials in every reaction the body makes in adapting to its environment. Any structural fixation adds to the work of the muscular system in adapting effectively. Tissue resistance can be eliminated to a great extent by making use of muscle action involved with respiration. Correction is most likely to occur at the end of maintained muscle contraction such as breath holding or with an infant, crying. The reason is the cervical muscles have a distinct tension on the cranial base which is suddenly relaxed each time at the end of exhalation. During this relaxed interval before another breath is taken, the rest of the bodies defensive mechanisims also relax so the optimal condition exists to correct the problem by the use of the recipical membranes. The procedure is to have the patient inhale as long as possible until the involumtary release of breath occurs. The use of exhalation may be more physiological for extension or internal rotation corrections than the above outlined method.

C- Muscle and Fascia Cooperation-

Like respiratory cooperation, muscle and fascia cooperation aids in directing and increasing effectiveness of C.S.F. fluctuation in the restricted reciprocal tension membranes. This method uses shoulder, sacrum and/or feet to increase the desired effect. To use with flexion and external rotation patient would pull with hands on front of table, sacrum apex anterior and/or feet dorsiflexed. If problem is bilateral, use bilateral arms and/or feet; if unilateral use arm and/or foot on opposite side of the body from the problem. The connective tissue system is continuous through the human organism and this is one method to utilize this tension via the connective tissues to bring about correction of a problem.

XV- Overall View Of Correction-

We will use the example of both temporals being fixed in external rotation. First check to see if any jammed sutural articulation is causing the restricted motion, use disengagement if jammed area is located. Second choose the type of correction you are going to use, exaggeration being preferred if not contraindicated. Third move both temporals more into external rotation to the point of balanced tension in the membrane system. Fourth direct the fluctuation of C.S.F. from the contralateral side of the skull, have the patient pull headward with arms, hold the sacrum in flexion position and/or dorsiflex both feet. Use any or all of the above methods to aid correction. Fifth have the patient inhale and hold it until they involuntarily breath out. At the point of relaxation before the patient inhales, the body's inborn physiological forces implored should cause a release and the doctor then follows the temporals into internal rotation. The operator is merely the one who initiates movement to the balanced tension point and follows the bodys shifting of the fulcrum to a pattern which is more physiologically suited for that patient

Heavy handed interference with the membranes or C.S.F. fluctuation to force the reciprocal tension system to a more physiological state will only cause additional trauma to the patient. Remember no external force can be safely brought to bear upon the living body nor is any external force as efficient or specific as the innate powers of self-correction contained within the patients own body.

The above outline are the steps for any correction regardless if it is stated in the following pages of correction techniques or not.

XVI- General Contacts For Correction

A- Sphenoid

greater wing
medial pterygoid plate (intra-oral)
lateral pterygoid plate (intra-oral)

B- Occiput-

Squamous portion close to asterion

C- Temporal

mastoid tip
squamous
zygomatic arch

D- Parietal

asterion
pterion
bregma
lambda

E- Frontal

bregma
glabella or metopian
frontosphenoidal area
alveolar processes (intracral and indirect)
cruciate suture (intraoral and indirect)

XVII- Correction of Sphenobasiliar Distortions and Accompanying Vault Accomodations

A- Flexion of Sphenobasiliar Junction-

Sphenobasiliar suture is jammed in a flexion position and correction by exaggeration is as follows. Contact alveolar processes (intraoral) and take anterosuperior; contact mastoid tips and take posteromedial. (Same as sphenobasiliar flexion fault pg. 137, Dr. Walther's Book) For complete outline see overview of correction and add the given contacts and directions.

B- Extension of Sphenobasiliar Junction-

Sphenobasiliar suture is jammed in a extension position and correction by exaggeration is as follows. Contact cruciate suture (intraoral) and move superoposterior; contact mastoid tips and move anterolateral (same as sphenobasiliar extension fault pg. 136, Dr. Walther's Book) For complete outline see overview of correction and add the given contacts and directions.

C- Torsion of Sphenobasiliar Junction-

Sphenobasiliar junction is torqued to give a high sphenoid and low occiput on the same side giving relative flexion and external rotation on that side of head. Correction by exaggeration is as follows. Method #1- contact frontosphenoidal area on side of high sphenoid and move anterosuperiorly: contact occiput squama on opposite side and lift posterosuperiorly. To find if problem exists, challenge in direction just listed and correction is in the same direction as challenge on respiratory phase which cancels challenge. For complete outline see overview of correction and just add given information.
Method #2- Contact greater wing on low side and move posteriorly; contact medial pterygoed plate above hamulus (intraoral) on the high wing side and move laterosuperiorly. Secondly, contact occiput squama on low side and move antero inferiorly; contact opposit occiput squama and move posterosuperiorly. To find problem exists, challenge in direction just listed in part 1 and 2 and adjust in the same direction on phase of respiration which negates challenge. For complete outline see overview of correction and just add given information.

Note- This distortion may be corrected by correcting parietals, frontals or occiput as listed in Dr. Walther's Book. Cranial parietal decent on opposite side of torsion pg. 147; cranial external frontal on same side as high sphenoid pg. 145; cranial internal frontal on low sphenoid side pg. 144; cranial universal on occiput and temporals pg. 143.

D- Sidebending Rotation of Sphenobasiliar Junction-

Sphenobasiliar junction is tipped down to give low sphenoid and low occiput and separated to give a bulge or convexity to that side of the skull.

Method #1- Contact frontosphenoidal area on high side opposite sidebending rotation side and move superiorly first and then posteriorly. Contact occiput squama on high side and lift superiorly first and then anteriorly second.

Method #2-

Contact greater wing on side opposite of low sphenoid wing and move superiorly first and then posteriorly; Contact lateral pterygoid plate on low wing side and move inferomedially first and then anteriorly. Secondly, contact occiput squama on low side and move anteroinferiorly; contact opposite squama and move posterosuperiorly. Challenge in directions listed and correct in same direction as challenge on phase which cancels out challenge. For complete outline see overview of correction and just add given information.

Note- This distortion may be corrected by Dr. Walther's cranial temporal bulge on side of convexity pg. 146; or by cranial internal frontal on low sphenoid side pg. 144; or by cranial external frontal on high sphenoid side pg. 145 or by cranial universal pg 143.

E. Correction of Vault Accommodations-

Vault accommodation to sphenobasiliar distortions are (1) separated suture, (2) jammed suture, (3) rotation about the pivot point and (4) sidebending about the pivot point.

Check for sutures being separated or approximated. (Dr. Walther's sagittal, lambdoidal, squamosal and zygomatic cranial are for separated or jammed sutures) Use any type of correction such as exaggeration or direct action listed under XIII choice of correction. For rotation or sidebending at pivot point the following may be used. All methods below are by exaggeration.

1- Temporal (external rotation)-

fingers interlaced loosely beneath occipital squama and thumbs extended along mastod processes. Hold the occiput slightly anteriorly while the mastoid tips are carried posteromedially.

2- Temporal (internal rotation)-

Same contacts with opposite directions to produce exaggeration of internal rotation.

3- Parietal Spread (external rotation)-

Bilateral condition, cross thumbs over sagittal suture with fingers over parietal. Gently depress parietal along the lambdodal suture (disengagement method) then with thumbs press to spread sagittal suture.

4- Parietal Lift (internal rotation)-

Bilateral condition, interlock thumbs over sagittal suture without contact on cranium. Fingers take an open spread across parietals. With fingers compress inferior border of parietals to disengage from temporal bone, then lift parietal into internal rotation.

5- Frontal Spread (external rotation)

Thembs are interlocked over metopic suture with fingers over lateral angle of frontals near frontoqygomatic area. With fingers, move anteroinferiorly and with thumbs lightly depress glabella posterosuperiorly.

6- Frontal Lift (internal rotation)-

Interlace fingers over metopic suture and contact lateral angles with thenar eminence and contace zygomatic process of frontal with heel of hands to gently compress and disengage frontal then lift frontals superiorly into internal rotation. Fingers moving slightly inferior and heel of hands going superiorly.

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THE POSTERIOR OCCIPUT

By Daniel H. Duffy, D.C.

ABSTRACT: A unilateral psoas major muscle weakness has been found to be produced by posteriority of the occiput on the ipsilateral side. The weakness responds only to correction of the occiput.

While investigating the effects of the psoas in idiopathic scoliosis, this writer discovered four cases which would not respond to the usual approach of neurolymphatic, neurovascular, etc.(1)

Goodheart has shown the relationship between the occipital fixation and the bilateral psoas weakness which led me to the investigation of occiput in these four difficult cases.

Correction of the posterior occiput caused an immediate strengthening of the psoas muscle in all four resistant cases.

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A C U P U N C T U R E M E R I D I A N S A N D

I L E O C E C A L V A L V E P A T T E R N S

By Daniel H. Duffy, D.C. Aug 21, 1978

ABSTRACT: Open and closed ileocecal valve syndromes have been found to correlate with small intestine and large intestine meridian pulse points, respectively. Diagnosis is accomplished by therapy localization* of the corresponding pulse point with the index finger of the opposite hand while testing an intact tensor fascia lata muscle.

P R O C E D U R E

During the latter part of July and early part of August an attempt was made to locate a more reliable and expeditious means of differentiating the ileocecal valve (ICV) syndromes. This is a time of year when many patients are afflicted with acute low back syndromes (ALBS) accomanied by or caused by the ICV dysfunction.

Random testing of patients with ALBS for[1] ICV dysfunction[2] revealed nineteen patients showing positive therapy localization of the ICV area on the abdomen (McBurney's point). Fourteen patients showed positive therapy localization (PTL) at the small intestine/heart acupuncture pulse point, five patients showed PTL at the large intestine acupuncture pulse point (large intestine/lung point).

All patients showing PTL at the small intestine point proved to have an open ICV dysfunction, all patients showing PTL at the large intestine point proved to have the closed or spastic ICV. All patients with the open ICV also showed Quadriceps weakness on the left, patients with the closed variety showed variable muscle weaknesses associated with the large intestine. A common pattern would be; open ICV, weakness of the left quadriceps, subluxation of the first sacral segment, and PTL at the small intestine/heart point on the left wrist.

Prior to investigating these points this writer was experiencing difficulties with the ICV diagnosis. Some patients would show evidence of both open and closed valves and would not respond symptomatically until all areas were treated.

The possibility of patients experiencing both syndromes at the same time was confirmed by Goodheart in June, 1977.[3]

It yet remains to be seen if the pulse point will yield 100% diagnosis of the ICV. The prior use of the iliacus yielded poor results for supplementing the valve diagnosis as well as the rectus/abdominis for the closed variety. (in the experience of this writer)

Overindulgence in raw fruits and vegetables is thought to be a precipitating factor in ICV syndromes. There is also the question of the actions of pesticides on these foods, or of other toxic products such as the solanaceous plants which include tomatoes, potatoes, peppers, eggplant and tobacco. This group of foodstuff has been found to cause arthritic syndromes in a fair percentage of the population as reported by Dr. Norman F. Childers (M.A. Blake profe ssor of Horticulture-Rutgers) in his 1977 book "Nightshades and health" available from Horticultural Publications Somerset Press, Inc., Somerville, N.J. 08876 for the price of $20.00. Book income is used for further research.

In conclusion, the ICV syndromes may be diagnosable initially by acupuncture pulse points and further refinement of corresponding muscle patterns may be necessary.

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1. Collected published articles and reprints by George J. Goodheart, D.C. 532 Michigan Building Detroit, Mich. 48226 Tel # (313) 962-6484
2. 1974 Applied Kinesiology Research Manual by G.J. Goodheart, D.C. (see #1)
3. Personal communication with G.J. Goodheart, D.C., June 1977.

*Therapy localization is a change in muscle strength caused by the patient touching an area of the body suffering dysfunction at the time of the muscle test.

DIFFERENTIATING THE LONG HEAD OF THE TRICEPS

By Daniel H. Duffy, D.C.

ABSTRACT: Weakness of the long head of the triceps muscle responds to neurolymphatic activity at acupunture point K-27 on the anterior and first dorsal lamina on the posterior, both on the ipsilateral side of weakness.

During the annual meeting of the International College of Applied Kinesiology Dr. Alan Beardall instructed me in the method of testing the triceps muscle in a manner so as to isolate the long head. (1)

Subsequent findings of weaknesses in this muscle revealed the fact that they did not respond to the usual kinesiological approach. Goodheart's discovery of therapy localization (2) simplified the search for the control points of this strategic muscle. To date, six patients have been found with the weakness, all six responded to therapy localization at the points mentioned, one responded to therapy localization at the acupuncture alarm point for the triple warmer. (just below the umbilicus). One patient with a severe arm-shoulder syndrome displayed weakness of both short and long heads. The long head responded to treatment listed herein, the short head responded to the usual treatment which further verified the different control points for this muscle. This calls for further investigation for other muscles containing different sections. I would expect that any muscle under a fascial envelope would be a separate and distinct entity and that the fascial envelope would be the separating factor.

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TEMPORAL - SPHENOIDAL ANALYSIS AS RELATED TO PAIN CONTROL

Lorraine M. Dumas

As is widely known, Dr. M.L. Rees of Sedan, Kansas, at the suggestion of Dr. M.B. DeJarnette, began wide and intensive investigation in the development of the temporal sphenoidal complex. Dr. Rees had hoped to find the relationship of this temporal-sphenoidal complex to health and disease and to functions of the body in many areas such as diagnosis, control of viscus disorders, blood pressure and depressive states; identification of exact vertebral level and visceral involvement; control of pain.

It is the area of Pain Control which will be discussed in this paper.

The sphenoid bone is in contact and is influenced by every bone of the skull. The sphenoid is the master control of all living body systems. Alter it to abnormal, and disease or malfunction of body systems results. In this sphenoid there is the mechanism for the movement of cerebro spinal fluid. This point is important to remember in temporal sphenoidal technique. No nerve or body function may move or react until this cerebrospinal fluid master control furnishes the green light for the excitation.[1]

The sphenoid bone is situated at the base of the skull, in front of the temporal bones and basilar part of the occipital plate. The sphenoid articulates with twelve bones, four single: the vomer, ethmoid, frontal, occipital; four paired: the parietal, temporal, zygomatic, and palatine.[2]

The temporal bones are situated at the sides and base of the skull. Each consists of five parts: the squama, petrous, mastoid, tympanic and styloid process. The temporal bone articulates with five bones: occipital, parietal, sphenoid, mandible and zygomatic.[3]

The articular surfaces of the temporal bones are unlike the rest of the cranial bones in the respect that they are able to overlap each other. The aponeuroses covering these sutures are ligamentous in nature and have the same capability of registering impulses as the proprioceptors of the cervical ligamentous structures. It is along these

sutures that ligamentous structures develop the "diagnostic" fibers found on palpation.

Dr. Rees found, through trial and error, the exact location of these "taut and tender" fibers and related them to specific vertebral levels to develop the Temporal-Sphenoidal line. There are twelve dorsal and five lumbar areas charted with each area corresponding to an associated viscus along with its associated muscle.

Subsequent research by Dr. Rees revealed that when the T.S. nodule was lightly held and its associated vertebral level manipulated, pain could be controlled or at least abated.[4]

This writer began experimenting with pain control and integrating it with Applied Kinesiology.[5] The following is a description of a typical case with an explanation of the applied technique.

The patient to be discussed is Sister Mary, age 33. She complained of headaches and mid and lower back pain. She considered the back pain tolerable but the headaches were so intense and frequent she thought she was going insane.

With the patient lying supine the T.S. line was palpated revealing tender and painful areas on D4, 6, 8, 9, 11, 12, and L3.

When, as in this case, there are multiple indicators the major for T.S. application technique must be determined. After noting all involved areas, as many indicators as possible were contacted with the fleshy part of the finger tips.

With a gentle rotary motion, these areas were manipulated for two minutes. (If there are more painful areas than you have fingers, two applications are necessary in order to manipulate every area of pain.)[1]

After the seconddtwo minute rotary application there was a slight amount of tenderness on D9 but D8 was still very painful. All the other painful areas were obliterated. D8 was selected as the major for T.S. application technique.

With the patient lying prone the major D8 on the T.S. line was held lightly while, with the other hand, the pain area of vertebral level D8, 9, 10, was manipulated. After about 30 seconds the pain in the dorsal area decreased and by the end of 2 minutes had completely disappeared. The only remaining symptom was a feeling of dullness in the head.

After having noted the painful areas on the T.S. line, the muscles corresponding to each area were tested, and all were found weak.[6] After manipulation of the T.S. line for pain control, all associated muscles strengthened with the exception of the pectoralis major, sternal division, and the sartorius. However, after manipulation of the vertebral levels D8, 9, 10, those two muscles also strengthened. By this time the feeling of dullness in the head had disappeared and the patient was pain free.

The only other procedure used on this visit was blocking technique for a Category II, left sacroiliac separation.[7]

CONCLUSION

It is not the intent of this paper to show Pain Control as a method of treatment but only as a method for the immediate control of pain. Further treatment depends upon chronicity of condition, nutritional needs, etc. It is up to the individual doctor to follow through with his preferred treatment whether it be Applied Kinesiology and the Five Finger Approach of Dr. George Goodheart or the Chiropractic Manipulative Reflex Technique of Dr. M.B. DeJarnette or the Bloodless Surgery of Dr. M.L. Rees or any other technique which may have proved to be successful.

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HYPOGLYCEMIA

by James V. Durlacher B. A., D. C.

Abstract: Kenneth Brockman, D. C. has researched the various organ malfunctions in the hyper and hypo function and published a 6 hour glucose tolorence test interpertation graph.[1] This paper shows the relationship of the Reactive Glucose Physiology and the six hour glucose tolorence test to the related muscles of the body tested in procedures of Applied Kinesiology.[2]

INTRODUCTION

A reactive Glucose Physiology testing procedure was recently published by Nutri-Dyne comprising a questionaire, interpertation code for the questionaire, interpertations of a 6 hour glucose tolorence blood test by Brockman a three phase diet regimen and suggested supplements. The six hour glucose tolorence test was broken down into the organ malfunction sequence if the glucose

level was hyper or hypo at that particular hour as follows: ½ hour, liver; 1 hour, pancreas; 2 hour, adrenal; 3 hour, gonad; 4 hour, thyroid; 5 hour, thymus &/or spleen, 6 hour, thymus &/or spleen.

PURPOSE

The purpose of this investigation was to determine by applied kinesiological methods of muscle tests if the findings of Brockman correlated with the related muscle/organ at the specific hours of the 6 hour glucose tolorence test.

PROCEDURE

Patients who were suspected to be hypoglycemic were selected to be included in the study. This was done by either having them fill out the questionaire after taking a history of their complaints and then testing muscles for at least the liver (pectoralis-major sternal), pancreas (latismus dorsi), and adrenals (sartorius). If symptoms, questionaire and muscle test indicated a probability of hypoglycemia a 6 hour glucose tolorence test was done on the patient with the use of a 12 hour fast, 100 mg glucose in the form of Glucola and finger prick capillary blood measured by standard procedure of Ames dextrose stix and Ames Eye-Tone in-

strument. During the G. T. T. muscles representing the organ of influence of the hour were tested immediatly after the blood was drawn. The age of the patients ranged from 14 to 75.

RESULTS

The results concerning the relationship of which muscles were weak during the hour of the test in which the blood sugar level was abnormal are summerized in chart I. The muscles tested were weak "in the clear", that is they were not a hidden weakness which had to be located by various challenge methods.

CONCLUSIONS

It appears that there is a degree of correlations between the Brockman study and actual muscle testing for the various muscles organ test, particularly in the Liver, Pancreas, and Adrenals. Further studies, checking for hidden weakness of muscles should be done before any definite conclusions are made.

References

[1]Brockman, Kenneth; "Interpertation of Blood Normals for a Six Hour Glucose Tolorence Test," Privately Published by Nutri-Dyne Chicago, Ill. 1978

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Patient & Age	FASTING	½ HOUR LIVER Pectorius Major Sternum A	1 HOUR PANCREAS Latisimus Dorsi B	2 HOUR ADRENALS Sartorius C	3 HOUR GONADS Gluteus Maximus or Medius D E	4 HOUR THYROID Teres Minor F	5 HOUR THYMUS/ SPLEEN Infra Spinatus G Mid Trap. H	6 HOUR THYMUS/ SPLEEN Infra Spinatus G Mid Trap. H
D.H. 32	79	150 A	160 B	48 C	48 E	75	95	72
M.M. 16	63	98	121	91	80 E	67	57 W	65 W
S.B. 17	55	143	155	85	38 F	54	54G	57 G
J.H. 15	63	208 A	150 B	95 C	70	55 D	61 H	60 H
S.B. 16	64	135	102	92	46 E	52 F	58 G	55 G
R.W. 48	59	102 A	121	91 C	91	84	55	48
T.S. 24	76	159	170	96 C	65	66	70	65
J.T. 35	68	165 A	125 B	89 C	63	62 F	74	68
E.R. 26	59	76 A	105 B	132 C	111	95	79	52 H
D.H. 33	79	115 A	103	97 C	81 E	72	62	65
C.V. 26	74	135 A	118 B	101 C	97	52	69 G,H	65 G,H
G.H. 49	79	102 A	141 B	125 C	84	64	78	81
R.V. 55	77	166 A	190 B	103 C	57 E	67	72	75
K.S. 35	65	132 A	152 B	130 C	102	47 F	58	60
D.H. 14	65	102 A	102 B	101 C	96	40 F	56	60
S.F. 17	90	210 A	185 B	130 C	89	80	76	65
L.S. 75	110	260	310 B	380 C	130	60	68	87
A.T. 55	92	220 A	155 B	148 C	100 E	96	45	60
D.S. 44	90	143 A	320 B	240 C	83	68 F	102	90

Chart I

Note: Letter after glucose level indicates muscle weakness.

REACTIVE GLUCOSE PHYSIOLOGY

PATIENT NAME _____

ADDRESS _____

_____

AGE _____ MALE _____ FEMALE _____

DATE _____ DATE FOR RECHECK _____

_____

_____

PROGRESS 1ST RECHECK _____

2ND RECHECK _____

3RD RECHECK _____

REACTIVE GLUCOSE PHYSIOLOGY CODE SHEET

SECTION A. Questions 1 to 47 indicate reactive glucose dysfunction. Therapy is as explained below.

		Supplements
MILD	Over 1/3 question responses Less than 1/2 question responses 1's (mild) and 2's (moderate) Predominantly 1's	Glycodyn 3 Livatrophic Conc. 3 Pantrophic Chelate 3 Trace Min 3
MODERATE	Over 1/3 question responses Less than 2/3 question responses 1's (mild), 2's (moderate) and a few 3's (severe) Predominantly 2's	Glycodyn 3 Livatrophic Conc. 6 Pantrophic Chelate 3-6 Trace Min 3 Sterotrophic Conc. 3
SEVERE	Over 1/2 question responses Sometimes over 2/3 question responses 1's (mild), 2's (moderate) and 3's (severe) Predominantly 2's and 3's	Glycodyn 3-6 Livatrophic Conc. 9-12 Pantrophic Chelate 6-9 Trace Min 6 Sterotrophic Conc. 6-9

NOTE: If patient should experience headache, nausea, etc., this indicates mild toxemia resulting from rapid toxic release caused by high doses of Livatrophic Conc. and Pantrophic Chelate. Stop dosage of both supplements until symptoms disappear. Then resume dosage at a lower level, slowly working up to recommended dosage.

Pre-digested protein Procase is of great value in Hypoglycemia. It should be given 2 tablespoons 15 minutes before each meal and between each meal. If night food cravings, morning headaches, nightmares, night muscle cramps, insomnia, etc. are problems — 2 tablespoons with 1 Glycodyn and 2 Trace Min should be given at bedtime.

SECTION B. Questions 48 to 62 indicate Pituitary involvement, either anterior pituitary or posterior pituitary.

SECTION C. Questions 63 to 79 indicate Thyroid, Liver involvement. A simple thyroid test is an underarm temperature taken before rising in the morning. Thermometer is left under the arm (armpit) for 10 minutes. Below 97.8°F indicated Hypo-Thyroid. Above 98.2°F indicates Hyper-Thyroid.

SECTION D. Questions 80 to 86 indicate Adrenal involvement. Postural blood pressure taken sitting and immediately upon standing will show adrenal weakness. Systolic blood pressure should rise 4 to 10 points upon standing.

Therapeutic Correlation of Sections A, B, C, D is as follows:

Correlation 1. Section A shows mild to severe reactive glucose dysfunction. Section B shows Pituitary involvement (minimum of 3 question responses). Section C shows Thyroid, Liver involvement by underarm temperature or (minimum of 4 question responses). Primary endocrine involvement is anterior pituitary, thyroid, liver.

Correlation 1 Therapy:		
	Prolantrophic Conc.	6 Daily
	Tri-Triphic 40	6 Daily
	Livatrophic Conc.	9-12 Daily
	Glycodyn	3 Daily
	Trace Min	3 Daily
	(with sinus or kidney problem) A & D	6-9 Daily

Correlation 2. Section A shows mild to severe reactive glucose dysfunction. Section B shows Pituitary involvement (minimum of 3 question responses). Section D shows adrenal involvement by postural blood pressure or (minimum of 4 question responses). Endocrine involvement is Posterior Pituitary, Adrenal.

Correlation 2 Therapy:		
	Pinealtrophic Conc.	9-12 Daily
	Sterotrophic Conc.	9-12 Daily
	Trace Min	9 Daily
	Glycodyn	3 Daily

Correlation 3. Section A shows mild to severe reactive glucose dysfunction. Section B shows Pituitary involvement (minimum of 3 question responses). Section D shows adrenal involvement by postural blood pressure or (minimum of 4 questions responses). Structural examinations show ligamentous weakness — endocrine involvement is Posterior Pituitary, Adrenal, Anterior Pituitary Gonads.

Correlation 3 Therapy:			
	Prolantrophic Conc.	6 Daily	
	Pinealtrophic Conc.	6 Daily	
	Sterotrophic Conc.	6 Daily	
	Gonadotrophic M or F	6 Daily	(F = Female, M = Male)
	Trace Min	9 Daily	
	Glycodyn	3 Daily	

Correlation 3 also holds the possibility of Thyroid and Liver involvement. Where this is indicated along with Pituitary, Adrenal, Gonads, a glucose tolerance test should be used to determine primary endocrine involvement.

White spots upon fingernails, slow healing of wounds and acne will indicate zinc deficiency and Pancreative involvement. Pantrophic Chelate should be added in this case, 3-9 daily. Doctor use discretion on severity of Pancreative involvement and dosage.

REACTIVE GLUCOSE PHYSIOLOGY QUESTIONNAIRE

Name _____ Date _____

INSTRUCTIONS: Beside the symptoms listed below mark (1) if you have the condition mildly, (2) if moderate, and (3) if severe. If you do not have the symptom leave it blank. If a yes or no appears to the left of the question, please circle the appropriate yes or no.

USED TO HAVE	PRESENT NOW	SECTION A	FOLLOW-UP
( )	( )	1. Nervousness	( )
( )	( )	2. Irritability	( )
( )	( )	3. Exhaustion	( )
( )	( )	4. Faintness, Dizziness	( )
( )	( )	5. Tremor, Cold Sweats	( )
( )	( )	6. Weak Spells	( )
( )	( )	7. Depression	( )
( )	( )	8. Headache (type)	( )
( )	( )	9. Digestive Disturbances	( )
( )	( )	10. Forgetfulness	( )
( )	( )	11. Insomnia, Awakening with inability to return to sleep	( )
( )	( )	12. Constant Worrying	( )
( )	( )	13. Unprovoked Anxieties	( )
( )	( )	14. Mental Confusion	( )
( )	( )	15. Internal Trembling	( )
( )	( )	16. Palpitation of Heart	( )
( )	( )	17. Rapid Pulse	( )
( )	( )	18. Muscle Pains	( )
( )	( )	19. Numbness (where?)	( )
( )	( )	20. Unsocial	( )
( )	( )	21. Antisocial	( )
( )	( )	22. Indecisiveness	( )
( )	( )	23. Crying Spells	( )
( )	( )	24. Lack of Sex Drive (Female)	( )
( )	( )	25. Allergies	( )
( )	( )	26. Uncoordination	( )
( )	( )	27. Leg Cramps	( )
( )	( )	28. Lack of Concentration	( )
( )	( )	29. Blurred Vision	( )
( )	( )	30. Twitching, Jerking of Muscles	( )
( )	( )	31. Itching of Skin	( )
( )	( )	32. Gasping for Breath	( )
( )	( )	33. Smothering Spells	( )
( )	( )	34. Staggering	( )
( )	( )	35. Sighing and Yawning	( )
( )	( )	36. Impotence (Male)	( )
( )	( )	37. Unconsciousness	( )
( )	( )	38. Night Terrors	( )
( )	( )	39. Nightmares	( )
( )	( )	40. Rheumatoid Arthritis	( )
( )	( )	41. Phobias, Fears	( )
( )	( )	42. Neurodermatitis	( )
( )	( )	43. Suicidal Intent	( )
( )	( )	44. Nervous Breakdown	( )
( )	( )	45. Convulsions	( )
( )	( )	46. Craves Sweets	( )

USED TO HAVE	PRESENT NOW	SECTION B	FOLLOW-UP
( )	( )	47. Cold hands, feet, all over	( )
( )	( )	48. Family history of mental illness	( )
( )	( )	49. Were you delivered with forceps	( )
( )	( )	50. Family history of unusual size	( )
( )	( )	51. History of serious head injury	( )
( )	( )	52. Infertility or Impotency	( )
( )	( )	53. Headaches behind eyes	( )
( )	( )	54. Headaches affecting one-half of head	( )
( )	( )	55. Disease of Bones, Ligaments or Tendons	( )
( )	( )	56. Excessive Urination	( )
( )	( )	57. Water Swelling, below eyes, ankles, fingers, feet etc.	( )
( )	( )	58. Difficult pregnancy or delivery	( )
( )	( )	59. Left Upper Neck Pain	( )
( )	( )	60. Left Little Finger Pain	( )
( )	( )	61. Overweight From Waist Down	( )
( )	( )	62. Overweight From Waist Up	( )

USED TO HAVE	PRESENT NOW	SECTION C	FOLLOW-UP
( )	( )	63. Right Neck Pain	( )
( )	( )	64. Nausea	( )
( )	( )	65. Jaundice	( )
( )	( )	66. Pain Under Right Rib Cage	( )
( )	( )	67. Right Side Body Pain	( )
( )	( )	68. History of Cancer	( )
( )	( )	69. Constipation	( )
( )	( )	70. Feel Better in mornings, worse afternoons	( )
( )	( )	71. Outer one-third of eyebrows thin or missing	( )
( )	( )	72. Constantly Fatigued	( )
( )	( )	73. Skin Thick, Wrinkly, Puffy	( )
( )	( )	74. Kidney Disorders	( )
( )	( )	75. Sinus Congestion or Headaches	( )
( )	( )	76. Soapy or metallic taste in mouth	( )
( )	( )	77. Grayish pasty or oily skin	( )
( )	( )	78. Varicose Vein or Hemorrhoids	( )
( )	( )	79. Visible blue veins in chest or abdomen	( )

USED TO HAVE	PRESENT NOW	SECTION D	FOLLOW-UP
( )	( )	80. Severe Emotional Swings	( )
( )	( )	81. Dialated Pupils	( )
( )	( )	82. Low Blood Pressure	( )
( )	( )	83. Dry Scaly Skin, Eczema	( )
( )	( )	84. Low Backache	( )
( )	( )	85. Air Sickness, Sea Sickness or Car Sickness	( )
( )	( )	86. Dizziness Upon Quickly Rising	( )
( )	( )	87. Osteoarthritis	( )
( )	( )	88. Coffee or Cola Drinker	( )
( )	( )	89. Diet Pill User	( )

DOCTORS USE ONLY:

1. Postural Blood Pressure is: Sitting_____ Standing _____.

2. Underarm Temperature is: _____.

3. Structural Examinations Show Liagmentous Weakness YES NO.

4. White Spots on Fingernails, Acne or Slow Heaing of Wounds YES NO.

PHASE I: MINIMAL LOW CARBOHYDRATE REGIMEN (6% or less)

Select and balance meals from foods listed herein. Eat at least three meals a day or six small ones, if preferred. Snacks are permitted moderately, only from among foods listed herein. Balance protein intake with green leafy vegetables in at least one generous green salad daily.

BREAD, CEREALS: None of any kind. Positively.

DAIRY PRODUCTS: Milk and buttermilk, sweet and sour cream, plain yogurt, and butter (no margarine). Natural cheeses only. Cottage cheese, eggs – unlimited.

FISH: All fresh fish (i.e., cod, flounder, haddock, halibut, herring, mackerel, perch, pike, salmon, sardines, trout, tuna, etc.). May be broiled or fried, baked, or boiled. In frying, use butter or vegetable oils (i.e., corn, safflower, soy or sesame). No lard or hydrogenated fats (i.e., Spry, Crisco, etc.). Do not use bread crumbs or flour. Avoid scavengers (i.e., clams, crabs, shrimp, scallops and lobster) which have high pollution concentration.

MEATS: Lean beef, lamb, veal, all poultry. Trim away visible, excess fat from meat. Bake, broil, boil, or saute in vegetable oil or butter. Organ meats also allowed. Avoid pork or food products containing pork or lard.

VEGETABLES: Artichokes, asparagus, beans (string), beet greens, broccoli, cabbage, cauliflower, celery, chard leaves, chickory, chives, collards, cucumbers, dandelion, eggplant, endive, escarole, fennel, garden cress, herbs, kale, lettuce, mushrooms, mustard greens, okra, green peppers, pumpkin, radishes, rhubarb, sauerkraut, spinach, squash (summer), tomatoes, turnip greens, watercress, zucchini. (Fresh preferred, may be frozen or canned. Unsweetened.)

FRUITS: Avocado, cantaloupe, casaba, cranshaw, honey dew, and watermelon. Lemons and limes. No canned, sweetened, or dried fruits of any kind.

MISCELLANEOUS: Mayonnaise, dietetic gelatin salads (Knox is best), salad dressings made from cider vinegar, lime, lemon juice, corn, safflower or sesame oil. Bouillion cubes, olives (ripe or green), pickles (dill or sour only). Mustard, fresh or dry. Hard boiled or deviled eggs. Fresh nuts—walnuts, pecans and almonds. No cashews. Fructose and protein powder or tablets. Seeds—sunflower, pumpkin and sesame.

BEVERAGES: No coffee. Herb teas—unsweetened. Buttermilk. Milk, Tomato juice and V-8 juice. No colas of any kind. No canned, condensed, evaporated or sweetened milk. No alcohol in any form. No sugar free soft drinks.

AVOID ALL FOODS MADE WITH OR CONTAINING SUGAR OR STARCH. No cereals, cereal products, bread stuffs, cakes, cookies, pies, candy, ice cream, etc.

SPECIAL: Take tablespoon or two (according to individual tolerance for fats) of corn, safflower, sesame, or soybean oil before meals in small amount of milk or tomato juice. Polyunsaturated fats act as an appetite depressant, speed burning of stored body fat for energy, provide carbohydrate-free calories for additional energy and effectively lower cholesterol levels.

NOTE: Increased intake of polyunsaturated fats requires increased intake of Vitamin E, as recommended by physician.

PHASE II: MODERATE LOW CARBOHYDRATE REGIMEN (10% or less)

NOT TO BE IMPLEMENTED UNTIL PATIENT IS A SYMPTOMATIC

The following may be added to Phase I on the advice of your doctor.

VEGETABLES: Beets, brussel sprouts, carrots, kohlrabi, leek, onions, parsley, rutabaga, turnips, and winter squash.

FRUITS: Grapefruit, strawberries, and cranberries (unsweetened).

BEVERAGES: Grapefruit juice.

PHASE III: MAINTENANCE LOW CARBOHYDRATE REGIMEN

The following may be added to Phases I and II on the advice of your doctor.

BREADS, CEREALS: Fresh, stone ground whole wheat and rye bread (Catherine Clark or Pepperidge Farm best). Limit one slice per meal. Whole grain fresh cracked wheat cereal.

VEGETABLES: Corn, lima beans, peas, and potatoes.

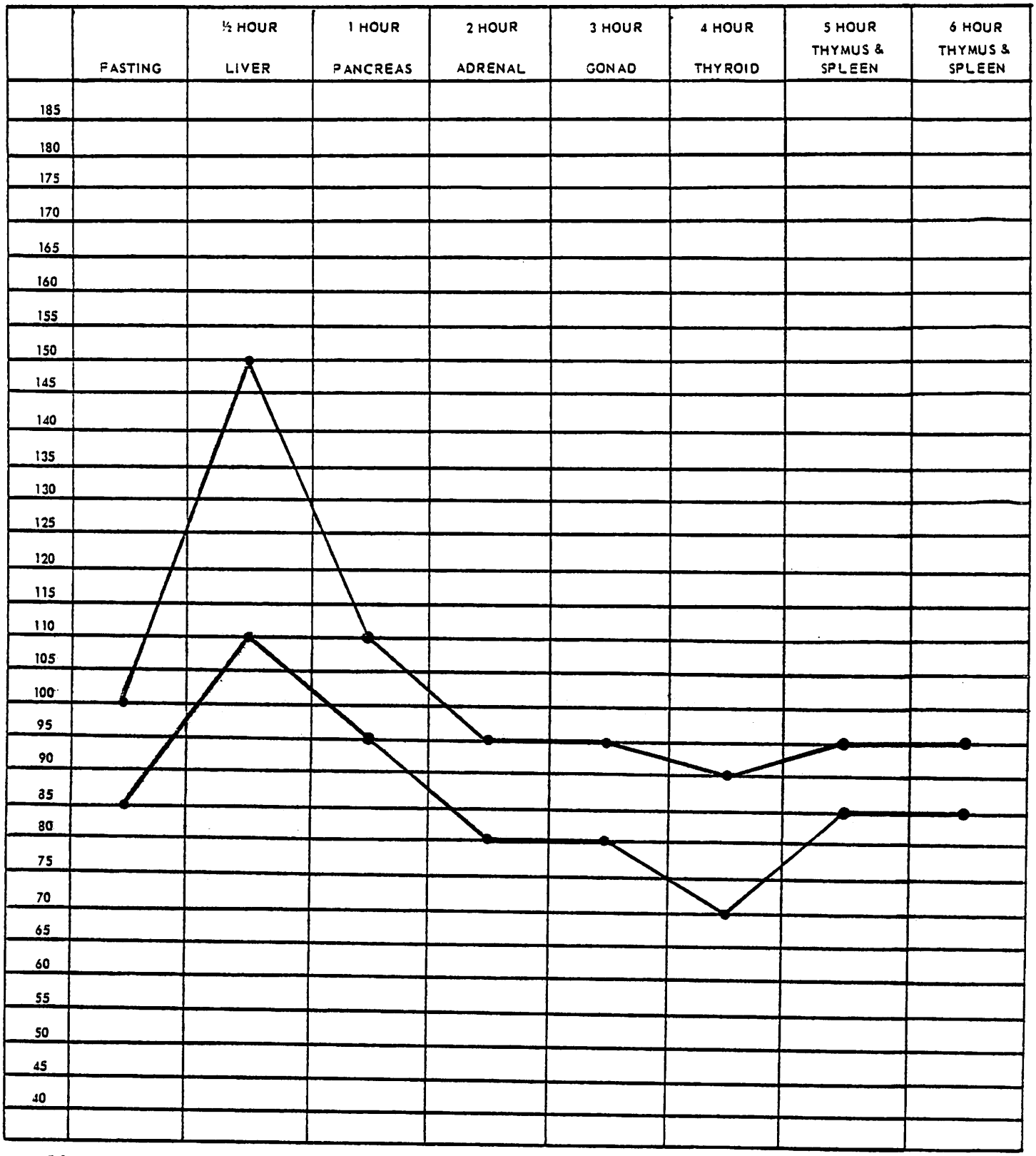
FRUIT: Blackberries, blueberries, apples, apricots, gooseberries, oranges, papaya, peaches, pears, pineapple, plums, raspberries, tangerines. Fresh in season or frozen (unsweetened).

MISCELLANEOUS: Custard, yeast, raw honey, or powdered fructose (as sweetener).

BEVERAGES: Orange juice, beer, dry (no heavy and sweet) wines, white or red.

For Doctor Use Only Follow-up date _____

Supplementation	Dosage	Follow-up Dosage
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____



READINGS BELOW NORMAL (MOST DEPRESSED) USE GLAND CONCENTRATE
READINGS ABOVE NORMAL (MOST ELEVATED) USE GLAND CHELATE
ANY TOTAL ARYTHMIA OF CURVE USE PITUITARY

THE INTERPRETATION AND BLOOD NORMALS PROVIDED BY DR. KENNETH BROCKMAN D.C.

The Use of Accupuncture to Correct Reactive Muscles

By George F. Frasca, D.C.

Abstract: Using Bladder 1 tapping to correct reactive muscles.

As applied kinesiologists, we have claimed (rightfully so) the ability to communicate with the nervous system at a much higher level than traditional chiropractic and most especially practicioners of other healing disciplines. By the use of Applied Kinesiology (AK) procedures we can evaluate various problems we face pertaining to muscle disfunction. We can determine weakening, spasms, hyper, hypotonicity, reactivity, etc., etc.

I am addressing this paper to the treatment of reactive muscles using the first point on the Bladder Meridian: (Bl - located at the inner canthus of the eye). Muscle reactivity is defined as the inability of an intact muscle to function in its muscle group, thereby causing the involved muscle to weaken or impair its function.

An example of the phenomenon is: if we have a quadriceps femoris reactive to the rectus abdominus on the same side. Let's assume the quad is set at 6 and the rectus at 4, with any activity that involves these muscles, 6 will be stronger than 4, thereby causing the rectus to weaken and not function in harmony with the quadriceps. Using AK testing procedures we can determine which muscle is the reactive muscle.

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The Use of Accupuncture to Correct Reactive Muscles

By George F. Frasca, D.C.

We can then treat the muscles by approximating the spindle cells, thereby reducing the quad to 4 from it's previous setting of 6. Following this traditional method of treating reactive muscles we now retest the previously involved muscles and find they are apparently equal. Maybe?

I've always questioned the validity of this statement. How do I know I did not reset the quad at 4¼ or 3 7/8? Why did this reactivity reoccur after correction and the proper nutritional support? How do I solve this problem in my office?

Since we know we can use Bl to unswitch the somatic to cerebral functions just the way we can use K27 and umbilicus to unswitch cerebral to somatic functions, I therefore postulated that: this function should be controlled by the body; let the body reset reactive muscles to their proper setting.

Methodology:

Find an intact muscle in the clear. Therapy localize (TL) Bl bilaterally. If this weakens the indicator muscle, treat the pituitary mechanism.[2] Assuming Bl does not blow out the indicator muscle, then begin testing procedures.

If you assume the quad and rectus are reactive, challenge the spindle cells of the involved muscle by quickly thrusting the spindle

cells together, immediatly after the challenge TL Bl and it will cause the strong indicator to weaken. Once this reactive mechanism is established, re-stimulate the spindle cells of the muscles involved, then tap Bl bilaterally for approximately 20 seconds. Rechallenge the spindle cells and TK Bl. It should not weaken the indicator muscles. I use this particular approach in treating other reactive muscle involvements; i.e. TMJ, Hyoid Bone, etc.

It is a very useful technique to use with people who aggravate their condition by any kind of movement. First let the patient lie motionless - TL Bl, the indicator muscle should be strong in the clear. Next have the patient do the activity that causes pain or makes their condition worse. Then rechallenging Bl, it should now be active. Tap Bl for a minimum fo 20 seconds or until the pain pattern changes. Let them repeat the activity that caused the pain and rechallenge BL. It should not weaken the indicator muscle. I then instruct the patient to tap Bl after they perform a particular function for approximately 30 to 60 seconds.

I have been using this technique for the past 6 months and it has worked consistantly on every patient. I also conclude the patient office visit with bilateral tapping of Bl. It is an adjustive adjunct that allows the body to set the adjustment into its proper place.

Respectfully Submitted,

George F. Frasca, D.C.

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By George F. Frasca, D.C.

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1. Walther, David S.,- Applied Kinesiology - The Advanced Approach in Chiropractic, Systems, D.C., Pueblo, Colorado 1976. p.22

2. Rodriguez, Jose - The Neuroendocrine Connection. Collected Papers of the International College of Applied Kinesiology. Published privately 1977. p.356

A FELDENKRAIS EXPERIENCE

by

Katharine Ayers Hovey, D.C.

Abstract:

An overview is given of the philosophy of Moshe Feldenkrais regarding motion and man's self-image and potential. Means of enhancing one's self-image and potential are discussed.

I. Motion and Man's Potential

Man is unique in his capacity to create new responses. These new responses are mediated through the nervous system and expressed through the musculoskeletal system. New movement creates new responses. New responses create new movement. Movement is an expression of our unique functioning as individuals. Each of us have our characteristic postures, internal autonomic functioning or movement, and external or visible movement. As we modify our movements and create new patterns in our nervous system, we change.

Each of us is like a crystal with many facets capable potentially of a wide variety of expression. Feldenkrais contends that most of us only express a small portion of our total potential. He says that we make use of our brain and nervous system in a very limited fashion, even though the capacity for learning is externally vast and varied. Learning to Feldenkrais means the internalization of experience as opposed to rote imitation or indiscriminate introjection of the ideas of others.

How does our capacity for expression through movement become limited, stereotyped or ineffectual? Mostly, we learn poor habits of movement and posture. Poorly learned habits of posture and movement expend extra energy and are ineffectual and inefficient. Feldenkrais says that "... the 'roundabout' approach to the simplest problem is the outstanding feature of inferior learning."[1]

We learn poor habits of movement in a number of ways:

1. by copying the movement of another that is not suitable for us or our structure. (children usually imitate the adults in their immediate environment); or
2. by not changing ineffective movement. This may be for a variety of reasons, such as
    a. not knowing how to change
    b. covering up what we feel are faults in our bodies or our behavior
    c. feeling that change is not possible.
    d. being resistant to change.
3. by following the injunctions of our authority figure as to how we "should" stand, sit or move, such as being commanded to "sit up straight", being forced to walk before one is ready, being punished for being too "active" and a host of other "do's" and "don'ts", "shoulds", and "shouldn'ts" that are superimposed on top of one's real self. Frequently adults are conditioned to use reward or punishment or make a child reward or punish himself as a means of modifying his movement or behavior. Hence external conditioning and acceptance of false stultifying concepts contribute to the building of a facade around oneself.

This limits one's true functioning and effective movement. Feldenkrais states that "the veneer that one adopts to make oneself appear presentable interferes with one's antigravity adjustment."[2]

II. Self-Image

One's self-image is very closely related to his movement and potential. As we change and vary our movement, a change also occurs in our motivations, self-image and potential.

Feldenkrais says that "our self-image consists of four components that are involved in every action: Movement, sensation, feeling and thought."[3] Early in life, the child's image changes rapidly. The infant's contact with external world is established mainly through the lips and mouth. Gradually, the infant discovers other parts of the body and their inter-relationship to one another. This gives him a concept of distance and volume. "The discovery of time begins with the coordinating processes of breathing and swallowing, both of which are connected with movements of lips, mouth, jaw, nostrils and surrounding area."[4] The activity of the cells in the area of the motor cortex, or homuculus are activated in changing kaleidoscopic patterns from moment to moment and year to year. The extent and variety of these patterns is related to one's self-image. Feldenkrais maintains that our self-image is usually more limited than our potential. In fact, he states that our self-image consists of only the groups of brain cells we have actually used and in the patterns and combinations in which he have used them. Limitation of motion limits the

variety of patterns projected on our brain and limits our potential and self-image.

Why is our self-image and potential limited? Certainly by limiting our movement for all the reasons previously listed, such as modeling ourselves after external models, fear of or resistance to change, self-imposed limitations, lack of information or ignorance, external pressures, stress or injunctions, accepting false notions or concepts, etcetera.

Other reasons why self-image is limited are: 1] Society may accept an individual at a certain stage of development as being useful; i.e., a competent car mechanic, and the individual may have no further stimulus or motivation to change "... some potential functions may not reach maturity at all. The organism may have no call to practice them, either because it sets no value on them as such, or because its drives lead it in a different direction."[5]; 2] If a child is valued only for his performance rather than being appreciated as an individual, he will lose his spontaneity. He will look to the environment for validation through his performance due to his intrinsic sense of lack of self-worth or poor self-image. Hence, he is then limited by what he thinks society or external authorities or peer pressure expect of him, rather than moving and growing from his center in an effortless and creative way. The more external restrictions or limitations he places on himself, the more limited and inhibited his growth and movement and the greater the number of blocks to the expression of his creative potential or true Beingness.

III. Increasing Self-Image and Potential

Once one understands how potential and self-image and movement become limited, how does one go about changing oneself and increasing his or her self-image and potential?

First, accept that change is possible. To accept, love and value oneself as an individual and to know that one has value which is independent of one's performance and accomplishments is primary.

The core of Feldenkrais's work is awareness. Awareness of self and the four components which compose one's self-image and that are involved in every action: 1] Awareness of sensation; the five senses, the kinesthetic sense [including pain, orientation, in space, the passage of time and rhythm]. Aware of sensation is noticing what one is feeling through one's senses. 2] to be aware of one's feelings including all the emotions of joy, grief, anger, self respect, inferiority, super-sensitivity, and all other tones and shades of emotion that color one's life. 3] Awareness of thinking. This means noticing and being aware of all the polarities in self, such as notions of good and bad, right and wrong, how one clarifies and orders one's thinking, the rules and judgments one makes of oneself, how one remembers, understands, learns, etcetera. 4] Awareness of movement such as all the temporal and spatial changes in the configuration of one's body and its parts. Be aware of voluntary and involuntary movement.[6] All of these processes of awareness are mediated through the nervous system. By repatterning the brain and the nervous system one can change one's self-image and potential. Through awareness one is able to expand one's potential. The

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physiological and anatomical basis for change of self-image and increasing one's potential is explained by Feldenkrais as follows:

> It is not possible for change to take place in the muscle system without a prior corresponding change in the motor cortex. If we can succeed in some way in bringing about a change in the motor cortex, and through this a change in the coordination of or in the patterns themselves, the basis of awareness in each elementary integration will disintegrate.
>
> Owing to the close proximity to the motor cortex of the brain structures dealing with thought and feeling, and the tendency of processes in brain tissue to diffuse and spread to neighboring tissues, a drastic change in the motor cortex will have parallel effects on thinking and feeling.
>
> A fundamental change in the motor basis within any single integration pattern will break up the cohesion of the whole and thereby leave thought and feeling without anchorage in the patterns of their established routines. In this condition it is much easier to effect changes in thinking and feeling, for the muscular part through which thinking and feeling reach our awareness has changed and no longer expresses the patterns previously familiar to us. Habit has lost its chief support, that of the muscles, and has become more amenable to change. 7

One gains feedback through one's own awareness. Sometimes it is useful to interact with another who may be more discerning in noticing what part of our appearance, musculoskeletal system or expresion is fictitious and which is genuine. At any rate, noting "mistakes" or the areas where one's movement is inefficient or is not serving, supporting or enhancing one helps to bring one more "on target". This is done through a process of self-discovery. Each individual is different and his or her optimal way of moving or functioning may be different from some one else's. Awareness is the key to self-discovery and in this sense the experience of Feldenkrais' work is like a moving meditation. One can be assisted or guided by another,

but genuine change comes through self awareness and self-acceptance.

Since my experience with Feldenkrais has been so recent, I am only beginning to see some of its applications in practice. Feldenkrais' systems and procedures for modifying and changing movement are at least as extensive as the amount of procedural material in Applied Kinesiology. Needless to say, I do not feel competent after seven full days of training. Like Applied Kinesiology, Feldenkrais is best performed by combining a high level of science and art. This requires application, experience and time in order to mature. I can certainly say that participating in the training has been a very valuable personal experience. I feel that the discoveries and applications of Feldenkrais are highly compatable with the principles and applications Chiropractic and Applied Kinesiology. One of Feldenkrais' discussions of the mental-emotional and structural sides of the triad of health is as follows:

> Every emotion is, in one way or another, associated and linked in the cortex with some muscular configuration and attitude which has the same power of reinstating the whole situation as the sensory, vegetative or imaginary activity.[8]

For me, Feldenkrias' work sheds added light upon mental-emotional and structural interactions. The implication is that resolution of an emotional complex or false mental concept resolves a body habit and/or promotes more efficient

posture or movement. Conversely, altering muscular configuration or structure promotes a change in mental-emotional patterns. The key to permanent change is awareness. The amount of change depends on the insight and awareness the individual has of his own process.

FOOTNOTES

1. Moshe Feldenkrais, Body and Mature Behavior, (New York: International Universities Press, 1966), p. 96.

2. Ibid., p. 97.

3. Moshe Feldenkrais, Awareness Through Movement, (New York: Harper and Row, 1972), p. 10.

4. Ibid., p. 13.

5. Ibid., p. 16.

6. Ibid., p. 32-33.

7. Ibid., p. 39.

8. Idem, Body and Mature Behavior, (New York: International Universities Press, 1966), p. 150.

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A Preliminary Report on the Effects of Alpha Brain Wave Production on Emotionally produced Symptoms.

Abstract: Three patients suffering from emotionally induced symptoms with associated muscle weaknesses were relieved of their symptoms and their associated weaknesses following production of certain specific brain waves.

On three occasions, patients exhibiting psychosomatically induced symptoms were seen and treated through brain wave training. One of the patients was typical of the three, she was 39 years of age and had been suffering with symptoms of angina for a period of years. These symptoms were transient and tended to occur after periods of emotional stress. She was initially examined and treated using the normal kinesiological techniques. Relief of symptoms was always achieved however upon stress the symptoms and the correlating muscle weaknesses would reoccur. These weaknesses were found to be the subscapularis, sartorius, and the pectoralis clavicular division. Treatment consisted of stimulation of the neurolymphatic, neurovascular, acupuncture and related spinal segments as well as the appropriate nutritional support.

On one office visit, the pain and the asscciated weaknesses had reoccurred. The patient had stated before that she had been involved in meditation for many years. We therefore attached her to an EEG produced by Cyborg which has the ability through very sharp filters to isolate brain wave production and give the patient feedback for a single cycle of wave form. After ten minutes of scattered alpha production, wave frequencies random between 13 and 18 cycles, there was no alleviation of symptoms or strengthening of the muscles. Feedback was then supplied and the frequency level for feedback was slowly lowered and the patient tested for changes in both symptoms and muscle strength. After two minutes of production of wave lengths 10 - 11 cycles the symptoms were

alleviated and the muscle strength returned to normal. The patient stated that she felt as if 'a heavy weight' had been removed from her chest.

Two other patients with this same type of syndrome were tested and found to exhibit the same response following this type of alpha-theta wave production.

These patients have trained to produce these wave forms at will and have showed evidence of being able to control their symptoms through the use of applied meditation.

August 7, 1978
David W. Leaf

Holistic Care

By James R. Lent, D. C.

ABSTRACT: Holistic health care will be a requirement which the present health care system does not provide. Applied Kinesiology does offer the solution.

The ever changing face of the practice of the healing arts finds the Chiropractic Physician now serving as a primary care physician. This requires him to consider the whole body.

Although on the surface it might appear that the profession "has arrived," it brings with it many additional responsibilities.

Legally, you are just as responsible for what you did not do, as what you did do.

In part, the change in position of the Chiropractic profession is being brought about on a national level through the planning of the National Health Insurance. About three years ago HEW started the formation of area Health System Agencies, whose job it was to design plans for the health delivery system throughout each of the states. The Chiropractic profession was active in their attempts, and succeeded in having Chiropractic stipulated in the plans, in many of the areas, as a primary health care provider.

For many Chiropractors, the changes may be overwhelming because they have been taking an osseous view of the human body, without the soft tissue that comprises the rest of the body. This does not reflect upon any particular school of thought, but rather upon complacency in general throughout the profession.

There are learned men within the profession who have tried to show that there is so much more to look at and consider. Dr. William David Harper has stated, "Anything can cause anything." Dr. George Goodheart states that "muscles move bones, bones do not move muscles." This becomes an admonishment to find the source of the problem rather than treating the symptom.

The necessity to look at the whole person to arrive at a diagnosis, or diagnoses, has become a requirement rather than an elective. It is no longer reasonable to merely X-ray the spine and arrive at a conclusion.

At this point we are having to use the presently acceptable medical standards to document a diagnosis. This is because sufficient Chiropractic research has not been done, and documented, to prove an alternate method does arrive at the same, or better, answer as the currently accepted medical standards.

An example is the use of Applied Kinesiology as a diagnostic tool. Those who are proficient in its application recognise the relationship of various muscles to internal organs. Clinical and sub-clinical conditions are disclosed, as well as their relationship to other parts of the body. It is known that too much, or too little energy will produce a weakness in the indicator muscle, and an alteration of function of its related organ. Applied Kinesiology provides the means to read and understand the body language.

Likewise the appropriate therapeutic approach can be shown, and an indication where there might be a need for further diagnostic examination.

Health is represented by an equilateral triangle shown as structure, chemical and mental. An imbalance of one will affect the other two. Through Applied Kinesiology each side can be evaluated and the proper balance be restored.

Although this may seem baffling to many people, just recall the response to accupuncture on the American scene. The orientals have successfully employed accupuncture for thousands of years. Scientific western medicine, however, responded that there were no known pathways that would justify a therapeutic result by such a proceedure. Westerm medicine now employs therapeutic accupuncture.

Dental work can upset the muscular balance of the jaw. This causes a dysfunction of the tempromandibular joint, which in turn sends a garbled message to the cerebral cortex, thence to some other part of the body, producing an alteration of response in that part. Through Applied Kinesiology this problem can be located and often alleviated. If necessary, the patient would be referred to a dentist who is trained in tempromandibular equilibration.

Another condition which is often missed and misdiagnosed is hypoglycemia. Through the reading of the body language it is unmasked and the proper laboratory test is done to verify it. The choice of treatment and nutrition can be determined immediately, and progress followed to a success-

ful recovery through Applied Kinesiology.

Applied Kinesiology is rather new in the health care delivery system. It provides the means to both examine and treat the whole person with reason and logic. The disorders of man are initially physiological before they become pathological. Early detection and correction will minimize the occasion of pathological incidents. To the health oriented practitioner, as contrasted with the disease oriented practitioner, this type of "Holistic Care" makes practical sense.

Within the healing arts there are few practitioners who consider the total p erson, yet that necessity must become a requirement if the term "health care delivery system" is to be considered as a truth.

We are limited only by our own self imposed limitations of vision, contemplation and understanding.

COMPARISONS OF HONEY AND GLUCOSE

USING THE ORAL GLUCOSE TOLERANCE TEST

Ben C. Markham D.C.

Abstract: Twenty six-hour sugar tolerance tests were given to ten adult subjects. Each person was given carbohydrate equivalent honey or glucose solutions one week apart. In nearly all parameters tested, honey was tolerated better than glucose. Comparisons were made of drops below fasting levels of 77mg%, total range of more than 100mg%, drop of 25mg% in any given hour, a drop below fasting, a decrease of more than 20% below fasting, average high and low values, and measures of the time above and below the curve at a fasting level.

We are continually questioned by our patients if they are allowed the use of honey in their diet and how it will affect them. Depending on our education and prejudices we answer them accordingly. However, this author is not aware of research that has of yet substantiated the the many attributes honey claims. One of the primary claims made of honey is that it does not have the insulin stimulating effects of glucose(sucrose), honey being levurotatory and an invert sugar(semi-digested previously). Much research has been done in the area of diabetes, hypoglycemia and the void between these two ends of the spectrum, with several laboratory indications of this carbohydrate dysfunction: 1) Glucose Tolerance Test (GTT) 2) urine sugar 3) beta cell examination, etc. Due to the questions arising on the use of honey and its effects, I structured preliminary research questions comparing glucose and unfiltered clover honey with proportionate carbohydrate content using the six-hour glucose tolerance test.

Materials and Methods:

Ten volunteers from a relative asymptomatic patient population were selected and advised of the upcoming GTT's and what it would involve. There was a careful explanation of possible mild side effects and illness during the test, so the subject would be aware of the situation and not become alarmed and emotionally upset. The subjects were in general good health and in an age range of 17-60 years. There are many factors that may interfere with the GTT or honey tolerance test(HTT) such as ACTH, caffeine, glucagon, nicotine, oral contraceptives, acute illness, and salicylates to name a few. The subjects involved were questioned in these areas and were instructed not to smoke, if possible, on the day of the test. A fasting time of ten hours was required. There was no attempt at prior carbohydrate loading of 300g/day but were instructed against excessive alcohol or exercise and to maintain their normal daily routine. Each subject would undergo two sugar tolerance tests, each one week apart. Two different sugar solutions were used at a dosage of 75mg as recommended by the ADA[1]. One was 75mg glucola by the Ames Co. and the other was a honey and water solution. Knowing that the carbohydrate content of 100g of cane or beet granulated sugar is 99.5% and the carbohydrate content of 100g of honey is 82.3%[2], you can convert proportionate quantities to 62 g of honey in 7 fl. oz. of water to equal the 7 fl.oz. of glucola with 75mg of glucose.

The blood glucose was monitored by the Ames Dextrostix-Eyetone system (Miles Laboratories). In 1970 Ames introduced an electronic instrument to

monitor diabetes and hypoglycemia[3,4] by reading Dextrostix reagent strips which although are fairly accurate in mid-ranges are not quite as accurate at the extreme ends of glucose concentrations[5,6]. Recently, Ames developed a more sophisticated reflectance meter, that uses a two point calibration at 50 and 400mg/100ml and uses whole blood from a finger puncture. There was a three centre study of the instrument[7] which showed it to be a significant improvement over the previous machine and a quick, reliable alternative to conventional laboratory methods.

It appears that plasma specimens are somewhat more satisfactory, reflecting more accurately the absorption, production, and tissue uptake of glucose[8]. However, a study was done that correlated the Dextrostix-Eyetone and laboratory glucose values on 133 samples and found the standard error of estimate of a single lab value from a single Eyetone value was 5.7mg/100ml at values around the mean and at the extremes, 5.9mg/100ml[9]. As expected the whole blood values were slightly lower than plasma concentrations and apart from this all measurements between whole blood and plasma glucose levels agreed well.

Most patients seem to tolerate finger puncture much better with less emotional involvement than with venipuncture. This could possibly decrease the release of catecholamine and obviate changes falsely increasing the glucose levels. Blood was drawn beginning between 8-9:00 A.M. after ten hours fasting at times of 0, 30 min, and then on the hour to complete a full six hours. The subjects were not informed as to the nature of what they were drinking, only that it was a sugar solution. The same clinician calibrated the Eyetone and drew the samples and had no knowledge of what that subject had injested. A different clinician prepared the glucola or warmed the honey solution and gave it to the subject. Double blind testing

was thus administered. Glucose readings were obtained by placing a drop of blood on the reagent area on the strip for exactly 60 seconds and then washing quickly and blotting it dry. It was then inserted into a guide on the machine which had been previously calibrated and read. The entire procedure taking only two minutes approximately. The details of the chemical reaction of the blood and reagent are explained elsewhere[10].

Results:

Authorities vary greatly as to the criteria for determining hypoglycemia, due to the extreme variation from subject-to-subject, several testing parameters are necessary. Several subjective and clinical determinants are discussed by Walther[11]. Several evaluations are shown following:

A. Glucose- average highest value: 181.2%
- average lowest value: 71.7%

Honey- average highest value: 151.9%
- average lowest value: 75.0%

B. # dropping below fasting level of 77mg%:

glucose- 50%

honey- 40%

C. A total range of more than 100mg%:

glucose- 70%

honey- 10%

D. A drop of 25mg% in any given hour:

glucose- 100%

honey- 100%

E. A drop below fasting:

glucose- 50%

honey- 90%

F. A drop more than 20% below fasting:

glucose- 50% :(Av. drop of that 50% - 28mg%)

honey- 40% :(Av. drop of that 40% - 28mg%)

G. Time under the curve above fasting levels (lag time):

glucose- mean value of 88.1 unit time

honey- mean value of 44.7 unit time

H. Time under curve below fasting levels(insulin response):

glucose- mean value of 11.3 unit time

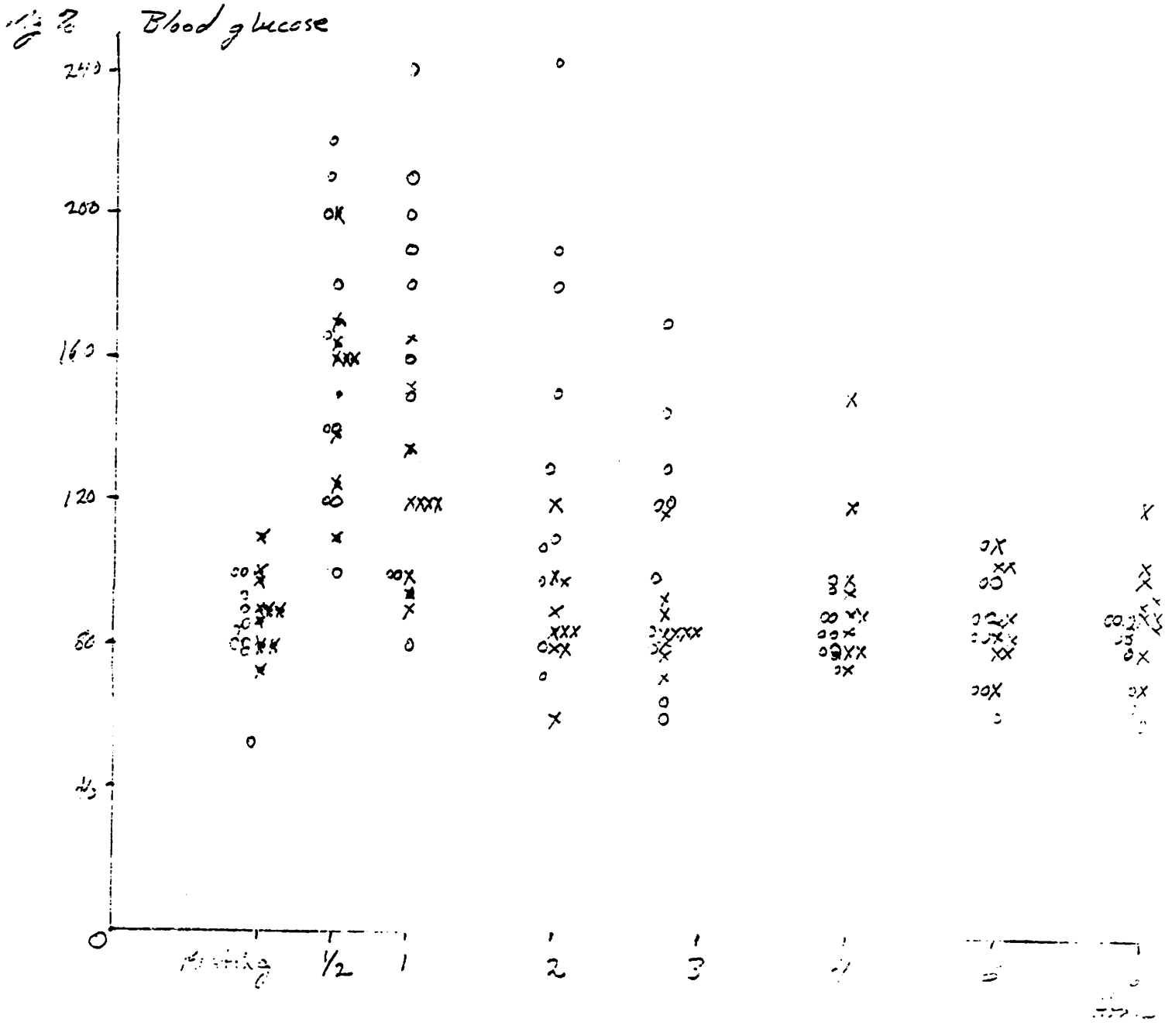
honey- mean value of 20.3 unit time

Discussion:

There are a great many other possibilities in method of testing for glucose-honey differences, and the number of subjects involved and parameters tested were limited. However, there are obvious statistical differences in most determinants shown. In almost all cases, honey proved to be tolerated as well and/or better than glucose. The results can be discerned easily from the preceding list. Glucose attained the higher and lower average values during the GTT and HTT. Honey values dropped below fasting more often than glucose, but honey did not drop below 20% as often as glucose. A very revealing parameter tested was the time/units under the curve above

the fasting level. This was twice as high in the GTT's as in the HTT's. The major portion of this curve is known as a lag curve or pre-diabetic curve when the blood glucose reaches abnormally high levels and these are sustained instead of dropping between the first and third hour. When lag curves are present it has been explained as evidence of impaired glucose tolerance[12]. I believe the higher values with honey for the time under the curve below fasting parameter were the result of a more gradual sloping return to normal levels rather than the rapid sharp slope of that of the glucose values. Symptomatically this would indicate fewer noticeable blood sugar deviations because of slower, gradual changes.

This research was primarily done to answer some immediate practical problems that occur on a daily basis. Does honey have less detrimental effects in carbohydrate handling and to what degree than glucose(sucrose). The answer at this point would seem to be yes.



Honey - x

Glucose - o

Overview of 20 Sugar Tolerance Tests

Markham - Honey & Glucose
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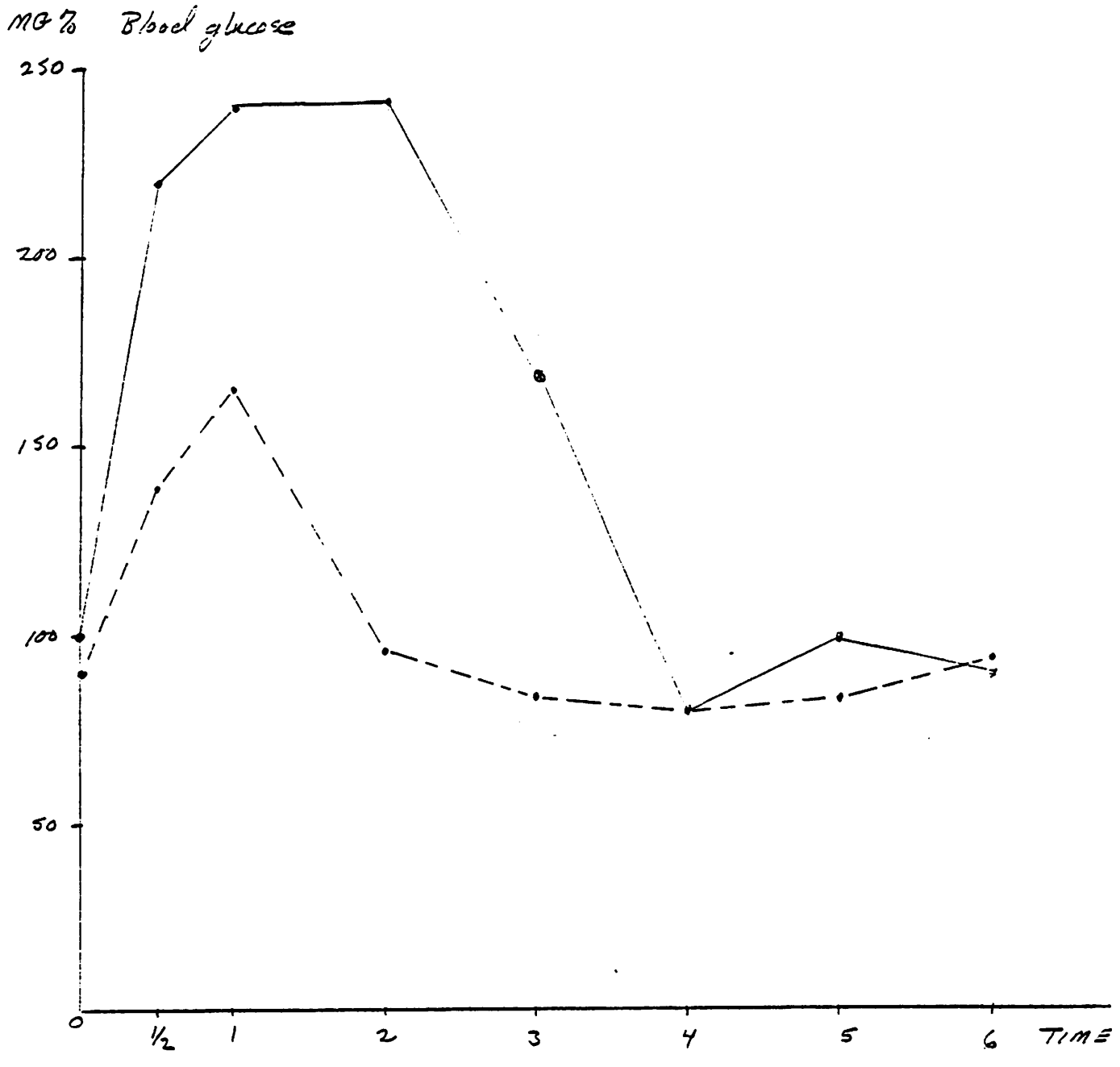

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Markham - Honey & Glucose
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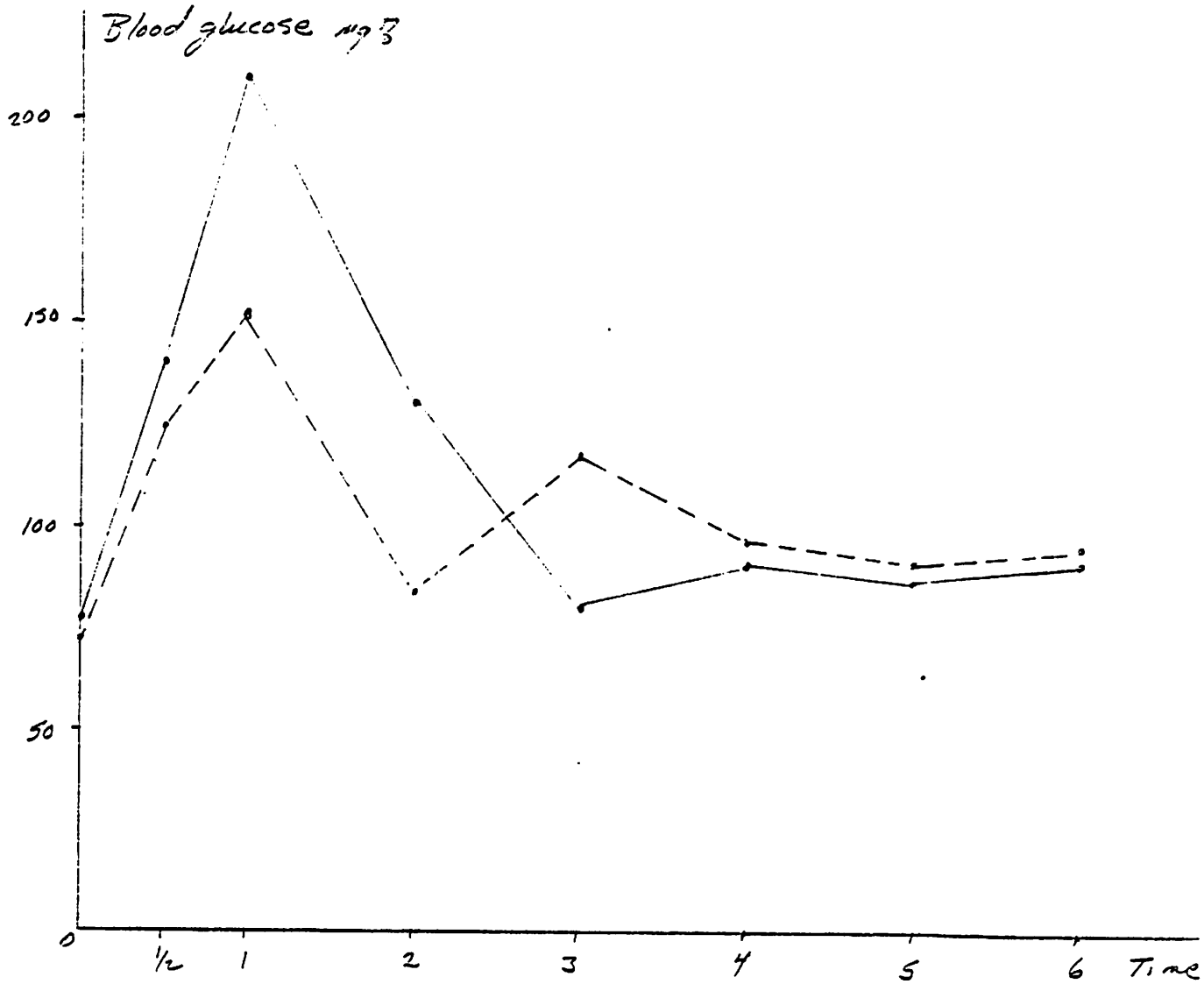

Honey ---- 8/6/78

Glucose —— 8/13/78

(2)

Markham - Honey & Glucose
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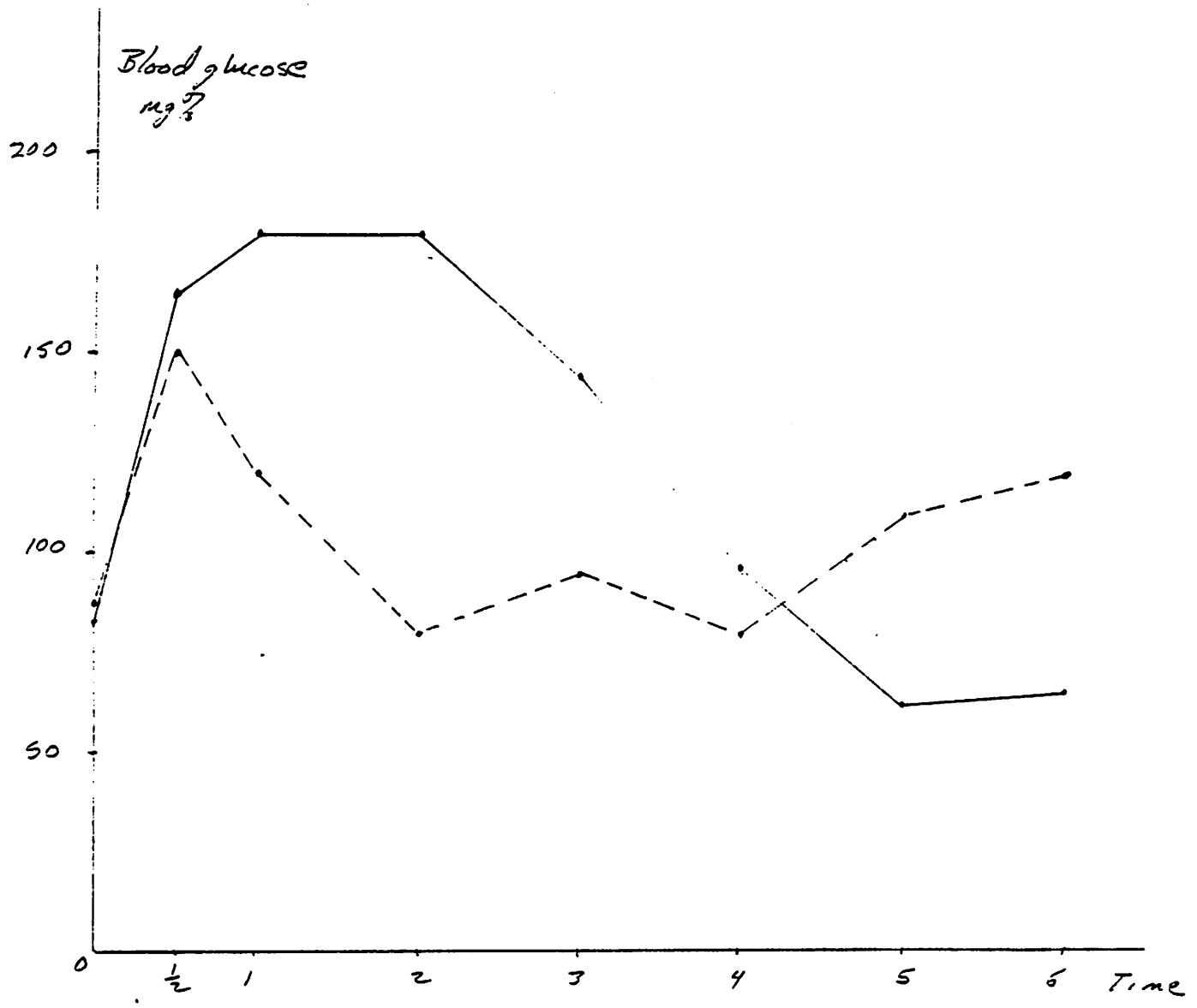

Honey ---- 8/10/78

Glucose —— 8/17/78

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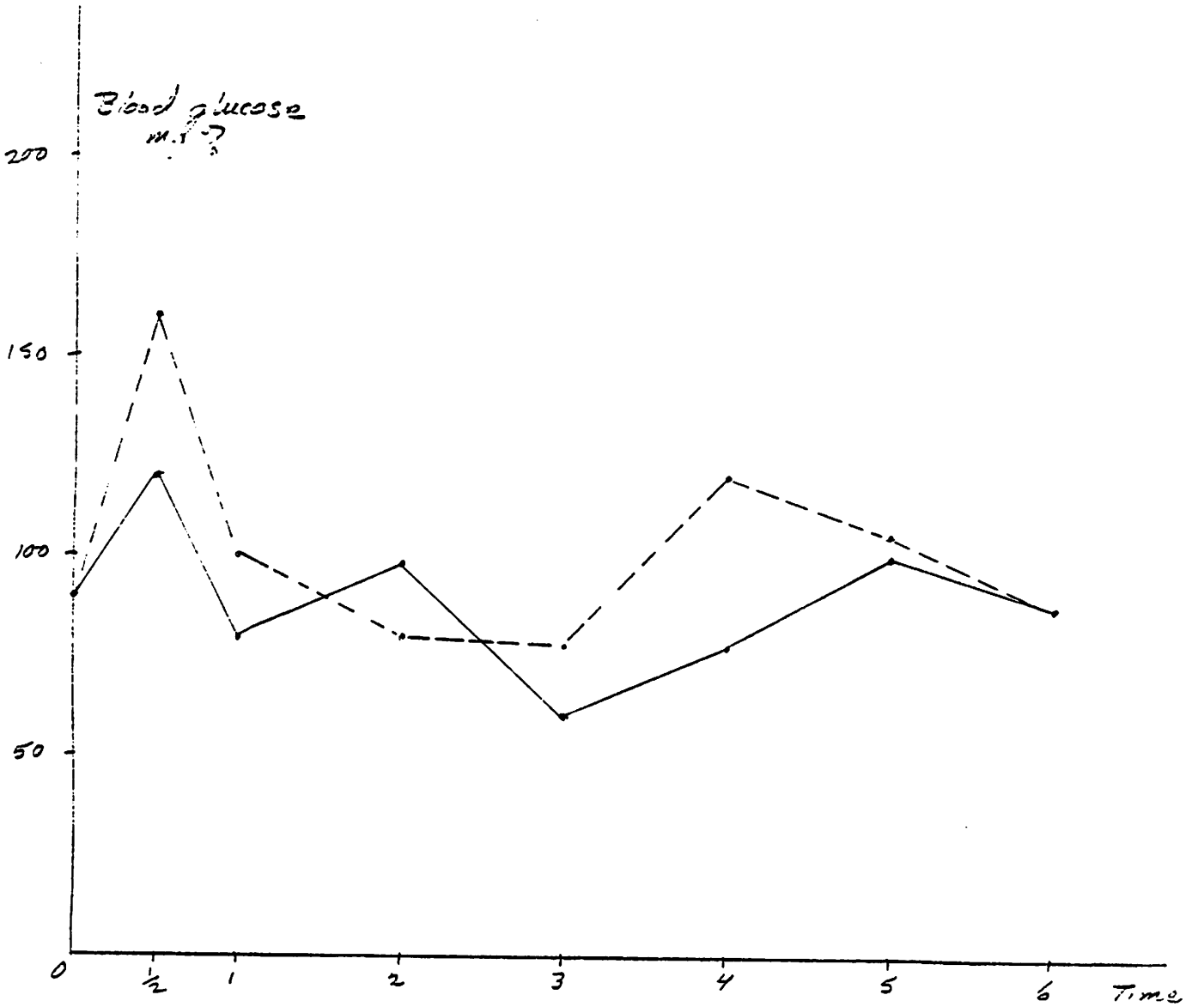
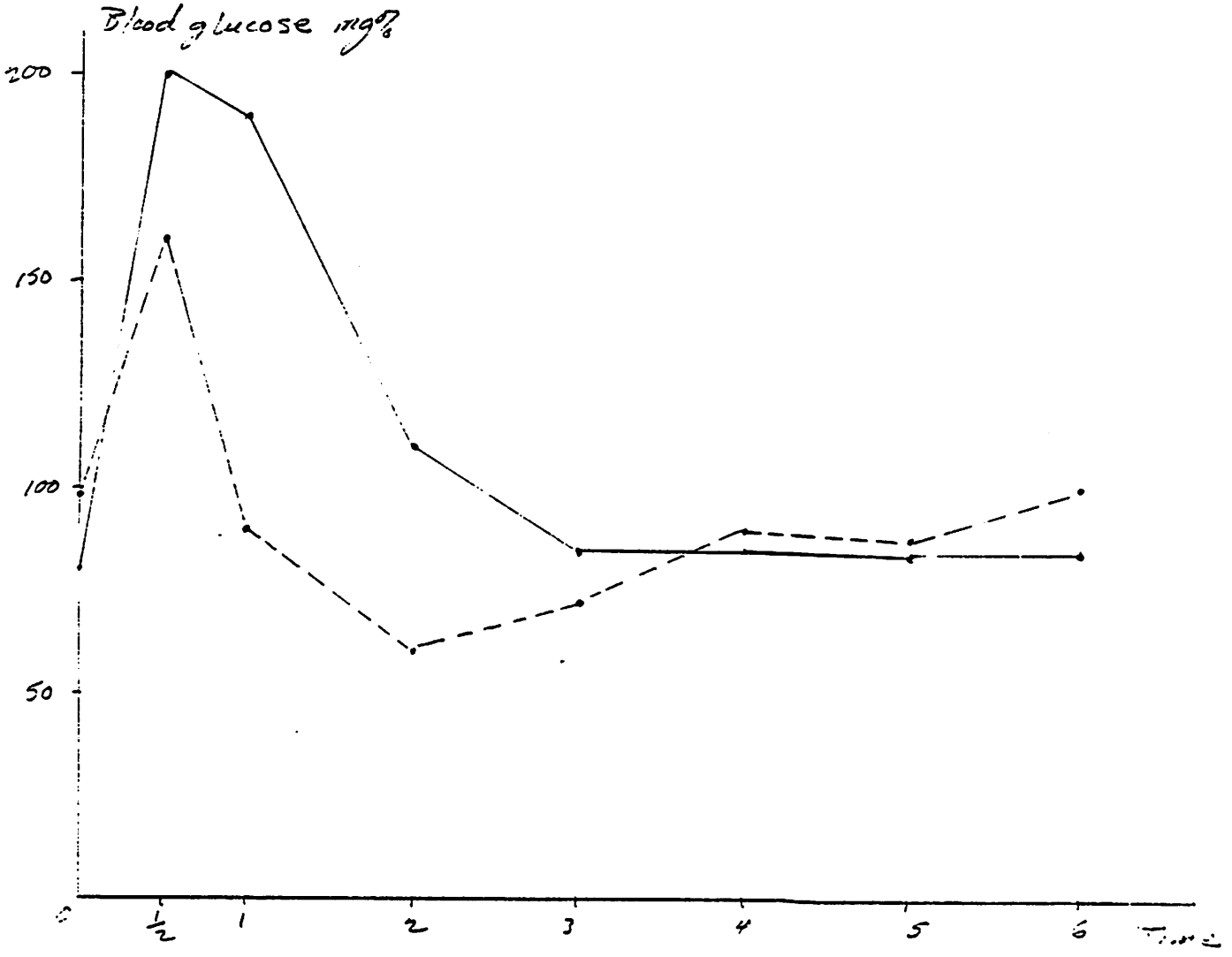


Glucose ——— 8/10/78

Honey - - - - - 8/17/78

(4)



Honey ----- 8/11/78

Glucose ——— 8/15/78

(5)

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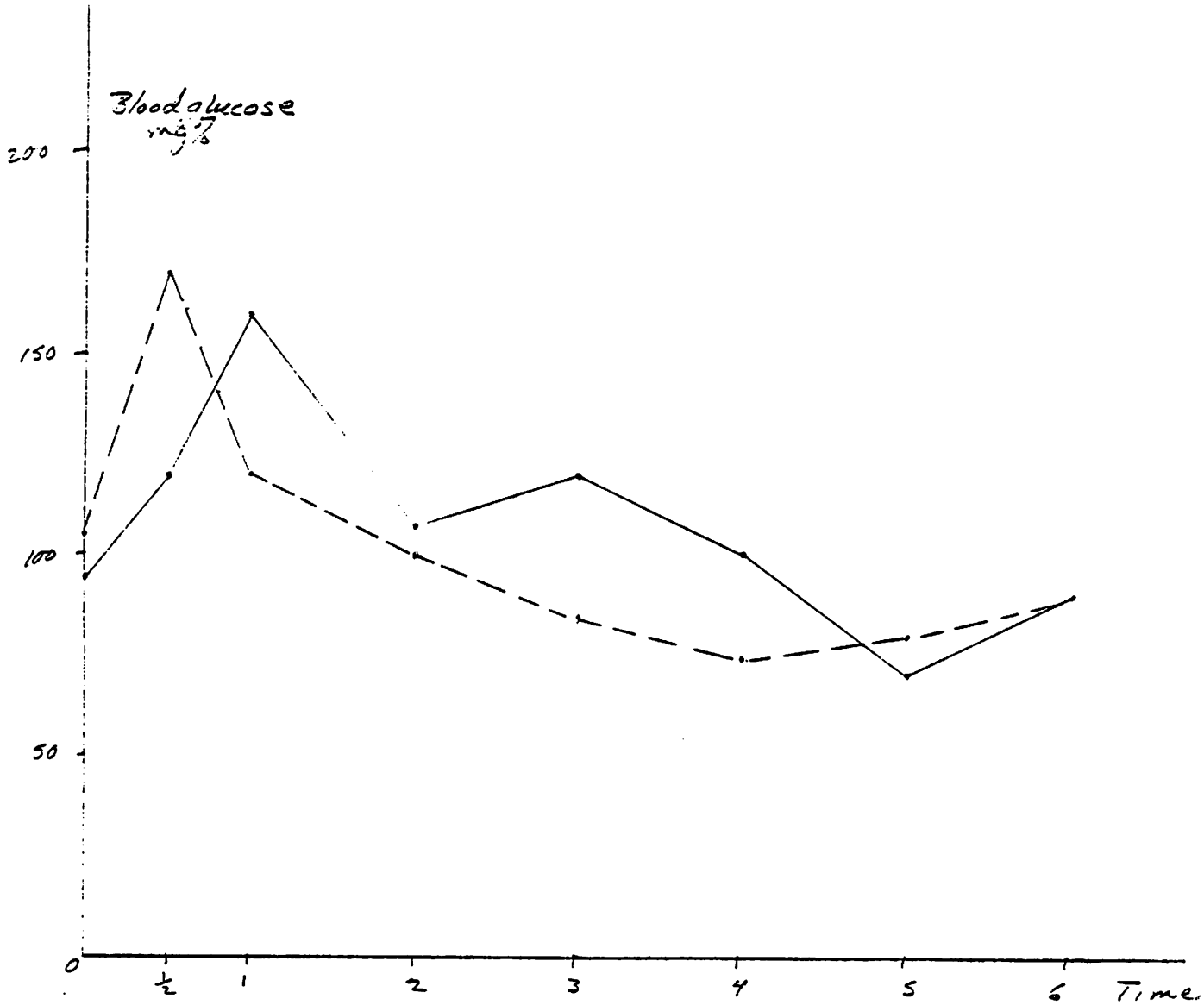

Glucose ——— 8/11/78

Honey — — — — 8/18/78

(6)

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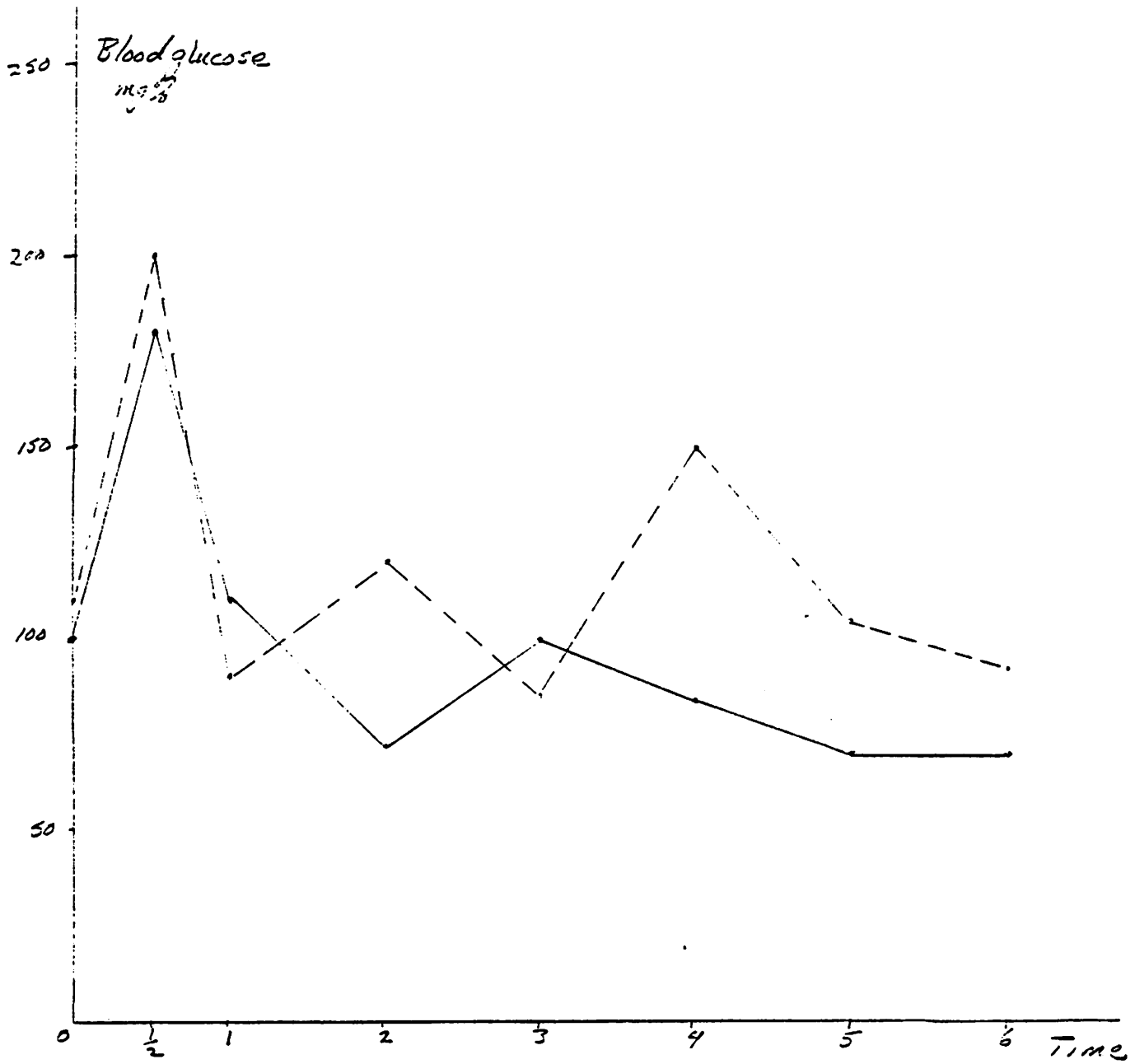

Glucose ——— 8/14/78

Honey - - - - - 8/21/78

(7)

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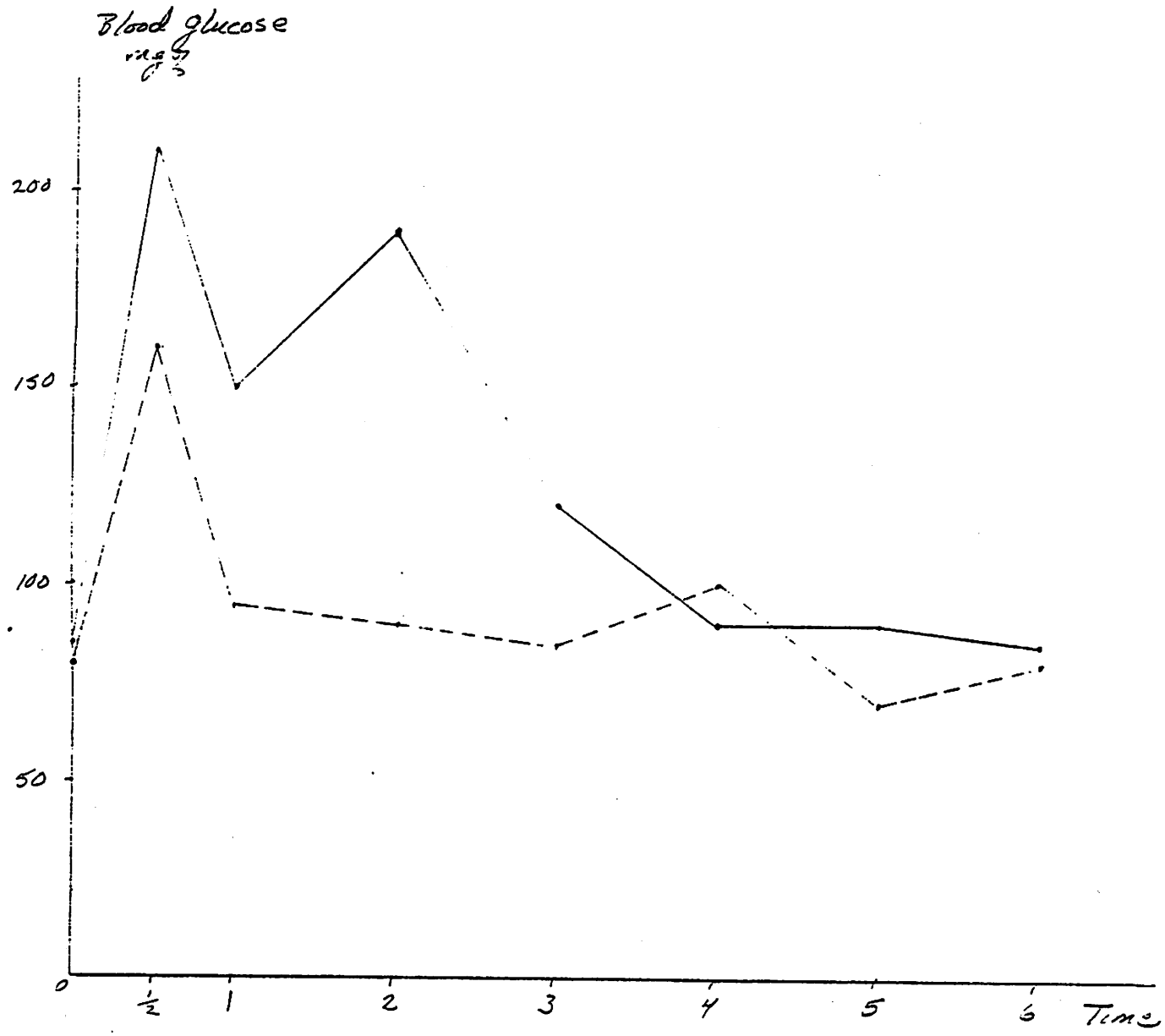

Honey ------ 8/14/78

Glucose ——— 8/21/78

(5)

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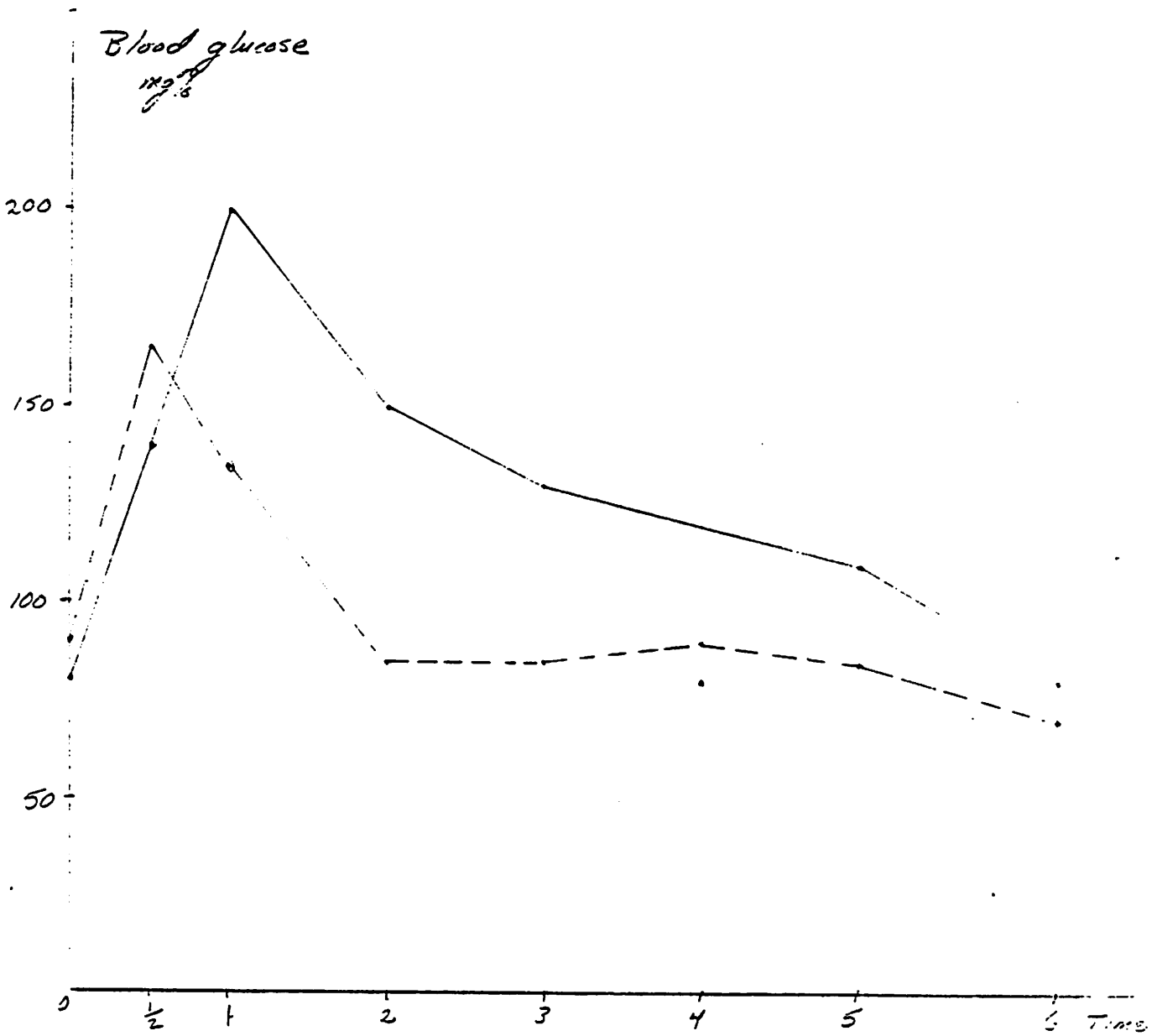

Honey ----- 8/15/78

Glucose ——— 8/21/78

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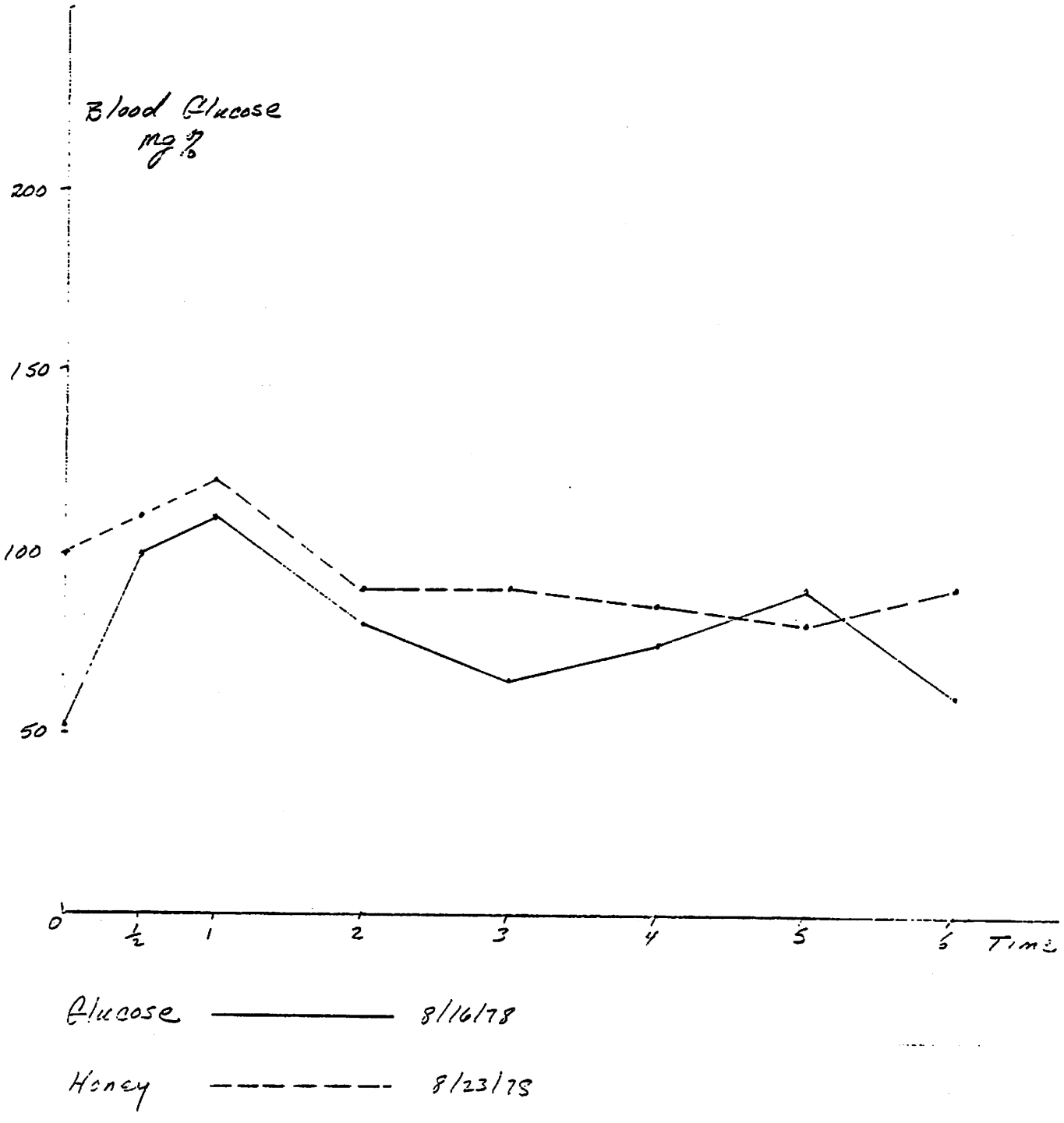

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SACRO-OCCIPITAL RESPIRATORY WOBBLE

Kerry M. McCord, D.C.

ABSTRACT: An observation of tongue protrusion and lateralization as an indicator of cranial/sacral respiratory fault, with a review of the use of the tongue as an indicator for occipital sideslip and the physiological rationale for the same.

> An interesting observation made by young Dr. Harrow, in Indiana, was that when a patient sticks his tongue out in a forward position there will be no muscle weakness, either unilaterally or bilaterally, of the pectoralis major clavicular, for example; but if there is an occipital sideslip, when the patient extends his tongue outward and laterally to that side, to the occipital sideslip side, there will be a marked muscle weakness on extension of the tongue in a lateral direction. This direction coincides with the side to which the occiput has sideslipped, and adjustment of the occiput to correct either sideslip or the jamming immediately neutralizes this tongue protrusion pattern...[1]
>
> G.J. Goodheart

INTRODUCTION

The concept of tongue protrusion and lateralization as an indicator for occipital sideslip has been well documented since its formal introduction to the profession in 1976 by Dr. George Goodheart. The use of the tongue as an indicator

of lesion appears to have its rationale in the action of the muscles related to hyoid and tongue movement. The digastricus, stylohyoidius, and styloglossus seem to be of greatest interest in that their origins and insertions are hyoid and/or temporal bone related.[2] As we study the motion of the hyoid bone in relationship to tongue movement we can, by placing thumb and index finger of one hand on opposite sides of the hyoid at the cornu, observe that upon protrusion the hyoid bone is elevated, and upon lateralization further elevation takes place on the side to which the tongue is moved indicating a change in length of the muscles mentioned. One can therefore conclude that tongue protrusion and lateralization, activating the digastricus, stylohyoidius and styloglossus, causes micro-movement of the temporal bone thereby serving as an indicator of abnormal position or function of it and contiguous structures (i.e. occiput). Thus, tongue protrusion and lateralization is not some inexplicable phenomenon but one based upon physiological fact and physiological reason.

However, the purpose of this discussion is not only to review and clarify what has already been discovered, but present additional information that might be of assistance in evaluation of cranial/sacral respiratory dysfunction. Therefore, the remainder of this presentation will consider protrusion and lateralization of the tongue and what will be termed Sacro-Occipital Respiratory Wobble. (Mention will also be made of the identification of any cranial respiratory assistance fault.)

CLINICAL OBSERVATIONS

Upon examination and reexamination of a twenty-five year old female, it was observed that a previously weak psoas muscle responded with remarkable strength to tongue protrusion and lateralization, both left and right. This was tested using other muscle weaknesses that were found in the clear on that particular examination, and it was observed that all muscle weaknesses were eliminated by the protrusion and lateralization of the tongue to either side. Further investigation revealed the same phenomenon occurring in other patients resulting in the hypothesis that because of the muscular activity involved in hyoid and tongue movement previously mentioned a lesion associated with proper temporal bone function might be indicated. It was further observed, in a sample of sixty-four patients, that bilateral hamstring weakness, either in the clear or upon respiratory challenge, was present in every case in which tongue lateralization left and right produced a strengthening response in weak indicator muscles. Not only did the hamstrings exhibit a need for respiratory assistance but one responded to inspiration, the other to expiration, a pattern that might be described as a wobble; a Sacro-Occipital Respiratory Wobble. It was further observed that of these sixty-four patients, two-thirds complained of low back and/or neck pain. The others seemed to have exhibited various syndromes related to cerebro-spinal fluid function. (See Figure A) This is by no means a remarkable discovery, but an

observation that may enhance our ability to identify, in yet another way, a cranial/sacral respiratory fault. Most recent evaluation and research has revealed that any weak muscle demonstrating a need for cranial respiratory assistance responds positively (i.e. with strength) upon protrusion and lateralization of the tongue to the side in need of therapy.

Correction of inspiration/expiration assistance lesions is described in Walther's Applied Kinesiology: The Advanced Approach in Chiropractic[3] and is a fundamental technique in Applied Kinesiology. In correcting the Sacro-Occipital Respiratory Wobble, using these same basic procedures, it is advisable to correct the bilateral lesion with simultaneous respiratory assistance applied, as indicated by respiratory challenge, in the prone position. The sacrum should be corrected first followed by similar corrective assistance at the mastoid processes and activation of the governing and conception vessels to lock in the correction. Reexamination will reveal elimination of the vast majority, if not all muscle weaknesses. If other controlling factors (i.e. neuro-lymphatic, neuro-vascular, etc.) are involved, appropriate therapy localization and/or challenge will reveal the need for further therapeutic attention.

SUMMARY

The purpose of this presentation has been to assist in the understanding of tongue protrusion and lateralization as

indicator of lesion and introduce a recently discovered challenge procedure indicative of cranial respiratory assistance faults and what is termed, in this brief presentation, Sacro-Occipital Respiratory Wobble. The need for continued substantiative clinical observation is essential and it is hoped that such observations, in varied clinic facilities, will take place.

SYMPTOM SURVEY OF PATIENTS EXHIBITING
SACRO-OCCIPITAL RESPIRATORY WOBBLE

Sex	Complaints
Female	headaches, neck, low back, stomach
Female	low back, headaches
Female	low, mid back, neck, hypoglycemia
Female	headaches, low back, neck, seizures
Male	headaches, low back
Female	back, neck pain, fatigue
Female	low back and neck
Female	low back and headaches
Female	pain everywhere, esp. low back, neck
Female	low back and neck
Female	low back and neck
Female	low back and neck
Female	low back and neck
Female	low back and neck
Female	back pain, neck, arm
Female	low, mid back, neck, seizures
Female	low back, headaches, neck, buzzing
Female	headaches, low back
Male	low back, neck, shoulder
Female	low back, headaches
Female	headaches, low back, neck
Female	neck, low back
Female	low back, headaches
Female	low back, legs
Female	low back
Female	low back, tension, dizziness
Female	low back
Female	low and mid back
Male	low back

Figure A

Symptom survey, continued

Sex	Complaints
Male	low back
Male	low back, shoulder
Female	obesity, low back, gas
Male	low back
Female	low, mid back, arm
Male	low back weakness
Female	headaches, shoulders, wrist, elbow, leg
Female	sinus, allergies, neck, headaches
Male	mid back, neck
Female	headaches
Female	severe migraines, menstrual pain
Female	shoulder blade, neck, arm
Female	headaches, neck, shoulder
Female	headaches, neck, dizziness
Female	headaches
Female	neck, shoulder, arm
Female	headaches, fatigue
Male	headaches, mid back
Female	neck, ear, arthritis, colds, knee
Male	headaches, stiff neck, stomach pain
Male	headaches, allergies
Male	nervous, tense
Female	sinus, allergies
Male	depression, chest, abdomen
Male	stiffness, pain in shoulder
Male	pain in eye, heart
Female	uterine prolapse
Female	sore and bruised all over
Male	cracked skin on fingertips

Symptom survey, continued

Sex	Complaints
Female	aching, smelling hands and feet
Female	menstrual irregularity
Male	nervous tremors
Male	pulled muscle mid back
Female	stomach problems, hypertension
Male	sinus, pain and burning mid back

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by Peter D. Milbrandt

"ORTHOTHERAPY" AND IT'S RELATIONSHIP TO PATIENT MANAGEMENT

Abstract: Orthotherapy is a term coined by Arthur A. Michele, M.D., to describe a series of tests and follow up exercises designed to bring about proper functioning of the musculo-skeletal system.[1]

INTRODUCTION

The book Orthotherapy, authored by Dr. Arthur Michele, was brought to my attention by a patient who had previously employed some if it's exercises in hopes of solving his own back problems.

Although this form of therapy-exercise did not cure the patient's problems, it has some points that I feel can be of benefit in patient management as well as follow up care.

Dr. Michele presents a self testing quiz and scoring guide which is relatively inclusive and may be used in the office to emphasize to the typical patient the chronicity of his condition to insure proper follow through.[2]

The other major area of interest in the book is a series of 21 exercises that in the author's words are designed for restoring muscle balance.

We have found a number of these useful for follow up home care by chronic patients, as well as encouraging our patients who participate in sports activities to use them in a warm-up program.

I will not try and present all the exercises that are recommended, but only a few that may prove most useful for the average patient involving some of the major muscle areas.

SELECTED MUSCLE STRETCHES

The "low back stretch" exercise is excellent for both the chronic patient and the athlete. The patient is instructed to sit on the floor and move his straightened left leg as far as possible toward his left side with the toes pointed straight up at the ceiling. The right knee is bent and brought toward the right side while tucking the right heel in close to the crotch, flattening the right leg on the floor. The left hand is held in the small of the back. Then, while sitting as erect as possible, the torso is twisted toward the left, until the patient is facing his outstretched left leg. Thus the whole upper body, head and right arm are stretching toward the left foot. Now, the patient is ready to reach out his right hand and try to touch his left toes, bending the torso from the hips. We recomend a moderate amount of stretching and repititions, 10-15, to loosen up a tight lower spine. The position is then shifted and the left hand is brought toward the right foot.[3]

The "fencer's stretch" is designed to stretch the iliopsoas muscle and has proven to be beneficial for many patients. As we all know too well, iliopsoas problems are involved with a large percentage of our patients' musculo-skeletal imbalances.

In this exercise the patient is standing and is instructed to

place his right foot forward, bending from the knee and stretching the leg as far in front of him as he can. The right foot is turned in slightly. The left leg is stretched out straight behind him so that the foot is pointing straight ahead and braced against the floor with the heel off the floor. The patient must be sure the left foot is pointed straight ahead and not turned in. The left hand is on the left hip and the right hand is on the right thigh to aid in balancing. The torso is held erect and bent backward slightly from the waist. Then have the patient move his torso backward with a moderate bouncing action while simultaneously he increases the bending of his right knee and the stretching of his left leg, until he feels a slight pull in the groin area.

The positions are then reversed to stretch the other side. Repitions of 5-15 are usually recommended, depending on the patient.[4]

The "hamstring stretch" is designed to increase flexibility of the hamstrings, and is another area of main concern with chronic patients, and is presented in the book. However, the method of stretching outlined by Stoner is preferred.

The patient sits on the floor with the left leg out in front of him, and the right leg bent at the knee and foot on the floor. The right knee is rolled outward, as the patient proceeds hand over hand down the left leg, until a mild pull is felt in the hamstring area. This position is held for about 10-15 seconds, and the positions are then reversed.[5]

CONCLUSION

There is much more information in this book that is consistent with the thinking and practice of most physicians used Applied Kinesiology. I have only attempted to share a small part with the college in this paper.

I highly recomend this book be reviewed by all members of the college.

FOOTNOTES

1. Michele, Arthur, A. M.D., Orthotherapy (Dell Publishing Co., Inc. 1971) p. 19

2. Ibid, p. 29-34

3. Ibid, p. 75-76

4. Ibid, p. 86-87

5. Stoner, Fred, D.C. The Electro-Approach to Chiropractic (F.L.S. Publishing Co. 1975) p. 348

"THE VOMER"

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Dumont, New Jersey
07628

In June of 1977, at the Summer I.C.A.K. meeting, Dr. Richard Schroeder presented a paper on "The Vomer". For the past ten months I have employed this technique in my practice with the following results.

HYPOTHESIS:

There is a direct relationship between Quadratus Lumborum integrety and the respiratory patterns of the Vomer as effected by the prominent Zygomatic Arch.

CASE 1:

PATIENT: Woman age 52 years, weight 147 Pounds.

SYMPTOMS: Severe Low back pains with radiation down the left leg.

ONSET: Pain occured a few hours after she moved some heavy furniture.

DURATION: Two weeks.

EXAMINATION: Examination revealed a category 1 on the right with a right sacral wobble. Upper and Lower Cervical fixation.

PROCEDURE: Normal corrective procedures were employed with favorable results in pain elimination, however, the patient complained that the pain would return after a short time. I then examined for a Quadratus involvement and found

it to be present. Correcting this entity using Dr. Schroeders' procedure, along with the correction of the original findings has resulted in a stable condition.

CASE 2:

PATIENT: Male, age 22 years, weight 158 Pounds.

SYMPTOMS: Severe low back pain with respiratory involvement.

ONSET: Symptom pattern occurred during heavy weight training.

DURATION: One day.

EXAMINATION: Examination revealed Dorso-Lumbar Fixation, Hypertonic Psoas on left, Diaphragm complex; L4-5 disc compression on left.

PROCEDURE: Normal correction procedures were employed with favorable respiratory changes, but minimal pain reduction in the low back. The patient was checked for a Q.L. involvement and found positive. The disc correction was then repeated along with the Q.L. procedure with an immediate pain reduction, and on subsequent visist the pain was totally eliminated.

CASE 3:

PATIENT: Woman, age 23 years, weight 123 pounds.

SYMPTOMS: Severe cramping during menstruation with very erratic periods.

ONSET: Since the onset of Menstruation.

DURATION: 11 years.

EXAMINATION: Examination revealed profound weakness of

Gluteous Medius, Piriformis and Gracillis on the left, with a Category 1.

PROCEDURE: Normal corrective procedures were employed with a good response in muscle strength, but with little symptom change. The patient was then checked for a Q. L. involvement and found it to be positive. Dr. Schroeders' method was then employed with a dramatic reduction in cramping on the next period. At this writing, the patient has minimal cramping during menstruation but the regularity has not been affected at all. I am presently investigating the problem using a SMA 26 and T4.

CONCLUSION: From the few cases I have presented here, it is obvious that the "Vomer" technique discovered by Dr. Richard H. Schroeder has significant validity and is a useful addition to our Therapeudic arsenal.

In my opinion, Dr. Schroeder is to be commended on his fine work, and credited with a major Therapeudic discovery.

REFERENCE: Collected papers of the I.C.A.K., June 1977, Dr. R.H. Schroeder. P. 400-405

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DURATION: One day.

EXAMINATION: Examination revealed Dorso-Lumbar Fixation, Hypertonic Psoas on left, Diaphragm complex; L4-5 disc compression on left.

PROCEDURE: Normal correction procedures were employed with favorable respiratory changes, but minimal pain reduction in the low back. The patient was checked for a Q.L. involvement and found positive. The disc correction was then repeated along with the Q.L. procedure with an immediate pain reduction, and on subsequent visist the pain was totally eliminated.

CASE 3:

PATIENT: Woman, age 23 years, weight 123 pounds.

SYMPTOMS: Severe cramping during menstruation with very erratic periods.

ONSET: Since the onset of Menstruation.

DURATION: 11 years.

EXAMINATION: Examination revealed profound weakness of

Gluteous Medius, Piriformis and Gracillis on the left, with a Category 1.

PROCEDURE: Normal corrective procedures were employed with a good response in muscle strength, but with little symptom change. The patient was then checked for a Q. L. involvement and found it to be positive. Dr. Schroeders' method was then employed with a dramatic reduction in cramping on the next period. At this writing, the patient has minimal cramping during menstruation but the regularity has not been affected at all. I am presently investigating the problem using a SMA 26 and T4.

CONCLUSION: From the few cases I have presented here, it is obvious that the "Vomer" technique discovered by Dr. Richard H. Schroeder has significant validity and is a useful addition to our Therapeudic arsenal.
In my opinion, Dr. Schroeder is to be commended on his fine work, and credited with a major Therapeudic discovery.

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Jerold I. Morantz, D.C.

VERIFICATION OF HAIR ANALYSIS

Present controversy over different diagnostic procedures forces the physician to attempt to verify results of certain laboratory tests. In conversation with Dr. Goodheart about[1] hair analysis, he had expressed not being satisfied with the interprelations, done by the laboratory, of the hair. To test the validity of results given by a particular laboratory, a sample of hair from a patient was divided and put into two separate envelopes with fictious names, etc. The outcomes of the two analysis were far too different to use as a criterion for research.

In turn, I wanted to check the credibility of a particular laboratory[3] and use the same method of a double sample on the same patient, as outlined above. The results of the two analysis were extremely close, raising the credibility of the laboratory and hair analysis, with equally pleasing results of other "double samples" which were submitted.

Not being entirely familiar with hair analysis, I contacted Dr. Brimhall to find out the meaning of certain highly elevated minerals such as Calcium and Magnesium. Dr. Brimhall had found high levels of Calcium and Magnesium usually occur in females and also, that if present eating habits remain the same with no nutritional support, osteoporrosis would occur if it had not occurred already.

The next step after finding what minerals were not within the norm and what the probable outcome of such an imbalance could be, is to find a way to correct the imbalance.

On several occasions, Dr. Goodheart had said, when the Protein is high in the bloodstream, give more Protein. The Calcium being high in the hair, I gave the patient Calcium Lactate. When post hair analysis were done after the recommended Calcium Lactate had been taken, we found, in many cases, the Calcium was even higher. I consulted with Dr. Brimhall and he suggested using Calcium Ortate, which is more readily available for absorbtion to the body. The Ortate form of Calcium definitely lowered the Calcium levels in the hair with patient noticing significant change in symptoms.

One patient is a young girl in her mid-twenties with severe menstral cramps. As a rule from past experience, we never had much difficulty with this type of patient. By the time the structure was cleared out and any chemical support if needed, the response was usually quick. After one year this patient felt overall good but no change in severe cramping. Upon starting the Calcium Ortate, she had her first pain free period.

The second patient is a woman in her mid-fifties with much hair loss and loosening of the teeth. The same hair analysis findings were present in regards to Calcium. The only difference is that this time we started out with the Ortate and the patient stating that less hair loss and tooth loosening were noticed.

To date, the post hair analysis have not been run on either of the problem cases. The symptomology is changing but unfortunately no muscle pattern has been elicited to validate a specific use for Ortates.

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A New Form of Therapy Localization

By Diane Saks, D.C.

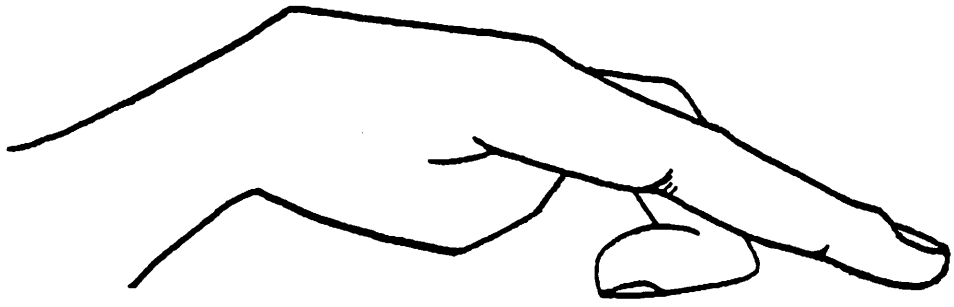
Abstract: In difficult cases in which normal therapy localization has proven negative in uncovering underlying health problems, a new form of therapy localization has been found useful.

Traditionally, therapy localization (T.L.) is performed by having the patient place the volar surface of the hand over the area of the body being checked and a strong indicator muscle is then tested. If no response is found, the dorsal surface of the hand is placed over the same area and the indicator muscle is then re-tested.[1]

Over the past year or two, other additions have been added to the therapy localization technique, including stretching the surface of the body in a cephalic to caudal direction to simulate the pull of gravity. Temporal tapping has also been employed while simultaneously performing therapy localization. The Melzack and Wall Gate theory of pain lead to the use of "pinching" or spraying the patient with a cold spray such as Flouri-Methane[2] to enhance the ability to find "buried" problems. Therapy localization by using the first three fingers of the hand while approximating the thumb and last finger has also proven a boon in discovering underlying problems.

Another type of therapy localization has emerged that can be utilized when all of these techniques have failed. The patient is asked to place one finger of the hand volar side down and one finger dorsal side down over the part of the body being checked, while simultaneously

testing a strong indicator muscle. This new addition to therapy localization is illustrated at the bottom of this page and will hopefully prove useful to other Applied Kinesiologists in their quest to find and fix difficult health problems.



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Pantothenic Acid

By Gary C. Saks, D.C.

Abstract: This paper outlines a technique of muscle testing which can be used to detect the need for pantothenic acid.

Pantothenic acid, a B vitamin, is a water soluable vitamin which plays a very basic role in metabolism. It is a part of the coenzyme A which acts in the release of energy from fats, carbohydrates and proteins. It also acts in the synthesis of amino acids, fatty acids, sterols, and steroid hormones.[1]

Several months ago while treating a patient a test for pantothenic acid was stumbled upon. The patient had therapy localized to the neurolymphatic reflex for the latissimus which was negative. Then the patient therapy localized to the neurolymphatic reflex for the sartorius, which also was negative. An involvement of these areas was suspect. While trying to double check our findings the patient made an error and placed his hands on both points simultaneously and the result was positive. Through a process of trial and error it was found that this positive response could be negated by pantothenic acid.

I have been testing patients routinely for this finding and have found approximately 35 patients with this finding --- all of them were negated by putting 250 mg. of pantothenic acid on the tongue. Also, it has been found that the same positive response can be elicited if the patient therapy localizes over the pancreas and one adrenal gland simultaneously.

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THE EFFECT OF PHOTOCHROMIC AND NEUTRAL GRAY LENSES ON MUSCLE STRENGTH

by Charles R. Schultheiss A.A., D.C., M.I.C.A.K.
and Brian T. White

Abstract: Using standard muscle testing procedures, a weakening effect of photochromic lenses was demonstrated. Neutral gray lenses did not produce this effect.

John Ott, Director of the Environmental Health and Light Research Institute, Sarasota, Florida, has reported (1973) various damaging effects observed in test animals and humans when part of the visible light spectrum was filtered from their environment.[1] He cited correlational data suggesting that sunglasses which filter out part of the spectrum instead of equally reducing the entire spectrum were injurious to health, while lenses which equally reduce all wave lengths in the spectrum were not.

Clinically, many physicians and optometrists have noted that there seems to be a correlation between the wearing of photochromic lenses and a variety of symptoms, i.e. stress syndromes, headaches, idiopathic fatigue, backache, nausea, exacerbations of arthritic pain, in some patients. The symptoms were found to have begun after the patients started wearing photogray lenses and disappeared when the patient stopped wearing them.[2]

Goodheart's work in applied Kinesiology has established the fact that muscle testing, under certain circumstances, can be used

to determine when an environmental stimulus can be harmful to the body.[3 & 4] This idea has since been expanded by other researchers in this field. Goodheart's original work dealt with the sense of touch and taste. Schultheiss[5] expanded the technique to include olfaction and Diamond[6] expanded it to include hearing. These researchers and others have noted that when stimulus is harmful to the body it somehow will produce an immediate diminution in muscle strength, as determined by the standard muscle testing techniques of Kendall, Kendall, and Wadsworth.[7]

Purpose: The purposes of this investigation were: 1) to determine if the muscle testing procedures of Applied Kinesiology would demonstrate the immediate weakening effect on a subject wearing photochromic lenses, 2) how great this effect was and 3) if neutral gray lenses had any effect on muscle strength tested in this manner.

Method: Subjects were selected at random from the polulation of students at Salisbury State College and from the patient population of the Sussex County Chiropractic Center. Subjects with known organic or functional disturbances of the shoulder girdle were excluded.

Materials and Apparatus: Neutral gray number three sunglasses and photochromic glasses were supplied by Dr. John Niccol, a Wilmington optometrist. Subjects who normally wore photochromic lenses were tested wearing their own glasses. Photochromic lenses were selected because they do not evenly reduce the full spectrum of visible light and because

of their recent popularity.

The testing apparatus was modeled after a similar piece of equipment described by Triano and Davis.[8] It consisted of an upright piece of channel steel attached to the right side of a straight backed chair by means of two large "C" clamps. A piece of box steel was attached to the upper end of the channel steel by means of a bolt in such a manner as to serve as a hinge. To this piece was bolted another piece of box steel at its distal end to form a right angle parallel to the side of the chair. A hex headed bolt was attached to the hinged arm at its distal end in such a manner as to allow a torque wrench to be attached to it.

The torque wrench used was of the dial type manufactured by the Snap-On Tool Company. By using this type of torque wrench, rather than the "click" type, we hoped to be able to obtain quantitative data rather than the subjective data usually associated with muscle testing. Subjective muscle testing while clinically valid, does not lend itself to the type of statistical analysis we hoped to be able to perform.

The study was conducted at the Campus of the Salisbury State College in Salisbury, Maryland. The procedures as outlined were performed by both investigators.

Procedure: The middle portion of the right deltoid muscle was tested in the manner described by Kendall, Kendall, and Wadsworth.[9] It was selected simply for convenience in testing.

The subjects were seated in the chair with the apparatus attached to it. The subjects were instructed to sit erect and face forward with both feet flat on the floor and the left arm at their side.

The subject was then instructed to hold the right arm in the proper test position. The apparatus was then placed so that its forward arm came into contact with the lower portion of the upper arm just above the lateral epicondyle. A foam pad was placed between the apparatus arm and the subject at the point of contact to minimize the possibility of producing pain.

The subjects were instructed to resist the downward pressure applied to the apparatus through the torque wrench, and hold the arm in 90° of abduction from the torso.

Pressure was applied to the torque wrench by the investigator in a line tangent to the arc of the hinged arm of the apparatus. The arm was forced downward through 20° of motion and the amount of torque registered on the dial of the wrench was recorded.

The procedure was performed with the subjects not wearing glasses, wearing glasses, and not wearing glasses with an equal time lapse between each muscle test. (ABA BAB sequences) The order was reversed with some subjects. The sequence was performed when testing both photochromic and neutral gray glasses.

A statistical analysis of the data was performed using the T Test.

Results: Both investigators obtained similar data during the testing procedure. Figure 1, represents the data obtained from the experiment.

Subjects tested showed a marked decrease in muscle strength when tested while wearing the photochromic lenses. The loss in strength varied from 24 to 50% with the average being 38.67%. As soon as the subject removed the photochromic lenses the muscle strength returned to its original state, thus reducing the possibility of a fatigue effect. Neutral gray lenses did not produce a state of muscle weakness in these subjects.

The order of testing did not seem to influence the results. ABA and BAB sequences yielded the same net result.

Difference in sex was not considered.

Statistical analysis resulted in the following findings:

$r = .85$

$t = 7.27$ alpha = .0005

$F = 1.76$ alpha = .01

Discussion: By eliminating from the experimental population all those with known or suspected shoulder problems we reduced the possibility of introducing an unwanted secondary variable.

Using the subject's muscle strength, noted in inch-pounds of torque applied to the apparatus helped control for constancy and proactive history.

Randomization was used in an attempt to equate all

secondary variables, including those which may not have been apparent to the investigators while the investigation was in progress.

The investigative situation was held as constant as possible in an effort to reduce any effects of retroactive history. Individuals were nieve subjects and all testing was done at one "sitting", thus reducing the possibility of sensitization.

Interaction effects were minimized by having each individual assume the same posture during the testing. The same instructions were given to all subjects.

To reduce instrumental invalidity, several test runs were made to refine the equipment, develop the procedural parameters, and familarize the experimentors with the equipment and its proper use. Once the design and procedure were thought to be adequate they were held constant.

The above procedures were considered adequate to reduce the possibility of external invalidity.

Conclusions: Photochromic lenses reduced the muscle strength of all subjects tested.

Neutral gray number three sunglasses did not reduce the muscle strength of any of the subjects tested.

From this it would seem that Ott's contention that improper sunglasses could cause injurious effect to humans may be well grounded. This did not seem to be true for neutral gray. It also seems that the testing procedures of Applied Kinesiology are adequate to test the

immediate effects of the lenses tested.

Further investigation of this phenomenon is indicated to determine how broad a range of physiological and possible psychological effects might be influenced by something as seemingly innocuous as a pair of colored lenses.

Pretest	Photo Gray	Post Test
520	280	520
270	170	270
250	190	250
250	190	250
310	210	310
300	160	300
270	140	270
300	150	300
420	250	420
270	170	270

FIG 1 Muscle strength as a function of torque applied to the testing apparatus expressed in inch pounds.

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INITIAL EVIDENCE OF A RELATIONSHIP OF TEMPOROMANDIBULAR JOINT DYSFUNCTION TO BELL'S PALSY

by

Raymond A. Seugling Jr., D.C.

ABSTRACT: Correction of TMJ dysfunction seems to be a key in a more rapid recovery of Bell's Palsey. The study utilized applied kinesiological TMJ procedures (buccinator/masseter spindle cell technique) with satisfactory results in two cases. Both responded rapidly with major changes occurring in one week.

DISCUSSION: Unilateral paralysis of the facial musculature is found incidentally with a large variety of diseases that affect the seventh cranial nerve. Most of the time, however, paralysis occurs as an isolated finding without etiology, at which point it is termed "Bell's Palsy."

"Anatomic study of Bell's Palsy has been limited to its late stages. Both Cawthorne and Kettel have observed gross swelling of the facial nerve in the facial canal; the microscopic examination revealed varying degrees of degeneration of the axis cylinders and medullary sheaths, but inflammatory lesions were absent. It has been conjectured that the edema of the nerve either is secondary to focal ischemia or is primary and damages the nerve by compression in its narrow passage."[1] Traditionally, it was felt that exposure to a cold breeze was

a preceding event to Bell's Palsy, but recent information does not support this theory. Pathogenesis is unknown and no bacterial or viral agents have ever been isolated.

Clinically the paralysis is usually abrupt and reaches its peak in hours. The unilateral facial weakness produces the sensation of weakness, speech is affected (muffled), eating is affected, whistling is impossible, the eye of the affected side cannot be closed and waters excessively. Auditory hyperesthesia (hyperacusia) may be noted in some cases.

Commonly, the course of Bell's Palsy begins to subside within two weeks and may completely clear in one to two months. Despite an estimated 85 to 90 per cent recovery rate, severe cases may take much longer and weaknesses persisting after a year are likely to be permanent.

It was hypothesized that TMJ dysfunction represents a logical source to search out first. This was largely thought of due to the close proximity of the seventh cranial nerve to the TMJ area and the overwhelming importance of the TMJ (homunculus, etc.). Dysfunction of the latter is perhaps a key to elimination of Bell 's Palsy. Possibly there is such an excitation of neural activity and acute inflammatory reaction that a Bell's Palsy "attack" is triggered in certain individuals.

The procedure used was standard examination and treatment of TMJ dysfunction using applied kinesiological method only. The patient was asked to therapy localize the right and left temporomandibular joints (making certain fingers were accurately placed). Using an intact muscle, fascia lata usually, all of the positions of jaw movement were simulated: ruling out condylar damage, ("TL in the clear" so as to speak); open and close the jaw rapidly, slowly, half open, full open, closed (clenched teeth), lateralized, protrusion, retrusion, swallowing and phonation, etc., as necessary.[2] Only TMJ dysfunction was corrected when found in two Bell's Palsy cases. This was done for the purpose of evaluating results based on TMJ correction exclusively. Admittedly, this study is limited, but normally we "fix what we find" rather than only isolate one finding. Both cases, one male and one female, were found to exhibit closed mouth problems which was corrected with the usual masseter/buccinator spindle cell firm thumb pressure technique followed by neurolymphatic, neurovascular, stress receptor procedures as indicated.[3] (Additional detailed information on patients purposely omitted due to no significant health problems in past or present existed.

Results were gratifying. The male sustained 75% improvement in the first week with total remission of symptoms in a total

of ten days. The total length of time of recovery for the female was about the same (2 weeks); however, the initial response was about 50% improvement after one week. Correction was necessary twice in the first week in both cases and once after in the female.

The results are apparently more rapid than is normally reported with standard medical treatment (which is symptomatic). However, there are only a few isolated cases and further research is necessary.

In summary, it appears, on a preliminary basis at least, that TMJ dysfunction is an important factor in Bell's Palsy. This area of investigation was chosen on the basis of both proximity to the seventh cranial nerve as well as the individual importance of the TMJ itself. Success in two isolated cases using standard applied kinesiology procedures seems to support this and hopefully future indications and test cases will continue to validate.

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INCIDENCE OF THE SPHENOBASILAR FAULTS IN FUNCTIONAL HYPOADRENIA

by

RAYMOND A. SEUGLING JR., D.C.

ABSTRACT: It is well known that functional hypoadrenia is one of the most common problems encountered in the applied kinesiologist's practice today. It seems that closely allied with hypoadrenia is a relatively high incidence of the cranial sphenobasilar fault. The following discussion contains a brief study of the incidence of sphenobasilar fault in 50 patients with hypoadrenia. Sphenobasilar faults should be looked for early in the management of these patients. It is especially important when considering the relationship of the pituitary to the adrenals and the proximity of the former to the sphenoid.

DISCUSSION: The importance of the adrenal glands in understanding your patient and their health cannot be overlooked. Functional hypoadrenia (adrenal insufficiency) can be correlated with problems of civilization (stress) to the point that it can be considered a disease of civilization.[1] The adrenal glands combat stresses to the body via their various hormone secretions. Brown-Sequard demonstrated that complete removal of both adrenals was followed promptly by death in experimental animals.[2]

As early as 1925, Hans Selye first described his "just being sick" syndrome.[3] He noted that there were certain symptoms

present in most diseases. Through research with rats he describes a triad being present in this syndrome: (1) Adrenal cortex enlargement, (2) Atrophy of the thymus, spleen, lymph nodes, etc. and (3) Deep bleeding gastric and duodenal ulcers. By applying different forms of frustration to the rats, he was able to create the stress triad. Walther[4] classifies the forms of stress into four categories.

1. Physical - Long hours of work, heavy physical exertion, loss of sleep, postural strain, etc.
2. Chemical - Could be nutritional (e.g. food chemicals), air pollutants, medications, etc.
3. Thermal - Overheating or over-chilling.
4. Emotional - Financial worry, job dislike, marital problems, etc. (endless list in modern society).

Selye went on to develop what he called the General Adaptation Syndrome (GAS) in which he further classified stress into three stages of development:

1. Alarm reaction - The first response in which the adrenal cortex secretes its hormones to the point of depletion.
2. Resistance stage - Here adrenal hypertrophy begins as well as the other factors of the stress triad and the cortex builds an abundant reserve to continue to adapt. As long as the

patient stays in this stage, he will continue to combat the stress.

3. Exhaustion - The adrenals have returned to a depleted state similar to the alarm reaction, usually an individual with a chronic health problem or either a long term nutritional deficiency and/or long standing emotional problem. (Most likely the state we see the patient in our offices)

The symptoms of functional hypoadrenia comprise a long list, some of which are infection, asthma, upper respiratory infections, gastric and duodenal ulcers, severe depression, suicidal tendencies, skin rashes, hay fever, headaches, colitis, rheumatoid arthritis, insomnia, fatigue, fainting spells, obesity, heart palpitations, edema (extremities), learning difficulties and so on. Unfortunately, the symptomatic treatment of these health problems probably contributes to further hypoadrenia.[5]

A study of adrenal physiology would be too lengthy here, but the reader is encouraged to do so on his own.

As part of our total applied kinesiological examination, we began noticing a cranial fault relatively common in hypadrenics, namely the sphenobasilar. It is hypothesized that additional stress is being placed upon the hypoadrenic in the form of

incomplete pituitary function in the presence of the sphenobasilar fault. This is due not only to the fault and its varied effects, but also to the effects of pituitary endocrine function directly upon the adrenals.

At random we selected fifty cases from our files that had been previously diagnosed as hypoadrenics. The diagnosises were based primarily upon their history, muscle testing, various entities - Ragland's Sign, Rogoff's Sign, pupil dilation, etc. and occassionally in conjunction with laboratory testing. Laboratory is "played down" because of the so-called subclinical nature of hypoadrenia and most laboratory tests being concerned with frank adrenal failure, e.g., Addison's disease, Cushing's syndrome, etc.

The following represents a brief statistical breakdown of the group.

INCIDENCE OF THE SPENOBASILAR FAULTS IN FUNCTIONAL HYPOADRENIA
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AGE GROUP	INCIDENCE TOTAL MALE FEMALE	S.B. EXT. (INSP. ASSIST.)	S.B. FLEX. (EXP. ASSIST.)	NONE FOUND
18-25	Total	4		3
	M	1		2
	F	3		1
26-35	Total	9	1	4
	M	4	0	1
	F	6	1	2
36-45	Total	7		3
	M	6		1
	F	3		2
46-55	Total	7		1
	M	3		1
	F	4		0
56-65	Total	6		1
	M	3		0
	F	3		1
66-	Total	3		1
	M	2		0
	F	1		1

Of the 50 cases selected, none had a previous history of applied kinesiology care and only several had any experience with chiropractic care at all. All patients were checked and corrected if necessary for switching as well as whatever AK procedures were indicated ("Fix what you find").

As you know, the spenobasilar symphysis, the junction of the occiput and the sphenoid, can be flexed or extended. This can be elicited by either a weak muscle responding with either inspiration or expiration or challenged by placing the thumbs on the roof of the mouth and testing.[6] When found and corrected

or already functioning normally, it has been noted by Goodheart[7] that there is a normal "milking" action by the sphenoid on the pituitary gland. This is apparently one way that the pituitary gland is aided in secreting its hormones. It is felt that this is why the sphenobasilar fault is quite readily found in the hypoadrenia patient.

In summary it has been noted in our experience that the sphenobasilar fault seems to be a common finding in functional hypoadrenics. In an analysis of 50 random cases, the fault was found 37 times. This is important due to the influence of the sphenoid on the pituitary and the latter on the adrenals. This in turn provides an additional factor involved in functional hypoadrenia.

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DENTAL WORK AS A CAUSE OF T.M.J. DYSFUNCTION

By Paul T. Sprieser, D.C.

Abstract: To determine whether dental work that required the mouth to remain open for a prolonged period of time caused changes in the spindle cell mechanism, and thereby created T.M.J. dysfunction.

This study was carried out because of observation obtained during my study of the Therapy Localization Over Load Phenomena.

Many of our patients that had been negative to T.M.J. dysfunction suddenly developed positive findings. Upon questioning these patients we found that many of them had just had dental work done.

Methods: With the help of Dr. Stephen A. Tietje, D.D.S. of Florham Park, New Jersey, we examined all patients before dental treatment. Any patient that showed T. M.J. therapy localization was ruled out of this study. Only those patients that were negative were used in this study.

1. Patients were asked to therapy localize with three fingers over the T.M.J. and this was done bilaterally.

2. The patient was then asked to activate the jaw by opening, closing, right and left lateralization, protrusion, retraction, phonation, swollowing. This was done before and after dental work.

3. The muscle that was used as our indicator was an intact Tensor Fascia Lata.

Findings: Out of 55 cases examined only 25 did not show T.M.J. involvement.

1. Total Cases 25.
   a. Men-9 cases-35% of sample.
   b. Women- 16 cases-65% of sample.

After dental care 20 cases developed T.M.J. dysfunction, which represents 80% of the sample tested.

Time of work varied from fifteen to ninty minutes.

Age of group tested ranged from 10 to 50 years of age, with the major portion of the group was between 20 and 40 years of age.

Conclusions:

1. Dental work of prolonged nature causes patients that tested originally negative to T.M.J. dysfunction to become positive.

2. The prolonged opening of the mouth places stress on the spindle cell mechanism and causes a reactivity pattern in the muscles of mastication.

3. Patients who have had teeth extracted from the lower jaw usually seem to develop a reactivity pattern in the temporalis muscle.

4. Dental work that consisted of cleaning or filling usually developed reactivity pattern on opening (ext. pterygoid) most of the time, with occasional other reactive pattern seen.

Discussion:

The purpose of the spindle cell mechanism and flower spray organ is in the nervous system proprioceptive functioning. Its function is to tell the central nervous system how much the muscle has contracted or is being stretched.

The spindle cell operates entirely below the conscious level. The signals are transmitted to the spinal cord and the cerebellum.

Guyton's Physiology states: "Rapid stretching of the muscle causes marked stimulation of the annulospiral endings of the muscle spindle. However, this excessive stimulation last for only a few seconds before it settles down to a much lower steady state. The steady state impulses transmit information to the central nervous system. Depicting the steady length of the muscle, while the intense instantaneous excitation transmits information depicting the rate of change of this length. To express this another way, the muscle spindle responds instantaneously to phasic changes in muscle length, but it adapts within a few seconds, and its degree of simulation thereafter is

determined by the tonic length of the muscle.

The flower-spray receptor responds to stretch of the muscle spindle in the same way as the annulospiral receptor except for one difference: far greater degrees of stretch must be applied to excite these receptors.

At the same time that the impulses are transmitted by the stretch reflex to excite the stretched muscle, inhibitory impulses are transmitted to the motorneurons of the antagonist muscles, thus inhibiting these muscles and allowing the reflex contraction of the stretched muscle to be more effective.

Even under normal resting conditions the annulospiral receptors of the muscle spindle transmits a tonic discharge of nerve impulses, and the rate of stimulation of the muscle spindle can be decreased as well as increased. When a muscle is shortened, the rate of impulses becomes reduced. Particularly so when the muscle is shortened rapidly. This decrease in impulses immedaitely inhibits muscle tone in the shortened muscle and simultaneously it automatically excites the antagonist muscle. obviously, therefore, this negative stretch reflex opposes the shortening of the muscle length, particularly if the shortening occurs rapidly.

Reciprocal innervation is when a stretch reflex excites one muscle, it simultaneiously inhibits the antagonist muscle. the phenomenon of reciprocal inhabition.

According to these statments from Guyton's Physiology about the spindle cell mechanism we can see that keeping the mouth open wide during prolonged dental work produces a pattern of reactivity and T.M.J. dysfunction.

The mechanism is that the mouth is opened by the external pterygoids and the digastric. Holding these muscles contracted evokes the stretch reflex in the massater and buccinator, which are stimulated for a short time and settle down to a low rate of fire. Because massater and buccinator should contract due to the stretch reflex and the muscle that open the mouth should be inhabited. However, this cannot take place due to the dental work being done an a reactivity pattern is set up.

Due to the functioning of both the stretch reflex and the negative stretch reflex.

1. Stretch reflex-the stretched muscle the massater should cause inhabition to the pterygoid.

2. Negative Stretch reflex-Contraction of the pterygoid muscle when shortened will cause the stimulation and contraction of the massaters.

All of the above cannot take place due to the dental work, and allows the reactivity pattern to occur causing the T.M.J. dysfunction.

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THE THERAPY LOCALIZATION OVER LOAD PHENOMENA

By Paul T. Sprieser, D.C.

Abstract: This is a study of a clinical observation that I termed The Therapy Localization Over Load Phenomena. When therapy localization shows the presence of an Ilio Cecal Valve Syndrome, but will not show whether it is open or closed to challange. When the presence of both Category # 1 and Category #2 are found to be present at the same time.

It has been my observation, since I started practicing A.K. five years ago, that on occasion I would get contradictory information from therapy localization.

On examination of the patient I would get a positive finding for the presence of a I.C.V. syndrome. Yet, when I had the patient challange to find out whether it was opened or closed nothing happened. This was quite disconcerting to me. I would then challange it myself and still it would not show whether it was opened or closed, just that it was present.

I also would occasionally find a patient that showed the presence of CAT. # 1 and CAT. #2 at the same time. This did not seem to make any sense.

Upon further investigation I discovered that all these patients had one thing in common:that was an active T.M.J. involvement. When I corrected this the other factors would then show (I.C.V.) opened or closed and that only one category was actually present.

After I made this observation I started to wonder why this had taken place. Many of these patients had been under care for some time and had been negative for T.M.J. when I first checked them.

I then questioned these patients. Had they received any trauma to the jaw or any recent dental work? The answer came back many times that the person had just had dental work done. Checking these patients further for occlusion problems they were negative. So, my conclusion was, if a patient sat for prolonged periods with his mouth open this would probably cause an imbalance in the muscle spindle. Which,inturn,produces a reactivity pattern causing the T.M.J. dysfunction.

Methods: For the last five months we have kept records on all new patients which are approximately 151.

1. Using standard A.K. examination of the T.M.J. Three fingers placed over the joint. Testing was done with a intact Tendor Fascia Lata muscle.

2. The T.M.J. was tested at rest and in motion (open-closed-protrusion-retraction-right and left lateral-ization-swollowing-phonation-chewing.)

3. Therapy localization was used over the I.C.V. and the P.S.S. of the ilium. Hands were placed both palms up and palms down. All patients were checked for both Cat. #1 and Cat. #2 even when one of the categories was discovered to be present on the first test.

Findings:

1. Total patients seen 151.
   a. Men-62
   b. Women-89
   c. Ages 18 to 70 years.

2. Findings on original examination of 151 patients.
   a. T. M.J. dysfunction-82 cases-54%
   b. Negative T.M.J.-69 cases-46%
   c. Over Load Phenomena-52 cases-35%

3. Total T.M.J. Dysfunction 82 cases.
   a. Men-27 cases-32%
   b. Women-55 cases-68%
   c. 45 cases had recent dental work.
      Men-15 cases-28%, Women-37 cases-72%.

Conclusions:

1. At least half of all the patients tested showed T.M.J. dysfunction. This represented 54% of our sample showed this involvement.

2. T.M.J. dysfunction will many times have priority over all other neurological disturbances. This is the case in the Over-Load-Phenomena. This condition was found to be present in 35% of our patient sample tested.

3. Many of the T.M.J. involvement showed connection with recent dental work in over 50% of the cases.

4. More women showed T.M.J. dysfunction then men. The women represent 68% of our sample.

Discussion: Dr. Goodheart had stated that 50% of all sensory and 50% of all motor cells of the pre and post central gyrus are devoted to the oral cavity. Therefor, the T.M.J. is the most important joint in the body in terms of the number of brain cell devoted to it.

This has been demonstrated in the sensory and motor Homunculus which can be found in the work shop manuals and most neurological text books.

This fact would mean that about 50% of patients we will examine, if they have any neurological involvement; will have it in the T.M.J.

Women make up about 80% of all T.M.J. problems and most are over the age of 40.

The Over Load Phenomena shows the importance of the T.M.J. due to the number of nerves supplying this area. This factor represented 35% of our sample, and showed the priority it held over other kinesiolgical findings. In these case the T.M.J. dysfunction had to be corrected first inorder to get the correct therapy localization information.

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PERSONALITY EVALUATION OF D.C.'s ENROLLED IN A CONTINUING EDUCATION PROGRAM

Louis F. Mortillaro, Ph.D.
Fred L. Stoner, B.A., D.C.

Introduction

For over a year the Stoner Foundation, in cooperation with New College of California, has been offering a fully-accredited Bachelor's Degree Completion Program for D.C.'s.

Obviously, most D.C.'s who enroll in this prestigious program feel a need to increase their academic and technical knowledge, not to mention their social prestige.

Louis Mortillaro, Ph.D., consultant to the Stoner Foundation, and Fred L. Stoner, B.A., D.C., decided to give personality evaluations to a random number of doctors registered in this fully-accredited B.A. program to discover the behavioral characteristics of these highly motivated professionals. D.C.'s enrolled in this program are from almost every state in the United States, Canada and Mexico. Drs. Mortillaro and Stoner thought this personality evaluation would give the doctors a basic insight into how they typically behave (personality patterns), and how they might change their behavior to increase their practice.

The fully-accredited B.A. Completion Degree Program consists of four 4-day seminars held every two months. The instrument selected to evaluate these chiropractors' personality values was the FIRO-B.

The doctors that have been involved in this program report a phenomenal growth in their practice, increased referrals, increased results, and thus, an increased income.

With these considerations in mind, it was considered that the personality evaluations would give some information as to the basic professional behaviors of the modern educational and success-oriented doctors of chiropractic.

Test Description

FIRO-B stands for Fundamental Interpersonal Relations Orientation - Behavior. It is a 54-item questionnaire which measures the three behavioral characteristics of Inclusion, Control and Affection.

Inclusion is defined as a person's need to establish and keep satisfactory interpersonal relationships with other people. Inclusion is, in effect, a measure of the degree to which a person interacts and associates with a number of significant others within his environment.

Control is defined as the extent to which a person exerts power and dominance over others with respect to decision-making and acceptance of responsibility for another person's behavior.

Affection is defined as the ability of an individual to establish and maintain

emotional involvement with other people. That is, to enter into relationships with others that are characterized by love and affection.

For each of the three variables, two scores, one expressed and the other wanted are determined. The expressed score represents behaviors that an individual expresses or manifests toward other persons. This behavior is capable of being observed by others.

The wanted score represents the behavior that the individual wants others to express toward him. This behavior is not as directly observable as the expressed score. Thus, the FIRC-B is a three by two matrix of Inclusion, Control and Affection scales, both expressed and wanted.

Table I - Positive and Negative Aspects of Inclusion, Control and Affection.[1]

	Positive Aspects	Negative Aspects
Inclusion	Associate, interact, mingle, communicate Belong, companion, comrade, attend to, member, togetherness, join, extrovert, pay attention to, encounter	Exclude, isolate, outsider, outcast, lonely, detached, withdrawn, abandon, ignore
Control	Power, authority dominance, influence, control, ruler, superior, officer, leader	Rebellion, resistance, follower, anarchy, submissive, hen-pecked, milquetoast.

Affection	Positive Aspects	Negative Aspects
	Love, like, emotionally close, personal, intimate, friend, sweetheart.	Hate, cool, dislike, emotionally distant, rejecting.

Description of the Subjects

The subjects were 38 random-selected, male chiropractors engaging in private practice attending the Stoner Foundation Seminar in Las Vegas, Nevada, on May 4-7, 1978. The average age was 38.53 years, with the standard deviation being 9.45 years. The age range was 23 to 64 years of age.

The average number of years of professional practice was 9.71 years, with a standard deviation of 8.67 years. The range was 1 to 40 years of practice. All persons taking the test were members of the New College of California Bachelor of Arts Educational Program.

Procedure

At the beginning of the humanities seminar taught by the senior author, the FIRO-B questionnaire was distributed to all participants. Instructions for taking the test were then read aloud to all participants. After completion of the test, participants were taught how to self-score the FIRO-B using a mimeographed scoring sheet. A basic data sheet was then passed out to all participants in which they could record their FIRO-B scores, as well as other pertinent demographic data.

Test Results

The test results of the FIRO-B are as follows:

Expressed Inclusion

Mean = 4.42

Standard Deviation = 2.39

Wanted Inclusion

Mean = 4.63

Standard Deviation = 2.95

Expressed Control

Mean = 4.34

Standard Deviation = 2.84

Wanted Control

Mean = 3.34

Standard Deviation = 1.79

Expressed Affection

Mean = 4.29

Standard Deviation = 2.37

Wanted Affection

Mean = 6.37

Standard Deviation = 2.34

Using the information developed by Leo Robert Ryan in his book, Clinical Interpretation of the FIRO-B, the following interpretation of the scores is as follows:

I. Inclusion

Ryan describes the person with the inclusion scores of expressed inclusion of 4

and wanted inclusion of 5 as having "social flexibility." He states that "persons with moderate expressed and moderate wanted inclusion scores not only reveal a moderate level of social interaction, but also manifest flexibility. These persons tend to be comfortable both in large groups or being alone whenever these situations occur. They lack the compulsive urge to move either toward or away from people. . .(and). . .they reveal little concern over rejection or being accepted by others."[2]

II. Control

The scoring configuration of the practicing chiropractors (expressed control of 4 and wanted control of 3) is described by Ryan as the "matcher." "The 'matcher' prefers to share an area of responsibility rather than doing it alone...He prefers to work shoulder-to-shoulder with people. He is democratic. He does not put excessive demands on others for support but merely asks others to match the level of responsibility he assumes. The 'matcher' is not dependent but does have some doubts about his ability. He finds reassurance in safety, in sharing responsibility with others. He not only shares responsibility, but also expects others to share the guilt whenever criticism or failure occurs."[3]

III. Affection

Ryan describes the chiropractors' scores on this variable (expressed affection of 4 and wanted affection of 6) as being the "warm individual." He states that "persons

with moderate affection scores are capable of both giving and receiving affection without going to extremes. They neither make excessive demands on others for affection, nor tend to be overly cautious in expressing affection. They tend to be realistic and practical, both in the amount of affection desired and the number of individuals from whom affection is sought. Although they want to be liked and prefer most people to be warm, they do not need nor demand affection from everyone. As such, they are also better able to tolerate the presence of someone who is unaffectionate or even hostile toward them."

Discussion of Results

An analysis of the interpretations of the FIRO-B reveals some interesting personality patterns with respect to chiropractic doctors:

1. The social flexibility exhibited in the area of Inclusion indicate that the chiropractors in this sample can effectively inter-relate, both with groups and people on a one-to-one basis. This is extremely important in the development of private practice due to the fact that chiropractors are often called upon to speak before groups, in addition to treating their patients. The socially flexible person does not have a high need to be overly gregarious. This is important in a high volume practice, as the doctor must spend quality rather than quantity time interacting with the patient in effecting the healing process.

The socially flexible person would seem to be an "ideal type" for a high-volume practice doctor.

2. With respect to control or leadership behavior, the group of doctors was rated as matchers. As matchers, the doctors will match their patient's efforts and interest in health. Such a classification could be a problem if the doctors were overly fearful of failure and criticism and want to share responsibility with others. In such a case, the doctors would be overly dependent upon their assistants, technicians, and even patients in finding support and reassurance. However, if the doctor wisely chooses assistants and technicians that will match his workload, as well as give his patients a healing structure, then a quality and quantity chiropractic service could be provided.

3. It is an extremely positive sign that the doctors were rated as warm individuals on the affection variable. Thus, these doctors so rated will not place inordinate demands upon their patients or their staff to meet their needs for affection. They will be perceived by their patients and their staff as being realistically warm and affectionate, but yet without a compulsive need to engage everyone in a deep and interpersonal relationship. Most importantly, these doctors will be able to tolerate those who would want to reject them, both on a personal and a professional level.

4. The average age of these doctors, 38¼ years, would indicate that these men, on the average, are involved in the mid-life crises state of development. Being classified as a socially flexible and warm individual, with respect to group and individual relationships, is a positive personality trait. However, the rating of matcher on the control and power variable may be indicative of the attempt by these practicing professionals to resolve the interpersonal change that is occurring within their life at this time.

5. This sample of doctors has been, on the average, a practicing chiropractic for approximately ten years. Thus, in terms of stability, it may be inferred that they are occupationally cohesive.

6. All the doctors in the sample are part of a humanities curriculum leading to the attainment of an accredited Bachelor's Degree. Many of the doctors are just beginning their studies. This overall personality profile, on the average, indicates a high potential for continued growth and development.

Summary

The FIRO-B test is a useful tool for describing three basic personality characteristics: A person's general social orientation, leadership behavior, and affection response. When this test is used to evaluate the professional behavior of a selected sample of doctors of chiropractic enrolled in a continuing education program, a person-

ality configuration favorable to high volume practice and continued personal growth and development emerges.

Political medicine has publically critized the educational standards of the chiropractic profession for years. The criticism was leveled at the lack of pre-professional training and interships.

Anyone that has been in the chiropractic profession for any length of time knows that the state basic science examination was for the purpose of eliminating chiropractors from the state licensing procedure. The medical profession failed to inform the public that chiropractors were passing the basic science examination with the same degree of proficiency that the medical profession was passing it - with our so-called "poor standards."

Be that as it may, unfortunately many state governments, and the Federal government, still thinks of chiropractic education as basically a fly-by-night doctor's degree.

But nevertheless, /Chiropractic has enjoyed a phenomenal growth for the last ten years in the face of extremely strong medical opposition. This growth has been due to a number of factors.

But irrespective of the "whys' and "wherefores" of this growth, I believe it is imperative that/ the individual D.C. makes the public aware of his educational training

and degrees. This counters the myth that lies in the public conscious.

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About the Authors

Louis Mortillaro, Ph.D. - Listed in Marquis' "Who's Who in the Southwest," member of the Board of Directors for Big Brothers of Southern Nevada, author of numerous publications, has a position of leadership in many professional organizations, a widely-traveled consultant, Academic Director for Park College, Nellis Air Force Base, and also teaches at Park College, University of Nevada, Las Vegas; Clark County Community College, and New College of California.

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HOW ATLAS CARRIES A WORLD OF FOOT SUBLUXATIONS

by
JOHN O. STOUTENBURG, D.C.

Perhaps nothing is more frustrating to a patient, and eventually damaging to his relationship with the Doctor, than recurring subluxations despite seemingly effective corrections.

One area where this is especially prevelant is foot subluxations. All too often seemingly effective corrections are ineffective.

For example, in his paper, "One Common Cause of Recurrent Foot Subluxations," Walter Schmitt Jr. D.C. notes that while in-shoe foot supports are often an effective method of treating foot subluxations, some patients show recurring foot subluxations in spite of this.[1]

In my own experience I have found that most patients depending upon in-shoe foot supports eventually return to a subluxated state. I do not approve of this treatment simply because it has much in common with a crutch. It does not get to the root of the problem.

I have found that in many cases the root of a foot subluxation lies in the atlas. To be sure there are times when a foot subluxation may primarily occur as a result of muscle weakness in the foot. However, in these cases I would prefer to see muscle exercises to generate the strength needed to support the arch. One very good exercise involves the use of marbles. Have the patient practice picking up marbles with his toes and placing them in a container.

However, if the atlas is a primary source of subluxation in the foot as is so often the case, then this exercise, like in-shoe supports, will not solve the problem. Subluxations will reoccur.

To find out if the atlas is involved, find the foot subluxations; correct it and then have the patient stand and jump on the foot.

The shock absorber technique utilized by many Applied Kinesiologists is also effective for this. After the correction has been made, apply a firm blow with your fist to the bottom of the patients foot and then retest for the subluxation. In either case of testing, a recurrance of the subluxation is an indication that atlas involvement is present in the problem.[2]

Interestingly enough, the nature of the foot subluxation gives us an indication of the specific atlas subluxation and vice versa.

For example, a lateral talus subluxation often means an atlas lateral subluxation on the same side. With regards to subluxations involving the metatarsal bones, when the distal end of the metatarsal is subluxated inferiorally, the atlas is subluxated anteriorally on the same side. Inferior subluxation of the proximal portion of the metatarsal is usually accompanied by a posterior subluxation of the atlas on the same side.

The Doctor who corrects the foot subluxation and then corrects the atlas subluxation will find the foot correction remains as long as the atlas corrections remains.

However, this means that correcting the atlas involves going to the source of the atlas subluxation. Often atlas subluxations are directly related to nutritional deficiencies, where this is the case, such deficiencies must be corrected or the atlas subluxation is likely to recur which will in turn cause recurrence of foot subluxations.

Where chronic lateral subluxation of the atlas occurs, we often find a potassium deficiency in the patient.[3] Administration of potassium corrects this problem.

Often in cases of chronic anterior atlas subluxation a calcium deficiency may be the culprit. If so, administration of phosphorus free calcium is essential to correct this condition.[4]

In the case of posterior atlas subluxations, phosphorus deficiencies are often the cause of chronic recurrence. Correcting the mineral deficiency is essential to ultimately solving the patients problems.

Thus we see that the real key to correcting foot subluxations (and indeed all subluxations) is to find the roots of the problem.

Where foot subluxations are common, test for atlas subluxations and then in turn test for mineral deficiencies. Correct them all in order to obtain permanent correction for the patient.

Of course there is a danger in suggesting that the aforementioned findings will occur in every situation. As the title of William Harper's book suggests, "Anything Can Cause Anything". The examples set forth in this paper indicate tendencies; but they set forth an even more important tenent, that is that the source of a problem may be somewhat removed from its symptom. Recently there has been some discussion about whether the psoas causes the lateral talus to be weak or vice versa. I suggest that the point is is unimportant. The problem lies elsewhere, usually in the atlas. It is ironic indeed that the source of a problem in the foot should be a body away, in the neck, or beyond in the nutritional habits of the individual.

Such examples prove again that real healing is a matter of treating the body as a holistic, interrelated mechanism.

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The Biorhythm and other Human Cycles Related to Symptoms and Office Visits

* * * * * *

John F. Thie, D.C.

Abstract: A statistical survey was conducted to explore the relationship between biorythm cycles and timing of accidents or onset of physical problems. The survey population was 621 chiropractic patients who could recall the date of onset of symptoms or the date of an accident which caused their symptoms.

The survey did not reveal any statistically significant relationship between these dates and the 23, 28 or 33 day Biorythm cycles.

There was, however, an unexpected finding - a relationship between the date of initial visit and a number of different cycles * which was significant at the 1% and 0.1% level

* * * * * *

In our life we recognize cycles and many researchers have observed these cycles. We recognize the physiological cycles in the lives of both men and women: the menstrual cycle in women and cycles of adrenal secretions which have been measured in men.

*These cycles are identified on p. 6 (they are not the traditionally recognized cycles.)

We recognize that there are times when we are more receptive to negative suggestions than we are at other times. We can have great swings between positive feelings and depression when there are only minor changes in our environment.

The fact that the personality is in the constant state of becoming, always changing, being more or less, becoming stronger or weaker, more aggressive or defensive, moving ahead or falling behind has contributed to the desire to see if these cycles can be plotted and used to the advantage of each individual.

Sleep research has indicated that we sleep in cycles of ninety minutes. Research on breathing indicates that we breathe in cycles, with each nostril dominant for twenty minutes. Body temperature flows in cycles during the month and varies from morning to evening. It is generally accepted that we are not the same all the time.

The German physician Wilheilm Fliess, developed the concept of biorythms around the turn of the century. He noted that a patient's physical resistance seemed to follow a 23-day cycle, reaching an apex between the 6th and 7th days and a nadir between the 17th and 18th days.

Working independently from Fliess, Hermann Swoboda, a psychology professor at the University of Vienna, observed the same cycle. Both doctors calculated the cycle beginning from the date of the person's birth. Subsequent studies by Fliess and Swoboda observed patients' emotional reactions and established a concurrent 28 day cycle. A third cycle involving intellectual performance and lasting 33 days, was established by Alfred Teltscher at the University of Innsbruck.

According to the studies, the 23-day physical cycle, the 28-day emotional cycle and the 33-day intellectual cycle all move in waves of fixed durations. The first half of each cycle is an "up" period while the second half is a "down" cycle. According to the analysts, the up phases are peak performance periods where the brain and nervous system deliver maximum energy and function optimally, while the down phases are rest or recouperative periods, where the brain and nervous system are operating at minimal levels with energy being restored. The shift from the up to the down portion of the cycle is theoretically a critical period and at these times injuries are more likely to occur; accidents are more likely to happen. In retrospective studies by various industries such as the R.K. Anderson Associates, industrial consultants in Rutherford, New Jersey, it was found that 70% of all accidents which occurred in their four factories took place on workers' critical days.

Proctor and Gamble paper products company in Green Bay, Wisconsin, showed that in one year, 42% of all self-induced accidents in their plant fell on employees' critical days.

A hospital in Locarno, Switzerland has kept biorhythm charts for almost 20 years and uses these charts to plan surgery. During this period 10,000 operations were performed and there were no failures, or complications yet the usual failure/ complication rate in surgery is 30% to 60% according to one report.[1]

In Japan, the Ohmi Railway Company which operates buses, taxis and trains, has recorded their drivers' critical days since 1969. On critical days the drivers have been given a warning card when they report to work to exert special caution. The result has been that the Ohmi company accident rate has been cut in half since the procedure began, making it 80% lower than their competitors who do not chart.

Other studies indicate that reaction to medication, drugs, allergies and bacterial infections all differ enormously according to their occurrence in circadian rhythm.

[1] The Realization of Human Potential, R.C. Schalfer and the Behavioral Research Foundation.

I had charted biorhythms for myself and felt that there seemed to be a correlation between my feelings and the three biorythm cycles. I noted that the times when I get symptoms are often the "critical" times in those cycles. I decided that if I could aid my patients by informing them of their cycles I would be serving them by allowing them to know when to be cautious and take more preventive measures. I decided that I would do a study of my own to see if patients coming to our clinic had any relationship between biorhythm cycles or any other cycles and the date of accident. I enlisted the help of a specialist, Mr. Neil F. Michelsen and he and I developed the following procedure: We would use records of the date of the patients first visit to our office as a new patient, the date the symptoms occurred for the first time or the accident occurred and then determine if there were any cyclical occurrences related to those two dates. Significance was tested both at the 1% level (CHI-Square exceeding 6.635) and at the 0.1% level (CHI-Square exceeding 11.5).

We studied a total of 621 cases with a symptom count of 566 and of course a first visit total of 621. This small number of cases may not be reliable because of the inadequacy of the numbers in each cycle. The results, however, do give some indications that the appearance of symptoms that cause new patients to come to a doctor of chiropractic for care do not relate to biorhythm cycles.

The accompanying table shows the full chart of the cycles from 2 to 90 days showing no statistical significance for any of the three biorhythm critical day cycles. Only one cycle showed any statistical significance at the 1% level and that was the cycle of 88 days, but only 14 symptoms corresponded to that cycle, which is too small a number to draw any conclusions. What was interesting about the study was that even at the 0.1% level of significance the date of the office visit was significantly related to the cycles of 42, 51 and 87 days. At the one percent level of significance the date of the initial office visit was significantly related to the cycles of 14, 17, 42, 45, 49, 51, 66, 77, 80, 85 and 87 days. The accompanying chart gives the days and the Chi-Square levels of significance for the study.

Conclusions

The study is too small to determine if biorhythms are valid, however, it does point in the direction of concluding that other factors may be more significantly related to the cause of symptoms than biorhythm cycles based on the date of birth. The research will be continued with more cases to see if a larger study population will change the results. The companies that used biorhythm cycles to warn their employees about being more careful may also have been more interested in prevention than other companies, thus other factors may have affected the accident rate.

The applied kinesiologist is interested in the cycles that affect patients and further study is needed to determine which human functions follow predictable cycles and how our understanding of these cycles can be helpful to patients.

* * * * * *

[2]Personal communications - Neil F. Michelson - Humbolt, California Touch for Health Foundation Annual Meeting, July 1978

DR JOHN THIE/NEIL F MICHELSEN BIORHYTHM STUDY

CASE COUNT= 621 SYMPTOM COUNT= 566 INITIAL VISIT COUNT= 621

CYCLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
SYMPTOM	0	294	182	131	114	93	87	76	54	55	49	45	38	47	46	50	41	25	31	26	26	28	25	23	24	21	15	20	22	24
CHISQ	22.0	0.9	0.4	1.0	0.0	0.0	0.5	0.4	1.4	0.1	0.1	0.1	0.8	1.2	1.9	6.4	1.9	1.4	0.1	0.2	0.0	0.2	0.0	0.0	0.1	0.0	1.8	0.0	0.3	1.4
IN VISIT	0	314	232	151	129	117	111	74	65	72	53	52	52	62	51	45	53	47	36	39	42	35	35	27	27	25	34	34	29	26
CHISQ	62.0	0.1	4.5	0.2	0.2	2.1	6.5	0.2	4.2	1.8	0.2	0.0	0.4	7.6	2.4	1.1	7.9	5.8	0.4	2.1	5.5	1.7	2.5	0.1	0.2	0.1	5.5	6.5	2.8	1.4

CYCLE	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
SYMPTOM	10	27	16	21	18	14	16	16	16	15	9	18	22	16	15	8	13	19	9	14	5	8	7	5	8	12	11	13	12	15
CHISQ	3.9	5.1	0.1	1.2	0.2	0.2	0.0	0.1	0.2	0.1	1.7	1.6	6.1	0.8	0.5	1.5	0.1	4.5	0.6	0.6	3.4	0.8	1.3	2.9	0.5	0.4	0.1	1.1	0.6	3.3
IN VISIT	26	19	22	29	25	19	26	19	20	24	16	28	18	17	25	18	16	16	22	18	24	12	18	18	14	18	18	17	13	14
CHISQ	1.8	0.0	0.6	6.5	3.1	0.2	5.2	0.4	1.1	4.7	0.0	12.1	0.9	0.6	9.3	1.5	0.6	0.7	7.0	2.6	11.7	0.0	3.4	3.7	0.7	4.4	4.7	3.8	0.6	1.3

CYCLE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
SYMPTOM	4	6	8	13	13	10	8	12	9	10	11	8	6	9	14	7	8	7	8	11	5	4	4	10	6	10	13	14	7	5
CHISQ	3.1	1.1	0.1	2.0	2.1	0.2	0.9	1.6	0.1	0.5	1.2	0.0	0.4	0.2	5.6	0.0	0.1	0.0	0.1	2.2	0.6	1.2	1.2	1.6	0.1	1.8	6.6	9.0	0.1	0.3
IN VISIT	11	16	14	12	15	18	11	14	15	15	15	9	13	13	12	12	16	12	13	16	14	9	13	14	15	11	17	10	7	12
CHISQ	0.1	3.6	1.8	0.6	3.2	8.0	0.3	2.6	4.1	4.3	4.5	0.0	2.4	2.6	1.7	1.8	7.9	2.1	3.4	8.9	5.3	0.3	4.1	6.0	8.2	2.0	13.8	1.2	0.0	3.8

CHI-SQUARE EXCEDING 6.635 SIGNIFICANT AT THE 1% LEVEL
IN VISIT 14 7.6
IN VISIT 17 7.9
IN VISIT 42 12.1
IN VISIT 45 9.3
IN VISIT 49 7.0
IN VISIT 51 11.7
IN VISIT 66 8.0
IN VISIT 77 7.9
IN VISIT 80 8.9
IN VISIT 85 8.2
IN VISIT 87 13.8
SYMPTOM 88 9.9

CHI-SQUARE EXCEDING 11.500 SIGNIFICANT AT THE 0.1% LEVEL
IN VISIT 42 12.1
IN VISIT 51 11.7
IN VISIT 87 13.8

COMPLETE INDEX OF COLLECTED PAPERS TO DATE

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ABBREVIATIONS USED FOR BOOKS ARE AS FOLLOWS:

OLD COLLECTED PAPERS '73, '74, '75.....OCP

1976 SUMMER DETROIT.....S76

1976 WINTER SCOTTSDALE.....W76

1977 SUMMER DETROIT.....S77

1977 WINTER SAN DIEGO.....W77

1978 SUMMER DETROIT.....S78

1978 WINTER HOUSTON.....W78

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