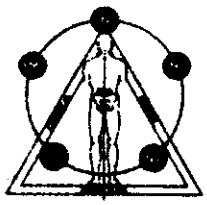

INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

GEORGE J. GOODHEART,JR., D.C.

APPLIED KINESIOLOGY

RESEARCH TAPES
NUMBERS 49 - 72

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DR. GOODHEART'S RESEARCH TAPES

Tape 49

Reading referral: Osteopathic Annals Nov. 1978.

The lymphatic System

- Reading from original issue of Neurolymphatic Reflex Book 1965 3rd edition.
- Talks about the lymphatic system and its anatomy.
  - Two times as many lymph vessels as blood vessels.
  - There is no normal heart to pump it.
  - its primarily a retrograde system - except for the head, neck, and abdomen it works against gravity.
  - The lymph is clear except after a fatty meal.
  - Without the lymphatic system the loss of blood protein would be disastrous - 1/2 of our blood protein leaks out of our circulatory system in any 24 hour period.
  - fluids pass to thoracic duct which passes to the subclavian vein.
  - nodes act as filters for the system - infections are usually noted upstream - i.e. painful inguinal nodes with toe infection.
  - The lymph system absorbs fat from the intestinal system since high fat levels in the blood destroys RBCs.
  - Antibodies and 1/4 of the WBCs are produced by the lymphatic system.
  - The most commonly found reflex is that of the PSOAS
  - The thoracic duct begins at the 2nd lumbar vertebra with the cysterna chyli
  - goes over specific anatomy of the system on the tape. Read text or British Grays Anatomy, the 1901 edition.

<u>Retrograde lympatics</u>

- The N.L. for the adductors behind the nipple many times is involved with Brachial Neuritis, Carpal tunnel, tennis elbow and adductor problems.
- Reflexes for T.F.L. are many times involved with sciatic pain.
- Many times I couldn't get the muscle to show weak though all things indicated so.
- The article in Osteopathic Annals, mentioned above, talks of pectoral tug for a myriad of problems. It's a general treatment.
- By placing the patient in Retrograde position 20° head down I thought the lymph system would be facilitated. Instead weakness I couldn't find before would show.
- The pectoralis minor is the problem - when the patient is retrograded having someone do a pectoral tug or having the patient lift their left arm above their head abolishes the indicator.
- Pectoral muscles show fascial flushing requirement - do so and do N.L. and N.V. reflexes.
- The pect minor is usually stretched and the origin and insertion need to be brought together for it to bring a normal rib angle approximately 34° many times its dropped from 36 to 40° - A rib technique may also be necessary.

- Sinus problems show a lot when patient is retrograde, showing many dormant problems we were unable to find, so do N.L. long and hard and do axill, tug or fascial flush to pectoral muscles.
- Read about anatomy of Pectoralis minor - its a rib lifter having same nerve supply as other pects except its innovation is from 8th cervical and 1st dorsal fibers where others are from about the sixth, so look to these areas to adjust.
- Look to retrograde in unilateral limb swelling, also look to diaphragm function. Left limb usually shows symptoms first since right diaphragm usually pumps more actively than the left.

Reading Referral: Lymphography of the Cervical Lymphatic System by U. Fisch, publ. by Saunders.

- Describes methods used to study the lymphatic system.
- If the lymphatic system can't drain itself completely it stores lymph in various areas until it can do so no longer. With poor lymphatic drainage there is poor absorption of fat. This causes a decrease in Vitamin A absorption.
- A helps abolish the retrograde weakness.

Reading Referral: Applied Nutrition, Harold Hawkins. Reprinted - International College of Applied Nutrition, LaHabra, California and Mojave Books, 7040 Derby Ave., Reseda, CA 91335.

- Page 47 especially for Vitamin A deficiency.
- We recommend 1500 units of A 3 times a day.

DR. GOODHEART'S RESEARCH TAPES

Tape 50

Reading Referral: Dental Kinesiology, George Eversaul. Call 702-733-8476 Wednesdays 10-5:00 p.m., Box 19476, Las Vegas, NV 89119

Reading Referral: Physical Fitness in 30 Minutes a Week.

- Talks about sitbacks for strengthening the abdominal muscles and lifts the rib cage.
- Look to serratus posticus superior doing origin and insertion work since it is a rib cage elevator and will help lymph flow.
- Also challenge for rib correction.
- I do the rib correction and reflex work with the appropriate phase of respiration.

Retrograde lymphatic.

- A common cause of lymph blockages and a unique diagnostic procedure.
- Look for with unilateral problems.
- Patients can be taught how to fascial flush the pectoral muscles.
- Good technique for limb swelling and reduction of pain.

Nutrition

- Lingual testing is the way to do it. On the body testing has caused many problems.
- to find out what was happening we found the color of the substance was what made the difference, putting the same substance into different color capsules changed the response.
- Color therapy has many ambiguities.
- We have some charts to use for color therapy work for those who wish to work with this.

Color Therapy

- We're aware of the polarity of the body Right front (+), Left front (-); Right rear (-), Left rear (+).
- polarity also has color, positive is bluish and negative is reddish.
- So left front is red hue; right front is blue hue, Left back is blue, and right back being red. This is the basic beginning of color therapy.
- Chakras also have colors associated with them.
- Use acronym R.O.Y; G.; B.I.V.
- Red, Orange, Yellow, Green, Blue, Indigo, Violet.
- Beginning anterior at the head going down it's red. The throat area being Orange; upper-chest, Yellow; mid-chest, Green; upper abdomen, Blue; middle abdomen, Indigo, and lower abdomen, Violet.
- It is reversed with the Posterior aspect beginning with Red at the sacrum to violet at the head and neck.
- Also overlay the acupuncture circuits. The different meridians have their own colors. So the associated points have the color of their meridian. Bladder - 2nd sacral foramen, Blue; S.I. at first sacral foramen Red. L.I. white L4, 5 - etc.
- Each doctor has an energy and color pattern that is uniquely his. And each patient has a unique need. So if a doctor is deficient in a

certain color level he must think of giving that color to patients where it is needed.

- You can find out what color the doctor is deficient in by having a doctor test a patient's muscle while the doctor in question places his hands on different levels of the spine. Where a weakness occurs that is the color the doctor should realize he has to mentally image for patients that are in need of it.

Reading Referral: Healing and Rejuvenation Through Color 1972, 15th ed. Corine Heline. Also, Healing and Rejuvenation Through Music, J. F. Rouhy Press, California.

- Power of the Rays The Science of Color healing, S. G. J. Orsley, L. N. Fowler Co., 15th Newbridge Street, London, England, EC4U6VB.
- When you make a structural correction or work on a part of the patient concentrate on the color in question for that area and transmit them with your holding hand.
- If the patients left hand therapy localization causes a muscle weakness you would use your right to treat that reflex area.
- You can show the use of lights at the wrong area will cause an immediate weakness.
- It works best if the doctor projects it with his right hand.
- It has influenced B.F.T. monitoring.
- Antecdotal - A logan basic contact cause no B.F.T. change on a patient until the correct color was projected.

Reading Referral: The Rainbow in Your Hands, Davis and Rowls.

- You can put color in to Melzack wall points according to what meridian the point is on.

Reading Referral: Anatomy, A Regional Atlas of the Human Body by Carmine D. Clemente

- Section figures 150 & 151 for lymphatics.
- Goldthwait & Kendall & Kendall Posture of Pain, p. 150, books on posture are good to review.

DR. GOODHEART'S RESEARCH TAPES

TAPE 51

Alexander technique:

- We give the patient four basic directions.
  - place your hips over your heels by moving backwards at the heels so your toes are almost coming off the floor.
  - Make your chest wide.
  - Drop their shoulders like a couple wet rain coats.
  - Lastly, put your head ahead - have the patient put their neck back slightly and then have then nod to say yes and this will get the head ahead.
- With the work of Feldenkrais and also A. K. we realize posture is a learned cortical awareness and not how we sit or stand.
- Your body learned how to have the posture it has.
- In the book of reprints, it's mentioned how Alexander changed the position of a man's head on his neck and the arches rised.

Anecdotal: A patient with a Morton;s Neuroma who had had podiatric care to no avail. I had noticed a change in her posture since the last time I saw her. So I showed her the technique and the pain of the neuroma immediately left her foot. The sensitivity to touch was also gone. While lying supine, the postural suggestions were made and once again the pain disappeared and I felt her metatarsals rise.

- The homeostasis that exists physiologically is so both metabolically and posturally.

Reading Referral: Universal Constant of Living by Alexander.

- He talked of the limited movement of the atlanto occipital joint in contrast to the wide range of movement of the cervical cranium.
- You can see where B. J. Palmer got the idea of the upper cervical if you read some of Alexander's techniqes in retrospect.
- Posture is a cortical awareness that was man's natural heritage and could be relearned while supine or in any position, not by imagining but by doing it.
- We've found the Alexander technique to work well with pain control in those patients where the Melzack-Wall Approach wasn't a good one.
  - We would press vigorously over the pectoral muscles, posterior cervical muscles, lumbar area and against the gluteal muscles while the patients were standing.
  - We would sit down and say, "Well now, that's your problem," so we would show them how to stand rocking the ankle back, making chest wide, shoulders down and head slightly ahead.
  - Now the pain elicited where we rubbed before was gone along with subjective pains.
  - It only works when we did all the postural changes and not just any one.

Anecdotal: Dr. Schmidt found it to take away his late night heart burn after a "Staph" party.

Reading Referral: Centered Skiing by Dennise McLuggage.
- One of the exercises they do is to have the patient with closed fist place their arms in front of them. The patient raises one arm and lowers the other, then bring them back to level - most have no problems with the eyes open. With the eyes closed many have problems. This indicates a lack of proprioceptive awareness.
- 40% of the people I gave reading directions on Alexander's technique were unable to follow the printed recommendation.
- We found that an additional concept to the posture concept involved a straight posterior 3rd cervical and 3rd lumbar.
- These areas would not T.L. in the non-weight bearing position but in a weight bearing position they would.
- We adjust them anterior in a prone position.
- After this was corrected many time the patients could follow the printed instructions.
- We've found no matter what indicator you've found having the patient do the Alexander technique directions will abolish those findings.
- This indicates the patient has control of many of the factors which continue to perpetuate problems.
- Still fix what you've found.
- We tell them to do the technique for 2 - 3 minutes in the a.m. and 2 - 3 minutes at night while lying down.

Reading Referral: Holistic Dimensions in Healing: A Resource Guide. Leslie J. Keslof, Doubleday-Dolphin Books. There is an article on A.K. in the manual; there are several other good articles in it on chiropractic, osteopathy, naturapathy, homeopathy, etc.
- The attitude that Alexander has produced certainly has an anatomical basis.

Reading Referrals: A Reorientation of a Viewpoint from the Study of Anatomy, Douglas 1937 plus The Functioning of the Sub-occipital Muscles, The Key to Posture Use and Functioning, Murdock. Also Soh Hitons October 7, 1936 address at the institute of Labor Management in Burton England. The last touches on the effects of the shocks and vibrations we are subjected to.
- Our exercise classes are "physical jerks" - The strongest can survive, most cannot.
- Show them how to improve the quality of their life.

Reading Referral: Understanding the Scientific Bases of Human Movement. O'Connel & Gardener, chapter starting on page 212.
- They talk of labyrinth receptors and tonic labyrinth reflexes. TLR's and labyrinth righting reflexes.
- They talk of body on body relfexes, body on neck reflexes, visual righting reflexes, the later being dominated by equilibration reflexes.

The Special Senses have dual functions.
- Mouth - eating and speaking.
- Nose - breath and smell.
- Ear - hear and balance.
- Eyes - see and level the head.

Head leveling (visual righting reflexes).
- Watch a blind person's head movements.
- You can show a difference in the cloacal reflexes when you T. L. to the occiput or supraorbital areas and opening or closing the eyes.
- The head and pelvis have automatic pilots.
- Check for occular lock and fix by the usual measures.

- Have the patient flex a knee and bring it across the center of the body, keeping the foot on the table, putting a tension on the piriformis. Test a muscle if a weakness occurs, check for eye lateralization that abolishes it. Indicating the visual righting reflexes are affecting the pelvis.
- There is a lack of synchrony between the upper and lower righting reflexes.
- This can be done to either side.
- You can repeat the test with the patient in the prone position.
- This indicates the need for a basic contact to level subclinical faults in the sacrum.
- Challenge the sacrum and fix what you find.
- While doing the contact have the patient lateralize the eyes left or right checking for a weakness. If one occurs find a phase of respiration that abolishes it, usually inspiration. If this is the case, make a contact like you would if you were going to use a sacral contact for an inspiration assisted lesion of the sacrum. There doesn't seem to be an associated cranial fault at this time.
- fix and then rechallenge especially the piriformis stretch.
- Video tapes are now also available for use.

DR. GOODHEART'S RESEARCH TAPES

TAPE 52

Posture (continued)

- You want to demonstrate to the patient the visual effect on muscular motion. Have the patient put his right arm in front of him and sight along his index finger without moving his feet, turn as far as he can to his right and note how far he can go. Then do the same to the left but have him keep his eyes to the right while he turns left. When the patient rotates to the right as in the beginning, their rotational ability will have increased.
- This is quite a dramatic procedure for showing the patient the relationship of the eyes to the body.
- Small alterations between the functional relationship of the eyes and the head create enormous differences.

Reading Referral: Awareness Through Movement, Feldenkraise, Harper & Row, 1974, 148-149, he say, "The eyes are not only for seeing . . . ."

- Using the eye rotation to counteract the piriformis stretch is working with the automatic pilot and attention to the saerum with the right phase of respiration will usually make the patient feel quite relaxed.
- The hold technique for sacral positioning takes no longer than 2 minutes.
- Works well with those who have ineptness in motion.

Lymphatics

- The Russians say that there is a lymphatic heart.
- They, with Radiography, studied the lymphatic duct and the cisterna chyli. Without the diaphragm and heart movement they observed a 12-10 pulse movement activity of the cisterna chyli.
- There are valves every 1/3 inch as with the venous system.
- I feel they have found the lymphatic system has a relationship to the spinal fluid system.
- We have found in Retrograde patients, once you get the sacrum moving well with the occular circuit, this adds to the lymphatic systems capacity to function.
- Anatomists vary in what they say of the entrance of the thoracic duct to the circulatory system.
    - Some say the subclavian vein, some the brachial-cephalic.
- Regardless the entrance is quite medial and the pectoralis minor alters somehow the external-internal pressures so attention to the G.T.Os along with the N. L. do the job.
- Nutrition seems to be 1500 units of Vitamin A, 3x/day.
- The occulo basic circuits have also affected vital capacities on patients.
- The Russians found the "lymphatic heart" was not dependant on respiration or the pumping of the major blood vessels.
- The thoracic duct has 20 valves along its course.
- I feel Sacral movement along with postural factors influence lymph drainage.
- Read Anatomy of Thoracic Duct in Grays.

    - The thoracic duct is the common trunk of the lymphatic system except for the right side of the head, neck, thorax, lung, heart and the convex surface of the liver.
    - It varies in length from 15-18" from the 2nd lumbar vertebrae to the root of the neck.
- It commences in the abdomen by a triangular dilation, the reservoir of piquet which is anterior to the 2nd lumbar vertebrae going behind the right side of the aorta and the diaphragm.
- The thoracic duct consists of 3 coats or layers which differs from other lymph vessels.
- The right thoracic duct is only a half inch in length and enters into the right subclavian vein.
- The fascia is the main source of lymphatic drainage and if it gets tight lymphatic disturbances will follow.
- The pectoral stretch technique doesn't really fix things, it elevates the ribs and works some of the fascia along with balancing some of the other factors which are in the article.
- This retrograde lymphatic factor affects many things.
    - Rib position.
    - Sacral occulo relationships affecting spinal fluid.
    - The nutritional component of Vitamin A.
    - And the fact that the system drains the chyll and digested fats into the venous system.
- This combination of factors produce many problems in man allowing us another way to render a service to the sick and ailing.

Postural Hypoadrenia - Hypotension

- Some patients don't respond to our treatments yet they show postural hypotension, dilated pupil, altered sartorius gracilis testing.
- On reading clinical prevention of cardiac necrosis there is evidence that the kidney is the number one homeostatic organ.
- We found the kidney system to show on these patients with right brain and left brain activity.
- These patients also show a globulin of 2.2 or lower.
- On doing the N. L. for the kidney we would get a good response (sometimes up to 5 min.).
- Nutritionally, we use Albaplex, I'm sure there are other products.
- It is wise to maintain support to the adrenal and sartorius.
- There is also usually Hyoid involvement also.

Ten syllabus session is now available on VHS format. A.K. Tie clips and lapel pins are available through Lance West, 416 Superior Street, Toledo, Ohio.

DR. GOODHEART'S RESEARCH TAPES

TAPE 53

This is the ICAK Annual Convention report and monthly report.

- It was good to see the quality of the collected papers.
- This method will grow and add to an already polished image.
- There will be some discussion on office computers and the ICAK later in the tape.

Hair Analysis

- We're primarily using it to determine toxic levels buy Jerry Morantz has a good article on hair analysis.
- One major one to look for is cadmium; it's been linked to hypertension.
- Cadmium is found in tobacco, kitchen utensils, from television screens if you're too close, and also dried sludge fertilizers.
- If you use zinc or some other nutrient to neutralize or chelate out the toxic hair analysis is a good way to monitor your progress.
- We found muscle testing went along well with the chemical and clinical improvement.
- Being the devil's advocate and checking all possibilities we found a finger lance of the finger and testing lingually the patient's blood would show allergen or toxic metals.
- This lingual testing allows one a monitor of progress between hair analyses.
- When you find a person reacting to their own blood you can test different substances to find which abolishes the weakness.
- We have found in certain patients who have lesions only on one side. That blood from that side and not the other will show a weakness.

Reading Referral: Scientific American, April 1974. Sue Binkley: A Time Keeping in Time with the Pineal Gland.

- Good article on the pineal.
- It's interesting; a lot of research on the pineal has been done by women. Virginia Fisk and others.
- Virginia found that the weight of pineals differed according to the length of light exposure.
    - those kept in continuous light had light pineals weight-wise.
    - Light and dark had middle weights.
    - Those kept in darkness had much heavier glands.
- She found that light and dark exposure is a major factor in pineal activity.
- We talked of melatonin production on the previous tape. This article talks of N-acetyltransferase in the pineal gland which produces a natural timing mechanism or biological clock regulating both physiological and behavioral processes.
- In the last tape we talked of patients who weakened on loss of exposure to light finding the photoreceptors of the skin and eyes were involved.

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- We found the fifteenth cranial fault associated with that situation which is a spenoid compression which requires a spreading of the condyles to fix it.
- At this point we have found no respiratory factor associated with it.
- We found in patients who we fixed the sphenoid spread, the pterygyid spread and condylar spread and other factors that in one to two weeks would fall down again.
- We found the pineal point on the lobe of the ear to be involved. It would show on cessation to light exposure. Indicating the booster activity of auricular therapy.
- the point on the ear is behind the pituitary and readily will T. L. using a vol finder or wooden orange stick.
- Stimulate the point by electrical means or mechanical it gives added reinforcement to the correction.

Renal Psoas fault and adrenal involvement.

- There is usually left and right brain activity needed to show this fault. The left Psoas will weaken with humming the right with addition.
- Prolonged N.L. activity to the Psoas reflex is needed for treatment.
- Aso check the hyoid for involvement.
- Nutrient material for the kidney is usually also needed.

Reading Referral: Complementarity in Biology, James Isaacs.

- It was the information in this book and the observations of how right and left brain activity affect certain muscles that developed the electron posing concept.
- Isaacs calls the "Bion" the smallest subdivision in nature, not the cell.
- The Bion is capable of reproduction and is capable of determining what type of cell the cell will be.
- They are linked together by the trace minerals - together they make cells and then the cells are linked at the interface by Vitamin A. So what one cell does is transferred to the others.
- A is sensitive to the cellular needs that it is capable of transmitting this to all the cells.
- It's like the cells are posed on the tip of a pyramid. If the cell tries to slide down one side, Vitamin C prevents that and Vitamin E prevents them from falling down the other side.
- So you have a linkage between cells of Vitamin A and an oxidative reductive capacity by Vitamin C and E giving the capability of electron poising versus nutritional support.
- Patients that show a weakness on left brain activity show a need for small amounts of Vitamin C but E would neutralize this need.
- Patients that show a weakness on right brain activity show a need for E but Vitamin C would negate that.
- Combination of Acp-trace minerals and E will abolish the right brain, left brain activity - give 1 per day.
- Shows good responses in chronic and slow neuromuscular degeneration.
- Once Isaacs gets the patient poised he can use 1/100th of the normal chemotherapy in cancer therapy.
- The new 79 manual discussed these concepts.
- Sometimes not all three are needed.

Vol Method

- We found a high percentage of patients showed an overactive kidney meridian. This correlated with an inability to turn off the renal Psoas relationship through the sedation points.

- A way to check for an overactive meridian. Have the patient T.L. to the pulse points while you touch the first sedation points and look for a weakness.
- The meridian is over so that when you T. L. as above it causes a shift which allows the weakness to occur.
- This along with auricular therapy should be explored in difficult patients.
- You might have to tap the sedation for a long period of time to negate the indicators.

Computer System

- Best is with each doctor having a microcomputer in their office with access to the G.E. System. The I.C.A.K. will have space on the G.E. System.
- Each doctor would need a phone modem to access the data base for A.K. in the G.E. system.

Inhalation Therapy

- Must be olfactory system that affects people.
- Ladies in dormitories, who randomly were having their periods before entering a college dorm, eventually fell in syncrony.

Reading Referral: Vitamins and hormones Advances in Research and applications by Academic Press, Vol. 34, 1976 edition, title Chemical Communication in Primates.

- We have shown patients in the past inhalation of toxic or noxious materials caused a weakness.
- In the collected papers, Dr. Brimhall's is of interest in regard to inhalation therapy for treating patients.

New Journal: Journal of Manipulative and Physiological Therapeutics, published by the National College of Chiropractic, 200 E. Roosevelt Road, Lombard, IL 60148.

DR. GOODHEART'S RESEARCH TAPES

TAPE 54

Pituitary Therapy

- I read endogenogenous endocraniotherapy - Samuels Therapy back in 1955.
- It was a treatment designed for treating diseases by treating the pituitary with short-wave therapy.
- One used the web of the thumb - pinching it off and using a small spectroscope, you watched for the spectroscopic change of the oxygen hemoglobin molecule observing the spectroscopic index shift. Normal 24-25 seconds.
- If it shifted down prior to pituitary treatments you also used short-wave to the gonads.
- If it shifted up you used short-wave radiation to the thyroid.
- This produced an addiction to the short-wave machine.
- We have found the glabella area to be the reflex area for the pituitary. When patients insufflated pituitary substance, the indicator at the glabella would disappear.
- We found that patients with diabetes insipidus, when post-pituitary substance was insufflated, it would diminish frequency of drinking and urination.
- We also observed patients with chronic problems having low specific gravity showed a failure of the liver circuits rather than the kidney. We now also look to the pituitary. When the specific gravity is higher look to the adrenals giving a false reading due to the electrolyte loss.
- Patients with low axillary temperature.
    - Look to fascial flush. T. minor.
    - Treat the N.L. reflex for the T. minor.
    - Pituitary and or thyroid substance nutritionally.
    - Ovarian reflex treatment at times needs to be treated, which has (-) feedback on the throid.
- With the exception of those patients that showed a Fralik's syndrome. We haven't had many patients to show a pituitary reflex.
- We would have a low temperature and specific gravity as evidence but the patients didn't respond to our treatment.
- If things didn't show we would try double T. L. to the thyroid and another organ. It is as if they have the same music but at different tempos.
- We tried this concept with the pituitary. We would have the patient T.L. to the glabella and another organ reflex. We found an inspiration assist to go with the above doing it quite vigorously and quickly.
- If doing the inspiration assist and we did not get a temperature increase within a minute we would then also take a contact on the hard palate at the cruciate suture pressing up toward the vertex with inspiration.
- If you aren't able to use a thermister to monitor axillary temperature, treat the patient who shows a double T.L. pituitary and some other organ for at least 5 minutes until all indicators are normalized.

Rebirthing

- Leonard Orr and Sandra Ray - Rebirthing in the new Age.
- Book is from Celestial Arts, Millbrae, CA., 231 Adrian Rd., 94030.
- You hyperventilate yourself back to your birthstate and it is also a cure for hyperventilation.
- Maybe this is somehow involved with the treating of the inspiration assist so quickly in this pituitary treatment.
- There are theta centers and seminars that discuss this process; 301 Lyon Street, San Francisco, CA 94117. (415) 924-1743.
- So, if you experience erratic movements of the patient while treating them, don't be alarmed.

Pituitary (continued)

- These patients when under usually show adiposity, whiteskin, sluggish mentality, low metabolic rate, increased urination, failure of hair growth.
- The patient who is hyperpituitary has thickened nose, lips, and tongue, excessive hairgrowth on legs and chest, impairment of their vision, an increased metabolic rate, headache and the temperature is usually increased. They may show a respiratory fault under pituitary thyroid simultaneous T.L.
- I only had one patient who was on L-Dopa for Parkinsons, whose temperature was in the sub-normal range that went down with the indicated cranial technique. I asked her to discontinue the medications.
- Quite often these patients will have strong hamstrings that blow out with expiration indicating the need for inspiration. Assist to the sacrum as well. This fault doesn't usually show in the clear until the respiratory technique is done cranially.
- In patients with complicated spinal problems we will use the contrapositional pattern on the coccyx as we treat the sacrum. In inspiration assist the sacrum would be pushed forward while the coccyx would be pulled backwards using a rectal contact.
- Under these conditions, we give pituitary substance 3 times per day.
- We then monitor the specific gravity and axillary temperature. The carbonic anhydrase cycle is dependant and affects glomerular filtration with H_2C0_3 being acted on to give H and HCo_3 (bicarbonate) which helps to maintain the normal acid alkaline balances. And the hydrogen goes off into the urine.
- The pituitary controls cell rate oxidation.
- All the substances the pituitary makes are essentially sulfur bearing, so make sure patients are getting enough in their diet.
- Need for pituitary drive.
    - Observe for a lower patient temperature.
    - Positive T.L. to the glabella.
    - A double T.L. of glabella and another N.L. reflex.
    - Check for a phase of respiration to abolish indicators usually inspiration assist.
    - Look for a sacral respiratory pattern checking for coccyx involvement also.

Front and back brain activity.

- We knew of the right brain, left brain activity so we looked for front and back brain activity.
- We found patients would weaken with a double flexion - i.e. flexing neck and knees simultaneously or double extension would show a weakness and a phase of respiration would abolish it.
- These show need for subclinical cranial faults we missed in the past.
- If the spinal cord gets too short - due to its cervical and second sacral attachments when we do inspiration assist, I hypothesize it frees up the filum terminale.

-Lowell Ward has shown the length of the spinal colum actually will lengthen and shorten.

Reading Referral: Robert Mendelsohn; Confessions of a Medical Heretic, Contemporary Books, Inc., 180 N. Mich. Ave., Chicago, IL 60601.

Also: Fit or Fat by Covert Bailey, publ. Houghton Mifflin, 1978.

- Shows when a patient is on a 600 calorie diet the body thinks a famine is coming and begins to store fat.
- Basically he recommends exercising a minimum of 10 minutes per day aerobically 220 - (your age) 80% of that number equals the heart rate to exercise at.
- Can use instapulse to monitor the rate made by Biosig Inc., P. O. Box 651, N.D.G. Montreal, Canada H4A3R1. It's a hand-held device.

Also: Behold Man, Leonard Nielson by Littlebrown & Co., Boston.

- Marvelous pictures of the body.

Also: Gentleman Quarterly. There's an excellent article on A.K. by Paula Siegel, August 1979.

Also: In the Present Issue of Sports Illustrated there is another fine article by Herman Weiskopf on A.K.

- We now have copies of Dr. Isaac's and Dr. Lamb's work on electron poising.
- In the published material - On the Conference of Trace Substances and environmental health, Vol 8, pp 313-321 copies may be obtained from Dr. Poortinga, 403 Xenia Ave., Yellow Springs, OH 45387
- the article mentions the regime for electron poisings. They noted many tissue changes most related to trace minerals.
- Copper helped visual perception of red and green color.
- Manganese has a sedative effect on the sight of some patients and a relaxing effect on skeletal muscle contracture and fasciculation associated with arthritis.
- Zn and Cu are helpful in skin disorders including staph pyoderma.
- Cobalt with 0.1 gms of tryptophan relieves coronary angina without the residual headache in those patients that get them with nitroglycerin.
- Copper with 0.1 gms of tyrosine diminishes aches in the flu.
- We found in patients demonstrating a subclinical cranial fault, that was demonstrated when in a double flexed position supine. When in sitting or standing positions, they would show the same response, but it would be abolished by left brain activity.
- In the supine position, the right brain is more activated.
- When in a gravity position, the left brain is more augmented.
- The left brain is water-soluble and right brain is fat-soluble (79 manual) along with the trace minerals.

DR. GOODHEART'S RESEARCH TAPES

TAPE 55

Reading Referral: Gentleman's Quarterly, August 79. Excellent article on A.K. by Paul Siegel.

- We got a phenomenal response from the article for A.K. referrals.
- Also the article in Sports Illustrated on Leroy Perry and his olympic involvement.
- Terry Franks is setting up his own practice near Minneapolis.

Pituitary Technique

- We continue to see good responses both in temperatures and specific gravities.
- On cranial pump technique it takes about 5 min. for th temperature to stabilize. Inspiration assist is the usual technique which needs to be done.
- The N. L. is at the glabella and is usually activated several times while doing the pumping action.
- We do give pituitary nutritional support.
- In patients that show the A plateau in temperature but it's still low, check for retrograde lymphatics.
- This all will help balance the pituitary, thyroid, adrenal axis.
- Check for right brain, left brain activity knowing right brain factors are fat-soluble and left brain factors are water-soluble.

Postural deviation.

- When patients heads are ahead or behind the lateral plumbline, or any lateral plumbline postural deviation.
- Femoral head fixation. We have found a new one which seems to be associated with a hidden occipital atlanto fixation.
- In this instance the symphysis pubis is related to the symphysis menti of the jaw.
- An anology between the head and pelvis relationship is like that of the fighter aircraft and the tanker refueling it. They both have to fly straight and level.
- It's the same pattern of cloacal, visual and vestibular righting reflexes.
- We have found fixation of the femoral head induced by both muscular and ligamentous relationships that relate of atlanto occipital relationships that do not show up in the usual fashion.
- Just as we show a stretch weakness of the piriforms by bringing the knee up and medial that is neutralized by lateral motion of the eyes. You can get a weakness by a double flexion or extension pattern when the patient is in a supine position.
- Have the patients bring their knees up- test a muscle - then have the patient flex their head on their chest with the limbs straight. You'll get a negative response. Do both movements together and a weakness

may occur, once in a while it occurs by doing extension of the above areas.
- You will also find a respiratory phase to abolish the above indicators.
- Measure patients' ability of passive abduction.
- To treat the above you contact the patient's head and while the patient attempts to flex or extend you resist that motion as you have in the past.
- Recheck for a weakness of the double flexion. Now negative.
- Note increase now in abduction.
- Also note change in lateral posture.
- If patient shows weak with double extension - treat it the same way.
- Pelvic position must be at an optimum level for good C.S.F. Movement and special movement. As the sacral apex moves forward the pelvis moves backward and coccyx moves backward and vice versa. The pelvic illii flare out with inspiration and in with expiration.
- The above technique allows better motion of the pelvis.
- Some patients who exhibit a sitting sciatica not present while standing or walking. We have found an open S. I. joint on the posterior which will only T.L. to the posterior neck extensors on that side. It responds to a challenge to the P.S.I.S. from a lateral to medial direction, frequently it is seen on the left side.
- You adjust from lateral to medial with respiratory factor found to abolish it, usually inspiration.
- Check for a subluxation also. Look to tape the area if needed.

Blood pressure.

- John Campbell's technique to T.L. to the carotid pulse with one hand and you can T.L. with the other hand to other areas. Once you correct the areas that are involved use the temporal tap to audit to make sure other areas aren't involved. (Collected papers 1977)

Reading Referral: George Meek, Healers and the Healing Process: Quest Book, Wheaton, IL, 306 Geneva Rd., 60187.
- Articles on healing.

Also: The Therapeutic Touch: How to Use Your Hands to Help or Heal, Dr. Dolores Kriger.
- "Physician Heal Thyself" and "A Physician who Treats Himself has a Fool for a Doctor." I used to wonder about the paradoxical meanings here.
- Anecdotal: A patient with a tri-malleolar fracture that had not responded after normal orthopedic care. There was still lymph edema and several muscle weaknesses. I, without letting the patient know, grasped the patient's ankle with two hands and for 2 or 3 minutes I visualized her ankle as being better, like mine. Past indicators improved.
- I generally do not communicate what I'm doing to the patient along with visualizations of color because some people are not ready for this type of information.
- See man with eyes that really see, Feel man with hands that really feel and hear man with ears that truly hear.
- We can't rule out the metaphysical realm.

Reading Referral: Lowell Wards, Dynamics of Spinal Stress.

- His physiological short leg concept is excellent.
- If a patient is off from the plumbline, any adjustment you make should bring them back to midline.
- A patient of Dr. Dan Duffy has made an excellent posture meter. If enough people are interested, perhaps we could get a group discount.

Electron Poising

- Acp-E-trace minerals. Are the Nutrients of Choice in Low Dosages.
- Glutathione can accept or give electrons which is mediated by the sulphur system which is modified by trace mineral material.
- Occ. Vit. K as in fat-soluble chloraphyll is needed in association with quinones.
- We are welcoming Dr. Kevin Kopriva to the office to replace Dr. Franks.

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DR. GOODHEART'S RESEARCH TAPES

TAPE 56

Thanks to Sheldon Deal for the timely release of the annual papers.

- One article to look at is the one on Lingual Ascorbic Acid and its correlation to bilateral pectoral clavicular weakness. 83% who showed bilateral weakness showed decreased ascorbic acid levels.
- All the collected papers showed great thought.
- On page 214 of The Scientific Bases of Human Movement. - O'Connel & Gardner.
- There are some discussions on righting reflexes.
- Stimulation of the labyrinthian righting reflexes evokes contraction of the neck muscles which orient the head in relation to gravity.
- Asymetrical stimulation of skin receptors caused contraction of trunk and limb muscles.
- If you stimulate the opposite side skin receptors simultaneously no righting reflex occurs.
- Visual righting reflexes orient the head and body with the environment.
- Equilibrium reflexes are evoked by stimulation of the semicircular canals.

- The Semicircular Canals
  - They level the head in three dimensions primarily
    - Forward and backward
    - Side to side
    - Left and right
  - There is receptor involvement for a pitch pattern of the head (forward or back)
  - There is receptor involvement for a roll pattern when one side is lower than the other.
    - There is receptor involvement for a yaw pattern where one side is anterior and the other is posterior.
  - We relate this to a tanker aircraft figher aircarft refueling. The head being the tanker, the pelvis being the fighter and the spine is the fuel line in between.
  - So you must level the sacrum to level the head and vice versa. You must detorque the pelvis to detorque the head and vice versa, etc.
  - The semicircular canals are sensitive to both pelvic and head positions.
  - We have a chin at our chin and one at our pelvis.
  - There is a symphysis menti and a symphysis pubis.
  - These two chins have to be level - if one is off the other usually follows.
  - You are all familiar with the occipto atlanto fixation tests. Flexing and extending the head both on and off the table.
  - Sometimes the body compensates and you get a femoral head fixation.
  - Some of the following technique is similar to the occulo basic technique where we stretched one piriformis and looked for an eye direction that abolished any found weakness. We then challenged the sacrum and we fixed it with the phase of respiration and eye movement that abolished the weakness. 79 Manual.
  - This showed how the eyes affected the pelvis.

- The Pry Technique - Pitch Roll and Yaw
  - The occulo basic technique comes under the Roll pattern leveling the pelvis to level the head.
  - The Pitch pattern - the patient flexes the knees with the feet on the table and flexes the head forward, then test a muscle. Some patients show involvement with the legs extended off the table and the head extended back - we fix this similar to the occipito atlanto technique. You have the patient extend or flex the head while the Dr. resists said motion strongly. Then retest the patient.
  - You will note an increase in femoral head movement if you checked it previously. We see great increases in abduction of the leg up to 40% without any fascial flushing.
  - The Roll pattern - the patient flexes the knees with their feet on the table; they then let them both go to the left side and you test a muscle; then they both go to the right side and you test a muscle if a weakness is found you fix the sacral fault with a basic contact and eye position that abolished the challenge. As in oculo basic technique.
  - The Yaw pattern - the patient flexes the knees with their feet on the table and lets both knees go to one side and then rotates the head to the other side causing a counter rotation. If a weakness occurs you adjust the occiput. The fixation is usually on the side where the occiput was up. You find a point of tenderness on the occiput and adjust in a direction to the base of the nose with no rotation of the head. You can challenge the occiput on the atlas. The occiput is fixed in a state of rotation on the atlas.
  - Check for femoral head movement before and after treating. Look for increase in movement after treatment.

Reading Referral - The Food Connection, David Sheinkin and Michael Schacter and Richard Hutton.

- Applied kinesiology allergy testing is noted. There is a chapter on it and I'm mentioned in the text.
- The paper published by Trianno and Davis published by I.C.A.K. on reactive muscles has proven very beneficial.

(B) Reactive Muscles

- Some seem to be more reactive to certain muscles than others. Anecdotal - A high ranking raquetball player who had elbow problems seizing up halfway through a match. No fascial flush showed or muscle weakness showed and there were no apparent vertebral or structural disrelationships. Checking for ligament I found that to be negative and ligament interlink is usually for joint involvement, not pain in a muscle. The triceps, through a gait relationship is related to the quadriceps. When I tested the right triceps after testing the left quad, there was weakness. So I did spindle cell therapy to the quad to reduce the tension retested, and the tricep was strong - look to muscles being reactive in gait patterns. This is myo interlink.
- We are all familiar with the decerebrate cat experiments, and how the cats were able to walk with different levels of spinal cord cuts.
- Anecdotal - I noted quadriceps temperature change while working the muscle spindle of the opposite triceps.
- It's very useful in athletic injuries.
- We look for an increase in temperature.

Reading Referral - The New American Medicine Show, Dr. Irving Oyle, Unity Press , Santa Cruz 1974.

- A book directed to bettering our philosophical concepts.
- It's a good book to understand how healing actually takes place.

Spinal Fluid Concepts

- "If the bones of the skull move with every breath we take, then the mandible is the handle of the pump." Dr. Willie May
- We've shown how the mandible is involved with this.
- We've shown inspiration to expiration assist.
- It's hard to find faults if the pressure is too high.
- I believe one of the functions of the T.M. J. is to monitor the C.S.F.

Anecdotal - A patient didn't show anything when in the supine position but showed T.M.J. involvement and a need to have the sacrum stabilized only when they were in the standing position.

- This is frequently seen in patients with a convulsive episode.
- We usually find the sacrum has to be held in a forward position. It moves forward with inspiration so in this example as the patient expires you hold the sacrum forward limiting its motion and reducing the C.S.F. flow rate.

Electron Poising Concepts

- The cell with its Bions (intra cellular bodies) they can be indeterminate when it comes to reproduction.
- The trace mineral potential availability determines what a cell can be.
- Cells in general are linked to one another by Vitamin A.
- The whole mechanism is then poised on top of a pyramid which is glutathione (a poly peptide of cystine, glycine, and glutamic acid). It has the unique capacity of giving and receiving electrons without changing itself.
- Now picture a shallow S on a piece of paper. On the top right put oxygen. On the lower left put hydrogen. At the mid point is the mid potential of the cell. Vitamin E prevents over-oxidation and Vitamin C prevents over-reduction.
- The cell is set up so that the more it oxidizes the more it will reduce itself (with hydrogen) glutathione is what keeps this remarkable balance.
- Oxygen is thyroid related, water soluble left brain.
- Hydrogen is adrenal or steroid related, fat soluble, right brain.
- The left brain is masculine and positive whereas the right brain is feminine and negative. This explains some of the acupuncture, biomagnetic, and positive and negative therapy localization relationships.
- Fundamentally we supply the patient with A.C.P., the P supplies the guinones which helps keep the body in mid potential.
- If the patient is exclusively left brain we try to supply those agents related to left brain (water soluble substances such as Vitamin C.)
- With the right brain we try to supply the fat soluble substances such as Vitamin A which will neutralize any weaknesses.
- Sometimes patients need both so we begin with trace mineral to begin nutritional therapy which abolishes both left and right type weaknesses.
- We basically start out with ACP, E and allorganic trace minerals or multitrophic chelate. A single tablet per day and then we add whatever nutrients appear indicated due to the patient type of pattern on testing. Also to increase their sulphur intake.
- Control of oxidation is under disulfide control which is basically the sulphur system which acts as a monitor for oxidation and reduction activities. That's why there is a nutritional need for things like mustard, horseradish, onions and garlic for the sulphur that is present in them.

- If you can imagine the S curve I've described as a propeller - the propeller hub would be copper, manganese would be on the oxygen side on the right, zinc would be on the hydrogen side on the left, etc. Trace minerals act as ergonizers. Substances which improve the potential of solving the complexity of the problem.

DR. GOODHEART'S RESEARCH TAPES

TAPE 57

Reading Referral - The Brain-The Last Frontier by Richard Restak.

- It's full or modern knowledge of the brain and nervous system.
- They state that speech seems to be lateralized to the left hemisphere. The speech area is larger on the left side than the right.
- Dr. Turkowitz noted a biasing of infant head turning to the right which would indicate the left hemisphere developing at an early age.
- Turkowitz noticed over 98% of newborns' heads were turned to the right. The other 2% even had their heads turned more to the right than the left when infant heads were positioned to midline while on their backs. 75% turned their heads to the right initially.
- Newborns responded to food stimulation more quickly to the right.
- Speech sounds were recorded to be perceived by the infants in the left hemisphere whereas non-speech sounds were recorded to be received in the right hemisphere.
- We know the left side of the brain controls the right side of the body 85% of the fibers decussate. The left side is mathematical, logical, reasoning, predictable and male.
- The right side of the brain controls the left side of the body is tonal, illogical, non-reasoning, non-predictable and female.
- Yet the left brain is like 3,000 years old and the right brain is like 5 million years old.
- Something has to bias the brain to the left. It's as if you have neurons 10^3 on the left and 10^{23} on the right.
- One notices how easily the left brain shuts down when someone has a few drinks, the speech and motor capability slows down.
- Something has to bias the brain to the left because the majority of us are right handed.
- In anthropological studies it is recognized a majority of wall writing occurs in the corner of a cave versus the edge of the cave indicating right handedness.
- In the animal, the limbic system (Rhinencephalon). It is the seat of anxiety and tension and where most of the M.A.O. inhibitors work.
- An animal's head turning is hooked up with his olfactory sense. This is demonstrated in animal studies where animals exiting from a wooded area turn their head from side to side while sniffing.
- We usually turn our heads from side to side when we smell something.
- The head turning muscles, the S.C.M. and upper trap have a dual innervation from cranial nerve (spinal accessory) and cervical nerve innervation.
- I accidentally noted on a patient that when he therapy localized the bridge of his nose it was abolished by head turnings. I noted on patients who showed negative T.L. to either the nose or another area that sometimes a weakness would occur when both were therapy localized. I found no cranial faults involved with it, it was immediately abolished with head turning. This made me wonder whether the

biasing to the left brain was upset giving an improper balancing between left and right brain.

- The right brain is so dominant neurologically to the left

Limbic technique

- Involves a fixation of the 7th cervical and first rib.
- Lovett brother - At the 1st lumbar and twelfth rib or sometimes the 11th rib via the posterior serratus inferior.
- If you T.L. the seventh cervical 1st rib bilaterally a weakness may occur on head turning. The same is true upon therapy localizing the 12th rib 2nd lumbar region.
- The head turning is merely a screening technique to show the patient what is going on. The real technique is to T.L. the area of fixation and turn the head to one side or the other.
- We challenge the vertebrae in question in one direction while pushing the rib in the other direction. We observe for a weakness. The side that produces the weakness is the side to adjust.
- The 7th cervical is the vertebral prominens, it is like a tiller, it is the spinal backup to the limbic system.
- The interesting thing to note here is the accompanying weakness of the peroneus tertius and/or longus and/or brevis and/or anterior and/or posterior tibial in about that order bilaterally.
- With this movement there is a marked increase in the patient's energy and reoccurring problems hold better.
- It is old fashioned chiropractic appealing to many people who like articular relationships. This is a true fixation.
- This is the structural component to the left brain, right brain sequence-electron poising - holography, etc.
- We're looking for the emotional side of the triangle for the right and left brain sequence.

(B.) Pitch, Roll and Yaw

- The two chins should be in balance with one another. The symphysis menti and symphysis pubis should be in syncrony with one another and have a full range of motion.

Pitch -The pitch pattern being involved with a femoral head fixation. You will usually note a full range of motion of a patient's hip while the patient is supine. However, in walking their gait seems greatly limited.

- The semi-circular canals and the relative pitch are responsible for the limiting of the femoral heads.
- We check for the pitch pattern by having the patient flex his head forward while flexing both knees and checking the pectoral claviculars for a weakness. Occasionally the patient will show an extension pattern. It gets fixed the same way.
- This procedure is different from the atlanto occipito technique because here there is bilateral flexion of the head and also legs at the same time.
- You fix this pattern by resisting patient head motion. As the patient attempts to flex the head forward you attempt to extend it and as the patient extends the head back you flex it forward. Your hands are holding the sides of the patient's head.

Roll - The roll pattern is basically the occulo basic technique. The patient flexes both knees then lets them both fall to one side or the other and we test for weakness. If weakness occurs, we fix the sacrum.

- The sacrum is challenged and it shows positive only with the patient's

eyes lateralized to one side or the other. You then find the phase of respiration which abolishes it.

- To fix the roll pattern you hold the contact that meets above criteria for about four to five respirations.
- The side we're fixing is usually the side of a short leg and temporarily may need to be lifted.

Yaw - The patient flexes the knees and lateralizes both of them to one side while the head is turned to the opposite side.

- When a weakness occurs, there is an occipital subluxation fixation usually on the side that was up on head turning.
- We challenge the occiput on the atlas. Hold the atlas and challenge the occiput.
- The occiput is then adjusted by a thrust to the base of the nose with the head in a straight up position.
- This will increase patient flexion considerably.

Unilateral Rib fixations.

- Exhibited by toe flexor weakness. All of them except for the big toe.
- This is challenged by challenging the levator costorum attachments. We challenge the spinous process with the rib just below it.
- We check for this with any P.R.Y. patients we find or limbic techniques.
- We adjust these rib fixations in the direction of the challenge.

Postureometer - We are taking orders for them so Dr. Duffy's patient will make them for us.

- Video cassettes of our sessions are now available on ½ V.H.S.
- We've recently returned from Australia, it was a wonderful visit.
- We have copies of the New Zealand report on chiropractic.
- There will be chiropractic representation for the 1980 Olympic games for the U.S. athletes.
- There was a very fine article on chiropractic and A.K. in the Cincinnati enquirer.
- Terry Frank is now in Burnsville, Minnesota and Wally Schmidt is in Chapel Hill, N. C.
- Currently Drs. Kevin Kopriva, Phil Dunard, Gary Klepper and Rob Resnick are the current staff.

INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

DR. GOODHEART'S RESEARCH TAPES

TAPE 58

Olympics

- This tape is being made at the Olympic Village in Lake Placid, N.Y.
- Chiropractic treatment is being given to the athletes who request it.
- We have a trailer here with a table and equipment for me.
- All the stories you have heard about the transportation is true.
- I have treated several skiers; Terry Lynch, Gary Crawford and Dave Erwin.
- Randy Gardner did not request chiropractic care so I was unable to treat him.
- Randomly athletes are chosen for drug screening, both winners and losers.
- I have seen some hockey games, been treated very well and you'll be hearing many stories as I lecture to various groups.
- The Olympic Village is a city in itself with a mayor and it is to become a minimum security complex after the games.
- The food is excellent and the athletes are well taken care of.

Reading Referral - Runner Magazine - March 1980. Talks of chiropractic and the U.S. Medical staff.

- The press has been good on this event.
- The athlete who injures himself is injuring the most precious thing he has and needs much support and reassurance that his body is responding well.
- Dr. Irving Dardik is to be lauded for all he has done in getting us involved with the Olympic games.

The Limbic System

- Is positioned between the two halves of the brain and as we've discussed previously is associated with smelling, and head turning.
- This technique was found accidentally in Houston when a patient T.L. to the valves of houston and his nose and it was abolished by head turning.
- We've found the nose is apparently the T.L. input to the olfactory system which is part of the limbic system.
- We know the S.C.M. and upper trapezius have both a cranial and cervical spinal nerve supply.
- We found head rotation really takes place at the 7th cervical.
- We found that T.L. to the 7th cervical 1st rib would be negative but with head turning it would be positive.
- As Isaacs says, if you give biology what it needs it will solve its problems. This is true with the three sides of the triangle.

Research

- The Olympic committee is funding a project to look into the correlation of palpation between 2 members of a team investigating by palpation of the spine and joints of athletes. There will be seven teams of 2 members each. They will treat the athlete with manipulation but this will not be evaluated at this time.
- Another experiment will be set up to evaluate manipulation treatment.

- I encourage you to submit your name to Dr. Murray Goldstein, D.O. to volunteer your time for the 2-man team trials. Write to Dr. Goldstein, N.I.M., C.D.S.- N.I.H. Bldg. 31, Room 8A 52, Bethesda, MD 20205 (301) 496-9746. He is setting up the statistical part of the research.

Flu

- The most recent epidemic affecting primarily the sinuses, nasal, throat did not show the usual signs. They show a double therapy localization to spleen and sinuses together but not individually.
- It's similar to checking the pituitary against the thyroid.

Nails

- Those who bite them show a need for trace minerals.
- Nails themselves are high in trace minerals.
- We supplment low dose broad trace mineral support.
- Sometimes we start with very low dosages - a 16th of a tablet so the body can build up its trace mineral reserves without putting any minerals out of balance.

Pitch, Roll and Yaw

- We've found an additional factor - a yaw #2
- We're familiar with yaw #1 where both bent legs go to one side and the head goes to the other. This indicates an occiput subluxation fixation.
- In Yaw #2 we block a prone patient. One block under the anterior iliac crest and the opposite shoulder. If a weakness occurs it is neutralized by the patient's hands on the sacrum bilaterally not unilaterally. This indicates a posteriority of the sacrum usually on the left.
- We adjust it on a side lying position with the upper leg bent and parallel to the floor and no rotation in the spine. The Doctor's thigh is placed behind the patient's bent upper leg and the patient is instructed merely to push lightly againt the doctor's thigh. Then with a pisiform contact adjust the sacrum in a forward direction neutralizing this torque pattern.

INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

DR. GOODHEART'S RESEARCH TAPES

TAPE 59

Welcome to I.C.A.K.

Aerobic Anerobic Muscle Concept
- I found it when working on Dave Erwin on the Olympics
- He had hamstrings that were very strong and his problem of not being able to hold a tuck towards the end of a run prompted me to test his muscles repeatedly. The intact left side was fine but the right medial hamstring weakened after a few repeated tests. I had an answer for something I had no question for.
- We are aware there are two types of muscles.
- Slow twitch
  - Red
  - Aerobic
  - Burns fat and oxygen to provide energy - they are the postural muscles.
  - This is the equivalent of the dark meat on a turkey.
  - It owes its color to myoglobin. It acts as an oxygen reservoir within the muscle which tides the muscle over from one contraction to the next.
  - Site is small and redder.

Fast twitch
- White
- Anerobic
- Burns glycogen by an enzymatic action.
- This is the white meat on a turkey.
- Site of these fibers are large and pale.
- Its action is primarily glycolytic indicated by its high A.T.P.ase activity.

Reading Referral: O'Connel & Gardner. Understanding the Scientific Bases of Human Movement, p. 157. They compare fast and slow twitch muscles.

- Most muscles in man contain both type fibers in varying ratios.
- Those with a higher content of aerobic slow twitch muscle will make better distance athletes.
- Those with a higher content of anerobic fast twitch fibers will make better sprinters.
- Evidence has shown you can bias these ratios by training.

There are basically three types of fibers.

A. Classic fast pale fibers.
   - found high % in gastochemicus small % of B or C fibers

B. Slow red fiber
   - high % in soleus muscle, low A fibers

C. Slow red fiber
   - high % in sloeus muscle, low % A fibers.

- With Dave Erwin I assumed that perhaps due to decreased lymphatic drainage the muscle was not getting enough fat to stay strong.
- With prolonged N.L. activation, the above weakness did not occur.
- When patients flex forward sometimes you will see one side higher. This high side should be the side of a weak psoas. Yet on testing the muscle I would not find it weak. But on repeated testing it would show.
- This works well especially with scoliosis patients when one cannot find a weakness.
- Capillaries have been shown to leak protein - 60% will be lost in a 24 hour period. All the fat is lost in the same period of time being retrieved by the lymphatic system.
- If there is a loss of retrieval especially of the fat it remains in the interstitial tissue of little benefit to us.
- So as the muscle keeps contracting, it does not get its proper supply of fat. So we try to improve the lymphatic drainage.
- If cramping occurs with repeated testing work both the N.L. and N.V. reflex. If the cramping persists we look to the nutritional requirement of that muscle.
- The 1980 manual has this in it.
- A person who doesn't eat meat is lower in iron and that may predispose them to this.

Anecdotal - A patient who has seen several dentists but was still having T.M.J. involvement. Her main problem was at 8:00 a.m. So I checked the then meridian alarm pt. to the now meridian alarm points. Individually there was no weakness but when both were T.L. Simultaneously there was immediate weakness. I then looked for a lou point of the above meridians to abolish the weakness. It abolished the pain in her jaw.

- It is best to stimulate a Yin meridian at a Yin time noon till midnight and a Yang meridian at a Y any time midnight to noon.
- This is the "Now and Then" technique.
- Check the now alarm point against the then alarm point or a major T.S. line indicator.
- Tap the lou point until the symptom is gone, the tap point is less painful or there is no longer a T.L.
- It is especially useful for those with jet lag or those who travel frequently.

B. Reading Referral. Killing Pain Without Prescription, Harold Gelb. It has a section on A.K. in Chapter 7.

- The charts we use are the ones printed in the 1973 manual.
- In the past we have described a sacral wobble and we have stated not every cranial fault has a sacral fault but every sacral fault has a cranial fault.
- A sacral wobble is a torque pattern within the pelvic girdle coming from its concentric movement.
- The patient when T.L. makes sure to T.L. only the sacrum.
- With regards to the spheno basilar junction there is evidence of a wobbling along with flexion and extension.
- There is a wobbling motion to the temporal bone.
- The frontal bones pivot at the mectopic suture.
- We're aware of the banana head.
- On examination there is an anterior divergence and convergence on the respiratory surface of the sacrum.
- On looking down at a skull checking the anterior frontal sphenoidal suture line there is a relative anterior convergence.

- At the pterygopalantine line there is a relative anterior convergence.
- The occipital condyles have a relative anterior convergence.
- At the occipital temporal suture the same is true.
- Some T.S. lines are painful to palpation and even though other things are improving the T.S. line will remain painful.
- I noted on some patients the upper T.S. line was painful on one side and the lower T.S. line was painful on the opposite side.
- I had noticed in some patients when I worked the glabellar area (reflex for the pituitary) I would get a response when manipulating the area in one direction and not the other.
- So I hypothesized that perhaps the sphenoid was rocking. I would have the patient T.L. to one side of the bridge of the nose looking for a weakness. It was usually negative.
- I instructed the patient to push the side of the bridge of the nose with about five pounds of pressure towards the top of the T.S. line on the opposite side. One direction may cause a weakness that is usually helped by inspiration assist.
- We fix this cranial fault the same way as it was challenged with the phase of respiration that abolished the challenge.
- The T.S. line will lose its soreness.
- This is how we fix a tilted sphenoid.
- The eye will be extruded on the high wing of the sphenoid. The high side will have a depressed high side T.S. line and protruding low side. The opposite would be true of the low side.
- Using the bridge of the nose to derotate the sphenoid is a lot more comfortable than using the pterygoid process. The nasal bone acts as a beautiful lever.
- This technique helps in long-standing T.M.J. problems.
- In the 1980 manual there will be drawings of the sacral and cranial anterior convergences.
- Because of the boycott of the Moscow olympics there has been some cutbacks.
- Those who wish to contribute funds can do so by sending them to the United States Olympic Committee Sports Medicine Foundation. Attention: Irving Dardik. Earmark it for chiropractic research if you wish. Call me for his address since he is moving.

The Brain

- 98% of right handed people who are asked a question requiring a verbal thought will respond with eye movement to the right. This is remnant of the biasing of the body from birth.

Reading Referral: Structure of Magic, Bandber & Grinder. Frogs and Princes. Real People Press, Boy F. Moad, Utah 84532.

- They talk of eye movement.
- When the eyes move up and to the right people are accessing constructive imagery doing visual manipulation.
- Eye movement up and to the left indicates access to remembered imagery. They like explanation with pictures.
- Eye movement down and to the right indicates access to feelings. It's good to work on this person at this time.
- Down and to the left movement is with accessing of internal dialogue and the person is talking to themselves.
- Eye movement level and to the right occurs when a person is thinking of something to say.

- With eye movement level and to the left they are accessing remembered literature.
- This lets you know whether a person is audio metric, kineso metric or video metric.

Reading Referral: Scientific American offprint #158, June 1963. Availability: 660 Mark Street, San Francisco, CA

DR. GOODHEART'S RESEARCH TAPES

TAPE 60

In the workshop procedure manual, Vol. 2, 1979, and in previous manuals, the sections of "apply appropriate cranial technique" is well-known to you and self explanatory.

- The mastoid is moved forward with inspiration (tongue on roof of mouth), when a muscle is helped by inspiration.
- The mastoid is moved backwards (tongue held down), with expiration when a muscle is helped by expiration.
- These were called the relay reset method (Tape #35).

Reading Referral. Myofunctional Therapy in Dental Practice, Bartell Dental Book Co., 112 Crown St., Brooklyn, N. Y. 11025. Page 177 - He describes tongue movement on swallowing.

- We have found many patients who have problems swallowing with their mouth open. This is a simple screen for cranial faults. You should be able to swallow with your mouth open. If not, it's indicative of a cranial fault 50% of patients cannot do this.
- The average individual swallows about two times a minute while awake and once per minute while asleep.
- This comes to about 2000 swallows in a 24 hour period. The force varies from 1.5 to 6 lbs of pressure.
- When the swallow is off it causes both dental and cranial faults.
- Measuring the strength of the orbicularis oris is about 3-5 lbs of pressure. Readings above or below this is abnormal.
- Thumb sucking has been hypothesized about with little proof. We don't believe it's due to insecurity. We believe it indicated a digestive problem where sucking helps to get increased predigestive juices as saliva. A properly breast-fed child rarely sucks its thumb.
- Assuming there is a cruciate suture imbalance we have patient try to spread the maxilla apart, many patients get a positive response.
- Dr. Schroed discussed this in the winter of 1979 collected papers - both the separation and closure.
- We have found the suture to usually be jammed. We challenge by pulling apart and finding a phase of respiration that abolishes it.
- DeClementes anatomy text figure 546 shows the origins of the pharygeal constrictor muscles attaching directly to the basal portion of the occiput as well as to the temporal bone. This indicates why we can use an open mouth swallow as an indication of a hidden cranial fault.
- Following the spread technique cervical muscles relax in a marvelous fashion.

B. Very practical in relieving the tension type headache demanding relief.

- The muscles of the soft palate have a vagal innervation.
- The forces add up to accumulated of 3,000 to 12,000 lbs of force over a 24 hour period in the oral cavity.

Dr. Steven D. Smith, M.D. of the Philadelphia College of Osteopathic Medicine who feels like I do that the tongue in the relay reset position is important. And that the tongue's anterior half comes in contact with meridian areas on

the hard palate which correlate to wrist pulse points. Starting with the conception vessel governing vessel on both the left and right sides and then the other respective points working their way back half way to the foveola palatina. They are on either side of the mid palatal raphe.

- There does appear to be evidence that these meridian points exist on the hard palate.

B. In those patients with dentures or bridges perhaps therapeutic cutouts could be used in the difficult patient.

- The points begin just behind the incisive papillae and are on either side of the mid palatal raphe.
- Dr. Smith has written an article which will be coming out soon.
  - There are basically four ruggae folds that seem to correspond to the wrist diagnosis points for the meridians. You can find these points yourself on patients.
  - It really means that tongue position is important and that our original concepts of the relay reset mechanism has validity.
  - Dr. Smith is the dentist who did the splint work with the Philadelphia Eagles correlating jaw posture with muscular strength. Published in the N.Y. State Dental Journal, Vol. 44, August 1978.
  - So re-read the sections in the 1979-80 manuals on "Apply the Appropriate Cranial Technique.
  - We have found the cruciate suture not to T.L. in the clear but only with expansion.
  - I was recently speaking in Cape Cod and had a delightful time.

Reading Referral: The Body has its Reasons. Teres Bertherat & Carol Bernstein. Translated from french by Avon Books.

- There is a unique concept that some of the Yin and Yang meridians are associated with the anterior and posterior parts of the body.
- The conception vessel is the most Yin the governing vessel being the most Yang.
- They don't T.L. frequently due to the fact that they are the most Yin and Yang of the meridians.
- When a patient T.L. in a standing position you usually get a negative response. If they hyerlordose the lumbar and cervical spine and hyperkyphose the thoracic spine with their fingers therapy localizing the spots to the left wrist you'll get a positive pattern most frequently kidney bladder. You hardly ever get a response with the right wrist.
- If you can't turn a meridian off by the sedation points that's a pretty good indicator the meridian is over. With the bladder meridian tapping K6 bilaterally will turn it off and cause an increase in forward flexing of patients.
- In 30% of the patients we got a decreased amount of forward flexing. By going to the connecting points for the conception and governing vessels. CV15 or GV1 this would increase the flexing.
- Works well in patients with diminished forward flexing along with use of the limbic and P.R.Y. technique.
- Dr. Marks, a podiatrist, who gave me a copy of the book "The Right Brain," is listed under a footnote.

Reading Referral: Vol. 8, #3, May 1980. American Journal of Sports Medicine Published Williams and Wilkins.

- Fundamentally it is a test of reliability of muscle testing manually and by cybex machines.

- Two populations were studied, one athletic, one not.
- Cutaneous afferent stimulation was used for proprioceptive neuromuscular facilitation.
- It shows manual muscle testing shows a standard which can be validated that the cybex may now show.
- Cybex measure concentrically whereas manual test measure eccentrically.
- We have reduced to 100 mg the amount of pantothetic acid we use with anerorobic muscle test weakness. 200 mgs seemed adequate but it was causing some irritability with some patients.
- Ten tests in 20 seconds for aerobic; 20 tests in 20 seconds for anerobic.
- Some muscles require the 18 mgs of the iron chelate for its aerobic activity as well as the pantothenic acid for the anerobic activity.
- In Tape #35 we identified an element of cranial technique that was involved with jaw opening and closing.
- We also found that putting the tongue against the roof of the mouth would negate the weakness that would occur when you would attempt to restrict mandibular movement with respiration, etc.
- So in difficult patients remember the tongue relay reset mechanism.
- Many times a lead square over G.V.1 will produce the same weakness as a lead square over the mouth which can be negated by tongue position.
- An I.C.A.K. member, Dr. Joan Sage, has written an excellent article on Gestalt therapy. Available through us or from Dr. Sagen, Georgia State University, 33 Gilmore St., S. E., Atlanta, GA 30303.

DR. GOODHEART'S RESEARCH TAPES

TAPE 61

The Cerebellem

Reading Referral: Involuntary Movement Disorders by Dr. Irving S. Cooper. Thanks to Dr. Baker for sending it to me.

- He will inflict a wound on the thalamus that will diminish involuntary movements as in Parkinson's and Chronic tonic torticollis.
- There is a dysarthria that occurs after the surgery.
- I truly enjoyed the section on the cerebellem because cerebellar cells are capable of reproducing.
- The cerebellem plays a major role in the processing of the information from the muscle receptors G.T.O.s and spindle cells.

Reading Referral: The Functional Organization of the Cerebellem in its Relationship in its Role to Motor Control by Eklels J.C. Nobel Symposium, 1-1936 edited by Granit 1966.

- He says a large part of the dorso spino cherebellar tract (D.S.C.T.) receives fiber from group 1A from the spindles.
- We are all aware of the spindle fiber makeup and the flower spray endings originating from the ends of fibers and the annulospinal component wrapped around the center of the interfusal fibers. The primary endings give rise to a large sensory fiber called group 1A ~ 12 microns in diameter.
- The secondary endings give rise to a smaller fiber, the group II fiber.
- So when the main muscle fibers are stretched, so are the interfusal fibers giving both the rate and intensity of the contraction.
- There is also a motor innervation to the spindle which will alter the spindles response to stretch, modifying the afferent information to the C.N.S. This is part of a loop cervo mechanism controlling muscle length. This is to be considered an involuntary movement disorder.
- We know the D.S.C.T. receives a large number of fibers from group 1A, 1B and Group II going to the ipsilateral side of the anterior lobe of the cerebellem.
- Some of the D.S.C.T. fibers have mixed transmissions which carry, 1A from the spindle, 1B from the G.T.O. and Group II from the secondary spindle. They are primarily IA which is usually restricted to one group of synergistic muscles.
- Here is why I'm indebted to Tom Baker.
- One relay to the mossy fibers is 40-60 milli seconds. The total conduction time of the D.S.C.T. ranges from 2.5 to 6 milli seconds. The ventral spinal cerebellar tract V.S.C.T. relays information almost exclusively from the G.T.O.s. Their conduction time is somewhat faster, 2.5 to 4 milli seconds. The V.S.C.T. fibers cross both in the spinal cord and the cerebellem again. Most of the fibers terminates in the vermis of the intermediate lobe on the same side as the limb of origin. They terminate in the cerebellar cortex mossy fibers.
- Another major tract is the olivo cerebellar tract. These fibers terminate slowly as climbing fibers in the cerebellem. There is a precise

projection of the inferior olive to the cerebellem. While the dorsal accessory olive and part of the medial accessory olive project to the contralateral vermis in the anterior lobe. The Spinalolivary tract to the inferior olive is a crossed tract and ascends in the contralateral vertical column. Thus, after relaying in the inferior olive, the ascending spinal olivary tract projects to virtually the same part of the cerebellem on the ipsilateral side as the D.S.C.T. and as the V.S.C.T.

- The latency for cerebellar response is longer for the olivary tract than the D.S.C.T. and V.S.C.T. It is 18 to 25 milli seconds.
- Dr. Resnick has an interest in the cerebellem as I do. His comments have been useful.
- There is only one output channel from the cerebellem with a connection to eye muscle cells.
- It has been found the purkinje cells are inhibitory.
- With all of this we see the cerebellem output is transmitted to the C.N.S. Solely by turning down the background discharges to these nuclei.
- This means that the cerebellem functions as compurator or error detector with respect to the execution of motion.
- So the cerebellem has to be involved with dyskinesias that we see.
- He talks of the basal ganglia and its control of the five modulations of motor activity.

Reading Referral: Ruchte - "Handbook of Experimental Psychology," Published by S. Wiley, N. Y. 1951, 154-208. He talks of the cerebellem.

- He says, "The cerebellem by this sensing mechanism functions as a compurator or an error detector in respect to the execution of movement."
- So if the cerebellem is an error detector and the V.S.C.T. travels faster but longer.
- Suppose the cerebellem is trying to correct errors and bring things to center like a catcher will in baseball so the umpire thinks it is a strike.
- The key to this is to test muscles in rapid succession like we do in reactivity. This unlike reactive muscles is not affected by ostogen. And it is not affected by iron or pantothenic acid.
- Here we test a muscle, challenge, or interrupt therapy localizing rapidly to see if a weakness occurs. This brings out the weakness before the cerebellem can correct the error.
- This technique will bring out many subclinical faults in the pelvis and upper cervical regions that do not show under normal therapy localization.
- I see primarily patients who have been referred to me from other doctors. I see a lot of problem cases, sometimes the problems that come in exceed our solutions giving me answers sometimes for which I have no question.
- We just returned from Norway where we had a beautiful time.
- On our way back we stopped at Jackson Hole, Wyoming and spent some time with Otis Thomas and Peggy with a Holistic Healing Group. Many five people were there.
- For those of you who want tapes of that session you could contact Otis Thomas in Houston.

Eye Motions

- At the May I.C.A.K. meeting we discussed the eye motion that Restak

talked about. Forming the basis of the book the structure of magic and neurolinguistic programming.

- When the eyes move down and to the right the patient is accessing feelings tactile and visceral kinesthetic feelings.
- When the eyes are moved level and to the right they are auditory rembering.
- When the eyes are moved up and to the right the person is constructing imagery and visual manipulation.
- When they move up and to the left they are accessing idedic imagery or remembered.
- When they are straight ahead but unfocused they may be accessing any class of information, generally the system they access most easily.
- The eyes up and to the left as allowing accessing of remembered sound. Like nursery rhymes.
- Movement down and to the left is like the person having internal dialogue with themselves.
- They believe these eye movements come from the vistigial pattern that comes from the fact all babies have their heads turned to the right from the left brain biasing as opposed to the right which is the source of instincts and reflexes. The left brain is more newly arrived information.
- You're also familiar with occular lock and the relationships that exist.
- Knowing occular lock exists and is a means of unswitching people. I've wondered why it exists?
- So I ask patients if you had to learn something new would you like to hear it, read it, or do it. Then I observe their eye response. A person who goes down to the right is kinesthetic and likes to do it. Level and to the right they like to hear it first, and upward to the right like to read and see it first. Then taking their answers I tested a T.S. line muscle and when a person who answered they'd like to see it put their eyes up and to the right a weakness would appear. Activation of the N.L. reflex would abolish that. The same thing would happen to the other eye positions.
- In these people the brain is taking 60% of the energy and the involved organ relationship only 40 and it should be 50-50. Out lifestyle can modify this.
- This is one thing that allows us to identify the different patient types and how best to relate to them.
- Some of this is shown in breathing patterns.
    - When the whole chest is breating vs. shallow breathing but prolonged expiration indicates auditory accessing.
    - Breathing highly and shallow indicate visual accessing meaning up and to the right and the breathing will change.
    - Abdominal breathers are kinesthetic and that's down and to the right.
- When the voice changes that means visual accessing which is up and to the right. You can hear it in my voice as I read or try to remember things.

Grand Teton Meditation Retreat

- Jackson Lake Lodge - Rev. Albert Hurd is president.
- Sig Paulsen was there, author of many articles and books.
- Dr. Norman Sheely was there also and a find neurosurgeon.
- Reservation can be made for next year through Otis or Rev. Hurd.
- It was a marvelous thing.

Olympics

- There is good indication there will be an applied kinesiologist on the Canadian Olympic Committee.
- We supplied them with the A.K. packet material from I. C.A.K containing published material from different sources endorsing A.K. as an on-going approach.
- This is of great value for those seeking official recognition.

INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

DR. GOODHEART'S RESEARCH TAPES

TAPE 62

Cerebellem continued

- Involuntary movement disorders - Irving Cooper.
- We discussed on the last tape the cerebellar function.
- The cerebellem plays a major role in the processing of information from muscle receptors. Both spindle cell organs to G.T.Os.
- It is part of the extra pyramidal system or the network that modulates motor activity.
- A large part of the D.S.C.T. receives group IA fibers from the spindles. Group 1B from the G.T.O. and group II from the spindle cells traveling to the Ipsilateral anterior lobe of the cerebellem. The total conduction time varies from 2.5 to 6 milli seconds.
- The V.S.C.T. relays information from all most exclusively the G.T.O.s with a faster conduction time 2.5 to 4 milli seconds. It crosses two times terminating in the vermis and intermediate lobe on the same side as the limb of origin.
- There is an appreciable number of contralatteral connections. The clinical importance is in the bilateral effects sometimes observed when the cerebellar thalamic tract is interrupted unilaterally in some cases of dystonia.
- I discussed the spino olivary tract and its relationship to the D.S.C.T. and V.S.C.T. projections.
- The olivo cerebellar tract contains primarily IA and II fibers from the contralaterail limb primarily the lower limb. The latency time is much longer, 18-25 milli seconds.
- There is basically afferent processing by the cerebellem with but one output channel by the purkinge cells relating possibly to the eye muscles.
- Ruch has stated the cerebellem functions as an error detector in respect to the execution of movement. It acts as a cervo mechanism for muscles and the cerebrum.
- The purkinge cells are primarily inhibitory in action.
- The whole output of the cerebellem is transmitted to the C.N.S. solely by turning down the background dischrges to the nuclei.
- Therefore the cerebellem is an error comparer comparing the error of the incoming fibers acting as a correlator, comparator and compensator. Like when you walk on the side of a hill the legs are bent appropriately so the head and shoulders remain level.
- When there is a distortion in the body, the cerebellem compares the error of both sides compensating.
- This system has led us to the concept of multiple challenge. Therapy localization, etc., to check through these cerebellar compensations.
- For therapy localizing you just multiplely make and break the contact while checking a muscle.

Reading Referral: The Structure of Magic, and Frogs into Princes

- We discussed the fact that people are audio, video and kinetic. That

is demonstrated when in certain thought processes they move their eyes in a certain direction.

- I tried affecting the patient by asking what way they would like to learn something; by seeing, hearing or doing a new thing.
- There were those patients who found this difficult to do using the binder and grindler concepts.
- One patient with a chronic sciatica I thought might get better tapping the bladder meridian affecting cerebellar activity the results were equivocal.
- She would drift to the left of plumb when her sciatica was aggravated. When she was feeling well she would be centered.
- She would show the need for a basic contact to the left sacrum. She also needed a heel lift.
- Patients who are ill or in pain seem to show a momentary nystagmus. Sometimes it looks like the patient is reading a teleprompter just past your head.
- So standing at a plumb line and off approximately 2" to the left I asked her to close her eyes so she would be unaware of the plumb. She was still two inches to the left. When she put her eyes down and to the left she would come back to center and the pain would decrease. When her eyes were in any other position she would drift to the side and the pain would increase.

Eyes Into Distortion (E.I.D.)

- We observe a patient for any occipital, shoulder, pelvic, spinal rotation or unleveling and mark the distortion mentally noting these elements.
- You can use E.I.D. to bring problems out that are not showing but they should be there.
- You have the patient place the eyes into the distortion. If the occiput is low on the right with no rotation the eyes go down and to the right. If it's low on the right and anterior on the right you would put the eyes down and to the right with slight movement to the left. Go with the major distortion.
- If your head is down and to the right and slighly posterior the eyes, to compensate, have to move up and to the left to look straight ahead.
- There's good correlation with what we talked about with Pitch, Roll and Yaw. And utricular and saccular activity of the semi circular canals.
- This also correlates with how we use to treat extra-occular muscles in scoliosis patients.

Reading Referral: November 1980 Scientific American. Article on Vestibular Apparatus by Donald Parker

- We are familiar with how a cat that is dropped always lands on its feet. Or if you tilt a newborn infant its eyes roll so the gaze remains fixed. These are controlled by the vestibule in the inner ear.
- These are compensations for a disturbance in balance or orientation and each is controlled in part by the vestibule of the inner ear and how that was done in the Pitch, Roll and Yaw pattern.
- The doll eyes reflex in infants is a vestibular compensation for a disturbance in orientation. Here an infant is held upright so the gaze is straight ahead. If its body is tilted its eyes will roll to keep the gaze straight. These reflexes are controlled by the otolith receptors and gradually decline as the visual receptors assume a greater role in the presentation of orientation and balance.

- treating low-range deafness. We can T.L. with left or right brain activity showing a need for long N.L. activity.
- We have also found the cerebellar technique shows a need for further N.L. activity. The interrupted T.L. and double challenge seems to be equivalent to each other.
- We do not know yet if the E.I.D. pattern is on this same level. It appears that way.
- This is a demonstration of how the cerrebellem works with the extra-occular muscles.
- These techniques have helped in a lot of problem patients.
- Having determined you are dealing with the comparator as part of the cerebellem, putting the eyes into distortion will allow you to evaluate the other circuits (N.L., N.V., Acupuncture, Nutrition, etc.)
- We found a large amount of muscles that would weaken with the E.I.D. pattern. We found the hyoid would abolish this. If the patient orients their hyoid into the distortion it will negate the E.I.D. weakness. The hyoid represents an override for this system reducing the number of N.L. reflexes that would need treatment.
- Balancing the hyoid helps in the E.I.D. pattern. Balance the hyoid by G.T.O. activity to the muscles around it.
- When making an adjustment, have the eyes into distortion and then do the bone memory tap to maintain good posture realignment.
- If a patient standing shows a distortion pattern merely place them into a correct posture putting their eyes into distortion and do the bone memory tap for good musculo skeletal changes.

The Tentorium Cerebelli

- Acts as a trampoline for the cerebellem attached at the straight sinus to the falx cerebri and the falx is part of the tentorium cerebelli which is attached at the ethmoid and occipital proturbance, and Petrous portions of the temporal bones so the brain is suspended in all positions so as not to be rattled with movement.
- The reciprical tension membranes are responsible for many of the cranial adjustments we make.
- The dura attaches to the skull and foramen magnum atlas, axis and 3rd cervical being free of attachments going to the filum terminale situated at the posterior aspect of the cocyx.
- Despite the evidence of C.S.F. flow rate problems and low backs that are resistant to treatment. The evidence of an upper cervical fixation (U.C.F.) remain rather high with its weak double gluteus max.
- We have found a respiratory factor to the U.C.F. pattern. Test for it in the usual manner and look for a phase of respiration to abolish it. In some instances like a ligament stretch patient we may use multiple small thrust to break the fixation with little trauma to the area.
- I believe these upper cervical fixes are placing tension on the reciprocal tension membranes allowing U.C.S.F. movement.
- You want to remember the tentoriums are like three sickles. All of which have a common origin at the straight sinus. The Sutherland fulcrum with secondary insertions into the bones of the skull. Look to your anatomy text.
- They play an important role in cranial faults and U.C. fixes.
- So we see there is a lot more to this than just the structural pattern.
- I'd like to thank Sheldon Deal for another fine production of collected papers.

- One in particular by Jason Schwartz - "Some Dangers in the Development of New Techniques in Applied Kinesiology." It's a good paper on some of the newer techniques on reproduceability.
- What exists persists and what persists, exists.

The parathyroid

- We are currently investigating parathyroid involvement and at this point the parathyroid seems to be the critical factor in calcium mobilization to individual segments of muscle activity.
- I would appreciate information from you on the parathyroid.
- We're using Cal Ma Plus. Parathyroid extracts are expensive.
- Localized vasospasm of artery and vein, localized myospasm even in a weak muscle including ducts. All of these seem to fall under the parathyroid. I'll keep you involved.

The Olympics

We would appreciate funds to support the research projects. I'll keep you informed.

For those of you are interested we are using the article on hypothyridism by Breslan & Pack from Metabolism, Vol. 28 #12, Dec. 1979. December 1979, American Journal of Medicine Article on Vitamin D., Vol. 67, and New England Journal of Medicine, November 3, 1977 article on Vitamin D metab.

DR. GOODHEART'S RESEARCH TAPES

TAPE 63

Thank you Dr. Poortinga for all the research work done in Literary Search.

The Parathyroid

- The levator scap is related to it.
- It seems related to microspasm of smooth and striated muscle.
- We see many of the problems of both Hypo and Hyper parathyroidism.
- In Hypoparathyroidism the calcium is usually low and the phosphorous high.
- In Hyperparathyroidism the calcium is usually high and the phosphorous low or normal.
- The levator scap goes from the first four cervical vertebrae to the upper one-third of the medial border of the scapula. Some authorities do not show it attaching to the atlas.
- It's action raises the scap to drop the glenoid cavity elevating and dropping the medial edge of the scapula.
- When the scapula is fixed it flexes and rotates the cervical spine.
- Test the levator scap with the patient seated and their elbow flexed like a rhomboid test. In this test the patient drops his shoulder and elbow without laterally flexing their body. You then stabilize the shoulder and attempt to pull the elbow away from the body.
- The patient will recruit by increasing their lateral flexion.
- The N.L. reflex is in the belly of the Teres Minor and in the first rib interspace near the sternum.
- It responds to parathyroid extracts and calma plus.
- The Parathyroid seems to have a monitoring affect on the thyroid. It helps to raise temperatures and it has a special effect on isolated muscle tension. We palpate muscle areas on the body looking for postural involvement and tenderness found on deep palpation.
- Having found a weak levator scap and elicited a response by lingual testing. Have the patient chew two or three calmaplus and there is a diminution of the muscle tension and pain.
- The sources for this were listed at the end of Tape 62.
- The article, Vol. 67 by Anthony Norman talks of Vitamin D along with the parathyroid hormone and calcitonon are the three principle effectors of calcium and phosphorous homeostasis.
- He says the steroid vitamin D_3 is subject to conversion to its biologically active form 1, 25, dihydroxy D.3. Its production is under the needs of calcium and the parathyroid hormone. It stimulates the intestinal absorption of calcium. There appears to be a specific protein receptor for it. It stimulates a calcium binding protein necessary for a biologic response.
- He reads from the article.
- The endocrine gland that produces the active form of 1,25 dihyroxy D3 is the kidney. The liver mitochondrial enzymes connect it to 25 hydroxy D3 showing the inter-relationship with the kidney and liver.
- There appears to be a feedback loop between the kidney and parathyroid.

- The parathyroid is controlled by a long loop feedback with ionized calcium in the blood.
- Article by Breslow and Poole is on Hypothyroidism. The renal metabolie of Vitamin D cholicalciferol is important in diagnosis and observation of hypo-parathyroidism - He quotes article --
- In bone, parathyroid hormone stimulates osteo clastic resorption and osteocytic calcium transfer. Causing destruction of the mineralized matrix making it possible for osteitis fibrosic condition.
- Parathyroid increases serum calcium levels then eventually decreases it.
- To make the parathyroid work one should have sufficient amounts of Vitamin D meaning strong quadriceps.
- Hypocalcemia is responsible for most of the neuro-muscular irritability and hyperphosphatemia. It's responsible for carpal pedal spasm, parathesias, schosteks sign, indicating low calcium levels causing a cramp in a blood vessel or smooth muscle of a duct, etc.
- Sometimes you will note a prolonged Q-T internal on an E.K.G.
- Parkinsons sometimes responds to this.
- Lens calcification in cataracts is related to this.
- Ectodermal changes of dry rough skin and mild trophic changes in the fingernails.
- The Lung meridian is associated with the levator scap. The usual deltoid and lung related muscle weaknesses do not exist in this type of patient.
- Cerebellem T.L. to the right pulse points bring out the lung meridian involvement.
- The usual lung meridian muscles usually are not found involved.
- The lung meridian alarm point is found involved and there is a positive therapeutic response to tapping of the first lung point L9.
- The parathyroid seems to act as an auxilliary governor to the thyroid. When the thyroid seems to run slow, the levator scap parathyroid work seems to have a remedial effect. The same is true when the thyroid is running fast.
- Many people with what looks to be laryngeal paralysis with hoarseness many times have a spasm of a vocal cord responding well to parathyroid material.
- It appears to be a help in those patients who have chronic clonic tonic intermittent torticollis. If they show levator scap involvement when fixed, it seems to diminish the symptoms.
- These patients are difficult and this is not the only answer to the system but when it is part of the problem it does help.
- I'm doing this tape up on Gaylord during Christmas time and it's enjoyable and fun here.
- I'd like to once again ask for contributions to the olympic fund.

Upper Cervical Fixation (U.C.F.)

- We're aware of the double gluteus max weakness associated with it.
- There is also a respiratory system involved with it. If you test for an U.C.F. and it's negative, have the patient hold a breath in or out while testing, many times this will bring an U.C.F. out.
- You challenge the fix out and fixt it.
- If the fixation is posterior you adjust the atlas on axis. If it is anterior, you adjust C_2 on C_3.
- It appears the conception vessel and governing vessels are the meridians that control the meridian energy releasing old energy so the body can take on new energy.

- If you T.L. the B & E of one of the meridian above and test a muscle weakness may show on one or the other or both which then is affected by respiration indicating the potential for a respiratory cranial relationship.
- We stimulate the two ends of the involved meridian. When this is done after an U.C.F. adjustment it appears to help hold it in position and prevent future occurrences.
- We have the patient T.L. C.V. one and then tap their hand to prevent erotic involvement.
- If you challenge the sacrum especially for inferiority as for a basic contact you may or may not get a response either with single or multiple challenge. One factor that seems to be related to inferiority patterns which appears to be related to contractions of the Coxcygeal muscle. When this muscle is involved and you use origin insertion technique but it eliminates the basic challenge. It also appears to be involved with sacral or coxcygeal respiratory activity.
- With weakness the patient may have a bearing down sensation or incontinence. This weakness causes stress on the utero sacral ligament causing lower back or cervical ache. That can be found both subjectively to objectively that with a uterine lift technique negates this.
- This sometimes is involved with urinary frequency and or irritability.
- I would highly recommend you check with E.I.D. especially with difficult problems in musculoskeletal cases and acupuncture circuits.
- Over half of the meridians either begin or end on the head. Tapping either the beginning or the end of said meridians has yielded good results.

Reading Referral: Allan Beardall's Clinical Kinesiology, Vol. 1.
It's a very good publication. Clinical Kinesiology, P.O. Box 1752, Lakegrove, Oregon 97034.

Reading Referral: Super Learning, Sheila Ostrander and Lynn Schroeder. Delta Confucion Press, 1 Dag Hammarskjold Plaza, N.Y., N.Y. 10017
Book on Learning and Using our Right Brain to Increase our Learning Capacity.

- Florida Regulation is questioning applied kinesiology and the case of nutritional testing holding vitamins.
- Please test nutrients orally.

End of Year Synopsis

- We've been doing work with a T.E.N.S. unit on Metzack wall acupuncture circuits.
- Olympic programs are still going.
- We're working with a dopler probe looking for changes with N.V. reflex work.
- We had a conference with Yoshita Imura, M.D. who is with a research foundation working with Bioengineering.
- I had a luncheon conference with Linus Pauling in regards to immunology.
- I also talked with Dr. Linden Smith. Thank you Jerry Morantz.
- The conferences have been many this last year creating many new connections.
- We're continuing P.M.G. investigation with thyroid involvement and oral pH changes with treatments.
- We have a reprint file of A.K material.
- It's been a good year.

DR. GOODHEART'S RESEARCH TAPES

TAPE 64

Upper Cervical Fixation (U.C.F.)

- Noted by double weak gluteus maximus
- Check for fix by palpating top three cervical vertebrae.
- Adjust with two hand thrust along facet planes
  - posterior fix adjust altas on axis
  - anterior fix adjust axis on C_3
- The vertebrae move more readily into fixation.
- i.e., spinous process moves easily from right to left, the right side is posterior. Then push on the facets and check for restricted movement. Left side restricted in this instance means an anterior fix or restricted right side would indicate posterior fix.
- Some complaints are low back or neck problems that come with standing for a long period of time.
- I looked for respiratory association with U.C.F.
- I found the conception vessel or governing vessel to be involved when the patient T.L. the beginning and end of said meridian.
- When the patient showed a bilaterial weakness only with respiration it would be neutralized by touching the beginning or end of the conception or governing vessel.
- We adjust the fix, correct the respiratory involvement and stimulate the beginning and the end of the involved meridian to hold the adjustment.
- We've had good results with an Italian nun who lost her sight and hearing - who said - acupuncture made her worse rather than better.
- Dr. Tesse had helped to regain her hearing but she was unable to affect her vision.
- We saw her in our office and on E.I.D. I found what he was sure he fixed, and indeed had.
- Pulse point T.L. showed response to E.I.D.
- There was peroneal involvement with E.I.D.
- On doing B & E to the bladder meridian after pulse point diagnosis with E.I.D. She commented on being able to detect light.
- We got both her hearing and sight back slowly.
- The point is it was tapping B & E with meridian respiratory involvement that turned things around.
- We've known lead, magnets and respiration have affected meridian energy.
- All the specified meridians either begin or end on the lead.
- We see changes in temperature, pH and Vitamin C levels with B & E technique.
- Breathing produces respiratory activity of the skull giving alternating pressure in the sinuses helping to maintain circulation to drainage.
- Vasque Lopez in 1942 said, "Visualizing the pituitary gland as a sense organ and an organ of smell. It acts as a chemoreceptor detecting changes in the blood sending impulses to the hypothalamus."

- Tucker & Wilson, in the theory of osteopathy, said, The anterior portion of the pituitary is a sensory organ testing the quality of the blood checking chemical balances and purity guiding physiological reactions.
- We believe the hypothalamic pituitary axis is a homeostatic one providing for internal adjustments and external as well.
- Temperature regulation is something it does. We feel through the paranasal sinuses. The pituitary like the testicle needs a cooling mechanism.
- We noted that as the temperature would go up in the axilla and posterior occipital protuberance it would go down over the area of the glabella.
- It would indicate to me that in the acupuncture system, especially those that begin or end on the head, are involved with this pituitary cooling system. The sinuses acting as cooling vessels to allow the pituitary to function at an optimum level.
- By doing the B & E technique to those meridians that begin or end on the head we have seen major changes in temperature, oral pH, and chemistry with good clinical response.
- We find an involved meridian via pulse point therapy localizing with or without E.I.D. And then we tap the beginning or the end of the meridian noting changes in what we are monitoring.
- We have also been using cranial technique along with the B & E technique. The involvement of meridians that do not begin or end on the head has been minimal.

The Procedure is:

- With the patient standing mark the major postural deviations. This will determine the eye position for Eyes into Distortion (E.I.D.) For example, a high right occiput - eyes would be down and to the left for E.I.D., other examples are given on the tape.
- Test muscles in the clear and T.S. line indicators.
- Go to the pulse points and check them in the clear and with E.I.D. looking for weakness.
- Then tap the Beginning and the End (B & E), of the involved meridian that begins or ends on the head, with respiration activity and note the changes of the factors you are monitoring.
- I see some people that bruise on one part of their body but not the other. I'm sure that the pituitary may be involved with this.
- If you monitor system levels of a chemical you may note differences. Sometimes the serum level of a substance is normal but the erythrocyte level is low. There has to be a control area for these differences.
- The pituitary seems to be able to do this when it is properly cooled.
- We've noted the temperature at the E.O.P. and axilla usually slowly rise but the glabellar temperature will rapidly drop.
- I think this indicates generally improved oxidation in the body both local and systemic juding from the three parameters we measure.

Reading Referral: Journal of Osteopathic Cranial Association for 1954. H. G. Grainger's remarks discussing cranial bulge.

- Wong, in his book on acupuncture, says twice there is no point in doing acupuncture meridian therapy to the head. So instead of doing things by rote, muscle testing lets you determine what to do where while monitoring something.

B. Eyes Into Distortion (E.I.D.)

- This represents what is left after you fix the major distortions.

Meridian Activity

- B & E. I'm strongly convinced that the conception vessel, governing vessel and those meridians that begin or end on the head play a major role in the maintenance of normal meridian activity.
- The utilization of the tapping to the beginning and end of the involved meridians has brought many good results.
- Dan Duffy has reprinted much material that would be of interest. You can contact him in Geneva, Ohio for what is available.

Reading Referral: New England Journal of Medicine. August 21, 1980. Article on Vitamin E and Free Radicals

- Free radicals are different because they carry an unpaired electron.
- Superoxide particles are produced in the cells by auto oxidation and by enzymatic processes.
- They have an ability to create even more potent oxidants being a constant threat to cellular integrity.
- The superoxide radical serves useful function. It participates in neutraphils and mediating inflammatory reactions. When they go unchecked they can create damage though.
- There are two types of White Blood Cells; T & B
    - T cells make a superoxide anion radical that works by contact distinguishing good from bad.
    - These free radicals are continuously generated and increase in hyperoxia - a danger in hyperbaric oxygen treatments.
    - The body has pathways to deal with these products. One being super oxide dysmutase S.O.D., glutathione synthetase, glutathione pyroxidase, glutathione reductase, g6pd and catalase.
    - Some nutrients help also. Sulphydrol amino acids, Selenium, Zinc, Copper, Riboflavin and Tocopherol (Vitamin E).
    - Vitamin E is the body's oldest recognized antioxidant. When the body produces an excess of these radicals they attack whatever is closest which is usually a joint.
    - It was by a chance observation on a paraplegic with a c_6 fracture that I noted that the muscle interlink work on his triceps would cause a temperature increase in the opposite quadriceps. The body thought the triceps was reactive to the opposite quadriceps. When I worked on the bicep I would get a rise in the hamstring, pushing together on the spindles and pulling apart on the G.T.O.
- A researcher at the N.Y. University Medical School has found that a critical factor in spinal cord injuries is a rancidity factor that causes a closing down of the capillary supply to the spinal cord tissue which then causes a rancidity reaction.
- In treating these patients we use things that help to reduce those things that help this rancidity reaction.
    - Vitamin E - 20-60 units of Selenium containing E. 20 x day. Also helps with convulsive states.
    - Superoxide dysmutase with catalase.
    - Trace minerals - for electron poising (also used with muscles and skeletal degeneration diseases)
    - Vitamin F in oil along with E has been useful with spinal cord disease involvement.
- One of the precursors that is involved in the prostaglandins important in auto-immunity as found in natural fat.

Reading Referral: Nutrition Review. W 130 March 1980
- Blood clotting abnormalities
- Arachidonic acid is required for the formation of prostaglandins and platelet formation.
- Vitamin E is an inhibitor of platelet aggregation perhaps by preventing the influx of calcium
- It is well known aspirin also reduces platelet aggregation.

- We use reactive muscle technique - fix what else we find and work with the nutrients above to neutralize the free radicals and decrease the rancidity by reaction.
- Quoting the journal again - Studies on Vitamin E can be classified into three categories. To correct deficiency states (Hemolytic anemia of low birth weight in infants, decreased red cell Life span, in cystic fibrosis, hyperagrability of platelets in biliary attresia; Retinitis pigmentosa, etc). The second category is not in deficiency states but where large doses are necessary to counteract affects pro-oxidation, i.e., divers involved with long-term hyperbaric oxygen treatments. The third category is in helping the bodies' defense against free radicals. (G.6.P.D. Hemolytic Anemias)
- Selenium increases the Vitamin E potency by 50 times
- Vitamin E also helps with sickle cell anemia.
- The combination of the above nutrients makes the care of these degenerative diseases easier.

DR. GOODHEART'S RESEARCH TAPES

TAPE 65

Paraplegia

- One patient who had a C_6 fracture from a diving accident with muscle function in his triceps and biceps.
- He had no motor function in his lower limbs.
- I hypothesized that in this instance the muscles of the upper arm were reactive to the lower extremity muscles. The upper extremity muscles were set too high.
- I put thermisters on the quadriceps and hamstring muscles measuring the skin temperature of both.
- I did the same with the biceps and triceps and then noted what the stabilized skin temperature of each was.
- Assuming the triceps was reactive to the quadriceps I then did spindle cell activity to weaken the triceps and noted a temperature increase in the contralaterial quadriceps of 2 degrees.
- We are familiar with the decerebrate cat studies discussed in the 1979 1980 manuals, and how they would respond with walking on a treadmill.
- You don't need your brain to walk with.
- I applied the same technique of spindle cell activity to the biceps and got an increase in the hamstring group and not the quadriceps.
- The majority of spinal cord injury patients (S.C.I.) hardly ever sever the spinal cord. They bruise it.
- There's good evidence through research at the New York University School of Medicine that nerve fibers are present and continue to be intact through the bruised area. If the eighth cranial nerve was stimulated you would get an evoked potential through the cord indicating continuity of nerve fibers through the bruised area.
- These fibers have the capability of functioning if the proper blood supply could get to them.
- There is free radical chemical pathology occurring in the membrane lipids which then causes platelet agglutination occluding the capillaries.
- Prostaglandin I_2 is inhibited by the action of lipid peroxidase.
- There is good evidence you only need seven percent activity of spinal cord fibers to walk.
- The key to remember is that these injuries are a bruising which causes a rancidity reaction.
- Nerve activity outside the brain gives electrical potential in the area of a microvolt which can be monitored nowadays. These potentials may be hidden by all the other activity being created by non-neural tissues, which are in the area of milli volts.
- As a result of signal averaging on the neuronal activity of the micro volt variety you can measure extra brain potential generated by a variety of sensory stimulation (periph nerve, auditory, etc).
- This monitoring can now be done without placing electrodes into the nervous system tissue.

- These so-called somatosensory evoked potental S.S.E.P.S. talked about by Restak serve to preserve integrity of the central nervous system.
- S.S.E.P.S. have been used to monitor damage in the spinal cord during surgery. They correlate to the recovery rate of these patients.
- S.S.E.P.S. appear to be more accurate in determining recovery than clinical examination representing a considerable improvement in managing S.C.I. patients.
- One of the limitations of S.S.E.P.S. is its inability to monitor the descending motor pathways. Some can be monitored.

The Rancidity Reaction in Spinal Cord injuries.

- The fibers don't function at the sight of the S.C.I. because their blood flow is impaired at that sight. The nerve fibers therefore are in a state of inactivity.
- The cause of the diminished blood flow is from the rancidity reaction as discussed previously.
- The prostaglandins are part of the autoimmune system. The Vitamin F factor are precursors to the prostaglandin. So the I_2 factor especially is diminished if these factors are present in low concentrations. Vitamin F will combat this rancidity reaction.
- We use Vitamin F at a dosage of 3 perles a day suppling the essential fatty acids.
- We supply 2 mgs. of Vitamin B_6 to insure the Vitamin F absorption and action.
- One of the main obstacles to any rancidity reaction are the antioxidants naturally Vitamin E being one of the best. Its action is potentiated 50 times by Selenium. We use a low dosage E Selenium source 20 times per day.
- There is a toxic level of Selenium of approximately 450 mgs per day so we give half of that per day.
- Low dosages of thymus and parotid is given to help counteract the autoimmune reaction. G.S.F. is one good product. We give it three times per day.
- The thymus modifies the R.N.A. patterns for eventual re-use. The thymus can determine what to keep or get rid of. The parotid receives this information and labels those things; food, etc for the substance to be used or not.
- When it breaks through the first antioxidant barrier which is Vitamin E and breaks through the second, Vitamin F, prostaglandin I_2 level. The third factor to consider is the superoxide radicals are inhibited by superoxide dysmutase. We give them from one to three times per day.
- We then use the reactive muscle technique monitoring the temperature response of the contralateral extremity sometimes ipsilateral. You should note at least a half a degree temperature increase in the muscle remote from the area you are treating.
- We treat the patient bi-laterally.
- This can be demonstrated on a normal patient also.
- One of our parameters for admitting a patient to treatments is that we get a temperature increase.
- The results are not immediate but you can show the increase temperature, indicating increase blood flow indicating increased spinal cord activity and gradual resolution of the platelet agglutination decreasing the rancidity reaction.

- It is the rancidity reaction along with the super anion radical liberation that makes the healthy patient his own worst enemy.
- An ascending axon can be up to three feet long with the dendrites sending messages to the cell body.
- The axon carries impulses away from the nerve cell body. The dendrites and the axons are called nerve cell fibers with the impulses being carried along the outer skin, known as the plasma membrane.
- The membranes are made of Lipids and proteins. It's the membrane that get screwed up.
- The average S.C.I. patient is male, under 30, and otherwise in excellent health. One S.C.I. develops about every 1/2 hour in the U.S. Right now there are over 500,000 and the federal government costs are over $3 billion per year.
- Approximately 90% of S.C.I.s are due to a sudden traumatic incident but in almost all the cases the cord was bruised and not severed.
- In the spinal cord the hematoma actually leads to a physical softening of the cord. Most of the fibers degenerate only at this segment where the bruise is at.
- The rest of the cord is normal.
- The physical softening of the cord is due to a gradual dimunition of blood flow. This softening is due to the fat molecules becoming rancid as a result of the bleeding at the bruise. There is also the lipid free
B radical reaction at the molecular level only a very small amount of blood is needed to promote that reaction. It will increase the rancidity reaction by a million times so a little blood can do a lot.
- The liver is responsible for making the super oxide dysmutase.
- Some of the rancid parts at the injury are caused by lipid peroxide causing medium size blood vessels to go into almost total spasm causing the blood in the small vessels to clot. The platelet mediated micro thrombi is what also occurs in M.S. patient spinal cords.
- Pharmaceutical agents that are capable of preventing the blood flow in the spinal cord blocking rancidity reactions can prevent the development of paraplegia.
- The rancid fat products that develop end up remaining there. Some collateral circulation attempts to develop but is stopped by this rancidity reaction.
- For those who say you have to live with it, you may not have to.
- It is felt the reason peripheral nerve fibers regrow is because of the good blood supply outside the C.N.S.
- Manual stimulation activates normal pathways.
- Spinal cord fibers can grow for very short distances. The stopping may be induced by some substance that inhibits the growth.

Three Stages of the Spinal Cord injury.

- Initial growth of nerve fibers through the injured sight.
- Elongation of the new growing fibers.
- Re-connection of the various fibers above and below the injury sight.
- Of these three phases research has found the first and the third are possible.
- The second step is the one inhibiting healing probably due to inadequate blood flow so it can't then occur, perhaps scar tissue, an inhibitory substance or perhaps all three.
- It has been shown that we only need 7 to 10% of the descending nerve fibers to walk in rats.

- It is reasonable to assume some S.C.I.s will be able to walk, perhaps awkwardly, even after a long period of loss.
- Restoration of the finer movements may not be possible.
- Injured neural tissue always contains abnormal blood flow so to get regeneration of nerve fibers the all or none law must be met.
- Elongation of nerve cell and new synapsis can occur.
- We feel our efforts are priming the pump.
- In some patients taking Valium or M.A.O. inhibitors for spasticity you get a better response if the patient stops the medications.
- Research at N.Y.U. Medical School is going to continue with S.S.E.P. Monitoring for ascending pathways of the posterior column and vestibular evoked potentials V.E.P.s for descending tracts in the anterior column.
- They are also monitoring the H. reflex of the gastrocnemius representing the lumbar area.
- The F reflex is from the abductor pollicis brevis and median nerve stimulation representing the cervical area.
- We have found the gastocnemius and soleus to be weak when there is a pooling of blood in them in hypoadrenia. Some symptoms of achiness and pain with B deficiency also.
- It's as if the calf muscles think they are in a fight or flee situation.
- To bring this weakness on, have the patient extend the opposite elbow. There is a gait reflex relationship. Activate all the reflexes.

DR. GOODHEART'S RESEARCH TAPES

TAPE 66

Those who will be attending the I.C.A.K. meeting will be receiving a report sent to Dr. Dardik of the U.S. Olympic committee. The paper is on the high speed photographic techniques and the athlete.

- They take up to 10,000 frames per second, then they are put into a computer system with a sonagraphic pen.

Reading Referral: Body Movement - Barteniff-Lewis. Pub. by Gordon & Breech, N. Y.

- There is a good amount of information on labanotation.
- Laban has put movement events into movement notation.

Reading Referral: Gravity, Michael Nebedon, Pub. Center of the Form, 1453B 14th Street, Santa Monica, CA 90404.

- They feel the universe is expanding and gravity is what limits the expansion. The same is true of the body.
- We are denoted as trapezoids on one another.
- So movement is a series of muscular activities that maintain the trapezoids in a balanced position.
- We we use E.I.D. we found a good number of fixations in the areas of maximum movement, C_7, T_{12}, femoral leads. The incidence of cervical dorsal fixation is very high.
- We're aware of the muscle testing for fixation involvement.
- When the body is in balance breathing and other movements are minimal for maximum effort.
- The key to remember is to use E.I.D. to check for fixations.

Pitch, Roll and Yaw

- We have another found phase, Yaw #3 - Patient is in flexed position for pitch testing and then turns the head to the left and to the right while the head is flexed. If a weakness occurs it means there is a lack of lateral motion of the head on the neck.
- To fix, the patient's head is in the flexed position and as the patient attempts to turn the head to the left or right, the Dr. resists this movement.
- It appears especially in patients who have digestive problems, especially in the lower bowel.
- We check for Yaw #2 in Dors lumbar fixation.
- Patients with fixation will show a high percentage of stress receptor involvement, especially for the psoas.
- When you fix a dorso lumbar fixation you'll note the psoas stress receptors reset, indicating the front limbs are out of balance with the hind limbs. Check the stress receptors for the sartorius and anterior tibial at the back of the writs you'll find a high incidence of involvement, usually contralateral.
- When fixing these fixations and stress receptors the front and hind limbs are in balance with one another.

- God will forgive you but your nervous system will not.
- We're accustomed to observing patients in the static position.
- When checking for gait reflexes, imitate gravity with pressure on the head many more will appear. They respond to gait circuits and correction of the Dorso Lumbar fixation.
- When we balance all of these things we usually see increases in Dynavit scores, vital capacities, or breath holding time.
- Many fixation patterns are masked by cerebellar involvement.
- In some patients whose P.R.Y. has been fixed with no increase in flexibility. There may be an over-active bladder meridian so we turn it off by taping k_6 and CV_{15}. K_6 is the Luo point between the bladder and kidney.
- Also check the lung, large intestine system. Many times the hamstrings show too much tension. If you can't turn off the large intestine circuit go to L_7 and tap.

B. Reading Referral: Latest Ciba, Vol. 1; The Nervous System
- Section on hypothalamus. It has a very widespread involvement.
- Therapy localization E.I.D. to the pulse point usually indicates meridian involvement of a meridian that begins or ends on the head.
- So we measure glabellar and other head area temperatures. We find in patients with disturbances in the special senses, the pituitary is not cooling itself good enough. As a result, it doesn't balance the chemistry, hormonal, nutritional, somatic components. So it fails to act as it should.
- We continue to get good results with B & E technique tapping the beginning and/or end of the meridians that begin or end on the head.
- A stroke patient's conception vessel was found to be involved.

Gravity
- Because of Nebedons concepts we've been looking into the forces of gravity neutralizing the expansile forces of the body.
- We can change the effects of gravity by having minor alterations of weight. This is another element that proper balancing produces.

B & E Technique
- If you don't get a drop in glabellar temperature with tapping of the head point go to the other end of the meridian and tap it.
- A patient with trigeminal pain wasn't responding to this technique. I then tapped both the beginning and the end of the meridian simultaneously and we got a good temperature decrease.
- If you tap the opposite meridian even though it didn't show itself to be involved. Sometimes you get a better temperature response.

Reading Referral: Common Glandular Dysfunctions in General Practice and and Applied Kinesiological Approach. Walter Schmitt. Available through Wally in Chapel Hill, N.C. Also his compiled notes on nutritional products.
- Dr. Dan Duffy has reprints of material printed a while ago.
- Dr. Ross Moody, D.D.S. has several very good tapes. Available through Sounds for Health. (714) 530-3613.

Reading Referral: Directing the Movies of Your Mind; Bry & Baer, Harper & Row publisher.
- This is similar to what Carl Simonton is doing to change patient's attitudes.
- I will be speaking with him at I.A.P.M.
- P.M. Magazine did a segment on us to be aired soon.

DR. GOODHEART'S RESEARCH TAPES

TAPE 67

- It was suggested in the past that for Melzack wall investigation one should use therapy localizing with breath holding if nothing was showing.

Eyes Into Distortion (E.I.D.)

- Last tape we talked of T.L. with an E.I.D. basis.
- In the cranial bowl, written by Sutherland, he cites the evidence that the spinal fluid is basically an electrolyte.
- The Falx Cerebri divides the brain into left and right halves.
- Through Davis & Rawles work we know the body is positive on the right and negative on the left in the front and the reverse being true on the back.
- Assume that breathing is the generator for the battery that is the brain.
- We believe the electrolyte factor of the C.S.F. is an element of maintenance and a better response to treatment.
- We remember when lead was placed over an ear that side of the body would weaken but lead over both ears would cause no weakness. Lead has an effect on acupuncture energy.
- We also know acupuncture energy is affected by magnetic energy.
- A 3000 gauss magnet is placed with the positive end to the right side of the head, nothing happens. The negative side to the left side of the head nothing happens. But the positive side to the left or the negative side to the right and the patient ceases breathing for a count of ten we observe a dramatic weakness.
- This indicates putting the wrong charge to a patient whose battery is low. Is like trying to start your car in the winter with everything turned on.
- This is what happens in many patients so they don't respond as well to treatment.
- We talked about the cranial muscles in the 1980 manual, Vol. B, that we would challenge by origin and insertion technique or by having the patient activating the muscle - i.e., frowning - to get a response.
- We now have the patient activate the muscles or the Dr. challenges them while the patient stops breathing. Weakness only occurs in this pattern in the cranial muscles and not skeletal muscles.
- This appears to be the key to the marked differences in cranial technique. Some recommend a light touch, others a thrust.
- We talked on the last tape of E.I.D. and glabellar temperature response. We found a good number of patients that responded to this and B & E technique giving good glandular and musculoskeletal changes.
- Some patients showed a temperature rise but would be brought down by simultaneous tapping of the beginning and the end.
- 90% of the venous blood leaves the cranium through the jugular foramen which is at the junction of two bones. Surrounded by dura.
- There appears to be two types of cranial faults. A subluxation that needs a manual technique we discussed in the past. The second con-

cept is one of a fixation. If you visualize the head as a capacitor or condenser this concept fits in.

Reading Referral: Osteopathic Medicine, July 1978 - Upledger & Retzlaff state that they have done histiologic work on specimens that show there are viable nerves and circulation within cranial sutures of the adult.

- The sutures have been shown to contain the structures necessary for nerve reflex activity. So abnormal sutural movement may cause abnormal neurogenic activity as well as intrasutural ischemia.
- It seems obvious that restoration of sutural mobility is desirable.
- Several mechanisms underly sutural dysfunction.
  - Hypertonus of the temporalis muscle.
  - Develop the concept that there are subluxation and fixation cranial faults and the fact that the cranial bones and their sutures have a resemblance to a condenser or capacitor.
- Condensers are classed according to the materials used to insulate them, air, glass, mica, etc.
- With this electrical concept, if the cranial bones are too close or too far apart, it will affect the electrical charges. The suture width can be affected by muscular activity.
- If the venous blood can't leave the Head then we won't get a temperature decrease.
- When we start to do golgi tendon or spindle cell activity monitoring the temperature. We will get a good temperature decrease when we release the jamming of a suture.
- This combined with B & E technique gives us a much better response. We now understand why such light contact cranial work is effective.
- With a good temperature decrease the lead square effect no longer occurs. Challenging with the magnet will give no response also.
- The patients usually note an increase in energy.
- Sutherland discusses how Dr. Kenny talked about the molecular magnetic potency of the blood corpuscles as the impelling power to the circulation of the blood rather than the muscular activity of the heart. He maintained that the C.S.F. was under the same law.
- He maintained the brain pulsed twelve pulses per second. Each of the brains molecules is an electric dynamo. Every red blood cell is carrying electrons containing electric power.
- The energy of this system is dependent on our vitality.
- So we have a skull that is like a capacitor, C.S.F. that is like battery fluid and breathing is the generator.
- When there is a good balance in this system as in children there is a quick response to treatment.
- The occipito frontalis appears to be the primary muscle involved with this technique.

Anatomy Review

- It may be a good thing to remember the relationship of the cranial membrane to venous flow and C.S.F. fluctuation. The main venous chambers in the brain are different than the rest of the body.
- The venous flow finds its way out of the cranium through an opening formed by two bones.
- The arterial walls and nerve supply are the same as outside the cranium. The arterial walls are protected on entering the cranium by passing through individual foramina in individual bones.
- You can reason membranous restriction disturbs the venous flow of spinal fluid. The cranial lesions may be primary the intracranial

membranes including the dura and arachnoid are the immediate disturbing factors that lead to trouble.

- If there is a lack of movement of the skull and membranous structures there will be an impediment to the normal flow of circulation. We have some thing to measure it by with the glabellar temperature.
- The jugular foramen is between temporal and occipital bones and there must be motion to encourage venous drainage.

Glenards Syndrome

- An unusual pattern of autonomic dysfunction which involves the psoas shelf, abdominal wall support and viscera.
- There is a vagal tug when someone is in the vertical position which is absent in a horizontal position.
- There is visceral drag with mesenteric traction which produces a host of very vague symptoms. Abdominal distress which can't be pinpointed, palpitations, heart beat change with positional changes, dyspnea and sometimes a choking sensation in the throat.
- We do an endo or pulse rate check in the supine position and then we get the patient standing. The pulse rate changes 10-12 beats faster or slower. The same thing occurs if you bring the patient up on the table.
- Measure the beat before and after, when the patient holds their abdomen upon standing the noted change in rate will not occur.
- You'll generally find a bilaterial psoas weakness in the clear or against reflex challenge.
- Abdominal muscle tone must be increased. Do inspiration or expiration assist, sagital sutural spread, Vitamin E, N.L.
- Many times there will be cranial faults associated with it.
- With this problem there is a failure of the psoas shelf to act as a shelf.
- Occassionally there is a mid-scapular rhomboid weakness inducing a scaphoid position of the abdomen. So in addition to working the reflexes associated with the abdominals, you may have to work with O.I. on the rhomboids. You still have to exercise the abdominals and at times support them.
- The P.M. Magazine presentation done on our office turned out very well. Copies are available.

Reading Referral: The Brain Mind Bulletin. April 10, 1981, Vol. 6, #8. Interface Press, P.O. Box 42211 S. Avenue, 52 Los Angeles 90042 (2131258-7333)

- Find article on naloxone use in spinal cord injury patients. Used as preventive measure to block the body endorphins which cause a reduced blood flow to the injured area.
- Endorphins do this only after binding with their own specific opiate receptors.
- The results are best when given as soon as possible after the injury.
- Naloxone is a morphine antagonist.
- There is good evidence D.M.S.O. acts like dysmuzyme in neutralizing anion radials of superoxide nature. Liberated by both T & B cells.

The 1981 Research manual has an extensive amount of information on spinal cord injuries. Whether to accept a patient and how to maintain a patient with an attitude of recovery.

- It also contains E.I.D. information.
- Some ideas on the hypothalamus and how it works.

DR. GOODHEART'S RESEARCH TAPES

TAPE 68

The Cervical Spine

- We all remember Ruth Jacksons' The Cervical Syndrome which came out in 1958.
- It seemed to validate the chiropractic position.
- She talks a lot on the cervical subluxation and discs extrusions.
- She believed it was possible for a posterior extrusions but a relatively large amount would have to be extruded to compress the nerve roots. The symptoms of which would be greatly aggravated by flexing of the neck.
- She feels the joint placement takes much stress off of the Inter Vertebral discs which therefore are much more vulnerable to injury and degenerative changes than the cervical discs.
- She discusses the capsular ligaments and spur formation which may give the appearance of extruded disc material.
- The surgeon who sees and feels an extrusion anterior to the nerve root may be misinterpreting this.
- When these joints are exposed they have the apearance of chondromalacia as seen in other synovial joints.
- Further dissection shows the nucleus pulposa being intact inside the annulus fibrosis despite the degenerative changes.
- I remember being impressed upon reading the book and some of the things you'd expect to see in a cervical disc patient.
- She talks of the positive hyperextension compression tests believing it to be diagnostically important. I must have done it to 2,000 patients and never found involvement with this.
- She talks of a shoulder depression test that if radicular pain occurs adhesions are present. I found this would occasionally work.
- Usually the blood pressure is 10-20 mm of hg higher on the side of involvement.
- She also noted dilation of the pupil on the side of involvement in 5% of the patients due to the reflex stimulation of the cervical sympathetics.

Reading Referral: Lowback and Leg Pain from Herniated Cervical Discs. Herman Kabat, Warren Green Books, St. Louis. I found out about the book in Australia!

- It discusses some difficult low-back and leg pains whose problems were not in the lumbo sacral area.
- Kabat believes cervical involvement is one of the major causes of low-back problems.
- Herniated Cervical Discs is another book he has written.
- He uses muscle testing as a system of identification using the flexor muscles of the wrist. Ruth Jackson talks of weakness of the extensor muscles of the wrist.
- I think both authors missed a simple thing. Cervical discs are possible of rupture and bulging. We found the annulus fibrosis to be capable

of laxity and the annular ligament can bulge in the absence of manganese or in the presence of mechanical imbalance.
- If the annular ligament is weak the nucleus doesn't have to herniate for the disc to bulge.
- I feel the discs get irritated especially at the disc between C_6 and C_7 when there is anterior movement of either C_5 or C_6.
- When you challenge with the patient supine for anteriorities you don't get a response till about C_5, $_6$ or $_7$.
- When the anteriority is found there will be dramatic weakening of any muscle.
- Then when you palpate the most inferior aspect of the spinous process you'll find a great deal of pain. Having established that we have found the wrist extensors as a good indicator.
- Test the wrist extensors in the clear then exert a downward pressure on the vertex of the head retesting the wrist extensors many patients will show an immediate weakness.
- We call this a H.C.D. Hidden Cervical Disc.
- Sometimes you need to challenge just one side with a diagonal challenge. A great many patients will show reaction to the extensors with cervical compression.
- A great many will show anteriorities at the level of the sixth cervical primarily.
- All the above can be neutralized by either rest or cervical traction.
- It requires not traction but a traction adjustment. The patient is lying on their back with the palmar surface of the knuckle of your index finger against the lowest segment whose spinous process is not tender. It's like your trying to adjust an anterior thoracic. The other hand grasps the patient's chin supporting the patients head with your forearm. You give a quick jerking tug toward the vertex. You may have to do this more than once and the patient may experience it at the waist level.
- I have the patient hold their breath while adjusting this with the tug allowing the involved vertebrae to slide down the articular process.
- If pain remains at the tip of the involved spinous process we give dysmuzyme (S.O.D.) as the chemical factor rather than manganese.
- The above challenges are neutralized by S.O.D. when on the patient's tongue.
- This anterior cervical disc syndrome will not therapy localize unless under cervical compression.
- Many times you'll find evidence of a carpal tunnel.
- For low back involvement you may wish to test a muscle such as the psoas against cervical compression.
- They may also need manganese nutritionally.

Procedure for H.C.D.
- Test wrist extensors.
- Give heavy compression of vertex of the skull and retest for either bilateral or unilateral weakness of the wrist extensors.
- Challenge the cervical segments for anteriorities, usually it is the sixth.
- Palpate the spinous process the most inferior tip of the involved segment will be tender to pressure. This anterior segment is the one which is compromising the involved disc allowing it to bulge putting pressure on the nerve root or spinal cord.
- The therapy is a traction adjustment. Allowing the involved cervical

to come down the facet plane to a normal position.
- We were on T.V. in Australia and copies of this are available on 1/2" VHS tape.
- My father used to say the more voluminous the history, the more localized is the cause. Many times it's a H.C.D.

B. - In the past we assumed with a cervical disc we would get brachial radiation yet we failed to realize the sensory tracts involved.
- Kabat's work is worth reading. His motion restrictions are almost impossible. This is his main therapy movement restriction.
- He classifies the problem into 8 faults.

I'm going to be on a program in the Fall in Chicago with Carl Pribram. He is well-known for his studies and Holographic brain function concepts.

The Brain and Holographic Concepts

Reading Referral: Pietsche, Author of Shufflebrain - The Quest for the Holographic Mind, 1981, Hougton Press, Boston, MA.
- Pribram finds it a most noteworthy book.
Pietsche is chairman of the department of basic health sciences at the School of Optometry of Indiana University.
- His research has been with salamanders primarily who have regenerative powers.
- He's been on "60 Minutes."
- His primary interest has been the regeneration of body tissues.
- Holographic predictions were dimetric to my theory and its implications were at odds with everything I believe, Pietsche said.
- Hologramic theory said memory can't be predicted by the structure of the brain.
- Pennfield & Rasmussen are responsible for the homuncular concepts concepts of which part of the brain is responsible for which part of the body. Pennfield would do his work on neurosurgery patients who were under local anesthetic. He would use electrical stimulation of areas of the brain and observe the response.
- They believed memory as well as motor function occupied a certain place.
- The memory aspect was to be repudiated.
- They did work with mice running mazes. It was found by incising the brain that they could not alter the rats memory of running the maze. If they removed any 20% of the brain the memory would be lost.
- In a decerebrate cat experiment they stimulated the hind legs with hot water. The animal learned to jerk the leg out, if the lgs were anywhere near the hot water. Similar to the brain experiment if they sliced the cord anywhere the response was still there but if they removed more than 20% of the cord the memory was lost.
- Pribram was impressed by Ashley's experiments and was related to that part of optics known as holography.
- It was invented by Gabor in London in 1947, he made the first hologram. Holography really did not take on till 1971. this is when Gabor also won the Nobel prize for holography.
- They take pictures with a reference beam and coherent light. They use lasers which is coherent.
- The laser beam is passed through a prism which splits it into two beams which strike separate mirrors. The first reference beam goes through a diffuser to the photographic plate. The second beam goes past the object being photographed to the same photographic plate.

- The film when developed has a series of concentric circles intersecting one another. When coherent light is passed through it you get a three-dimensional image.
- If you cut the film in pieces you still get a whole image just losing its clarity.
- This is unlike a photograph that if you cut in half, you get half a picture.
- So with holography the picture is not in any one place but all over the plate.
- The original left brain right brain activity of John Diamond has tremendous potential.
- Let us suppose the concepts of the beams with the mirrors is a crude method of demonstrating how holography works.
- Suppose that the mirrors are out of focus - we don't get a picture without both beams hitting the plate.
- The intereference is what gives us the image in three dimensions.
- Suppose the skull and spine are the mirrors if they are off focus things will be off.
- We are aware of the left brain right brain and the opposite body side innervation. That 15% of the fibers don't decussate at the pyramidal decussation but 8% do lower down. Leaving 7% of the fibers going down the same side.
- Suppose the electrons of the skull are like magnets and have become jumbled. So when you test a T.S. line indicator against either left or right brain activity and find it to be strong, that side is focused on the photographic plate.
- The side of brain activity where weakness occurs is not focused on the photographic plate.
- The one mirror can reset the other. If you can't find a weakness in the clear, put the eyes into E.I.D.
- The spinal column has the same resonance factor.
- If you have the patient therapy localize to the area of nerve supply for the muscle you are testing unless there is a subluxation there it will test (-). If the patient does that activity which caused weakness, while therapy localizing that spinal segment, weakness will occur with the hand that is primarily innervated by the side of the brain you are using, i.e., left brain - right hand.
- Tap the boney segments on the right while you activate the left brain. This will neutralize the weakness. It's as if the bone has to remember what the angle is.
- We've had good results with chronic musculo skeletal diseases.
- Holographic technique fits in well with electron poising.

DR. GOODHEART'S RESEARCH TAPES

TAPE 69

Reading Referral: Ligament and Tendon Relaxation Treated by Prolo Therapy. George Hacket, Publ. by Charles Thomas Co., Springfield, IL

- Trigger point therapy has been around for a while. Such people as Janet Travel and Ray Nimmo have popularized it.
- Nimmo works with referred pain coming from ligaments and uses the Nimmo T to work on them.
- With trigger point therapy a distant point will hurt. Sometimes I couldn't find a trigger point but the patient would feel better.
- Patients' pain thresholds vary.
- In some painful tarsal tunnel syndromes I had fixed there was still pain in the heel. Melzack wall technique was a short-term relief.
- I had learned femoral ligaments would occasionally reproduce pain in the heel area. So I put a thermister on the area where the patient said the pain was on the heel.
- I attempted to use the T with hard, heavy intermittent pressure on the posterior superior portion of the femoral ligament. A spectacular rise occurred in the heel and the patient remarked it was a good hurt.
- Hacket uses prolo therapy where a sclerosing agent is injected into the ligament, this is needed sometimes. Most of the time pressure is enough.
- We sometimes do ligament interlink to augment it.
- We use this heavy intermittent pressure until the referal pain, or the temperature, stops rising.
- Put the termister over the area the patient is complaining of, wait for it to come to a constant level, then use heavy pressure to a reflex area and observe the response.
- Trigger points will therapy localize.
- There can be more than one cause for the same problem.

Hidden Cervical Disc.

- I observed people have problems giving the high velocity supine adjustment as described on the last tape.
- Another simple way to make this adjustment is in the prone position. And you adjust by contacting the anterior of the vertebrae in question with the head rotated, and adjust downward along the facet line on both sides. Use origin and insertion technique on the area in question also.
- You have a knife edge contact of the index finger on the vertebrae in question and do like a bench movement being sure to adjust downward, not, I repeat, not across, with the head turned toward the side you're adjusting. Facet range with the head in this position is inferior. Do this bilaterally.
- You may have to use a little more force on the second side since the vertebrae has pivoted slightly.
- If this adjustment doesn't take the spinous tenderness away, attempt

the supine adjustment as dicsussed in the last tape. If pain remains give S.O.D. orally, 3 X/day.
- I can't recommend the Kabat book more highly.

Electron Poising
- The new collected papers have some good articles on it. Especially Wallys, on Iron.
- If you think of a sine curve. The upper right is thyroid and oxygen. Adrenal and gonads and hydrogen are on the lower left. If all we did was take in hydrogen from hydrocarbon we'd be in excess reduction.
- We are in a state between oxidation and reduction. That's one reason for products containing sulphur: onions, mustard, horseradish and curry powder.
- the sulphur along with the quinone in green leafy vegetables sort of work in this oxidation reduction system.
- In the '80 manual we talked of the left side being hooked with adrenal gonads and hydrogen and the right side being associated with the thryoid and hydrogen. This is how Isaacs drew it.
- If we reversed it it would fit left and right brain activity perfectly. The left would then be left brain, thyroid and oxygen and the right would then be right brain, hydrogen and adrenal.
- The water soluble elements are left brain and the fat soluble are right brain.
- The center of the sine curve is like a shaft of an engine. The curve is like a propeller. the propeller is attached to the shaft by copper. The electrons enter the system by the use of zinc in relation to the sex gland adrenal basis. They get out by the way of manganese which is hooked up with the hydrogen oxygen basis left brain.
- The body simply splits water apart. It does so enzymatically so that there is no high heat given off. In the process electrons are moved.
- Trace minerals allows the cells to communicate with each other. Vitamin A allows the cells to connect with each other. Vitamin C & E are around to prevent over reduction and oxidation.
- The poising products act as a base and after the patient has been on it for a while we then test to see if there is a specific need for a particular nutrient.
- The trace minerals are augmented by the electron poising product.
- The poising products are useful with the P.R.Y. technique, left and right brain technique, and holographic technique.

B.
- The conference in Chicago with Carl Pribram, D. Cheraskin and Dr. Upledger went well.
- I was able to show them the holographic, right and left brain tapping technique.
- We've also learned to challenge segments making the proper adjustment, then rechallenge the segment against also left or right brain activity and see whether a weakness occurs. If it does, then after making the correction tap that segment on the phase of brain activity that doesn't cause a weakness.
- For the trigger point therapy we ask the patient where they are having the discomfort and this is where we place the thermister. We then search for a trigger point that will refer pain to that area or increase the temperature there.
- I will have the patient therapy localize the point and find a phase of respiration that abolishes it.

- I use the opposite Dr. hand to patient side to treat the point with respiration. Then Drs. right hand to the patient's left, for example.
- the point doesn't have to be on the same side as the pain.

Reading Referral: Language of the Brain, Carl Pribram. It's out of print so if anybody can get me a copy, let me know.

- Dr. Cheraskin noted as Vitamin C leves were decreased in guinea pigs their blood sugar levels increased. He believes this has something to do with the diabetic syndrome.
- Some people taking large doses of Vitamin C show abnormal lingual ascorbic acid tests because their level of ascorbase is so high.
- There is both cortical memory and spinal segment memory.

Reading Referral: New Guinea tapeworms and Jewish Grandmothers, Robert Desowitz, W. W. Norton Co., New York 1981.

- It deals with parasites and the troubles they cause.
- The chapter on giardia is especially interesting. A lot of patients that never really get well from a foreign trip are good candidates for it.
- With all the traveling people are apt to do today, this is a good book for your library.
- We're including a copy of the trigger areas with this tape. Invitations to join I.A.P.M. is also enclosed. Up until now, a D.C. could only be an associate member.
- Those who would like tapes of the conference in Chicago can obtain them from the Oasis Center for Human Potential, 7463 N. Sheridan road, Chicago, IL 60626.

Reading Referral: Understanding Holography, Michael Winion, Arco Publ. Co., New York 1978.

- We now have the concept the cortex is like the parabolic dishes they have for radio transmission. It constitutes the mirror or the hologram.
- We're experimenting with holographic technique and vision problems.
- See you in Acapulco.

DR. GOODHEART'S RESEARCH TAPES

TAPE 70

Holography.

- At Acapulco, John Brimhall demonstrated a weak left psoas with vertex compression. We fixed the H.C.D. that with right brain activity it all came back.
- You take the side of the skull of the activity that caused weakness and tap that side with the patient saying the opposite sides activity that didn't cause weakness.
- You then challenge the area of neural innervation for the muscle in question with right and left brain activity.
- Usually only one side of the involved segment will T.L. with one hand with one phase of brain activity.
- You tap the side that T.L. with the phase of brain activity that did not cause weakness.
- Lashley found that a trained rat would be capable of running a maze with up to over 50% of his brain removed with only insignificant errors. The more complex the maze, the smaller the amount of brain that could be removed before errors occurred.
- The point is memory is not at any one place.

Reading Referral: The Brain, the Last Fontier, Restak, page 223 in particular. He talks of Pribram's holographic brain concepts.

- The hologram stores visual information across the entire surface.
- To move a finger both sides fire the a thousandth of a second later the same two areas fire again, then just before the movement occurs the side involved fires only. There are actually five firings instead of the one we used to be taught.
- A simple tapping is all that is needed to reset this system.
- Adjustments hold longer when left and right brain holograph technique is done.
- You tap with the phase of brain activity that didn't cause the weakness.

Clonic Chronic tonic torticollis

- I have a pediatrician with this who counsels a group with this.
- We're trying to find out why more people are getting this. It does not appear to be nutritional other than niacinamide B_6 or specific needs you find.
- If you analyze gait - as your right arm goes forward and left foot. The body torques appropriately. The right clavicle comes forward and you'd expect the head to follow suit and go to the left, but it doesn't.
- When you take a step the opposite lat weakens to allow the opposite arm to go forward.
- Certain muscles are activated on or off with gait.
- All the muscles of the right leg to bring it forward are activated along with the muscles of the left arm. Their antagonist are inhibited to

allow them to go forward.
- While this is happening the opposite is happening with the other controlateral limbs.
- The homolateral trapezius should weaken with a step because the head had to turn slightly to remain centered straight ahead.
- I.E., A left step with the right arm coming forward, the head is being pushed to the left by the right shoulder clavicle coming forward.
- To keep the head focused straight ahead, the left SCM. Scalene must contract to turn the head to right to keep it centered. For this to occur the left trap right SCM must release.
- This usually does not happen in these torticollis patients.
- Look to in neck problems.
- We check this by having the patient take a step forward with their opposite arm forward and staying in this position. The trap on the side of the leg being forward should be weak and the opposite SCM scalene groups.
- The stress receptors for the upper trap on the forehead and the mastoid processes for the S.C.M. are involved and they are challenged With the patient in a normal position. Challenged for a direction causing weakness and the phase of respiration that abolishes it. We Then fix them appropriately and recheck the gait as we found it.
- This is why there is a dual nerve supply to these muscles because with it the muscle would have to be on and off at the same time. This is because the trap has to let go on the same side the S.C.M. is contracting and they share a common nerve supply.
- As a home exercise, see which phase of gait has a tendency to keep the head centered better. Then have the patient accenuate this part of gait at home for the zigs and zags to match. It's like you've got 2000 zigs and 4000 zags, they have to balance.
- We see this in reoccurring U.C.F., head tilts, and normal patients.

B - Pitch Roll and Yaw
Tilt - The newest component of the P.R.Y. technique.
- The had has a pitch pattern it shares with the pelvis.
- The head also shares a roll pattern with the pelvis.
- The had also shares a yaw pattern with the pelvis.
- The head moves and the body follows.

Tilt
- You check for this with the patient supine and only one knee bent up. Have the patient bring his ear to his shoulder on that side. Test a muscle for weakness. The tilting or lateral flexion should occur with no rotation.
- When you get a positive reaction we find an indicator to observe flexion - Leg abduction, etc.
- You fix this like the pitch component except from side to side. As the patient laterally flexes to the left you resist and as the patient laterally flexes to the right you resist that motion doing it four to five times. No rotation should occur.
- We observe the increase in our indicator.
- This tilt pattern seems to relate to the gait pattern we just discussed.
- We're not sure of the nutritional component for it yet. It appears to be trace minerals.

Acupulco
- At the winter meeting I was able to get hold of Kabat's exercises and

some of them are impossible.
- It really means balance the structure even if it appears unrelated to the problem. Musculo skeletal stress adds fuel to the fire.
- The prone adjustment in a downward direction is very effective and doesn't require as high a velocity as the supine adjustment.
- If you find a cervical disc after you fix it and rechallenge it, challenge it against left and right brain activity.
- Also, check the trap gait circuits against left and right brain activity and do the appropriate tapping.
- You get better responses and the treatment lasts longer when the holographic technique is done.

Reading Referral: Dr. Scmitt's paper about the Abolition of Murphy's sign after Ligament interlink.
- We move quadripedaly even though our stance is bipedal.
- We talk of ligament interlink and revenue sharing of the spinal cord.
- It is fundamentally contralateral.
- Sometimes this interlink can phase in a muscle response which then causes a visceral response.
- His paper describes a ligament interlink involving the elbow and the knee and the abolishing of murphy's sign.
- It's one to look for with recurrent gallbladder problems.
- We appreciated the attendance of Dr. Dardik in Acapulco and he was intrigued by Dr. Caskey's presentation on running.
- If you would contact Mr. Nathan Keats of Keats Publishing, New Canaan, CT. and asks about the book, "You'll be better." The bigger the response from doctors, patients and friends, the better. It might get it published. He's had the manuscript. Keats publishing Co., 26 Grove St., New Canaan, Ct. 06840.

Electron Poising System
- It is the chemical equivalent of the Hologram and works well to negate left and right brain activity.
- Do use the basic product and modify the nutritional need as needed.
- There are neuropeptides - American Heart Journal, 1980, Vol. 99 #1. They talk about them having similar actions and there are no apparent reason why enkephalins and endorphins have separate existence.
- It appears that enkephalins act as neuro transmitters and endorphins may act as neuro modulators.
- I think when the area of representation in the brain doesn't match that of the body then there is something wrong.
- Thank you Dr. sheldon Deal for another well compiled paper. The papers are getting better and better.

DR. GOODHEART'S RESEARCH TAPES

TAPE 71

Clonic Chronic Tonic Intermittent torticollis

- The head turning without the patient's wish.
- When severe the person can't eat.
- We generally find a fixation of L_5 on S.
- Occipital atlanto torque patterns are frequently seen.
- There is a need for Niacin - B_6.
- We look for levator scap parathyroid involvement.
- Each case has its own pattern.

Trapezius

- For the neurological level of innervation I have found no less than six different interpretations of the innervation of the upper trap.
- The trapezius and S.C.M. have spinal segment innervation and a spinal accessory innervation.
- It basically comes down to the fact that there is a dual nerve supply to both the S.C.M. and upper trapezius.
- Why do these two have two innervations?

Gait

- When you analyze gait under high-speed photography, 10,000 frames per second. That's right, second not minute, per second. This shows motions not visual to the naked eye.
- I was struck by the motion of the head and neck.
- The head has a tendency to go toward the side of the foot going forward. It must, however, turn towards the side of the arm in moving forward to keep looking straight ahead.
- Since the neck has mobility it doesn't move with the shoulder girdle. It turns to the side that the shoulder is going forward thereby keeping the head in the center.
- For this to take place the S.C.M. must be turned on while the trapezius turns off on the same side.
- So with a left step, right arm forward, the left S.C.M. must turn on while the left trapezius is off and the right S.C.M. must turn off to allow the left S.C.M. to pull. The right trap also must contract.
- This explains why there is a dual nerve supply.
- The upper trap should shut off on the side of the foot forward. And the S.C.M. on the side of the forward shoulder shall shut off.
- The opposite S.C.M. and trap should be strong.
- When these aren't working properly the stress receptor for that muscle is treated. Find a direction that causes weakness with a phase of respiration that abolishes it. Then treat it in that direction with the phase of respiration that abolished it.
- This allows more zigs and zags when things are off causing symptoms structurally posturally, etc.
- We have the patient accentuate the weak movement to balance the zigs and zags.

- Sometimes you'll see a weak upper trap that will strengthen when you take a step forward on that side. It will be negated by the N.L. for that trap, fix it. This will usually not show on a postural exam.
- This is useful in preventing reoccurring U.C.F., helps prevent middle and lower cervical fixations, and in improving gait involved problems. We apply with every treatment given to ensure good balance in this area.
- A Brodal - he talks of the spinal accessory as being both sensory and motor. He indicates there is motor innervation to the muscles from both the spinal accessory and cervical nerves.
- This dual nerve supply allows one muscle to be on while the other is off on the same side.
- It's hard for the same nerve to be on and off at the same time.
- This I believe is why things return even though we fix them because walking is screwing them up.
- You treat the stress receptor on the side that the muscle is not turning off on.
- In the chart in the 1974 Research Manual for Neck Flexor the #16, The number is 17. It's the same areas as on pp 12 and 13 of the Blue Walther manual.
- A retrocollis pattern is seen sometime. Turn on or off the proper stress receptors as needed that involve both neck flexors and extensors as well as the S.C.M. and upper trap.
- The pediatrician was in the office last night and I had Dr. Swenson from North Dakota and our newest associate, Mark Diener, in observing.

B. - I hope this gait pattern is clear because it's a very useful thing.

Holographic Technique

- I had a patient who had a pain in her leg at night. Thinking it may be pineal involvement I checked her in a bright and dark room with her eyes open and closed - no response occurred.
- When she thought about her leg problem with her eyes open and closed, when she did it with her eyes closed weakness occurred.
- It seemed reasonable if there is a left and right brain there should be a front and back brain. Pribram believes this to be true also.
- When you look at something you do so with the occipital cortex in the back of the brain.
- When you look at something with your eyes closed there's no retinal stimulation, there is frontal lobe activation.
- To fix this problem, if the patient weakens with their eyes open thinking about the problem, you have the patient close their eyes and tap the back. If weakness occurs with the eyes closed and thinking about the problem, you have the patient open their eyes and tap the front.
- You get a good increase range of motion in patients this shows in.
- I've shown this to Drs. Swenson and Diener in the office today.
- You must also do what is necessary mechanically.

Reading Referral: What's So Bad About Feeling Good, Dr. robert Freyman 1982. He's a seventh generation physician.

Glenards Syndrome

- On page 106 of the new 1980 workshop procedure manual we talk of Glenards Syndrome.
- There's a disturbance of the psoas shelf which is a source of visceral support.

- Dr. Schmitt observed patients showing weakness on anterograde or with a table angled up at 30 degrees.
- We find things show in different positions. This anterograde is a failure of the N.V. for the restintaculum chyli, the lymphatic heart, the reservoir of piquet. There are a number of names for the dilation of the lumphatic duct.
- A patient with an anterograde problem may not show it in a fully vertical position.
- Muscle weakness will show usually from 30-45 degree inclination forward. Check this when there's a problem you can't get to show or just to check in the clear.
- This is a failure of the N.V. component. The glomus coxcygium is the N.V. for the restintaculum chyli. You stimulate the tip of the coxcyx intra rectally with expiration. The glomus is stimulated with respiration.
- The coxcyx moves forward on expiration, it's as if the coxcyx isn't moving forward enough.
- The N.L. is k_{27} bilaterally.

Reading Referral: The Vital Probe by Irving Cooper.

- On Kirlian photography
- It describes her journey into body energies.
- One of the interesting things she found was the evidence from another source that the acupuncture points produced more carbon dixoide than oxygen.
- This must mean the points take in more oxygen.
- I test points against oxygen infusion by using a small vital air on the area, on testing muscles hardly ever do they strengthen. When I do this to a N.L. or N.V. reflex, they will show a response.
- With a subluxation there is over-activity. When there is under-activity it indicates the body has turned something off that was over active. This is why it's so essential to do lymphatic activity.
- Do the N.L. and spray the area with carbon dioxide the muscle weakness reappears. Spraying it with oxygen causes strength.
- On page 140 she cites papers particularly one dealing with electrodermal points rather than acupuncture points. The Hungarian research showed the electrodermal points differences to gas.
- This is probably why Hyperbaric treatments work forcing the oxygen through these points.
- Some patients respond to carbon dioxide.

Auricular Therapy

- Dr. Worley in Detroit does a lot of work with this.
- Dr. Radtke attended a workshop on it.

DR. GOODHEART'S RESEARCH TAPES

TAPE 72

Gait Pattern

- While in Texas I tried to demonstrate the pattern to the doctors there.
- The S.C.M. releases on the side of the forward arm, the splenius capitue and trapezius release on the side of the forward leg.
- There are other walking gait patterns.
- The Psoas is turned on on the forward leg side. We put the patient in an upright position on our Hi-Lo with one leg forward on the bottom plate while the other leg is back to the side of the table. The leg that is behind should be off and we test it in this position.
- We work the stress receptors here also if the muscle isn't off as it should be.
- The quadriceps should be on on the forward leg side and the hamstrings should be off on the same side.
- This pattern is frequently disturbed when you see this, it's a stress receptor or a reactive muscle.
- In the chronic clonic tonic torticollis patient it's usually a mixture of stress receptors and reactive muscles.
- One of the hardest torticollis patients I had showed spindle cell involvement of the left quad. When it was done it negated head turning.
- The concept that muscles turn off and on with walking is an easy one.
- These walking gait patterns should be looked into with persistent problems. We also test them against E.I.D., inspiration expiration and left and right fore and back brain.

Glenard's Syndrome

- I discussed Glenard's syndrome in the 1981 manual.
- This is where there is a mesenteric tug on the vagus when the patient goes to a standing position.
- We're familiar with retrograde. It made sense that there is anterograde lymphatic drainage.
- Terry was observing muscle weakness on different positions about 45 degrees. The weaknesses were not always present.
- Wally felt it was anterograde.
- The cysterna chyli at the 2nd lumbar has three muscle layers.
- There is a pulsatile flow in the lymphatic system as in the C.S.F. It flows in a retrograde direction emptying into the subclavian vein.

Anterograde Lymphatics

- The patient will demonstrate a weakness when at a 35-55 degree upward inclination.
- Usually when the patient is in a standing position it may now show.
- The N.L. reflex for this is at K_{27} bilaterally.
- Vigorous manipulation of K_{27} is the treatment.

- The glomus coxcygeum is the area Coombs discovered giving colonics. He found some patients got better by the tip before the water even began flowing.
- It is a baro-receptor in front of the tail bone. That's the N.V. receptor, treatment is on expiration.
- The acupuncture meridian is the governing vessel.
- The patient's symptoms are: not liking to stand in line, back pain which develops as the day goes on, getting better with a rest, then the pain comes back once they are up again for a while.
- In some cases K_{27} may have to be stimulated 4 to 5 minutes.
- Look to see if the patient can't get out of a chair.
- The patient may also complain of fatigue after being up 2 to 3 hours which doesn't seem to be hypothyroid or hypoadrenia.
- We will also T.L. to the spine in retro and anterograde position.

Lovett Brother relation

- We're aware of the Lovett brother relationship, L_5-C_1, L_4-C_2, etc. And that if L_5 is posterior on the right look to C_1 to be posterior on the left.
- If you T.L. the segments in this condition you may get a response. If you get a response adjust it appropriately.
- Some patients will palpate like something is present but don't T.L. or challenge. T.L. the opposite side in the cervical and lumbar area for the Lovett brother involved and challenge and it will show.
- This means a Lovett Brother or, as Dr. Jarnette referred to it as a resistance and contractive factor.
- Palpate the cervical and lumbar area for tenderness. Manipulate heavily the area that doesn't hurt as much till the tenderness at the opposite area diminishes.
- This is a representation of a slow down of lymph drainage.
- Then work your way down the spine with this opposite side T.L. and manipulate the upper areas.
- The reverse is true in the neck since the drainage of the lymph is in a downward direction. You T.L. the atlas axis and opposite $L_{4, 5}$ if its positive manipulate the $L_{4,5}$ area.
- Look for an U.C.F., E.I.D., and the rest also.

Holographic technique

- You recall the left and right brain technique where we tap the side of the head that caused weakness with the phase of brain activity that didn't cause weakness.
- We do the same thing therapy localizing to the spine.
- We now do front and hind brain that we challenge with eyes open or closed thinking of the problem. Eyes open activates the back, eyes closed activates the front.
- We tap the area that caused weakness with the eyelid position that was strong.
- I.E., patient weakened with eyes closed. We tap the front of the head with the eyes open.
- With the eyes open the occipital cortex is being activated. The frontal area is activated with the eyes closed.
- It seems to work only when the patient is thinking about the problems at hand.
- We get good symptom diminishing effects and increase ranges of motion.
- There is not only bone memory but also soft tissue memory.

Reading Referral: Psychology Today, February 1979 - fine interviews with Carl Pribram.

- Pribram talked off Bernstein's work in the thirties. The coordination and regulation of movements.
- He dressed people in black and had them dance against a black background. White dots were on the joints of the body. He filmed these people and had wave forms for different motions. He did frequency analysis of the waveforms by Fourier transforms as with hologram.
- With this analysis he was able to predict where the next movement would occur.
- Pribram read this realizing this is what the brain was probably doing.
- We're finding our senses do holographic representation and the brain does a Fourier transform measuring the crest and the waves components and acts on them.
- The bone memory techniques are really holographic principles.
- Contact us if you wish a copy of Pribram's interview.

B.
- Sir John Eckels, who probably knows the most on the cerebellem than many contemporary people mentioned there were synaptic potentials between many cells giving a ripple effect like a stone hitting water.
- Intersecting wave fronts when they come in contact set up an interference pattern.
- Pribram thought if there were intersecting wave fronts in the brain these fronts might have the same properties as in a hologram. Holograms are resistant to damage as memory is in the brain.
- The brain has to behave in part as a hologram.
- This concept allows for perpetual constancy and transfer of learning.
- Pribram said they had to find if individual brain cells acted as frequency analyers allowing certain cells to resonate with that sensory inputs frequency. Pribram found this to be true.
- It's as if the micro dot three dimensional actual you and the three dimensional micro dot image of that part of you must be in parallax to be healthy.
- When you take the memory and tap it into resonance as we do you see remarkable changes and increases in motion.

Reading Referral: Scientific American, Vol. 220, #1, 1969. Pribram's article on remembering.

- There is a useful biofeedback type thermometer available through Heathkit M-99 electrotherm retailing for $49.
- Works well for glabellar - B & E technique. Any temperature analysis technique.
- Contact Raleigh Jones in Florida of V.M. Nutri, he bought a large quantity.
- Thermometry is essential with spinal cord injury patients and indicates how long to tap in hypothalamic technique.
- David Leaf has a computer printout of A.K. classes and are available from I.C.A.K.
- In Thelma Mosses' book the body electric discussing Kirlian photography. On page 190 she discussed electrodermal point carbon dioxide production. They now use electrodermal instead of acupuncture points. It was shown these points were a source of energy flow.
- On some patients we will treat these points or reflexes with oxygen or carbon dioxide which even causes strength. We use a small vital air applicator.

- You can use tank carbon dioxide or your own breath, to treat the points. Use whatever doesn't cause a weakness at the point of involvement.
- It makes the treatment more long-lasting.
- Dr. Carl Messman showed us the remarkable results available to us with tempero mandibular splint work at the last I.C.A.K. meeting.
- He showed us films of cervical and cranial movement and copies are available.
- There is a fine article on A.K. and dental work in the sports medicine field from the American Dental Association.
- I'll be lecturing to dentists at Ohio State this weekend on a post-graduate level.