

FUTURE POLICY Melbourne has come and gone and was the largest Seminar in S.O.T. EVER held in the Southern Hemisphere. We were delighted with your approach and we hope all who attended were rewarded for attending. We would point out to all we give you a guide and you must go home and do the work. Nothing that is good comes easily.

At the Seminar there were the usual few groans when it came to settling up time at the end. We have with the exception of the first two Seminars have had our expenses at the Seminar venue and travel covered by a small charge made on all those who have attended. I was approached at the Seminar by two Doctors to publish our costs and how much we made from each Seminar from registrations etc. and from that how much we gave the College and how much we kept for ourselves and so on. This well meaning approach was made in order to silence future grumbles. We have considered this carefully and have come to the conclusion that no worthwhile good would come of such an exercise even if we went to the trouble of calculating same and informing all. However we would point out that what is left after all the shouting has died down hardly comes near what we gave up in terms of missed time in our practice. This is not of much consequence to us in overall terms as the help we can give you all is a source of deep satisfaction as we wish to share what we know with you and so improve your service to the patient and very important conserve yourselves. We are certain that as a result of our seminars most of you have become more skilled at a minimal cost to yourselves and whilst we invite you to attend there is no obligation for you to do so. At the present Keith and myself are the only authorised instructors outside the North American Continent and a similar seminar presentation held over 5 weekends in U.S.A. by an authorised instructor nets that Doctor in the region of \$10,000, not bad for 10 days work.

So for the future the beginners registration fee will include the current manual, blocks etc., newsletter and a basic fee plus a calculated amount to cover expenses for that Seminar. This will remove one of the reasons for the mutterings we hear from time to time. For those of you who have taken our Seminars before, your Registration fee for the rest of this year will remain the same but all will have the same precalculated amount built in whether you attend a 2 or 3 day seminar as before. e.g. 2 day \$15 + \$20 expenses = \$35. 3 day \$20 + \$20 expenses = \$40. This is the same as at present but we will estimate the expenses and you will pay as part of the registration. If expenses are in excess of our estimates that is our loss. By using this method we will eliminate the lineup at the end and thus be able to devote more time to teaching and thus this will be of greater benefit to you all. In future seminars order forms will be handed out at the beginning so that you may order and pay for any items at any time. This will make things much more efficient. We will in future limit the size of our seminars in order that we can efficiently give those who attend the maximum benefit. Obviously 50 is the maximum we can handle at Noah's Hotel. We had to turn away 6 this last time. This was sad but those Doctors will not be so late with their Registration in future we hope. We want to help everybody but we feel we both have physical limitations and in the future we will appoint some of you as Assistant instructors to conduct sections. Those going to Omaha this year had better sharpen their wits for positively when we come to Melbourne there will be a paper to sit to test you on your knowledge. Also I am toying with the idea of asking one or two of you who register for the October Seminar to present a paper on a particular S.O.T. subject. This will be confined to the advanced group but if it is good enough you will be invited to present same to those taking the beginners refresher course later in the day.

PROOF OF VERTEBRAL CORRECTION After our Federal enquiry the Government might set up standards for judging vertebral subluxation correction, and this is a trap we must avoid at all cost. The 'Radiological manifestations of spinal subluxations' as reprinted in our July-September Journal is a case and point. How many of you have re-Xrayed a patient to find no change, yet your patient is well. The result may be no payout for your services in some distant scheme which the Government may devise for our Profession. I for one feel this classification of subluxation as adopted in the USA is most unfortunate.

A vertebral subluxation is corrected when its body pattern changes from abnormal to normal and its predetermined reflex point disappears. Those are the two criterions for proof of

correction. We must not accept a standard that demands proof of the "vertebral misalignment". The misalignment has nothing whatsoever to do with the vertebral subluxation except to determine a line of correction if your tests have proved the existence of a subluxation. Only at that point does does vertebral position have a place in our art. Our proof of correction lies in normalisation of body pattern and the disappearance of the reflex point NOT in possible change in misalignment. A vertebra that to all intents and purposes is near normal, can be a violent and deeply pathological subluxation. A fourth lumbar rotated with its spinous process as far to the right as possible to move without fracture, may be a totally adaptive compensation, and may be totally agreeable with that persons occupation or health habits. If you change that adaption, the man becomes sick. X-ray is a most valuable tool but lets not turn it against ourselves. Think about it.

A GOOD QUESTION WITH A GOOD ANSWER In the Despatcher January 1971 the following question was posed. 'Please comment on the causes and treatment for the complaint of cold hands or cold feet or patient complaining of being cold all the time'? Dr A. Dangerfield the noted S.O.T. Physiologist gave the following answer.

The feeling of cold hands or feet or of always feeling cold can be attributed to many factors. To explain this let us review the physiology of the thermotaxis or regulators of body temperature. People who have cold hands and feet, that are cold even in a warm room usually are low in thyroid and adrenal functions or are hypo-adrengic or hypo-thyroid. The excessive loss of heat to the touch of the skin could be referred to as "Renard's Disease" or disease of the vasomotor systems. Our approach to this condition could be through the peripheral nerve root levels, the occiput, cranial adjustments with the blocks, and the hypothalamus.

Man creates environmental temperatures of his own choosing by constructing buildings equipped with artificial heating and cooling systems; in this way he is able to secure a favorable temperature gradient, whatever the natural weather conditions. Changes in the temperature of the body surfaces, on the other hand, is brought about in man through the activity of three different physiological mechanisms. In the first place, surface temperature is largely determined by the ease with which heat is transported from the depths to the surface of the body. This transport is partially accomplished by conduction through tissues and tissue fluids, a process which is not easily altered in a quantitative sense; but more important than this, heat is brought to the surface by the circulating blood. Water, present in the blood to the extent of about 80 per cent by volume, has a high heat capacity and is able; therefore, to take up relatively large quantities of heat in warmer parts of the body and to give up this heat in the cooler regions. In the cutaneous circulation, heat is ordinarily given up by the blood, the temperature of which is thereby lowered while the temperature of the skin rises. The total amount of heat brought to a given area is conditioned by the rate of blood flow through the area. If the arterioles are constricted the rate of flow is retarded, the total heat transfer from blood to skin tends to be small, and the skin remains cool; but with arteriolar dilatation the rate of flow is brisk, a large quantity of heat may be exchanged, and the skin becomes warm. Eventually the temperature of the skin might equal that of the circulating blood were it not for the intervention of the other mechanisms shortly to be described. Surface temperature depends upon the ease with which heat is transferred from the body to the environment and vice versa. If condition of radiation is retarded by the interposition of some heat insulating material, surface temperature will undergo a corresponding change. The temperature of body surfaces is

modified by the humidity of the surface since 0.580 KCAL. of heat is removed by the vaporization of each gram of water from the respiratory membranes of the skin. There is a certain rather small amount of water, about 50 ML. per hour, which is lost from these two surfaces because they are moist; this is known as the "Insensible" water loss, to distinguish it from the "Sensible" loss, which is the sweat. Man's rate of heat loss is similarly altered by the vaporization of water, but the excess water is not vaporized from the respiratory membranes but from the surface of the skin. All of the reactions which have been identified with the maintenance of thermal equilibrium are under the control of the central nervous system. This control is exerted through both the somatic and the visceral motor nerves. The somatic motor fibers activate the respiratory muscles which produce panting, as well as the muscles of the trunk and extremities are responsible for posture, for voluntary activity, and for shivering. The visceral motor neurons of the autonomic nervous system activate the cutaneous blood vessels, the sweat glands, and the pilo-erector muscles of the hair follicles. Preservation of a relatively constant body temperature may require the participation of several different levels of the nervous system and integration of the activity of those levels. Where this intergration is achieved is a problem of some importance. The integration of the reactions which maintain temperature equilibrium is accomplished in the hypothalamus, the ventral portion of the diencephalon lying behind the optic chiasma, above the hypophysis and rostral to the cerebral peduncles of the midbrain. The hypothalamus functions as a regulator, which is able to change the rate of heat production and heat dissipation, through its influence upon the somatic and visceral motor neurons of the brain stem and spinal cord. The anterior hypothalamus is usually said to be responsible for protection against hot environments, while the posterior hypothalamus confers resistance to cold. Through the somatic and visceral motor neurons of the brain and spinal cord, the hypothalamus normally modulates the rate of heat formation and dissipation in such a way that the central or deep temperature of a resting individual is almost constant in spite of fairly wide variations in the temperature of the environment and in the physiological state of the body. It is important to inquire how this part of the diencephalon is called into action and what factors determine whether the mechanisms of heat loss or those of heat conservation are brought into play at any given moment. Two sensitive mechanisms, one central and the other peripheral, appear to interact in this regulation. The central one consists of thermal-sensitive neurons in the anterior

hypothalamus, its existence was first demonstrated by "Barbour" in experiments in which he warmed and cooled this portion of the brain. "Magoun" and his collaborators were later able to activate selectively certain mechanisms of heat loss by heating the anterior hypothalamus of cats with high frequency currents. The most responsive region lay in the supra-chiasmatic and preoptic regions, but a zone of lesser sensitivity extends caudally into the dorsal part of the hypothalamus. All of this evidence suggests that the anterior hypothalamus is sensitive to heat and that it has the function of protecting against hyperthermia. The caudal part of the hypothalamus, on the other hand, appears to protect against cooling. The peripheral mechanism includes the thermal-sensitive endings of skin, mucous membranes, etc., where reflexes begin when the environmental temperature is changed. Under natural conditions all of the motor mechanisms of temperature regulation may be brought into activity with no obvious change in the central temperature of the body, provided that the hypothalamus itself is normal. This suggests that the peripheral mechanism is effective through integrations which occur in the hypothalamus. If the deep temperature has not changed, there can be no stimulus to the sensitive neurons of the hypothalamus, and yet the constancy of the deep temperature is evidence that the hypothalamus is functioning properly. It is clear that the hypothalamus has two separable functions in this regulation; as an integrator of all of the information available to the nervous system relative to temperature, and as a sensing element capable of supplying a specific type of information, namely the central or deep body temperature. The peripheral reflexes rather than the central receptors appear to provide the basis of regulation when a resting, fasting animal is exposed to heat or cold. The central receptors, on the other hand, appear

to function when temperature is not the only variable which must be regulated under a given set of circumstances. For example, during exercise the distribution of blood in the body, the rate of pulmonary ventilation, posture, activity of skeletal muscles, etc. cannot be controlled for purposes of temperature regulation exclusively, and the central temperature then varies depending upon the work load and the ambient temperature. Under these conditions the change in deep temperature is great enough to activate the neurons of the central mechanism which then becomes more important than the peripheral reflexes.

The usual picture of a person with hands and feet that are always cold is one of low blood pressure, thin and slightly anemic. They usually have moist hands and feet and the evaporation of the moisture produces the sensation of coldness. The amount of muscular exercise (activity) also plays a factor as the circulation depends on quick return of the venous blood. Also, exercise increases the metabolic rate and increases heat dissipation. The cranial subluxation usually involved is the internal or external temperal, which is explained in the 1969-70 notes and the assistance book (page 69). The temperature reflex arc is cutaneous receptors (krause end bulbs and possibly ruffini and others) then to the dorsal nerve root, then the lateral spino thalamic tract, posterior portion, then to the thalamus, and last to the hypothalamus.

Dr. A. Dangerfield

Reference:

- Pages 488-489, Human Neuroanatomy by Raymond C. Trues, Malcolm B. Carpenter, Sixth Edition.
 Pages 1109-30, Fulton Textbook of Physiology, 17th Edition.

CASE HISTORY. About 2 months ago I received a distress call from a patient of ours. A friend of his visiting had severely injured himself in a boating accident - could I help? I X-rayed the patient. Then categorised and blocked the patient as a Category 3. Some immediate relief was the result. I saw him the next day and repeated the procedure the patient decided against my wishes that he must get back home as he had to be at work the next day. He was greatly improved but needed further care. I referred him to a colleague who was an Association member close to where he lived with the instruction that he was to contact the Chiropractor concerned as soon as possible and for him to contact us and we would forward the X-rays or at least give an opinion on the pathologies present or other abnormalities. Failing this then our advice to have further X-rays taken would be advisable as his case was particularly severe there being disc herniation. The patient arrived back in our office yesterday. The Chiropractor we referred him to had said he did not want our X-rays or a report as things had changed in the few days since my X-ray for the patient was no longer analgic. This was reasonable however NO further X-ray was taken. Over a number of subsequent visits this patient was "pulled pushed and twisted" and proceeded to get progressively worse again. The patient quit. Now in desperation he drives 250 miles back down here again. Our patient was just a plain and simple Category 2. now and responded beautifully. We saw him again this morning and he was as happy as Larry. The Category 2. was gone and we removed a Line 2 Area 7. L.5. This case illustrates the need to eliminate rank amateurishness which I thought was no longer present in our profession here in Australia. We should be very concerned with our image, a professional approach and maximum care for our patients is utterly essential if we wish to appear or pretend that our educational standards and training is better and more thorough than that of the home grown variety of spine twisters. Keith and I saw the need to help increase the professions knowledge of Chiropractic by offering Seminars in S.O.T. A great many of you have availed yourselves of this knowledge and do great credit to the profession. It seems there are a few more out there who need S.O.T. We have absolute faith that when we refer to you, the patient will get S.O.T.