

THE CHIROPRACTIC REPORT

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Professional Notes

Update on Hypertension

'Hypertension Case Finding and Management in Chiropractic Clinics' Jamison J R, *European Journal of Chiropractic* (1987) 35, 151-155. PN1

During the New Zealand Commission of Inquiry into Chiropractic there was investigation of the case of Mrs. M., who suffered from moderate hypertension for many years which was relieved entirely during a course of chiropractic adjustments for a whiplash injury. Following special investigation of her case and report from the N.Z. Medical Association the Commission was satisfied that "the probabilities are that the chiropractic treatment did have the effect both of relieving her hypertension and reducing her dependency on medication. ('Chiropractic in New Zealand' Report of the Commission of Inquiry (1979) P. D. Hasselberg, Government Printer, Wellington, New Zealand, 167 PN2). Such clinical reports, common in chiropractic practice, whet the appetite for research in this area. There are no formal studies published.

Jennifer Jamison, M.D., writing in the *European Journal of Chiropractic*, leaves adjustment on one side but provides an excellent review of the general research on hypertension and why the detection and management of mild essential hypertension is important in chiropractic practice.

In making decisions on therapeutic approach one must weigh overall benefits and disadvantages.

continued on page 7.

American Back Society – the way it was meant to be

A. Introduction

1. In the world of knowledge five years is now a generation, and nowhere is this more true than in the research and management of spinal problems. Two changes are having a major beneficial impact on the relationship between the chiropractic and medical professions.

2. Firstly recent chiropractic and medical research worldwide, including Australia¹, Canada^{2,3}, Denmark⁴, England⁵, Central Europe^{6,7}, and the United States^{8,9,10} means that there is now more scientific evidence of the effectiveness of skilled spinal manipulation than any other treatment for back pain.¹¹

3. Secondly following the admission by respected medical experts in Europe¹² and North America^{13,14} that "modern medicine ... has completely failed to cure the vast majority of patients with simple low-back pain", there has been recognition that "the main theme of management must change from rest to rehabilitation and restoration of function".¹² Vert Mooney, Past President of the International Society for the Lumbar Spine, an orthopaedic surgeon from the University of Texas, Dallas, expresses the majority view in medicine today in rejecting surgery, prolonged rest and passive physical therapy modalities in the treatment of most chronic back pain problems and concluding "that mechanical therapy is the most rational approach".¹⁴

4. A new era of cooperation, of enormous benefit to patients and both professions, is evident in education, research and practice and is now even found where change is most resisted - in the political organizations representing each profession. Two current examples are:

a) The theme of this year's International Chiropractors' Association Annual Convention in July at Monterey, California is 'Making DC/MD Relations Work' and a keynote speaker is prominent orthopaedic surgeon Arthur H. White, Director, San Francisco Spine Center. Per Freitag, an orthopaedic surgeon from the John F. Kennedy Hospital, Chicago, and James Gregg, a consultant chiropractor at the New Center Hospital, Detroit, will speak on their experiences concerning successful DC/MD relations on the staffs of their respective hospitals.

b) The June 1, 1988 issue of the *Journal of the Canadian Medical Association*, not

historically a forum for approval of chiropractic, contains a special report entitled 'Are Physicians' Opinions about Chiropractors Changing' which records that they are. A number of medical specialists interviewed acknowledge that chiropractors have an admitted role in the health care system and explain the inter-referral relationships they have established. Dr. Richard Ogilvie, an orthopaedic surgeon and assistant professor at McMaster University, Ontario, admits that chiropractic "works as effectively as anything" with back pain and Dr. Augustin Roy, Secretary-General of the Quebec Medical Association observes that the first two years of medical and chiropractic study are almost interchangeable, that cooperation between the professions is becoming common, and that good communication will solve the "exaggerations on each side".¹⁵

5. This spirit of cooperation is spawning new inter-professional organizations, and none is more exciting than the American Back Society (ABS) founded in 1982 in California. This Report looks at the ABS and its recent symposium in Orlando, Florida during May. (For a summary of the other societies that have a specialized interest in the management of back pain - see Table 2).

B. American Back Society

6. The ABS represents a new concept, and is the first society worldwide that has managed to attract as members and to its conferences many leading members of all health professions interested in spinal care.

7. It was founded in August 1982 by its Executive Director, Aubrey A. Swartz, M.D. an orthopaedic surgeon from Oakland, California, who had experienced the benefits of professional referrals to and from chiropractors since 1978. Dr. Swartz's purpose was "to furnish a forum for health care professionals and scientists interested in relieving pain and diminishing impairment of the patient suffering from spinal pathology" with an emphasis on bringing together the leading people and knowledge from all professions. First links between the ABS and the chiropractic profession were through Stephen Gray, D.C., Scott Haldeman, D.C., M.D., Ph.D. and the Palmer-West College of

"Next Issue: Whiplash – bumped from this issue by report on ABS Meeting".

Chiropractic. Michael Pedigo, D.C., ICA President and Robert Anderson, D.C., M.D., Ph.D. are now ABS Directors, and David Cassidy, D.C. M.Sc., and Terry Yochum, D.C., D.A.C.B.R. are advisors.

8. Full details of the Board of Directors and Council of Advisors appear in Table 1. These are prominent and well-published figures from various medical specialties, chiropractic, osteopathy and physical therapy throughout North America. ABS membership and meetings are open to professionals internationally and the European advisor is Dr. Malcolm Jayson, rheumatologist of Salford, England.

9. First ABS President, from August 1982 to May 1988, was Dr. Rene Cailliet, former Director, Department of Physical Medicine and Rehabilitation, University of Southern California School of Medicine, now of Santa Monica, and current President is Dr. William Kirkaldy-Willis, Director, Department of Orthopaedic Surgery, University Hospital, Saskatoon, Canada.

10. The majority of the ABS membership is orthopaedic surgeons. However there are large numbers of neurosurgeons, neurologists, rheumatologists, physiatrists, radiologists, chiropractors, osteopaths, physical therapists, psychologists, other health professionals, basic scientists, and attorneys.

There were 560 registrants for the Orlando meeting, the majority were medical practitioners, the largest single specialty orthopaedic surgery, but 27% of registrants were chiropractors.

11. The ABS has two comprehensive meetings each year - the last a Spring Symposium in Orlando, Florida, the next a Fall Symposium in San Francisco, California December 1-3, 1988 where Course Chairman will be San Francisco orthopaedic surgeon Dr. Arthur H. White. The Spring Symposium 1989 will be held April 13-15 at the Hyatt Regency Hotel, Boston, Massachusetts in affiliation with the New York College of Chiropractic.

12. The ABS meeting format, a first-class model for any inter-disciplinary meeting, is worth discussion in some detail.

It comprises:

Day 1 of 3 days

a) Keynote scientific program for all registrants for the morning - approximately six 30 minute presentations on current

clinical research and ample question time (8.00 a.m. to 12.30 p.m.).

b) Afternoon workshops. 16 one hour workshops are available. Participants attend up to four of their choice, two on the afternoon of Day 1, two on the afternoon of Day 2.

These provide an opportunity to get state-of-the-art information on all aspects of back care. Available choices in Orlando, for example, were:

- Back School - Methods and Techniques.
- Consultation Clinic (Presentation of private cases by the registrants for consultation and second opinion).
- Pain Management.
- Muscle Energy Treatment for the Cervical Spine.
- Arthritis and Osteoporosis - Diagnosis and management.
- MRI and CT of the Spine.
- Exercise Physiology.
- Ultrasonography in the Diagnosis of Spinal Injuries and Diseases.
- Chiropractic Methods and Techniques: Conservative Management of Disc Disease, including Manipulation.
- Spinal Anatomy.
- Orthopaedic Examination of the Back.
- Vocational Rehabilitation and Ergonomic Planning.
- Clinical Neurophysiology and Electrodiagnosis.
- Myelography - Indications and Technique.
- Muscle Energy Techniques for Balancing the Pelvis; including Problems Related to the SI Joints, Pubic Symphysis, and the Hips.
- Clinical Methods and Techniques in the Diagnosis of Non-surgical Sciatic Pain Syndromes.

c) You will note that the chiropractic workshop related to management of disc disease. Many MDs and PTs attended this workshop by John Triano, D.C., Chicago, and David Cassidy, D.C., Saskatoon.

They were not shown chiropractic techniques. They were exposed to chiropractic research and clinical experience concerning the valuable role of chiropractic care in many cases of clear disc herniation and were told - in an authoritative forum where they could raise questions and accept what they were hearing - that:

- Chiropractic adjustment is effective for many patients with disc herniation - the adjustment being aimed at the dysfunctional facets (the real source of the problem) rather than the disc herniation (frequently benign and capable of natural remission).

Table 1

A.B.S. Board of Directors

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- Chiropractic adjustment probably cannot cause herniation, neither is there good evidence that it may injure discs in any other way. Biomechanical evidence suggests the facets will fail before disc injury.
- There is good evidence of success of rotational manipulation where there is documented disc herniation. (Three scientific papers in favour. There is only one, for example, supporting discectomy for herniation).
- In individual cases manipulation may prove not to be of value - however, "I use it and have never experienced a case where the patient was made worse". (Cassidy).

13. Day 2

- a) Two concurrent scientific programs for first half of morning 8-10 a.m.
- b) Grand Rounds 10.30-12.30. With all registrants back in one session, clinical case presentations are made to a multi-disciplinary panel, with each panelist making recommendations on management from the perspective of his/her discipline.

Chiropractic shone in this environment in Orlando since chiropractic was represented by Cassidy, neurology by Haldeman, both surgical representatives were emphasizing conservative care, and the overall moderator was Kirkaldy-Willis. In essence North America's gathered experts were being told that nearly all cases require a non-invasive active treatment approach first, that there is more evidence for the effectiveness of skilled manipulation than anything else, and the most qualified profession in this area was chiropractic.

- c) Afternoon workshops. As Day 1.

14. Day 3

- a) Choice of full day instructional courses. These run 8.00 a.m.-5.00 p.m. and the selection offered in Orlando was:

- ABS Practice Management Series: Diagnostic and Procedural Codes and Collection Techniques
- ABS Medico-Legal Series
- ABS Industrial Clinic Series
- ABS Chiropractic Postgraduate Continuing Education Series: Conservative Management and Rehabilitation of the Chronic Spine
- ABS Manual Medicine Series
- Myofascial Approach to Soft Tissue Mobilization: PT Methods and Techniques
- Imaging Modalities in Spinal Disorders
- The Feldenkrais Method
- ABS Surgical Hands-on Bio-skills Laboratory

- b) Again anyone can register for any course. The chiropractic course was mainly for chiropractors. It involved goal setting, rehabilitation, results of treatment with various techniques, stages of patient management, and clinical case presentations.

15. There is some criticism from chiropractors concerning inter-disciplinary meetings, based upon the perception that other professionals are being taught to use chiropractic adjusting techniques. This may be true of some limited technique courses, but is a complete misconception of the environment, purpose and effect of an ABS meeting. While there is a large interchange of information between all disciplines, the effect is that other professions are exposed to the depth of chiropractic education, research, knowledge and clinical skills rather than instructed in technique. At Orlando contemporary chiropractic was revealed as an equal partner with medicine in the understanding and management of spinal conditions. It was evident that both professions needed and respected each other.

Table 2

MAJOR BACK PAIN SOCIETIES

a) **International Back Pain Society (IBPS).** Founded in England in 1985, primarily by Dr. Malcolm Jayson, a prominent English rheumatologist. Membership and attendance at meetings is open to all professionals interested in spinal disorders. Has recently had its fourth annual meeting, entitled 'Back Pain: Current Concepts and Recent Advances', May 4-6 at Montreux, Switzerland. (A principal speaker was Scott Haldeman, D.C., M.D., Ph.D. - see para 17). The emerging European equivalent of the American Back Society.

b) **International Chiropractic Academy for the Study of Back Pain.** Founded in Chicago in 1982 by Dr. James Cox, a leading U.S. chiropractor. Interprofessional board and membership, primarily chiropractors, orthopaedic surgeons and rheumatologists. Current President Jay Triano, D.C. Next annual conference September 17-18, 1988, Schaumburg, IL. Keynote speakers: Charles Burton, orthopaedic surgeon, Minneapolis, Per Freitag, orthopaedic surgeon, Chicago, Dale Mierau, chiropractor, Saskatoon. Contact: Ms. Sheila Wadda, National College of Chiropractic, 200 East Roosevelt Road, Lombard, IL 60148. Tel: (312) 629-2000.

c) **The International Society for the Study of the Lumbar Spine.** Truly international, founded in 1970, the most learned society, and restricted to 160 members. Each member must have made a substantial contribution to the literature (presently assessed as 20 papers published in peer reviewed journals). Has one meeting annually. To retain membership each member must present one scientific paper at a Society meeting each 5 years (currently about 200 papers are submitted each year only 70 accepted). Scott Haldeman is the only chiropractor currently a member. Other chiropractors have had papers accepted, and presented them, at meetings. All health professionals are welcome to attend meetings as general registrants, and many chiropractors do.

d) **The North American Spine Society (NASS).** Founded in 1986, as an amalgam of North American members of the International Society for the Study of the Lumbar Spine and other spine surgeons who wanted a North American clinical group similar to the International Society. Has one meeting annually and 400 members. Scott Haldeman is President-elect.

Has similar membership entrance requirements to International Society membership. Not open either to MDs or DCs unless they hold a Ph.D. or have made a substantial contribution to the literature.

e) **The American Back Society (ABS).** Of most professional interest to general members of the chiropractic and medical professions. Open membership, distinguished interprofessional leadership, high quality meetings, held twice each year. The subject of this report and described more fully below.

f) **International Federation of Manual Medicine (FIMM).** Established in Europe in the early 1960s. Members are national organizations of manipulative medicine. Primarily established to foster medical interest in manipulation and promote education and research. Chiropractors have been excluded from membership and meetings.

The North American member of FIMM has recently changed its name to the North American Academy of Musculo- skeletal (formerly Manipulative) Medicine. (NAAMM). Also founded in the early 1960s. 20 years later the NAAMM had under 300 members throughout North America and its force has been contained by rival societies, first the American Society of Orthopaedic Medicine and now the American Back Society.

g) **Society of Orthopaedic Medicine. (SOM).** Founded by the late Dr. James Cyriax as a vehicle for his courses in manipulative medicine taught initially in London, England in the 1950s, the SOM has given rise to branch societies in America and Canada largely to support the personal teachings of Cyriax. Has always excluded chiropractors from membership. Continues to operate at technique level, and is being supplanted by more sophisticated truly interprofessional societies such as IBPS and ABS.

C. ABS Orlando Meeting - May 12-14, 1988

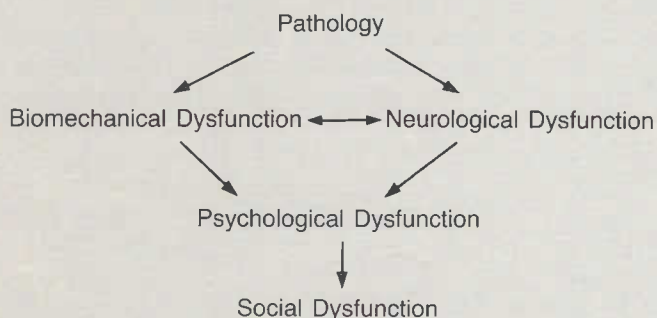
16. In dealing with the Orlando meeting we summarize information of value to all health professionals, but particularly chiropractors.

Haldeman - Treatment Objectives with LBP

17. Scott Haldeman, neurologist and chiropractor, accepted internationally as a foremost authority on the subject, spoke on the treatment objectives that must be shared by all health professionals managing patients with low-back pain. He was in Florida direct from Montreux, Switzerland where he had made a similar presentation to the European based International Back Pain Society.

a) Haldeman's overall message was that the theme of management in 1988 must be early active intervention and back education, with the aim of return to function, exercise, then work as soon as possible. Skilled manipulation should be a first line approach, because it is an active therapy, promotes early return to function, and has more evidence of effectiveness than any other conservative treatment. It should be combined with back education and an appropriate exercise program.

b) He suggested that there was much failure in spinal care because of simplistic models - people looking at only bones or discs or nerves or muscle or environment or psyche. The studies indicate that 66% of the cause of continuing back disability is 'social dysfunction' rather than pathology, as in the following model:



c) Acute Uncomplicated Low-back Pain

i) 70-90% of cases would resolve over time with natural remission.

ii) Thus the goal of conservative treatment is not to relieve pathology (which often cannot be found) but to relieve pain, shorten period of disability, and prevent chronic pain.

iii) Bed rest beyond 3 days should not be contemplated. Of about 60 conservative treatments available there was more evidence of effectiveness for manipulation than any other treatment approach.

d) Acute Complicated

Same as treatment approach to acute uncomplicated, after ruling out inflammatory problems or those few requiring surgery.

"Because of the risk of prolonged disability after surgery the final decision on whether to go to surgery should always be made by the conservative treater, not the surgeon".

e) Recurrent Acute

Same as acute uncomplicated, but with more education, exercise, lifestyle modification, and "keep him/her in the work place".

f) Chronic Uncomplicated

These are patients who have had months or years of back pain - but without generalized pain and with no significant loss of neurological function.

"Pathology does not equate with pain in many of these patients".

"Try each potentially valuable treatment for short periods".

Haldeman gave emphasis to the important role of manipulation by referring to the good results reported in the Palmer College trial,⁹ and by saying you should start with the most active treatments on the following scale:



g) Chronic Complicated

By definition these are patients who have had unnecessary/ineffective surgery one or more times and they need definitive diagnosis to rule out further surgery, weaning from dependency on drugs, and intensive education.

(Incidentally, Haldeman reports being well-advanced with the second edition of 'Modern Developments in the Principles and Practice of Chiropractic'¹⁶ due to be published in 1989).

18. Rosomoff - It is Not the Disc

a) Hubert Rosomoff, neurosurgeon, Chairman, Department of Neurological Surgery, University of Miami, was one of several speakers on the Day 1 keynote scientific program who illustrated the dramatic change in medical management of low-back pain. Earlier in his career he operated on several thousand patients with back and leg pain on the model of relieving nerve root compression from disc herniation.

b) With growing experience he decided that disc herniation, even when clearly visible through imaging, was seldom the real cause of pain. "Pain is from a passing impulse, not a continuing compression". "We know a lot about peripheral pain but very little about the cause of deep tissue pain - pain in the muscles and ligaments".

c) He decided that associated soft tissue injury was the likely cause of the problem and that there was "one yawning canyon concerning how to treat the 99% of back pain patients that didn't need surgery".

d) Concluding 15 years ago that "back pain should be viewed as a non-surgical problem, subject to a few exceptions" he imposed a moratorium on surgery at his hospital for 6 months. His subsequent extensive non-surgical experience has convinced him that "simple medical back examination is no good", that "the underlying problem is usually missed", that "all chronic low-back pain is an iatrogenic disability because of unskilled diagnosis and management", that "the herniated disc doesn't produce pain per se and the most common cause of pain is associated muscle damage".

e) Rosomoff then reported on clinical results during the past 10 years for patients with lumbar spine problems, but viewed these results as equally applicable to the neck and thorax. His pain center treats chronic back pain patients through intensive counselling, lifestyle modification, and exercise rehabilitation, rather than any practitioner-based therapy. Asked what use he made of medication Rosomoff replied "Generally none - there is no evidence that muscle relaxants will help mechanical

contraction of muscle - I did the trials on this (unpublished) 25 years ago".

f) Asked whether muscle contraction and damage as reported by him, and shown visually on slides, could cause 20 years of chronic back pain, Rosomoff said yes because of constant aggravation by mechanical stimulation, the failure to ever find or treat the muscle problem, and psychological overlay and learned behaviour.

g) Chiropractors present saw his basic approach as consistent with chiropractic management, subject to his concentration on muscle damage alone rather than dealing also with joint subluxation or dysfunction. (For detailed comment on the respective roles of muscle and joint dysfunctions see TCR, May 1988, Vol. 2 No. 4, 'Back Power').

19. Sarno - Tension Myositis Syndrome (TMS)

a) Dr. John Sarno, a specialist in physical medicine and rehabilitation from New York City, spoke on Tension Myositis Syndrome (TMS) with the sub-title 'Questioning Conventional Diagnosis'. He also criticized the traditional medical approach of looking for a source of compression, taking surgical steps to remove it if present, and in its absence viewing the problem as psychological with 'no objective findings'.

b) Sarno reported on a study of 109 patients with documented lumbar disc herniations, all of whom had been told that this was the cause of their pain many of whom had been sent for surgery. All were disabled from work and other normal activities by back and/or leg pain. Treatment simply comprised initial pain relief with medication and then 4 hours of intensive counselling and education concerning TMS, supplemented by further counselling in a minority of cases. At 1-3 years follow-up 96% of patients had no significant pain or restriction from physical activity.

c) Sarno described TMS as primarily caused by tension/anxiety, but with symptoms often triggered by a physical incident (40% of cases). The basic mechanism was tension giving abnormal autonomic nervous activity, leading either to tendonitis or constriction of arterioles feeding postural muscles and associated nerves, and thus muscle spasm and pain. The 3 tissues involved were muscles, nerves and tendons/ligaments.

d) Sarno actually required discontinuance of all practitioner-based therapy. Chiropractors at the ABS meeting agreed that chiropractic management was consistent with Sarno's description of TMS and therapeutic goals, but with the benefit of addressing subluxation/joint dysfunction and its additional impact on autonomic nervous activity. At an interprofessional meeting numerous examples arise of where disciplines can learn from each other - this is perhaps one good example for chiropractors, specialists in physical medicine, psychologists and surgeons.

20. Referred Pain or Radicular Pain

a) William Kirkaldy-Willis, orthopaedic surgeon, presented his recent research^{17,18} and stated that the two best ways of determining whether non-specific low-back pain was *referred* (e.g. from posterior joint syndrome, sacroiliac joint syndrome, and various muscle syndromes) or *radicular* (e.g. from herniated disc, stenosis, and spondylolisthesis) were in order of preference:

i) Manipulation.

ii) Injection of Marcaine under fluoroscopic x-ray control.

He explained how he had come to this conclusion after extensive work with the chiropractic profession, observing that "this is very good proof that good things happen when chiropractors and orthopaedic surgeons get together".

21. Question Period

Following an opening scientific program dominated by recommendations for conservative care with reliance upon manipulation, many questions from MDs in an audience of over 500 related to spinal manipulation and were of interest.

a) Q. "Where manipulation is used, how much treatment should there be"?

A. (Cassidy and Haldeman). "You should start with 5-8 treatments over a period of 2-3 weeks. If manipulation is going to work you should see subjective and objective improvement in that time. If there are signs of improvement treatment should be continued as appropriate".

b) Q. "Is there enough research to use manipulation as a primary course of treatment"?

A. (Haldeman). "There is more research on the value of spinal manipulation than any other conservative treatment".

A. (Kirkaldy-Willis). "Our work has shown that spinal manipulation is a very effective and cost-effective treatment for patients with dysfunction - and these are 90% of our chronic low-back pain patients".

c) Q. "Does facet syndrome really exist"?

A. (Haldeman). "There is no argument about the fact that it co-exists with disc problems. There is also good evidence of facet syndrome as an independent entity - there is appropriate innervation with pain fibres, the Australian chiropractor Lynton Giles has shown entrapment of tags that can cause pain,¹⁹ and facet pain can be blocked with marcaine injections".

D. Conclusion

22. In this summary there has been no mention of many presentations of great interest at Orlando, including David Cassidy's analysis of sacroiliac joint anatomy and function illustrated with slides showing microscopic and gross anatomy of the joint from embryo to 8th decade, and drawing on research with Bowen published in *Spine*.²⁰ However it is hoped this Report has opened a window on an exciting new horizon - where mutual respect and the pursuit of valuable clinical knowledge prevail over distrust and rivalry.

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Organic Disease

"The idea that organic disease can precipitate musculoskeletal manifestations such as muscle spasm and autonomic reflex activity is well recognised. In contrast, the idea that musculoskeletal dysfunction may precipitate organic problems is usually considered as nothing less than quackery. It is difficult for a traditionally trained physician to accept such a possibility. The thought of treating coronary vascular disease by manipulation seems outrageous, but it should not be rejected out of hand. If autonomic reflex activity is accepted as a vehicle for many of the manifestations of joint or somatic dysfunction, then one can postulate that coronary vasospasm might be a result of somatic dysfunction and, if so, that it might respond to manual management.

One of the authors (JFB) has experience in a case which gives one pause to reflect. A cousin visiting from abroad remarked that since his previous visit he had developed angina. ECG changes were present, and walking for some 180 metres (200 yards) up a slope of 1 in 7 made him need nitroglycerin. Inquiry revealed that he had a history of neck pain and stiffness, although at the time he had no neck symptoms. It was proposed that he should be examined and treated on the basis that any dysfunction found would be treated and the effect on cardiac function observed, if any. Examination did indeed reveal dysfunction in both neck and upper thoracic spine, and treatment on five visits over a 2-week period made a significant difference to the objective signs of joint dysfunction. *The effect on cardiac function, or presumably on cardiac function, was remarkable.* By the time he was due to return home, he was able to play a full set of tennis followed by a swim with no need of medication.

This case does not signify anything other than that an explanation is necessary. The results may not have anything to do with manipulation, but similar observations have been recorded by other practitioners of manual medicine. The cardiac nerve is said to arise from the T1 to T4 segments. It has long been speculated that the visceral effects of manipulation are mediated through the autonomic system and vasospasm as a result of autonomic reflex changes is certainly possible. It seems that following up this anecdotal experience is likely to be worthwhile; *only the fool dismisses what he does not understand!*"

Sacroiliac Movement

"Despite more than 50 years of documentation to the contrary, some physicians still consider that the sacroiliac joints do not move. These joints are complex and not fully understood, but it is clear to the authors that they can have a profound effect on body mechanics. The argument regarding movement was discussed at length in Chapter 2 ... *anyone who still holds the view that these joints are immobile can never hope to achieve control of common back pain.*

The sacroiliac joint appears to be the single greatest cause of back pain. The range of motion is small and difficult to describe but, when normal joint play is lost, agonising pain can be precipitated ... on confronting a patient in severe pain of sciatic distribution the first thought should be 'sacroiliac' not 'disc' ... A known disc herniation is not a contraindication to properly designed manipulation treatment and many patients respond in such a way that any question of surgical treatment is forgotten".

'Spinal Manipulation' John F. Bourdillon, M.D. and Edward A. Day, M.D., William Heinemann Medical Books London; Appleton and Lange, Norwalk, CT/Los Altos, CA, 1987, Fourth Edition, 237-238, 228-230.

Professional Notes: *continued from page 1.*

Drugs are proven effective in lowering blood pressure but, says Jamison, should not be the basis of intervention with mild hypertension for two reasons -their adverse side effects, and the various health- positive side effects of interventions based on exercise, diet and psychological effect.

There is clinical trial evidence supporting effectiveness of dietary modification, weight loss, exercise and relaxation techniques. These are capable of reducing both systolic and diastolic blood pressure levels in the order of 3 to 6 mmHg, "sufficient to achieve re-classification of a mildly hypertensive patient".

Moderate regular exercise is thought to reduce blood pressure as a result of "overall reduction in sympathetic activity and an increase in peripheral vascular capacity".

Monitoring and correction of dietary calcium deficiency is valuable since low dietary calcium "has been identified as a risk factor in at least two epidemiological surveys" and "three clinical studies ... have found that diastolic blood pressure can be reduced with calcium supplementation". Details are discussed. "When 17 nutrients were correlated with the blood pressure profiles of over 10,000 Americans lower calcium intake was found to be the most consistent factor in hypertensive individuals".

There is firm evidence supporting advice to patients with hypertension to reduce salt intake. However, "current thinking suggests that only a certain group of people may be sodium-sensitive" and helped by dietary sodium restriction. The jury is out on that. Another nutrient being studied in relation to hypertension is linolenic acid, an "essential fatty acid that is a precursor of prostaglandin and other vasoregulators".

Jamison advises that a number of the necessary dietary modifications "can be achieved by conversion to a lacto-ovo vegetarian diet" and cites authority. There is then a review of evidence of psychological interventions, concluding with this suggested overall pecking order of effectiveness for reduction of blood pressure with mild hypertension.

Weight loss, *yoga*, salt restriction, *meditation*, exercise, *bio-feedback*, muscle relaxation, placebo.

New Academic Status – Europe and Australia

AECC - B. Sc. (Chiropractic) Degree Course Validated

When the Anglo-European College of Chiropractic (AECC) was established at Bournemouth, England in 1960 its program was based on the U.S. model of chiropractic education, involving a high number of formal class hours. In the European tradition medical physicians receive a Bachelor of Medicine or equivalent degree

on lower formal hours, more independent study, and a postgraduate internship.

In 1978, supported by the European Chiropractors' Union, AECC decided to integrate with the European model and seek a formally recognized Bachelor of Science degree followed by a one year internship program to be administered by national chiropractic associations. An added advantage of this approach was that a significant part of chiropractic education would take place in the country where each chiropractor desired to take up practice.

In June Arne Christensen, D.C., Principal, and Neils Nilsson, D.C., M.D., Head of Academic Affairs, AECC, announced that the AECC's program has now been validated by the U.K. Council of National Academic Awards as a Bachelor of Science (Chiropractic) Degree.

"CNAA recognition puts chiropractic education on a par with other medical degree courses", says Christensen. This is highly significant for the development of chiropractic in Europe, because it facilitates interprofessional cooperation, the development and funding of research projects, and allows chiropractic graduates to register for Ph.Ds and other higher degrees within the university system.

'Complementary medicine' - the name commonly given to alternative health care professions such as chiropractic, homeopathy and osteopathy in England - has overall had a wider base of acceptance in Europe than elsewhere in the world. (A recent study in England showed that 50% of general medical practitioners surveyed had referred patients to a chiropractor or osteopath for spinal manipulation within the past 12 months. 'General Practitioners and Alternative Medicine', Anderson E and Anderson P. J Royal College Gen Practitioners (1987) 37:52-55 **PN4**). The AECC four year fulltime chiropractic course now becomes the first degree program for complementary medicine to be recognized in the United Kingdom.

Australia - First University M.Sc. (Chiropractic)- open to DCs worldwide

Both Australian chiropractic college courses involve government funded and recognized Bachelor of Science degrees. At the School of Chiropractic, Phillip Institute, Melbourne, Victoria a five-year funded program leads to a Bachelor of Applied Sciences in Chiropractic - 'B App Sc (Chiro)'. At the Sydney College of Chiropractic the first three years are funded at the University of New South Wales and lead to a Bachelor of Science degree, then two postgraduate years culminate in a Graduate Diploma in Chiropractic.

In May Griffith University, Brisbane, Queensland announced an international first - establishment of the first university master's degree in chiropractic. Faculty will

Quote-of-the-Month

A medical practitioner writes on chiropractic

"The major hypotheses that underpin chiropractic are:

Nerve compression effect. Symptoms in the body can be caused by compression of the segmental spinal nerve as a result of intersegmental spinal derangements, which alter action potentials.

Somatosympathetic effect. A reflex effect is produced on visceral structures following manipulation of the spine and treatment of trigger points.

Viscerosomatic effect. Irritation, inflammation or disturbances of visceral structures lead to spinal subluxations, the occurrence of trigger points, referred pain, spasm of the spinal muscles and skin changes (hyperesthesia, temperature change, sweating).

Somatopsychic effect. Chiropractors suggest a relationship between psychological problems, body mechanics and posture. Through spinal ascending pathways, subluxations can stimulate the reticular system, thereby enhancing anxiety and other stress disorders.

Proprioceptive injury. Excessive stimulation of sensory nerve endings in muscles, ligaments and synovial membranes may occur as a result of articular derangements. Unusual afferent impulse patterns to central neurons can alter the homeostasis of the autonomic and central nervous system.

Neurodystrophic effect. Neural dysfunction is stressful to other organ systems and can modify specific and nonspecific immune responses. An extensive bibliography describing the neuro-anatomical and physiological studies associated with the above hypotheses is listed in reviews by Janse and Leach".

Peter Curtis, M.D., Professor, Department of Family Medicine, University of North Carolina, 'Spinal Manipulation: Does It Work?' In 'Occupational Back Pain', Spine: State-of-the-Art Reviews (September 1987) 2:1, Hanley and Belfus, Philadelphia, 34. PN3 The two chiropractic reviews that Curtis references are Janse J (1975) 'History of the Development of Chiropractic Concepts; Chiropractic Terminology'. In Goldstein M (ed): The Research Status of Spinal Manipulation. NINCDS Monograph No. 5 DHEW, Publication No. (NIH) 76-998; and Leach A R (1986) 'The Chiropractic Theories: A Synopsis of Scientific Research', 2nd Edn., Williams and Wilkins, Baltimore, 7.

include Lynton Giles, D.C., Ph.D., a Canadian Memorial Chiropractic College graduate who has been a prominent

researcher in Western Australia during the past 10 years.

The new Master of Science (Chiropractic) program, open to chiropractors worldwide, follows some years of chiropractic research at Griffith University, funded by the Australian Spinal Research Foundation, the research arm of the chiropractic profession in Australia. Chiropractors will join other health care professionals and scientists in establishing a comprehensive centre for musculoskeletal research at the university. (For information on this program contact Prof. Roy Webb, Vice Chancellor, Griffith University, Nathan, Brisbane, Queensland, Australia 4111. Tel: (07) 275-7340, Fax: (07) 277-3759; or John Hinwood, D.C., Australian Spinal Research Foundation, 2908 Pacific Highway, Underwood, Queensland 4119, Australia; Tel. (07) 341-7077.

Points

- Average direct cost (health care and compensation) for an individual worker with strain or sprain industrial back injury in the U.S. in 1987 - \$5,739.00. Estimated cost of industrial low-back pain in the U.S. in 1983 (treatment and compensation) - \$25.25 billion. (Stover Snook, Ph.D., Lecturer on Ergonomics, Harvard School of Public Health, 'The Costs of Back Pain in Industry', in *Spine: Occupational Back Pain, State-of-the-Art Review (1987) 2(1):1-4 PN5*).

- There is no established or effective treatment of neck pain. There is "a lack of published clinical trials on the efficacy of drug therapy, collars, transcutaneous nerve stimulation, physiotherapy, manipulative therapy, acupuncture, and trigger point injection". ('Neck Pain: An Update', Nikolai Bogduk, *Australian Family Physician (February 1988) 17(2):75-80 PN6*).

"I will be as delighted as every other physician when an effective treatment for neck pain is defined. Until then I must rely on explanation and encouragement with or without unproved and placebo therapies". (Letter to Editor, Huston G J, *rheumatologist, Leeds, England, Br Med J (March 19, 1988) 296:862 PN7*).

- "...this book is the most remarkable compilation of scientific and factual data thus far published concerning the many facets

of the cervical spine". (Ruth Jackson, M.D., F.A.C.S., foremost U.S. medical author on cervical spine injuries during the past 30 years. (known for her text 'The Cervical Syndrome') in a foreword to the new chiropractic text 'Whiplash Injuries: The Cervical Acceleration Deceleration Syndrome', Foreman S M and Croft A C, Williams and Wilkins, Baltimore, London and Sydney, 1988. Drs. Foreman and Croft are chiropractors on the postgraduate faculty of the Los Angeles College of Chiropractic).

- The American Journal of Chiropractic Medicine is a new journal with a controversial title edited by Roy Hildebrandt, D.C., former and founding editor of JMPT. Its first issue (March, 1988) is impressive, has a useful section devoted entirely to abstracts of chiropractic journal literature, and has an excellent nuts and bolts article on searching the scientific biomedical literature. (AJCM address: Mountain Spring Press, 24W760 Geneva Road, Carol Stream, IL 60188. Phone (312) 653-2246).

Muscle Energy Techniques for Cervical Spine

1. John Bourdillon, one of the most published and experienced medical manipulators and now an Associate Professor, College of Osteopathic Medicine, Michigan State University, presented a lecture and workshop 'Muscle Energy Techniques' at the American Back Society Symposium in Orlando and explained that these are replacing manipulation techniques for the cervical spine in medical practice.

2. Muscle energy techniques, as the name implies, work directly on muscle and only indirectly on joints. The practitioner palpates to find tight (hypertonic) muscle restricting joint movement.

The correcting force, instead of being applied externally as in manipulation, comes from the patient pushing against the manual resistance of the practitioner. The patient exerts the force for about 5 seconds then fully relaxes. This is repeated about 4 times. The basic principle is that the isometric contraction of the hypertonic muscle produces a post-isometric relaxation phase during which the muscle lengthens. Only small forces are required because the muscles involved are small.

Sometimes the joint will 'let go' or 'snap' after several post-isometric relaxations. "No one knows why" says Bourdillon, and often this doesn't happen. This must raise a question on the reliability of these techniques in fully addressing joint dysfunction.

3. Muscle energy techniques were first developed about 20 years ago by a prominent U.S. osteopath, Fred Mitchell Snr. He started with techniques for the pelvis, then developed techniques for other regions in the spine. The latest work on these muscle energy techniques has been done by Carl Steele, P.T., D.O., M.Sc. (Anatomy) who has just developed a curriculum for a course at the College of Osteopathic Medicine at Michigan State University.

4. Bourdillon suggested that muscle energy techniques will become widely used because they are not difficult to learn, effective, safe and well-tolerated by patients. Bourdillon is an experienced manipulator. Summarizing his present practice he says he still uses high velocity manipulative techniques widely in the lower cervical spine, but only occasionally in the upper cervical spine. For further description of muscle energy techniques see 'Spinal Manipulation' (1988) Bourdillon and Day, William Heinemann Medical Books, London, Appleton and Lange, Norwalk, CT/Los Altos, CA, Fourth Edition; and 'Treatment of Reversible Hypomobility of the Cervical Spine with the Muscle Energy Techniques According to F. Mitchell Snr.', Neumann H D, Manuelle Medizin (1988) 26:17-25.

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