THE CHIROPRACTIC REPORT

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By David Chapman-Smith, LL.B.(Hons), Toronto. May 1987 Vol. 1 No. 4

Professional notes:

American Back Society – PCC-West

Congratulations to the American Back Society, a Director of which is Scott Haldeman DC MD, and Palmer College of Chiropractic-West on their continuing series of symposia on back pain. These represent inter-disciplinary cooperation and course format of the highest quality. The program brings together prominent researchers and clinicians from chiropractic, medicine, osteopathy, and physical therapy, together with basic scientists, attorneys, and others with special qualifications or interest in the field of back pain.

There is an attractive mix of scientific program, workshops, and 'Grand Rounds' – clinical case presentations to an ABS Grand Rounds inter-disciplinary panel offering specialist comment from the fields of chiropractic, neurology, neurosurgery, orthopaedics, osteopathy, physical medicine, physical therapy, psychiatry, rheumatology. All registrants have the opportunity to bring their interesting and difficult cases for presentation and comment. This program model deserves to be adopted on a wide-spread basis.

The Spring Symposium, April 29 - May 2, 1987 at Anaheim, California had broad DC participation on the scientific program (Robert Anderson, Scott Haldeman, and John Triano) and in the workshops ('Chiropractic Approach to Adjustive Techniques' – Gray, Feinberg, Haney and Hegetschweiler; 'Value of Plane Radiography for Manipulative Care' – Phillips and Howe; and 'Treatment Evaluation in Clinical Practice' – Keating Ph.D., Meeker, and Adams).

continued on insert page 2.

Manipulation – Professional Standards of Training and Practice

Introduction

1. During 1985 the Australian Royal College of General Practitioners, through its journal the Australian Family Physician, conducted a $100.00 correspondence course in spinal manipulation. Challenged on the irresponsibility of this by Australian chiropractors the Austrialian Medical Association quickly replied that the Association "thankfully has neither academic or business affiliations with the publication in question."[1]

2. A cursory look at any of the major physiotherapy/physical therapy (PT) journals reveals a proliferation of long weekend courses claiming to provide a basis for practise of spinal manipulation[2], of a type condemned by leaders in chiropractic, manual medicine, osteopathy, and physiotherapy itself. Independent government inquiry has also found such courses inadequate and recommended that they be stopped.[3]

3. And now this remarkable advice to general practitioners from a British MD Grayson in the British Medical Journal (reminding us never to respect journals or institutions but only individuals with demonstrated training, competence and standards): "Courses including manipulation *(lasting about a week)* are run for doctors and physiotherapists by the Cyriax Foundation and by the Society of Orthopaedic Medicine, and *intensive weekend courses* for doctors are held by the British Association of Manipulative Medicine. *These courses provide clinicians with the knowledge and the necessary manual skills to start treating patients safely. Doctors will then need at least six to nine months of regular practice to begin to feel that they are treating the right patients and doing so appropriately – and years to become fully experienced and confident.*[4]

4. If family physicians started to practise orthodontics on the basis of a few weekend courses, knowing they weren't really capable of doing it well, but hopeful that they would be quite skillful in a year or so, dentists might complain – especially if the MDs did this part-time while continuing in general practice. Imagine the outcry if chiropractors started offering correspondence courses for $100.00 on physiotherapy or muscle injection techniques.

5. The questions that arise are what is spinal manipulation, what represents an adequate education and basis for practice, can it be practised part-time, and why after years of neglect is there this new interest in spinal manipulation in the professions of medicine and physiotherapy.

What is Spinal Manipulation?

6. There are 2 views of spinal manipulation.

The first is simple reflex or pain therapy. One learns a few techniques, and manipulation is used on a stiff or painful joint. Two or three treatments are enough, if not just one.[5] Either the manipulation will have removed the pain, which is viewed as success, or not – in which case another treatment should be used.

- This is the British medical approach, taught for many years by James Cyriax and his Society of Orthopaedic Medicine in long weekend courses in Europe, North America, Australia, and New Zealand, and dominating thought and practice in western medicine and physiotherapy.
- As Alan Stoddard, the respected British osteopath and specialist in physical medicine observes, you can teach such spinal manipulation not only to MDs and PTs but also to farmers – and they will have some successes also.[6]
- Cyriax' techniques, traditionally learnt over a few weekends and developed in only part-time practice, are often rough and painful. I have taken signed statements from patients of Cyriax-trained Canadian MDs who are later amazed at the subtlety of chiropractic adjustment techniques after the threat of medical manipulation. One patient was shown by her MD, a recent President of the North American Academy of Manipulative Medicine, how to have her father – a layman – give her a few follow up manipulations of the lumbar spine. I have experienced both types of techniques myself.

7. A second view of manipulation is that, beyond reflex and pain therapy, it is primarily directed at restoring proper joint function, with wide ranging consequences mediated by the nervous and vascular systems. This view gives spinal manipulation much more complexity and range.

Since correct movement of the spinal vertebrae, and the whole musculoskeletal system, is interdependent this involves analysis of all sites of joint dysfunction, then manipulation of these in order of importance – not until pain has gone but until normal function has returned. To concentrate on the

painful joint – which may have the present symptoms but be of secondary or tertiary importance – is often evidence of superficial understanding and invites long term failure.

Today's disturbed joint *function* creates stress that produces tomorrows permanent *structural* damage. People understand this in a car – misalignment at the front end gives vibrations/stress then worn tires then engine damage; and after a time running on spent rear shock-absorbers and springs there is engine knock and expensive damage.

This is the view of manipulation held by the professions with greatest experience and knowledge of the art and science, chiropractic and osteopathy in the western world and medicine in central Europe (primarily West Germany and eastern block countries). It is fair to acknowledge that some individuals in western medicine, such as Mennell[7] and Bourdillon[8], share this wider view.

8. These 2 opposing views are summarized well in a recent editorial in Manual Medicine by Karel Lewit, a Prague neurologist who has 30 years experience in the use and research of spinal manipulation. Lewit, writing under the title 'Manipulation – Reflex Therapy and/or Restitution of Impaired Locomotor Function' concludes:

(a) Manipulation has received much greater acceptance by medicine in recent years, but its real importance is not recognized.

(b) Most medical manipulators stop treatment after obtaining a striking short-lived effect, but "here precisely lies the main source of therapeutic failure and frustration; treatment of the painful structure or the site of pain is more often than not useless in the long run…"

(c) "The great majority of (medical) students and doctors who learn manipulation are taught far too little about how, where, and when to use it … *they are clinically blindfolded*".

(d) The practice of spinal manipulation understanding all the many forms of disturbed function of the motor system, "*requires great skill demanding long training;* this is not achieved by everybody whereas other methods of reflex therapy such as using the needle … appear to be easier and more in keeping with the habits of the medical profession."[9]

Adequate Training – MDs

9. For a graduate medical practitioner there are 3 necessary areas of specialised training – theory (including principles, applied anatomy, biomechanics, neurophysiology, and radiology), examination and diagnosis, and treatment techniques.

10. The finding of the 1 government commission that has looked at the international evidence thoroughly is that a medical graduate would require 12 months full-time training "to acquire a degree of diagnostic and manual skill sufficient to match chiropractic standards" and represent an adequate basis for practice.[10] (See Insert, P. 1.)

11. There is a case for a longer term, as in other medical specialties. This is illustrated by osteopathy in the United States where – unlike England – undergraduate training no longer centres on spinal manipulation. American DOs are today the equals of medical graduates, with the same rights of practice and proceeding to the same range of specialties, and osteopathic colleges have become in effect additional medical schools.

However some U.S. osteopathic hospitals still guarantee intensive training in manipulative therapy, *which is a new specialty requiring 3 years of training*. Graduation from this course makes the American DO a specialist entitled to be a Fellow of the American Academy of Osteopathy.[11] It gives him a similar foundation to the chiropractor or British osteopath, both of whom receive this specialized education as the basis of their 4 or 5 year undergraduate programs.

12. MDs qualified in spinal manipulation do not quarrel with the need for lengthy training. Lewit's views are given above, and others are:

• "To learn when to manipulate and when not, and what sort of manoeuvres to use, is a diagnostic problem involving years of study … (It) requires a high degree of knowledge and skill." James Cyriax, England.[12]

• "Prolonged training under guidance is indispensible." Robert Maigne, France.[13]

• "The accurate appreciation of joint stiffness and, even more, that of excess tension in the muscles requires training and … even with constant practice this training takes a long time. The necessity for this training is not always appreciated …" John Bourdillon, Canada.[14]

Appraisal of the texts on spinal manipulation written by all of these medical specialists makes it apparent that they are dealing with a complex specialty completely beyond the scope of short term courses.

13. One illustration of this is found in the 3rd edition of Bourdillon's 'Spinal Manipulation'. Bourdillon was trained as an orthopaedic surgeon at St. Thomas' Hospital London, England, the home of James Mennell and James Cyriax and there learnt their approaches to spinal manipulation. After 20 years of practice, mainly in Canada and absorbing the knowledge of North American schools of manipulative therapy to go with his experience, he wrote his textbook in 1970. Its' 2nd edition, following 25 years of experience, was in 1973. Yet in the 3rd edition, in 1982, Bourdillon writes:

"For this edition major changes have been made in the text … New techniques of examination are described, including methods by which the loss of movement can be precisely defined. The non-specific treatment techniques described in earlier editions *have been omitted because I believe that they ought no longer to be considered good enough … Fully specific high velocity techniques are described and, in order to use these, precise definition of the movement defect is essential.*"[15]

Cranial Adjustment

1. Which 3 U.S. states have more than 1 chiropractic college?
2. Name the famous rags-to-riches French singer who toured with a personal chiropractor during h later years?
3. Which country has the largest number of chiropractors out of Denmark, Italy, Sweden, Switzerland?
4. Name the chiropractic legal trial that is being re-heard as you read this.
5. In which Canadian province would you be known as un(e) chiropraticien(ne)?
6. Which chiropractic college did the 'Big Four' establish in Indiana in 1926?
7. Why is it legitimate for Life and Palmer to have hookers?
8. Who was J.J., and in which country was he born?
9. Which Belgian DC was a mentor for L. John Faye of the Motion Palpation Institute?
10. Which national chiropractic association had its 25th anniversary in 1986, and represents a rising sun in the chiropractic world?

ANSWERS

1. California, Missouri, Texas.
2. Edith Piaf.
3. Denmark (200) just beats Switzerland.
4. Wilk et al v. AMA et al.
5. Quebec.
6. Lincoln.
7. Because they play rugby football.
8. Joseph Janse DC, 1909-1985. Holland.
9. Henri Gillet.
10. Japanese Chiropractic Association.

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NEW ZEALAND COMMISSION OF INQUIRY INTO CHIROPRACTIC – Findings relevant to training in spinal manipulation

Introduction

'Chiropractic in New Zealand' (377 pages, PD Hasselberg, Government Printer, Wellington, NZ, 1979), the report of a New Zealand government Commission of Inquiry into Chiropractic in 1978-79, is acknowledged internationally as being by far the most thorough investigation of the chiropractic profession. It also contains the most thorough independent assessment of necessary training for the practice of spinal manipulation.

Factors that determine the authority of a government inquiry are its terms of reference, the qualifications of those sitting on the commission or committee, the procedure adopted, and the opportunities given to collect evidence. On each of these measures the New Zealand Commission was stronger than any other.

The terms of reference were broad, to look at all issues pertaining to chiropractic to answer the question whether or not there should be government funding for chiropractic services. Commission members were a prominant lawyer (now judge), a senior educationalist and a senior scientist (professor of chemistry).

A fully judicial procedure was adopted. Evidence was heard on oath, and subject to cross-examination from various counsel including counsel representing each of the medical, chiropractic, and physiotherapy professions. All evidence was recorded and is referenced throughout the Commission's Report.

The Commission heard from chiropractors, medical specialists, physiotherapists, and consumer experts from New Zealand, Australia, Canada and the United States. It heard from many patients. Beyond this formal evidence, the Commission made informal visits to many chiropractic, medical, and physiotherapy offices. It then travelled to England, the United States, Canada, and Australia and met in each country with representatives of government and the professions of medicine, chiropractic, and physiotherapy.

Given below are its central comments relevant to training for the practice of spinal manipulation.

General Evaluation

"Nor can there be any doubt that chiropractors must by reason of their intensive and concentrated training be regarded as specialists both in the diagnosis of spinal disorders which will respond to spinal manual therapy and in that therapy itself. The Commission finds as a fact that neither general medical practitioners nor physiotherapists in this country are adequately equipped by their standard training courses to carry out spinal manual therapy although a few, by subsequent training and experience, have acquired skill in that therapy. The Commission accepts the evidence of Dr. Haldeman *(Dr. Scott Haldeman, DC MD Ph.D, neurologist, Los Angeles)*, and holds, that in order to acquire a degree of diagnostic and manual skill sufficient to match chiropractic standards, a medical graduate would require up to 12 months' full-time training, while a physiotherapist would require longer than that (Submission 131, pp.42-3, Transcript, pp. 3312-3, 3332)." (Report P. 198 para 2.)

Principal Findings

- "Chiropractic is a branch of the healing arts specialising in the correction by spinal manual therapy of what chiropractors identify as biomechanical disorders of the spinal column. They carry out spinal diagnosis and therapy at a sophisticated and refined level.
- Chiropractors are the only health practitioners who are necessarily equipped by their education and training to carry out spinal manual therapy.
- General medical practitioners and physiotherapists have no adequate training in spinal manual therapy, though a few have acquired skill in it subsequent to graduation.
- It is wrong that the present law, or any medical ethical rules, should have the effect that a patient can receive spinal manual therapy which is subsidised by a health benefit only from those health professionals least well qualified to deliver it.
- The responsibility for spinal manual therapy training, because of its specialised nature, *should lie with the chiropractic profession. Part-time or vacation courses in spinal manual therapy for other health professionals should not be encouraged.*" (Emphasis added.) (Report, Summary of Principal Findings, Pp. 3-4.)

Training in 'Manipulative Therapy'

"7. We come now to training in manipulative therapy, to use the term adopted by the physiotherapists. This is defined by them to be movement of joints beyond their normal passive range. The basics are taught early, but only in the last year is some limited instruction given in manipulation, including the joints of the spine. Both in New Zealand and in England the instruction appeared to be elementary, even crude. At St. Thomas' in London, even under Miss J. Hickling who has so much influenced New Zealand therapists, the training appeared unstructured."

"8. In New Zealand, physiotherapists wishing to specialise in this field must undertake the post-graduate course arranged by the New Zealand Manipulative Therapists' Association. We have briefly discussed this in chapter 5. The course reaches the standards of the International Federation of Orthopaedic Manipulative Therapy and there is no doubt that some New Zealand practitioners are highly skilled."

"9. However, the Commission has reservations about the way in which physiotherapists as a group acquire their manipulative training. They are taught techniques at weekend courses and at certain points are sent away to practise them, unsupervised, before they are fully trained. The Commission has a similar reservation about those medical practitioners who, with even less training, in fact considerably less, undertake spinal and other manipulation. We are satisfied that the safest sources of manipulative or manual therapy in New Zealand is the chiropractor."

"14. Physiotherapists are convinced of the value of manipulation and argue strongly in its favour. However, they see no need for undue sophistication in this field. "It is our stance that manipulation, useful as it appears to be clinically, should not be allowed to become shrouded in unnecessary sophistication which leads to overclaim inevitably and this is particularly so with regard to techniques" (Transcript, p. 1364). Clearly there are two distinct and strongly held points of view: that of the physiotherapist and that of the chiropractor."

"15. The manipulative therapist learning his techniques as he does in a fragmented fashion, first very sketchily at a physiotherapy school, then in a course spread over 3 years or more in small sections, contends that while practice is essential there is little point in over-refinement of what is only a strictly limited range of techniques. The chiropractor, on the other hand, in his 4 or even 5 years at college has a much greater and more systematic exposure to techniques. He naturally believes that the expertise he achieves before he uses these techniques, unsupervised, on his patients, must with further practice give him a greater ability to help those patients. Beside, he tends to become a specialist in the one area, the spine."

"16. It is claimed that chiropractors over-refine their skill. At the same time it is alleged that their technique consists mainly of the "dynamic thrust". This is claimed to be dangerous because it is a sudden high velocity movement, the patient cannot see what is being done, cannot resist the thrust, and is therefore at the chiropractor's mercy. Until the Commission saw chiropractors at work it imagined from such descriptions that this was the only way the chiropractor operated while the physiotherapist/ manipulative therapist with his gentle articulations, extension, or mobilisations was a very different practitioner. *The truth is that while the chiropractor's movements are indeed often very quick, perhaps more so than those of the manipulative therapist, they are also usually small and precise. The most forceful manipulations we saw were performed by manipulative therapists.*"

"17. While the physiotherapists asserted that patients are often harmed by over-zealous manipulation by chiropractors, *evidence in support was almost totally lacking; and we find that chiropractic treatment is safe* (see chapter 15)." (Emphasis added.) (Report Pp. 130-31.)

Brainstem Injury – A Valuable Case From Boston

'Case 3-1987, Case Records of the Massachusetts General Hospital', N Engl J Med (January 15, 1987) 316(3):150-157. **PN1**

This Report has dealt comprehensively with this subject before (TCR, Promotion issue). The risk of brainstem injury from cervical adjustment is real but remote, and greatly exaggerated from time to time by people speaking outside their fields of expertise. In recent months the Canadian Chiropractic Association has had an exchange of correspondence with an Ontario neurologist who claimed to have experienced 1 case per year over the last 10 years in his area hospital. The CCA challenged this unlikely incidence and asked for details. In his reply the neurologist confessed he could not verify – and didn't even identify – a single case.

Eack weekly issue of the New England Journal of Medicine provides detailed analysis of a case record from the Massachusetts General Hospital, and you will be most interested in the above referenced one, concerning which:

(a) It relates to a 17 year old girl admitted to hospital because of a possible brainstem lesion.

(b) Her case history involved 'cervical manipulation' by a chiropractor. Two days after the last treatment there was "a total body numbness on the right side, followed by vertigo, nausea, vomiting, double vision, oscillopsia (i.e. a sensation the world was moving) and dysarthria".

(c) On admission to hospital "the physicians seemed to have suspected the possibility of some relation to the chiropractic manipulation because they immobilised her cervical spine with a rigid collar". We can be confident that in New England there were liberal reports of a case of brainstem injury following chiropractic treatment.

(d) Note, however, that this sort of unfounded allegation is not possible in the context of a learned case discussion in the highly visible pages of the New England Journal of Medicine.

The written analysis of the Massachusetts General staff and the guest neurologist, Dr. Bresnan from Harvard, completely rules out any chiropractic involvement and the 3 suggested diagnoses are multiple sclerosis; tumour in area of foramen magnum; arteriovenous malformation, cryptic.

Here is a paper you can wave at anyone who says he has heard of a case or cases at a local hospital of brainstem injury following chiropractic adjustment.

Cervical Manipulation – Medical Trial

'Involvement of the Cervical Spine in Back Pain', Arkuszewski, Manual Medicine (1986) 2:126:128. **PN2** *(Paper orders will include this and an earlier paper published on the trial.)*

Though leaders in manual medicine and osteopathy increasingly use high-velocity, low-amplitude dynamic thrusts in cervical manipulation, and describe these techniques (often calling them 'adjustments') in their textbooks, some sections of the medical profession cling to the view that there should be no 'neck manipulation'. Here is a trial from Arkuszewski, a specialist in manual medicine from Poland, using manipulation for both neck pain and chronic low back pain and reporting successful results. Further points are:

(a) This is the second paper published on the trial (for comment on the first see TCR Vol. 1 No. 1). 100 patients with sciatica or lumbosacral pain were divided into 2 groups, one given drugs, bed rest and physiotherapy, the other given the above treatment *and* manual treatment (traction, mobilisation, and/or manipulation) applied to all segments in which functional movement restriction and soft tissue changes were found." (i.e. This is not a straight trial of manipulation.)

(b) Arkuszewski adopts a chiropractic approach in concluding "the spine reacts to overload or bad posture as an organ and not as separate segments" and *"manual treatment of the entire spine, including the cervical segments, accelerates the improvement of low back pain"*.

(c) The results reported are on the 88 patients left (after drop-outs) and re-examined 6 months after treatment.

With these patients, who had been suffering chronic back pain for 8.4 years on average, it was found 6 months after treatment that "all the signs had improved more markedly" in the group of patients receiving manual treatment. The signs measured were posture, intensity of pain, and neurological deficit.

(d) Arkuszewski's final conclusion is that mobilisation and manipulation of the cervical segments "might explain the more pronounced improvement of back pain in patients entering this trial than in some previous trials, in which standard rotational manipulation of the lumbar spine only was performed".

(Gordon Potter DC MD of Vancouver, British Columbia advises that he has completed a study on the effectiveness of cervical adjustment and sent it for publication – more on this in the next issue.)

Books

'Essentials of Skeletal Radiology' by Terry Yochum DC, DACBR and Lindsay Rowe DC, DACBR (1,136 pages, 2 Vols, Williams and Wilkins 1987) is an impressive new textbook and reference text, certainly the most comprehensive in the field of x-ray yet published within the chiropractic profession. Forewords are written by renowned specialists in chiropractic (Joseph Howe, Chairman Radiology Department LACC), osteopathy (Bruce Farkas, Professor of Radiology Chicago College of Osteopathic Medicine), and medicine (Steven Brownstein, Professor of Radiology New Jersey University Medical and Dental School). Brownstein endorses the work as "an excellent core textbook… (which) I would recommend… to anyone interested in skeletal radiology" whatever their basic discipline.

Yochum (LACC) and Rowe (NWCC) dedicate their work to Bryan Hartley MD, an Australian surgeon and radiologist with whom they worked.

'Love, Medicine & Miracles' by Bernie Siegel MD (Harper and Row, New York 1986) quotes this extract from Plato, *Laws*, Book IV which contains thought-provoking comment on who really is the 'scientific' doctor:

"Did you ever observe that there are two classes of patients… slaves and free men? And the slave-doctors run about and cure the slaves or wait for them in dispensaries. Practitioners of this sort never talk to their patients individually or let them talk about their own individual complaints. The slave-doctor prescribes *what mere experience suggests, as if he had exact knowledge;* and when he has given his orders, like a tyrant, he rushes off with equal assurance to some other servant who is ill.

..But the other doctor, who's a freeman, attends and practises upon freemen; and he carries his enquiries far back, and goes into the nature of the disorder; he enters into discourses with the patient and with his friends, and is at once getting information from the sick man, and also instructing him as far as he is able; and he will not prescribe for him until he has first convinced him.

..If one of these empirical slave-doctors, who practise medicine without science, were to come upon the gentleman-physician talking to his gentleman patient and using the language almost of philosophy, beginning at the beginning of the disease and discoursing about the whole nature of the body, he would burst into a hearty laugh. He would say what most of those who are called doctors always have at their tongues' end: "Foolish fellow," he would say, "you are not healing the sick man, but educating him; and he does not want to be made a doctor, but to get well."

Segal, now prominant in North America, is a pediatric and general surgeon in New Haven, Connecticut specialising in the treatment of cancer patients. His book challenges modern medical thinking in a similar way to Norman Cousins' 'Anatomy of an Illness' and traverses much recent research and his many years experience in exploring the link between mind and body, and in explaining how most healing comes from within.

He draws on the work of Hans Selye on the effect of stress on the immune system, which has been important to many in the chiropractic profession, and explains that he has "come to believe that the resolution of conflicts, the realisation of the authentic self, spiritual awareness, and love releas incredible energy that promotes the biochemistry of healing."

Excellent reading from a highly scientific mind that understands emotion and the innate.

14. These words contain a ringing warning to those, such as Grayson (para 3 above, in BMJ) who would recommend mere long week-end courses to MDs as a basis for the practice of spinal manipulation.

The problem for medicine is that, despite the cries of Cyriax and others, no adequate formal training in spinal manipulation has been established by medicine in the western world. This has been viewed as work for PTs. No medical school has any significant training at undergraduate level, and there are no full-time postgraduate programs.

15. The best graduate medical seminar courses are in Denmark, Germany, and Switzerland. However these are for practising physicians. They involve theory and principles and comprise approximately 12 weeks (360 hours) spread over the course of a year. There is no extended supervised clinical component, and they are viewed as the first stage of development of adequate courses.[16] An MD can practise spinal manipulation without completing or even attending such seminars.

16. The first North American structured post-graduate program is currently being developed at the Michigan State University, the only university with both allopathic and osteopathic medical schools. Philip Greenman, a prominant DO who is on the faculty of MSU, an editor of Manual Medicine and a past president of the North American Academy of Manipulative Medicine (NAAMM), explains that this is in response to a clearly unmet need for a proper full-time course.[17] Currently the developing course merely involves 12 one week tutorials similar to the courses mentioned in Europe.

17. In the meantime the NAAMM and the American Society for Orthopaedic Medicine continue to offer plainly inadequte week-long pratical courses in spinal manipulation on the band-aid approach adopted by the frustrated Cyriax in his later years – patients require manipulation, mainstream medicine and medical schools have not understood or adopted this specialty, therefore let's start by introducing MDs to a few techniques thereby establishing grass roots medical acceptance.

Adequate Training – PTs

18. Western medicine has no adequate training for the practice of spinal manipulation because it views this as a specialty for PTs – and such a specialty has been emerging in recent years since the formation of the International Federation of Manipulative Therapists (IFOMT).

19. Early leaders of IFOMT, largely self-taught like the early chiropractors and osteopaths but all exposed to Cyriax' work in the 50s and 60s, have come from Australia (Geoffery Maitland), New Zealand (Robin McKenzie and Brian Mulligan), and Norway (Freddy Kaltenborn). They have led the drive for adequate education.

20. Robin McKenzie, author of 'Spinal Manipulation' and a specialist in lumbar spine techniques, is the most prominent and his methods are widely taught throughout the western world. Giving evidence before a government commission in 1979 he said:

(a) A 1 year full-time postgraduate course in manipulative therapy was the present practical goal of PTs.

(b) "The ideal towards which we should aim ... which might be 10 years to come" would be a "2-3 years course of training," similar to a medical specialty.[18]

21. PTs in Norway, lead by Kaltenborn, have come near to this standard, and there is a 3 year formal program leading to specialty status as a certified manual therapist (CMT). This specialty is recognized by the government health plan, which pays a separate fee for manipulative therapy from a CMT. The 3 year course, though affiliated with the University of Oslo, remains private. All clinical training is under the supervision of graduate CMTs of whom there are currently approximately 120.

22. Australia has been first to establish a full-time government-funded postgraduate program – there are now four 1 year courses. These grant Graduate Diplomas in Advanced Manipulative Therapy, and confer specialty status.[19]

23. Elsewhere basic postgraduate courses are still being developed. The need for true specialty education and status is recognized but has not yet been achieved.

24. In the United States the American Physical Therapy Association (APTA) has ruled a masters degree will be an entrance to practice requirement for all PTs by 1990. One of the 6 areas of specialty is to be 'Orthopedic Physical Therapy' which will include manipulative therapy. No formal program has yet been approved by the APTA or commenced at any PT school.[20]

25. Despite these praiseworthy first steps in PT to establish proper training, the reality is that only a few PTs have graduated from formal programs. The great majority today attempting spinal manipulation do so on the basis of a superficial introduction at undergraduate level and/or in informal short-term courses of a few days or a few weeks duration.

Strangely PT leaders such as McKenzie and Kaltenborn are among those offering these manifestly inadequate courses.[2] This can be interpreted, as with Cyriax, as intense frustration with university systems they have found immensely resistant to change.

26. Yamada and Montague, senior PTs from California, are candid about the effects of inadequate training:

"By taking short courses in manual therapy, the PTs acquired basic information on orthopedic examination and treatment, but in a haphazard and unrefined way. Applying short course information to practice, therefore, proved not only difficult but frustrating. The PTs found it difficult to select appropriate treatment measures and predict reasonable progress because they could not accurately interpret examination signs and symptoms."[21]

Some PTs examine and manipulate spinal joints with skill, and there will be many more in the future, but most have no adequate basis for practice as is readily acknowledged by PT leaders and evidenced by the new postgraduate programs emerging. This is a full postgraduate specialty.

27. A New Zealand Commission of Inquiry, which compared chiropractic and PT training in the techniques of spinal manipulation in 1978/79, reported that PT instruction in leading countries "appeared to be elementary, even crude" and the "the most forceful manipulations we saw were performed by manipulative therapists."[22]

The Commission held that PTs would require "longer than 12 months full-time training" to acquire diagnostic and manual skills matching chiropractic standards.[23] (See Insert, P. 1.)

Full-Time Practice

28. If one reads the texts of chiropractors, osteopaths, specialists in manual medicine, or leading PTs such as Grieve, Maitland, and McKenzie forceful meaning is given to the simple advice of Kirkaldy-Willis MD and Cassidy DC, in the Canadian Family Physician to MDs, that spinal manipulation requires full-time practice and they should refer to someone appropriate.[24]

29. Stoddard, twice qualified as an osteopath and MD, comments:

"The art of manipulation depends on the ability of the practitioner to combine the forces he uses such that the maximum leverage occurs precisely at the level of the restricted joint. Such skill takes a great deal of practice to perfect. Clearly those engaged in continuous practice are likely to be more skilled than those who manipulate only on rare occasions. The concert pianist practises his art daily to maintain a high standard. *This applies equally to the art of manipulation.*"[25]

Medicine's New Interest – Another Fad

30. Why is medicine, which has been so opposed to manipulation that it has treated MDs advocating this art as outcasts, suddenly offering correspondence courses and urging family physicians to take weekend courses and start 'practising' on patients now?

31. Principal reasons are:

(a) The explosion of research in the 80s showing spinal manipulation to be effective and cost-effective in the treatment of acute and chronic low back pain, headache and migraine (at a time when there remains no valid evidence for many common medical treatments for back pain such as conventional traction, use of corsets, and transcutaneous nerve stimulation,[26] and bedrest is increasingly proven ineffective[27].)

(b) The arrival of market factors in the practice of medicine – physician oversupply, the prevalence of back pain and headache, consumerism making patients more independent and judgmental, and the evident success and maturity of chiropractic and osteopathy.

32. It is with considerable surprise and dismay that one sees leaders in manual medicine and physiotherapy promoting manipulation as a mere set of techniques that can be acquired in a few weeks when this contradicts their lives and writings. Cyriax elsewhere brands this educational approach now adopted by his school, and published in the British Medical Journal, as "highly undesirable",[28] and it clearly is.

• It is fair to say that medicine has had some unfortunate fads in the treatment of musculoskeletal pain. The last has been chemonucleolysis with chymopapain (mortality rate of 700 per million[29], failure rate of 60-70%, unforeseen complications, and cost in U.S. of approximately $140,000 per successful procedure. Most surgeons who took up chymopapain have now stopped[30]). Spinal manipulation has less potential for serious harm, but unskilled manipulators will cause unnecessary injury and discomfort, and will discourage many people from using a highly effective approach to treatment of their problems.

• Interestingly the current medical view of chymopapain is that it is safe and effective in the hands of skilled medical specialists – the problem has been that it was used by thousands of MDs on the basis of inadequate short term postgraduate courses offered in the field. Manipulation, particularly of the spine, is likewise no field for the sporting amateur. It is a complex and independent specialty, requiring prolonged formal training and full-time practice.

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