

# THE CHIROPRACTIC REPORT

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## Scope – Conditions Relieved by Chiropractic Adjustment

### A. Introduction

1. In December, 1986 a young woman, unable to receive any clear diagnosis or plan of treatment from medical specialists, approached a New Jersey chiropractor concerning her increasing blindness. She had no sight in her left eye, diminishing sight in her right eye. Within the first week of a trial of chiropractic treatment, and after two series of adjustments, her vision was restored. It remains normal three months later<sup>1</sup>.

- A middle aged woman, who had been taking medication for high blood pressure and oedema (water retention) for 15 years, consulted a chiropractor for whiplash injury. She disbelieved the suggestion that his spinal adjustments might assist her 'medical' problems. She and her MD were equally surprised when her blood pressure returned to normal and her oedema improved "about 75%".

(Mrs. M. gave evidence on oath before a New Zealand government Commission of Inquiry, was cross-examined by lawyers representing the NZ Medical Association, and the Commission then allowed detailed medical investigation of her case, including records of individual blood pressure readings. At the conclusion of the inquiry the Commission was satisfied, according to judicial standards of evidence, "that the chiropractic treatment did have the effect both of relieving her hypertension and reducing her dependency on medication."<sup>2</sup>)

2. The subject of which conditions may respond to chiropractic adjustment is of high interest – it has also inspired much controversy and uninformed comment. I introduce discussion of the topic with three key points:

3. Firstly, all claims made by the chiropractic profession on this subject are now also made by leading specialists in the medical and osteopathic professions. (See paras 6 to 20 below.)

4. Secondly, surveys of chiropractic practice in North America, Europe, and Australia show that over 90% of chiropractic patients seek care for musculoskeletal pain – headache, neck pain, back pain, pain in or radiating to the limbs. Those who seek chiropractic care for loss of hearing or eyesight, or visceral disorders such as heart and respiratory problems, almost invariably have prior or concurrent medical assessment,

and the great majority of chiropractors endorse this approach.

5. Thirdly, it is important to appreciate the fundamental point, again made by specialists in medicine and osteopathy, that the primary target of all skilled forms of spinal manipulation is not a specific symptom or disease. The target is abnormal spinal joint movement. This, because of the intimate relationship of the nervous system with the spinal vertebrae, has a body wide effect through the altered and improved function of the nerve supply.

- A patient's immediate concern may be headache. If a chiropractor finds vertebral subluxation at a corresponding level in the spine he will be confident of relieving the headache, and will be unsurprised if there are other beneficial effects. However his aim is to correct the vertebral subluxation.

- There is an interesting analogy with the situation where a patient takes an analgesic pill for his headache. The pill also does not work just on the headache but has a body wide effect. The difference is that this effect is not desired.

- A useful image, from Grieve<sup>3</sup>, is to think of the specialist in spinal manipulation as either a mechanical engineer or a telecommunications expert. The traditional view in medical manipulation is that a medical specialist is a mechanical engineer restoring normal mechanics or function to the spinal vertebrae and associated muscles.

The traditional view in chiropractic is that the chiropractor is a telecommunications engineer. The spinal joints are richly and extensively 'wired up' to the whole body by the nervous system, and skilled spinal adjustment not only corrects local problems but also influences body functions and many diseased states through direct, indirect, and reflex nerve mechanisms.

- During the last 25 years there has been new scientific and medical support for the chiropractic view of things. I now look at this.

### B. West Germany

6. The chiropractic premise that correction of vertebral subluxation may have wide ranging effects on health through altered neurophysiology was first investigated seriously by medicine in West Germany in the 1940s and 1950s. This followed the arrival of the first U.S. trained chiropractors

### Professional notes:

#### Industrial Health – Chiropractic Results

Interview with Dr. J. Sweere, The American Chiropractor (February, 1987) 5-10, 83-86. Viracon letter dated April 15, 1985. PNI

Viracon Inc. of Owatonna, Minnesota, a glass manufacturer, began a chiropractic pre-employment screening program in October, 1980. The company has reported these results to the American Public Health Association:

1. 80% lesser incidence of back problems amongst those screened (all employees since October, 1980 – about 50% of the current work force of 400).

2. Where screened employees have a back injury, loss of work at a ratio of 1 day to 15 days as compared with non screened employee injuries. i.e. Lesser severity when injury occurs.

Cost saving has been considerable. Viracon's chiropractic consultant, Dr. Joseph J. Sweere is Director of the Department of Occupational and Community Health at Northwestern College of Chiropractic and has held senior state government appointments in occupational health since 1980. He gives a lengthy interview in the February, 1987 issue of TAC which contains much sound advice for doctors of chiropractic interested in specialist work in the field of industrial health.

#### Fresh Trial Evidence – SMT for Back Pain

'Manipulation in Back Disorders', Grayson MF, Brit Med J (Dec. 6, 1986), 293:1481-2. 'A Limited Role for

in Switzerland and their evident success in an area of practice overlooked by medicine.

7. A number of prominent West German medical professors saw the potential of manual medicine as a new specialty and in 1953 established the FAC (in English, the Society for Research and Development of Chiropractic)<sup>4</sup>. By that year a senior researcher, Professor Gutzeit of Bayreuth, had published evidence on the basis of which he described spinal blockage/subluxation as the "initiator, provocator, multiplacator, and localisator" of many organic diseases<sup>5</sup>.

8. A prominent student of Gutzeit was Professor Werner Kunert, a cardiologist whose 1963 text 'The Vertebral Column, Autonomic Nervous System, and Internal Organs'<sup>6</sup> was highly regarded in Europe.

9. In 1965 Kunert published 'Functional Disorders of Internal Organs Due to Vertebral Lesions',<sup>7</sup> which was translated into English and is fascinating reading for anyone with a serious interest in the potential range of effects of skilled spinal manipulation. Comments on this article are:

- Kunert's emphasis is the thoracic spine, where the sympathetic nerve supply, which regulates visceral or internal organ function, has a major nerve trunk lying immediately in front of the spine.
- He explains how vertebral subluxation/blockage can disturb this sympathetic nerve supply, including the stellate ganglion "a relay centre of paramount importance for the entire head, arms, and organs in the thoracic cavity" – which of course include the heart, digestive tract, and lungs.<sup>8</sup>
- He lists different mechanisms by which the subluxation complex acts, including those acting on nerves *inside* the spinal column (and involving reflex pathways), and mechanisms which irritate sympathetic nerves *outside* the spinal column (including blockage, vertebral displacement, functional and degenerative changes in the rib attachments to vertebrae, and pathological tension on nerve root sheaths in the spinal canal.)
- He emphasizes a simple point so often overlooked in health care because of the structured way in which anatomy is taught and visualized, that "the spinal and the visceral systems coalesce not only morphologically (i.e. physically) but also functionally. The spinal nerves and their ganglia contain sympathetic (i.e. visceral) nerve fibers, which means that the two systems are bound to work and suffer together."<sup>9</sup>
- Kunert gives 2 case examples where the

first medical diagnoses were respiratory block and heart disease. In most communities this would also have been the final diagnosis. On reference to his specialized unit the primary causes were found to be vertebral problems corrected by spinal manipulation.

• In the cardiac case there was distinct pain in the heart, or intracardially. Kunert is unable to be definite on the cause of this pain. It may have originated "in the heart itself, in the spine or autonomic nervous system"<sup>10</sup>, or possibly even in the brain, muscles or skin. His conclusion is that "*lesions of the spinal column... are perfectly capable of simulating, accentuating, or making a major contribution to organic diseases.* There can, in fact, be no doubt that the state of the spinal column does have a bearing on the functional status of the internal organs."<sup>11</sup>

10. The FAC was a sustained movement with many prominent medical researchers from different disciplines, including Sell, Biedermann, Gutmann, and Junghans. Its work has had great impact in West Germany which has by far the largest specialty in manual medicine worldwide.

### C. Czech School – Lewit

11. There are no chiropractors or osteopaths in the Eastern Block countries and this has assisted unbiased medical investigation of the scope of spinal manipulation there.

• The most experienced well-published and famous group of medical manipulators are from Prague, Czechoslovakia. The dominant figure, a neurologist with broader clinical and trial experience of manipulation than any western medical specialist, is Dr. Karel Lewit (pronounced 'Love-ette'). His extensive writings, primarily in Czech and German, are now accessible through the 1985 revision in English of his major text 'Manipulative Therapy In Rehabilitation of the Motor System.'<sup>12</sup>

12. Lewit is clear that "movement restriction in the spine" has far reaching consequences that are mediated by the nervous system. Painful input to a spinal segment has both a somatic response (which includes movement restriction in the spinal joint and muscle spasm) and an autonomic response which is "much more varied."

The autonomic response is both local at the spinal level affected (numbness, pain spots, and constriction of blood flow) and central, where the presence of the spinal problem "may affect respiration, and the cardiovascular or the digestive systems. *These central effects are understandable, for pain is also a stress factor*".<sup>13</sup>



13. To what extent is Lewit talking about referred pain from the spine or pain mimicking disease in the heart or stomach or other organs; or actual disease caused in those organs?

He, like Gutzeit and Kunert, recognises both. He deals at some length with his experimental and clinical experience using spinal manipulation to treat patients with tonsillitis, respiratory problems, heart disease, digestive problems, gynaecological disorders, migraine, vertigo/dizziness, and other conditions.<sup>14</sup>

- Let's take heart disease as an example. Lewit's analysis includes these possibilities:
  - (a) Spinal blockage (subluxation) causing symptoms mistaken for heart disease.
  - (b) Heart disease causing reflex reaction bringing about spinal blockage.
  - (c) Heart disease has caused blockage as in (b), the underlying disease has now subsided, and the blockage gives symptoms simulating continuing heart disease.
  - (d) Spinal blockage is causing heart disease.<sup>15</sup>

14. Lewit is understandably careful on the last point and, like Kunert, emphasizes that the precise role of spinal blockage as a factor in heart disease "remains open"<sup>16</sup>. However his main point, of great practical importance, is:

- (a) With heart disease a major symptom and concern will be pain.
- (b) The primary cause may be intracardial (i.e. in the heart) or in the spinal column (vertebrocardial syndrome). Both causes may coexist, and likely will as the condition persists.
- (c) In each case it is important to distinguish the separate causes of pain and treat accordingly.
- (d) "The most adequate treatment" of the spinal component in the disease is manipulation.<sup>17</sup>

15. What does this mean for patients who present to an MD or chiropractor with symptoms indicating visceral disorders, whether heart disease, respiratory problems, digestive problems, hypertension, dysmenorrhea, disturbances of equilibrium, or even – as in the New Jersey case – loss of vision? It means that there is a need for diagnosis and possibly treatment from two different perspectives, and cooperation between the different health professionals holding the relevant training and experience.

#### **D. North America/Great Britain**

16. As an accident of history a few important fields have traditionally been missed in undergraduate and postgraduate medical programs in North America and Great Britain. One is a study of geriatrics, another nutrition, and another manual medicine. There is still no training at any medical school in the United States, Canada, or Great Britain that provides an adequate basis for the practice of spinal manipulation – both diagnosis and treatment of vertebral dysfunction.

Accordingly there have been few medical specialists practicing spinal manipulation and able to understand the scope of this approach to health care. Those specialists who have risen to prominence are largely self taught and have been under considerable pressure to be circumspect in their writings. However they too acknowledge that skilled spinal adjustment has wide ranging health effects.

17. Perhaps the best known figure in manual medicine in the United States is John Mennell, who writes:

"Pain from joint pathology may be appreciated in any distant structure which shares its nerve supply with the joint. Indeed, one may postulate interference with the function of viscera as a result of referred joint pain through a somatic/visceral reflex arc. *I am certain that such phenomena occur.*"<sup>18</sup>

18. Bourdillon, the most prominent figure in Canada and writing 20 years after Mennell in his text 'Spinal Manipulation' in 1982, is prepared to acknowledge more openly the wide ranging effects of spinal manipulation mediated by the sympathetic nervous system. His term for the various disease states caused is 'reflex sympathetic dystrophy'.

Bourdillon refers to 'perversions of the sympathetic nerve supply' such as excessive sweating, oedema (water retention), bone atrophy, circulatory changes in the skin, and distal changes such as wrist swelling, carpal tunnel syndrome, painful heels and flat feet, and says that his experiences "strongly suggests that faulty innervation caused by spinal joint lesions is one of the main factors" in the production of these conditions.<sup>19</sup>

• One of Bourdillon's cases of particular interest to chiropractors because of the similar experience of the father of the profession, D.D. Palmer, involves the cure of deafness through spinal manipulation at the thoracic level. Bourdillon acknowledges that the mechanisms remain unclear to him (as indeed they do to everyone) but that "the sympathetic supply... was probably the main source of the symptoms."<sup>20</sup>

19. Alan Stoddard, who has dual qualifications as a specialist in physical medicine and an osteopath, is the best known

practitioner of spinal manipulation in England. His long experience in practice (40 years, 26 in charge of the Department of Physical Medicine, Brooke Hospital, London) and his osteopathic textbooks have brought him the respect of all health professions internationally.

His basic response to the question of what conditions he can treat is identical to the chiropractic response, and is that "(in my book) I have not attempted to deal with individual diseases as such... because *this would spoil the basic idea that whatever the disorder, the principle behind treatment is to restore proper and harmonious mechanics*"<sup>21</sup>

The following two comments, which further define his attitude on scope, would also be supported by all chiropractors:

"It is... impossible to say whether osteopathy (or chiropractic) is effective or not in any one disorder. So much depends in each case on the structural factors, the type of patient, and the competence of the practitioner, but it is still as true as ever, whatever the patient's disease, *that he will have a better chance of full recovery if he is mechanically sound.*"<sup>22</sup>

"Mechanical lesions (subluxations) are aetiological in many diseases because the lesions weaken those viscera which are reflexly and segmentally linked with them... To claim that mechanical lesions are the only factors in disease is, of course, ludicrous. They are rarely totally responsible, *but they cannot or should not be discounted in any disease.*"

20. Physical therapy/physiotherapy has only recently turned its attention to spinal manipulation, and is still in the process of establishing basic, formal training programs. However a few PTs, like the early chiropractors 90 years ago, have been pioneers and have developed a vision of the potential of spinal manipulation from experience in practice.

The most comprehensive text is by the English PT Gregory Grieve.<sup>23</sup> He speaks of migraine, vertigo, visual disturbances, hearing impairment, and respiratory and abdominal problems, and confirms that "numerous examples" of successful treatment of each of these can be related by "all those experienced in manipulation."<sup>24</sup>

#### **E. Conclusion**

21. The chiropractic profession has always maintained that patients diagnosed by the medical profession as having a variety of specific diseases should have concurrent chiropractic diagnosis to allow recognition and treatment of the spinal component (vertebrogenic factor) that is frequently an important contributing cause of the patient's ill health.

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Professional notes...continued from page 1

Manipulation', editorial by Jayson, Brit Med J (Dec. 6, 1986) 193:1454-5. PN2

A recent issue (December 6, 1986) of the British Medical Journal takes another look at manipulation for back pain, and reports a new trial by John Mathews, M.D. published in his doctoral thesis at Cambridge University. Noted is:

A. Mathews performed a controlled trial of manipulation for 2 groups with mechanical backache, 58 patients without dural pain and 233 with dural pain.

B. Cyriax techniques were used - i.e. high-velocity small-amplitude thrusts. In contrast to previous trials, there were daily assessments of relief of pain for 2 weeks - not, say, assessments just at 3 days, 2 weeks, 3 months, etc.

C. "In the first group (without dural pain) there was a striking early improvement during the first 5 days in the manipulated patients compared with the controlled group given infrared radiation. The benefits tended to level out during the second week." (1481)

D. "In the second group a statistically significant benefit of manipulation was seen during the 2nd to 8th days and was sustained through to 2 weeks." (1481)

Here is fresh evidence that at the all important early stage of treatment the approach of spinal manipulation is 'strikingly' successful. Other aspects of the report on spinal manipulation are more surprising. Grayson gives this advice to MDs interested in spinal manipulation:

"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 6 to 9 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." (1481)

Experienced medical experts recommend that MDs attend a one year full time formal post-graduate program before practising spinal manipulation. John Mennell, MD, who should know, advises that learning spinal manipulation "is a formidable undertaking for an active medical practitioner". Diagnosis of joint dysfunction is highly complex, and "anything but the use of correct technique places the patient in jeopardy." (Back Pain, 109-110)

Given what the BMJ has published, in the next issue of this Report I will consider in some detail what amounts to adequate training for different health professionals for the practice of spinal manipulation.

As discussed above, the research and clinical experience of medical specialists worldwide during the past 25 years provides strong support for this approach to health care.

22. To the question "will chiropractic adjustment relieve or cure my asthma or high blood pressure?" there are 3 possible answers.

(a) Yes. (This is unjustified on the evidence available.)

(b) No. (This is equally extreme and unscientific on the evidence.)

(c) It may - there is a logical explanation, and substantial clinical evidence showing that patients have been relieved of their asthma/high blood pressure through chiropractic adjustment to correct the effects of vertebral subluxation. There can be no guarantee of relief. However a trial of chiropractic treatment may be considered wise, given that the treatment involves no significant risk, is comparatively inexpensive, and whether or not chiropractic will be effective should be apparent within a few weeks.

Of the 3 answers this is the only rational and scientific one.

23. With a condition such as heart disease disturbed spinal mechanics may, as Kunert and Lewit testify, be a significant cause of the disease itself. More frequently it will be the source of referred pain which mimics heart disease (meaning the diagnosis is incorrect).

Whether an individual case is one or the other is unimportant for the patient. In either case he needs health professionals attending him to be aware of the need for skilled assessment and treatment of the spinal contribution to his problem.

References

1. Personal communication, signed patient statement dated February 24, 1987.
2. 'Chiropractic in New Zealand' (1979) Report of Commission of Inquiry, P.D. Hasselberg, Government Printer, Wellington, Chapter 32. (Other cases discussed include asthma, impaired hearing, fertility, and loss of concentration.)
3. 'Mobilisation of the Spine' (1984) Grieve G, Churchill Livingstone, London/New York, 4th Edition, 218.
4. 'Forschungs und Arbeitsgemeinschaft fur Chirotherapie' (FAC).
5. Gutzeit K (1953), 'Wirbelsule und innere Krankheiten', Munchner Medizinische Wochenschrift 100: 47; quoted with approval by Lewit K. (1985) 'Manipulative Therapy in Rehabilitation of the Locomotor System' Butterworth and Co., London and Boston, 43.
6. 'Wirbelsaule, vegetatives Nervensystem und innere Organe' (1963), Kunert, Enke, Stuttgart.
7. Kunert W (1965) 'Functional Disorders of Internal organs Due to Vertebral Lesions', CIBA Symposium 13(3):85-96.
8. ibid 91. 9. ibid 90. 10. ibid 96. 11. ibid.
12. Lewit K. (1985) 'Manipulative Therapy in Rehabilitation of the Locomotor System' Butterworth and Co., London and Boston.
13. ibid 1-2. 14. ibid 336-342. 15. ibid 336. 16. ibid 339. 17. ibid 3.
18. 'Back Pain - Diagnosis and Treatment Using Manipulative Techniques' (1960), Mennell J McM, Little Brown, Boston, 16.
19. 'Spinal Manipulation' (1982), Bourdillon J, Heinemann Medical Books, London, and Appleton-Century-Crofts, New York, 3rd Edition, 207. 20. ibid 6, 205-6, 218-9.
21. 'Manual of Osteopathic Practice' (1983), Stoddard A, Hutchinson and Co., London, 2nd Edition, xvi. 22. ibid xii.
23. 'Common Vertebral Joint Problems' (1981), Grieve G, Churchill Livingstone, London/New York.
24. 'Mobilisation of the Spine' (1984), Grieve G, Churchill Livingstone, London/New York, 4th Edition, 22-23.

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