Mrs. Pat Chevrier
[redacted]

November 24, 2016

Mr. Neil Duboff, Chair
Health Professions Advisory Council
c/o 300 Carlton Street
Winnipeg, MB, R3B 3M9

Dear Mr. Duboff:

RE: **Reserved Act # 15, Administering a high velocity, low amplitude thrust to move a joint of the spine within its anatomical range of motion – high neck manipulation**

In response to your September 8, 2016 letter requesting written input on the performance of high neck manipulation, I am forwarding, on behalf of the Manitoba Chiropractic Stroke Survivors (MCSS), our submission on high velocity low amplitude (HVLA) thrust of the high neck, commonly referred to as high neck manipulation.

You will note that our submission has an attached annex, as well as additional reading material, written and submitted by our medical advisor, Dr. Murray Katz MDCM. Dr. Katz is a graduate of the Faculty of Medicine at McGill University and is a pediatric practitioner in Montreal, PQ. He has worked with the Neck 911 organization in the USA and has been actively involved internationally in raising awareness as to the dangers of HVLA thrust to the high neck.

We are willing to provide further documentation and answer any questions that the Council may have. As well, we respectfully request that the Council give the MCSS and Dr. Katz, MD the opportunity to rebut, in person or in print, any argument put forth by a health profession seeking authority to perform an HVLA thrust to the high neck.

We respectfully request that the Council keep us informed of their progress and of their recommendation to the Minister of Health, Seniors and Active Living.

Sincerely,

[redacted]

Mrs. Pat Chevrier
[redacted]

Enclosed: 4

HIGH VELOCITY LOW AMPLITUDE THRUST OF THE HIGH NECK

High Neck Manipulation

NOVEMBER, 2016

SUBMISSION OF THE MANITOBA CHIROPRACTIC STROKE SURVIVORS (MCSS)

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SUBMISSION OF THE

THE MANITOBA CHIROPRACTIC STROKE SURVIVORS (MCSS)

November, 2016

INTRODUCTION

HVLA thrust of the spine within its anatomical range of motion has been designated as a reserved act within the Regulated Health Professions Act (RHPA) and as such, the Minister of Health, Seniors and Active Living has requested a literature review of the risks and benefits of an HVLA thrust specific to the high neck.

The Manitoba Chiropractors Association (MCA) is seeking authority under the RHPA to perform this reserved act, and as our knowledge and expertise on the topic of HVLA thrust of the high neck is specific to the chiropractic profession, our submission is a direct reflection of that knowledge and expertise.

The MCA defines manipulation as "A manual procedure that involves a directed thrust to move a joint past the physiological range of motion, without exceeding the anatomical limit." (Attachment 3) Many of the references in this submission use the phrase "neck manipulation" and "HVLA thrust of the high neck" interchangeably.

An HVLA thrust of the high neck within its anatomical range of motion poses a material risk. Adverse events as a result of HVLA thrust of the high neck can cause catastrophic, debilitating, lifelong, life altering consequences: arterial damage, brain deficits, paralysis, locked in syndrome, stroke and death, and most often in a population under 45 years of age and free of risk factors for arterial damage and stroke.

Safeguards against HVLA thrust of the high neck will not come from the chiropractic community as HVLA thrust of the high neck is one of chiropractic's signature beliefs and endorsed by chiropractic regulatory bodies. Safeguards must come from government ministries of health.

1.0 THE PURPOSE

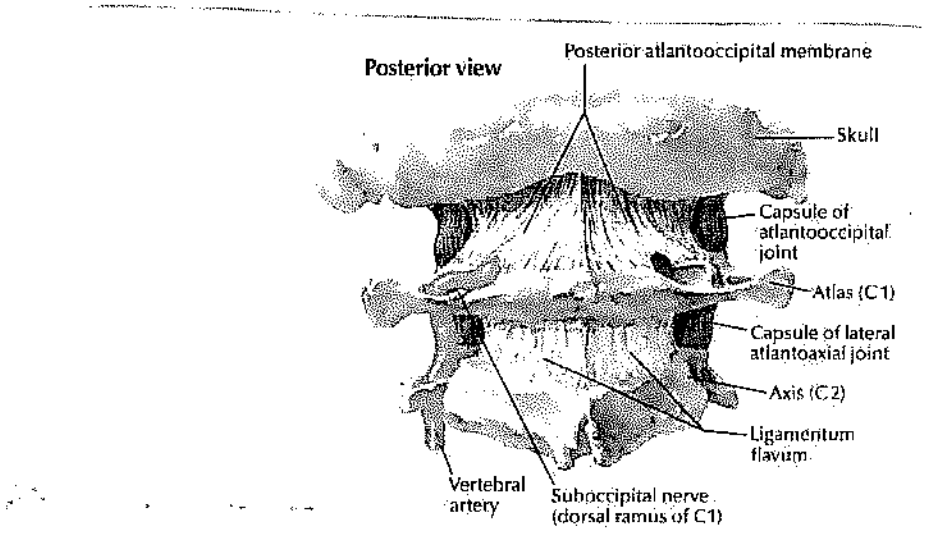
The purpose of this submission is to provide the Health Professions Advisory Council (HPAC) with information regarding the dangers and risks associated with HVLA thrust of the high neck / high neck manipulation, so that the Council may make recommendations that are in the best interest of public safety.

Our submission will:

- explain the anatomy of the high neck and of an HVLA thrust, detailing how vulnerable the delicate cervical arteries are to injury and why an HVLA thrust to the high neck poses a material risk.
- provide background information on chiropractic philosophy, the chiropractic vertebral subluxation and its association with an HVLA thrust of the high neck and why the onus falls on the shoulders of government health agencies to legislate safeguards.
- debunk the chiropractic subluxation construct / philosophy as a cause of ill health and body malfunction.
- debunk the chiropractic profession's argument in support of HVLA thrust of the high neck with specific reference to their practice guidelines, patient safety handouts, statistics and chiropractic studies.
- present studies, case reports and reviews of the scientific, medical and research communities documenting their efforts to assess the material risk and the benefits of an HVLA thrust to the high neck.
- ask the question "What is the Diagnosis?"
- present suggested restrictions, conditions and limitations on HVLA thrust of the high neck in an effort to ensure public safety.
- present suggested legislative recommendations on the performance of an HVLA thrust of the high neck in an effort to ensure public safety; and
- conclude with the recommendation to deny or at the very least, restrict authority to perform an HVLA thrust to the high neck as it is the opinion of the MCSS that the MCA has not acted in good faith to protect the public from an HVLA thrust to the high neck

2.0 HVLA THRUST OF THE HIGH NECK / neck manipulation

2.1 Anatomy of the High Neck



The high neck area in the spinal column is defined as the area from the base of the skull, where contact is made with the 1st cervical vertebrae (atlas) to the bottom of the 2nd cervical vertebrae (axis).

There are two main arterial systems, the carotid and the vertebral that serve as the arterial blood supply to the entire brain. The left and right carotid run up the anterior of the neck and the left and right vertebral run up the posterior of the neck. The vertebral arteries pass through the holes (foramen) in each side of the neck vertebrae and unite to form the basilar artery at the base of the brain. Interruption of the blood flow through the basilar can lead to severe brain and organ malfunction including death.

At the 2nd cervical vertebrae, the vertebral arteries begin to make a slight horizontal turn and at the 1st cervical vertebrae, they make a very abrupt, sharp 90 degree horizontal turn through the holes of the vertebrae.

Due to the vital functions of the areas of the brain supplied by the vertebral and carotid arteries, in particular the brain stem and the cerebellum, a wide variety of strokes with multiple symptoms can result from arterial injury.

2.2 Anatomy of a High Velocity Low Amplitude Thrust of the High Neck

HV (quick), LA (sudden stopping of the rotation)

HVLA thrust of the high neck is an abrupt tilting (chin is raised), stretching and twisting of the vertebrae in the high neck within the high neck's anatomical range of motion. The thrust takes the patient by surprise and cannot be resisted by the patient thereby increasing the risk of injury. A chiropractic HVLA thrust of the high neck has a mean force of 264 Newtons and a mean force duration of 145 milliseconds. The thrust can be equated to **38% of the force used in a hanging.** [1]

2.3 Anatomy of an Arterial Injury following an HVLA thrust to the High Neck

With the abrupt tilting of the chin, stretching, and twisting of the high neck, the three delicate layers of the vertebral and carotid arterial walls are subject to complete separation and/or tearing, medically known as a carotid artery dissection (CAD) or the more common, vertebral artery dissection (VAD). This dissection and/or tearing can be limited to the inner lining of the artery or can extend to the underlying muscular layer and even through the outer connective tissue layer.

At the 2nd cervical vertebrae, the vertebral arteries begin to make a slight horizontal turn. At the 1st cervical vertebrae the vertebral arteries make an abrupt 90 degree, horizontal turn and it is at this location, the 1st and 2nd cervical vertebrae that the vertebral arteries are extremely vulnerable to dissection from an HVLA thrust.

Once some degree of dissection occurs, the arterial wall will bleed causing the walls of the arteries to balloon and/or clot formation to occur. At some point, and that can be another HVLA thrust, the clot or parts of the clot can be dislodged and/or the arterial wall will balloon sufficiently enough to block blood flow to the brain, resulting in a full blown stroke. Should a dissection extend through the outer connective tissue layer of the arterial wall, a massive haemorrhage would occur.

A dissection, as a result of continued HVLA thrusts, can cause a slowly progressing clot buildup, gradually resulting in completely blocking blood flow through the

[1] Mark Crislip MD. Science-Based Medicine, Chiropractic and Stroke: Evaluation of one paper. July 17, 2008

vertebral artery to the basilar artery and the brain. This mechanism would account for a delayed onset of clinical symptoms. [6]

Angiographic evidence of injury to the vertebral artery following an HVLA thrust to the high neck is at the C1-C2 level.[2]

The symptoms of a vertebral arterial dissection are sudden and severe neck or occipital pain,[2] a thunderclap type of headache at the back of the neck. The results of the arterial damage can range from simple nausea or dizziness with the dissection healing and the patient never presenting back to the chiropractor, or result in a full blown brain stem stroke and/or death.

Chiropractors routinely perform an HVLA thrust of the high neck to treat head and neck pain as well as migraines without fully understanding the underlying cause of the symptoms. Their own clinical practice guidelines state there is no test a chiropractor can perform to determine who is at greater risk of arterial dissection and stroke as a result of an HVLA thrust (Attachment 6) and there is no test a chiropractor can perform to determine if the head and neck pain and migraine, are symptoms of an on-going dissection.

The Canadian Stroke Consortium, a national network of highly respected stroke physicians state: "The vertebral artery is extremely vulnerable to torsion injury because it winds around the atlas to enter the skull: any abrupt rotation may stretch the artery and tear the delicate intima (lining). Thrombosis formed over this vascular injury may subsequently be dislodged and may embolize to the brain." They go on to say "There is no doubt that chiropractic neck manipulation can result in dissection of the carotid or vertebral arteries leading to stroke." [2]

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[6] U Reuter, M Hamling, L Kavuk, K Einhaupl, E Schielke Vertebral Artery Dissections After Chiropractic Neck Manipulation in Germany Over Three Years, Journal Neurology, 21 Nov 2005

[2] JW Norris, V Beletsky, Z Nadareishvili. Sudden neck movement and Cervical Artery Dissection CMAJ2000;163(1):38-40

2.4 Material Risk and HVLA thrust of the High Neck

Material risk is defined as "A risk with grave consequences regardless of the frequency it is statistically shown to occur." [23]

One HVLA thrust of the high neck can cause a host of catastrophic, debilitating, life long, life altering consequences. It can cause a full blown brain stem stroke resulting in a patient suffering complete paralysis or what is known as "locked-in syndrome" ; it can cause brain damage that affect a survivor's vestibular system causing vertigo and affecting balance and the ability to walk; it can cause vision and hearing deficits; it can cause intellectual and memory deficits; it can affect a survivor's ability to talk and communicate; it can cause neuro fatigue and it can cause DEATH.....and all of this most often in a population under the age of 45 years, in the prime of their lives and free of risk factors for stroke. [9] (Attachment 9)

[23] D Nixdorf, Current Standards of Material Risk, J Can Chiropr Assoc 1990 Jun;34(2):87-89 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2484583/

[9] Jean-Yves Maigne, MD A Prevention of the Vertebrobasilar Accidents following Cervical Thrust Manipulations – recommendations of the SOFMMOO, 11/23/2007

3.0 CHIROPRACTIC PHILOSOPHY & HVLA THRUST OF THE HIGH NECK

3.1 The Chiropractic Vertebral Subluxation & HVLA Thrust of the High Neck

HVLA thrust of the high neck is the quintessence of chiropractic and one of their primary treatment techniques. Chiropractic is based on the belief /philosophy that the vertebrae is somehow the master of the human body and that misalignments of the vertebrae called "vertebral subluxations" are the cause of ill health and body malfunction. According to chiropractic literature, vertebral subluxations can affect every cell, organ and system in the body; 95% of vertebral subluxations are painless and cannot be felt by the patient; and only chiropractors, not medical doctors, can perform the unique service of locating and correcting vertebral subluxations. (Attachment 1 & 3)

In 1895, DD Palmer founded chiropractic, not as a therapy for joint or back pain, but as a therapy for removing the cause of disease and ill health, the chiropractic subluxation. Palmer claimed that the first chiropractic adjustment cured a man of 17 years of deafness. (Attachment 3)

In the 1930s, BJ Palmer, the son of the founder of chiropractic announced that he had found the one and only cause of all disease, the vertebral subluxation of the high neck/atlas.[23] Chiropractic belief / philosophy is that an HVLA thrust of the high neck will remove this most damaging of vertebral subluxations; release the bodies "innate intelligence" or inborn wisdom and thereby allow the body to self-heal.

In a 2004 government commissioned report titled **The Report of the Manitoba Chiropractic Health Care Commission** by Dr. R. Chernomas PhD Dr. L. Carrothers PhD and Dr. J. Loxley PhD, the authors report:

"In traditional chiropractic theory, subluxations are spinal misalignments that impinge on nerves, disrupting the Innate Intelligence and its ability to perform its vitalistic task of regulating the body's health." "Chiropractic adjustments allowed the Innate Intelligence to restore the body to health." (Attachment 3)

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[23] The Problem with Chiropractic NUCCA, Science-Based Medicine https://www.sciencebasedmedicine.org/the-problem-with-chiropractic-nucca/

It is important to realize that this fundamental, signature belief in the chiropractic vertebral subluxation and an HVLA thrust of the high neck, is still being taught in virtually every school of chiropractic and explains why HVLA thrust of the high neck is one of chiropractic's primary treatment techniques, used repeatedly by the profession to diagnose and treat malfunction of every cell and every organ of the body, as well as malfunction of the immune system; to attain and maintain wellness; and to treat pain in parts of the body totally unrelated to head or neck pain. (Attachment 2)

The following chiropractic case report and/or studies bear witness to the extent of the chiropractic belief/philosophy that the vertebral subluxation of the high neck is the most dangerous of all chiropractic subluxations and that repeated HVLA thrusts to the high neck can eliminate that subluxation and thereby permit a chiropractor to treat a host of non-musculoskeletal conditions.

1. Upper Cervical Chiropractic Care for a Nine Year Old Male with Tourette Syndrome, Attention Deficit Hyperactivity Disorder, Asthma, Insomnia, and Headaches[3]

2. Atlas Vertebra Realignment and Achievement of Arterial Pressure Goal in Hypertensive patients: a pilot study[4]

3. Correction of Upper Neck Injuries may halt and Reverse MS Progression [15]

The chiropractic profession is not about to abandon or self-impose conditions, restrictions and limitations on the practice of HVLA thrust of the high neck.

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[3] Erin Elster DC Upper Cervical Chiropractic Care for a Nine-year-old Male with Tourette Syndrome, Attention Deficit Hyperactivity Disorder, Asthma, Insomnia and Headaches: Case Report. Journal of Vertebral Subluxation *research, July 2003*

[4] G. Bakris, M Dickholtz, P Meyer, G Kravitz, E Avery, M Miller, J Brown, C Woodfield, B Bell Atlas Vertebra Realignment and Achievement of Arterial Pressure Goal in Hypertensive Patients Journal of Human Hypertension 2007 (May); 21(5): 347-352

[15] Erin Elster DC Correction of Upper Neck Injuries may halt and Reverse MS Progression The Journal of Subluxation Research

3.2 The Manitoba Chiropractors Association (MCA) & Vertebral Subluxation

The MCA is a subluxation based entity. In their submission to the 2004 Report of the Manitoba Chiropractic Health Care Commission, (Attachment 3) the MCA state:

Page 18 - "The major object of most chiropractic adjustive treatment is alleviation of vertebral subluxations".

Page 19 - "Chiropractors seek to locate and correct spinal misalignments (also called subluxations). These misalignments can affect the body's ability to heal itself and function optimally. Simply put, subluxations are spinal misalignments that cause interference with the transmission of nervous signals. This interference leads to malfunction of the various cells, tissues and organs that the nerves supply, which may cause symptoms to appear. "

And on page 21, the report reads:

"The MCA indicated that chiropractors expect a subluxation complex will be present in the majority of patients presenting clinically with pain."

The MCA then go on to say on page 19 of this government commissioned report:

"Your chiropractor is the only doctor with specialized training to detect and correct subluxations.

It is beholding of the chiropractic profession to explain how a chiropractor and only a chiropractor can detect and correct a spinal misalignment / vertebral subluxation when a medical doctor, with their access to state of the art technology including X-rays, CAT scans and MRIs, cannot.

4.0 DEBUNKING THE CHIROPRACTIC SUBLUXATION CONSTRUCT

4.1 The Vertebral Subluxation and the Disease Process – ES Crelin PhD [5]

There is no medical and scientific evidence for the chiropractic subluxation being associated with any disease process and/or of creating sub-optimal health conditions requiring intervention. (Attachment 4)

Dr. ES Crelin PhD, professor of anatomy and Chairman of the Human Growth and Development Study Unit at Yale University School of Medicine did research to determine how much vertebral misalignment / displacement / chiropractic subluxation is necessary before a spinal nerve is impinged or encroached upon at the intervertebral foramen to produce pathology. The study concluded:

"This experimental study demonstrated conclusively that a subluxation as defined by chiropractic – the exertion of pressure on a spinal nerve which by interfering with the planned expression of Innate Intelligence produces pathology – does not occur."

Dr. Crelin goes on to write: "By a process of natural selection the vertebral column of mammals has evolved into one in which the articulations allow an overall range of motion so that individuals may function well for survival within their environment. At the same time, the selective process has favored vertebral columns that have spacious intervertebral foramina in combination with the barest minimum of displacement between adjacent vertebrae – two factors that preclude impingement upon the spinal nerves as they pass through the foramina."

In a subsequent study on cervical spines, Dr. Crelin and associates concluded that "ligaments holding vertebrae in place would not permit a range of motion that would cause impingement of the cord or spinal nerves and for impingements to occur, ligaments would have to be ripped apart and bones broken." [5]

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[5] Edmund Crelin PhD A Scientific Test of Chiropractic's Subluxation Theory , Sept/Oct 1973 Issue of American Scientist. Revised Jan 21, 2010

4.2 The General Chiropractic Council (GCC) & the Vertebral Subluxation (Attachment 4)

The General Chiropractic Council (GCC) is a United Kingdom statutory body with regulatory powers established by the Chiropractors Act 1994. The GCC has three main duties:

- To protect the public by establishing and operating a scheme of statutory regulations for chiropractors.
- To set the standards of chiropractic education, conduct and practice; and
- To ensure the development of the profession of chiropractic.

In August 2010, the GCC issued a statement to practising chiropractors titled "Guidance on claims made for the chiropractic vertebral subluxation complex". A quote from that statement is as follows:

"The chiropractic vertebral subluxation complex is an historical concept but it remains a theoretical model. It is not supported by any clinical research evidence that would allow claims to be made that it is the cause of disease."

4.3 Hill's Criteria of Causation & the Vertebral Subluxation (Attachment 5)

Hill's Criteria of Causation is the most commonly used scientific model for evaluating whether a suspected cause is a real cause. In "An epidemiological examination of the subluxation construct using Hill's Criteria of Causation", the researchers used peer-reviewed chiropractic literature to determine if the evidence shows that chiropractic subluxations cause interference with the nervous system and cause disease. The evidence failed to fulfil even a single one of Hill's nine criteria of causation.

The researchers concluded "There is a significant lack of evidence to fulfill the basic criteria of causation. This lack of crucial supportive epidemiologic evidence prohibits the accurate promulgation of the chiropractic subluxation."

There is no supportive empirical evidence found for the chiropractic subluxation being associated with any disease process or of creating sub optimal health.

4.4 Chiropractic Vertebral Subluxation Belief – Summary

According to MCA and chiropractic literature:

- The chiropractic vertebral subluxation impinges on the neural integrity of every cell, tissue and organ in the body and is the cause of ill health, disease and body malfunction. (Attachment 1 & 3)
- The chiropractic vertebral subluxation can be asymptomatic and still cause ill health and body malfunction. (Attachment 1)
- The chiropractic vertebral subluxation can only be detected and treated by a chiropractor, not a medical doctor who has access to state of the art, technology ; (Attachment 1 & 3) and
- The chiropractic vertebral subluxation will be present in the majority of patients presenting to the chiropractor. (Attachment 3)
- An HVLA thrust of the high neck will remove the chiropractic subluxation thereby attaining and maintaining wellness [3] [4] [15]

It is up to the chiropractic profession to provide empirical evidence that:

- the chiropractic vertebral subluxations does exist;
- that an HVLA thrust of the high neck will remove and eliminate the vertebral subluxation; and
- that by eliminating the vertebral subluxation, the body will be restored to and maintain optimum health.

Until then, the chiropractic vertebral subluxation construct remains theoretical with no basis in the real world of health care.

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[3] Erin Elster DC Upper Cervical Chiropractic Care for a Nine-year-old Male with Tourette Syndrome, Attention Deficit Hyperactivity Disorder, Asthma, Insomnia and Headaches. Case Report. Journal of Vertebral Subluxation research, July 2003

[4] G. Bakris, M Dickholtz, P Meyer, G Kravitz, E Avery, M Miller, J Brown, C Woodfield, B Bell Atlas Vertebra *Realignment and Achievement of Arterial Pressure Goal in Hypertensive Patients Journal of Human Hypertension* 2007 (May); 21(5): 347-352

[15] Erin Elster DC Correction of Upper Neck Injuries may halt and Reverse MS Progression The Journal of Subluxation Research

5.0 THE CHIROPRACTIC ARGUMENT IN SUPPORT OF HVLA THRUST – DEBUNKED

5.1 The Canadian Chiropractic Clinical Practice Guidelines 2005 – Evidence-Based Treatment of Adult Neck Pain not due to Whiplash (Attachment 6)

The above mentioned guidelines, page 188, section 17, state that there is NO test available to chiropractors to determine which patient is at greater risk or lesser risk of experiencing arterial damage, stroke and/or death as a result of an HVLA thrust.

And those same guidelines – page 172, para 4.1 state that 90 % of acute and chronic neck pain will self-resolve within 6 weeks.

5.2 In the Summary Recommendations of the Canadian Chiropractic Clinical Practice Guidelines –Adult Neck Pain not due to Whiplash (Attachment 7)

Page 2 reads – "Manipulation should be part of cervical care and that evidence suggests that multiple manipulations improve pain in the short and medium term." There is no mention of long term benefit.

Page 3 under Risk Management Recommendations, the guidelines recommend that if a patient reports symptoms of neck or occipital pain which is sudden and unlike any other - do not manipulate the neck and immediately refer to emergency services, BUT if those symptoms are not ongoing, but reported as recent, proceed with caution is the recommendation.

Occipital pain which is sudden and unlike any other is the classic symptom of an arterial dissection. A dissection that is not ongoing, but reported as recent, is a dissection that is healing. Further manipulation of the high neck can disrupt a healing dissection, dislodge a clot and/or cause further dissections and clot build-up possibly resulting in a full blown stroke!!

Considering the following:

- The cervical arteries are very fragile and susceptible to injury. [2]
- The force used in an HVLA thrust is equivalent to 38% of the force used in a hanging. [3]
- There is no pre-manipulative test a chiropractor can use to determine who is at greater risk or lesser risk of arterial damage and stroke from an HVLA thrust. (Attachment 6)
- 90% of acute and chronic neck pain will self-resolve. (Attachment 6)
- Multiple manipulations result in only short and medium term benefit; (Attachment 7)
- Symptoms of a dissection in progress might send a patient with head or neck pain and/or migraine like symptoms to the chiropractor. Further HVLA thrusts will only make the dissection worse resulting in a possible full blown stroke or death. [3]
- Adverse events can be lifelong and life altering or at worst, cause death.[24]

It begs to be asked: How does a chiropractor proceed with caution when applying a neck manipulation to a possible healing arterial dissection? And why in the world would a chiropractor manipulate the neck of a patient and risk the patient suffering horrendous life long, life altering consequences or death?

The answer - because HVLA thrust of the high neck is the quintessence of chiropractic and their signature treatment technique.

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[2] J. Norris, V Beletsky, Z Nadareishvili on behalf of the Canadian Stroke Consortium CMAJ2000;163(1):38-40

[3] Mark Crislip MD. Science-Based Medicine, Chiropractic and Stroke: Evaluation of one paper. July 17, 2008

[24] F Albuquerque, Y Hu, S Dasht, A Abla, J Clark, B Alkire, N Theodore, C McDougall, Craniocervical Arterial Dissections as Sequelae of Chiropractic Manipulation: patterns of injury and management, J Neurosurg,2011,Dec;115(6):1197-205

What the Rothwell and Bondy study actually states and what is NOT mentioned in this handout is as follows:

"Results for those aged less than 45 years showed vertebrobasilar accidents (VBAs) to be 5 times more likely than controls to have visited a chiropractor within 1 week of the VBA. Additionally, in this young age group, cases were 5 times as likely to have had greater than or equal to 3 visits with a cervical diagnosis in the month before the case's VBA date."

This same section reads – "By way of comparison, neck adjustment is significantly safer than other commonly used health remedies. For example long term use of non-prescription pain relievers and the use of birth control pills both carry a far greater risk of serious complications than neck adjustment."

Just because one treatment modality carries risk, does not negate the risk involved in neck manipulation and does not mean that there are no other treatment options to be used that prove much safer. The chiropractic argument has absolutely no substance!

Section – How do chiropractors know who should not have a neck adjustment?

The handout reads:

"Chiropractic treatment guidelines provide clear advice on when not to perform a neck adjustment. Ask your chiropractor for a copy of the patient handout on treating neck pain to understand how you can actively participate in ensuring the safety and effectiveness of your treatment."

This patient handout on the safety of neck manipulation does not warn the patient that there is NO test a chiropractor can perform to determine which patient is at greater or lesser risk of an arterial dissection and/or stroke and that there are much safer, less risky alternative treatments.

Section – Why would neck adjustment have an effect on anything other than neck pain or headache?

A chiropractic explanation as to why if one has a pain in the lower back – they will manipulate the neck! Neck manipulation is the quintessence of chiropractic and one of its primary treatment techniques.

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Section – Are all neck adjustment techniques equally safe? – The handout states that there is no evidence to suggest than any of these techniques are less safe than other. UNTRUE – HVLA thrust of the high neck is the MOST dangerous considering the anatomy of the arteries in the high neck. Gentle mobilization, heat, massage and exercise are all alternative, much safer therapies.

This patient handout on the safety of neck manipulation is incomplete, inaccurate and misleading. Please reference another chiropractic handout titled - Chiropractic Treatment & Patient Safety with attached critique. (Attachment 10)

Who will protect the public from HVLA thrust of the high neck?

Not the chiropractic profession!

5.4 The Chiropractic Argument in Support of HVLA Thrust of the High Neck-Debunked

To counter the direct scientific and medical evidence that HVLA thrust of the high neck presents a material risk and that this material risk far outweighs any short to medium term benefits, the chiropractic community has a number of strategies.

(a) They will simply deny that arterial damage and stroke can occur as a result of an HVLA thrust to the high neck. Witness the MCA 2015 Annual Report, Complaint #14-10. (Attachment 11)

The MCA, in response to a patient's complaint stating that she suffered a stroke on the chiropractor's table, the MCA emphatically state:

"It is the current researched opinion of the chiropractic community that a chiropractic adjustment cannot cause an arterial dissection, irrespective of the anecdotal comments made by the complainant or any of the attending professionals handling the complainant's treatment."

Over 50 years of scientific and medical studies, case reports and reviews have concluded that neck manipulation can and does cause arterial damage, stroke and death and that the under 45 years, in the prime of their lives and free of risk factors

for stroke are at five times greater risk of suffering an arterial dissection. See section 6 – Studies, Case Reports and Reviews.

Also note a 2006 email from the MCA denying culpability for any arterial damage a patient may suffer at the hands of a chiropractor. (Attachment 12)

Now, back to the MCA 2015 Annual Report, Complaint #14-10. The patient actually suffered a stroke on the chiropractor's table, of this there is no dispute!

So how did the MCA explain the stroke happening immediately after a neck manipulation? I am quoting the MCA:

"With respect to the 'stroke', it is reasonable for the committee to conclude that it was 'coincidental' with the treatment provided by the member."

This is the conclusion reached in a study titled: The Risk of Vertebrobasilar Stroke and Chiropractic Care (Attachment 14) by chiropractor and epidemiologist David Cassidy. The Cassidy Study concludes that it is an arterial dissection and stroke in progress that sends a patient to the chiropractor. The scientific and medical community have debunked this study claiming that the conclusion is not supported by the data in the body of the study. The Cassidy study will be discussed at greater length in section 5.5 of Chiropractic Studies.

Let me point out that the MCA's informal resolution to Complaint #14-10 was to have the MCA member doctor write a letter of apology for not recognizing the signs of a stroke sooner and mandated to attend a level 1, first-aid course dealing with sudden medical emergencies.

(b) The chiropractic profession will also quote three specific Canadian studies in support of the safety of HVLA thrust, claiming that an HVLA thrust to the high neck is unlikely to cause arterial damage (the Herzog study[6]) or make an existing dissection worse resulting in a full blown stroke (the Kawchuk study [7]). And

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[6] W Herzog, T Leonard, B Symons Internal Forces Sustained by the Vertebral Artery during Spinal Manipulative Therapy, J. Manipulative Physiol Ther. 2002 Oct; 25(8):504-10

[7] G Kawchuk, S Wynd, T Anderson S Effect of Cervical Spine Manipulation on a Pre-existing Vascular Lesion within the Canine Vertebral Artery Cerebrovasc Dis, 2008;26(3):304-9

they will quote the David Cassidy study, The Risk of Vertebrobasilar Stroke and Chiropractic Care. (Attachment 14)

The Cassidy study is continually quoted and referred to by the chiropractic profession and simply concludes with the unproven premise that it is a dissection and stroke in progress that sends a patient to the chiropractor with head and neck pain. I will point out that is exactly what the MCA stated in their response to Complaint #14-10, page 30 of their 2015 Annual report.

The Herzog Study, the Kawchuk Study and the Cassidy Study have been debunked in scientific and medical circles and will be discussed in greater detail in section 5.5, Chiropractic Studies.

(c) The chiropractic profession will also claim that the risks associated with the taking of dangerous anti-inflammatory medications or prescription medication is far greater than the risks associated with HVLA thrust of the high neck. An incredulous argument! Just because one treatment modality poses a risk of injury, does not negate the risks associated with HVLA thrust of the high neck. One HVLA thrust of the high neck can cause lasting impairment or death – one aspirin will not!!

(d) And they will minimize the risks of high neck manipulation. I quote from the Canadian Chiropractic Protective Association's (CCPA), the insurance arm of the chiropractic profession in Canada, suggested Informed Consent to Chiropractic Treatment Form, para (b): (Attachment 13)

"There are reported cases of stroke associated with any common neck movements including adjustment of the upper cervical spine. Present medical and scientific evidence does not establish a definite cause and effect relationship between upper cervical spine adjustment and the occurrence of stroke."

The fact that the cervical arteries are so vulnerable to injury from innocuous head movements, simply underscores another reason for avoiding an HVLA thrust of the

high neck. Massage, heat, gentle manipulation, and exercise are far less risky forms of therapy.

The same paragraph goes on to say:

"The possibility of such injuries resulting from upper cervical spinal adjustment is extremely remote".

What the scientific and medical researchers actually state is that manipulation of the upper cervical spine can and does cause arterial damage and stroke; that the *exact incidence is difficult to study, unknown and most likely under-reported;* and that the under 45 years of age are five times at greater risk of arterial damage and stroke than those over 45 years.

(e) The chiropractic profession will also attempt to use statistical analysis to disprove and discredit all scientific and medical studies that say the exact incidence of an adverse event after cervical manipulation is unknown, and most likely under-reported. The chiropractic profession discredits the Kaiser Permanente statistic of 1.3-5 VADs and stroke per 100,000 manipulations[12] as well as another statistic of 1 to 3 adverse events per million manipulations claiming that it is erroneous to equate correlation with cause. A stroke after a chiropractic manipulation is not proof that the manipulation caused the stroke![16]

And the more favorable statistic quoted continually by the chiropractic profession, the CCPA's statistic of 1 stroke in 5.85 million neck adjustments [14], is only a reflection of malpractice legal challenges; relies on an estimate of the number of cervical manipulations performed by chiropractors and is based on the total number of individual manipulations not risk per person.

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[12] Kaiser Permanente Mid-Atlantic States and Mid-Atlantic Permanente Medical Group, Chiropractic Manipulation Medical Coverage Policy (Referral)

[16] Terri Rondberg DC, CEO World Chiropractic Alliance, letter to Kaiser Permanente of the Mid-Atlantic States, re: exclusion of cervical chiropractic manipulative treatment, Aug 30, 2010

[14] M Kapral, S Bondy, cervical manipulation and risk of stroke CMAJ 2001; 165(7):907-8

Virtually all scientific and medical studies, reviews and case reports on this subject conclude that the exact number of adverse events as a result of an HVLA thrust to the high neck state is unknown and most likely under-reported. (Attachment 15)

That is because:

- The arterial damage and accompanying symptoms might be relatively minor, with the damage healing and the patient never presenting back to the chiropractor or to a medical doctor.
- The stroke and/or arterial damage can manifest itself hours, days, weeks and even months after the HVLA thrust of the high neck – so consequently the association between the stroke and the thrust is never made.[8]

  In the under 45 years of age, the symptoms of a stroke often can be undiagnosed and misdiagnosed ex. migraine– so again, the association between the symptoms and the HVLA thrust is never made.
- In a routine autopsy "the vertebral arteries in the neck are almost never removed and examined to determine if a dissection occurred and where it occurred; (Attachment 16) and
- There is a general reluctance amongst practitioners of HVLA thrust to report adverse events.[2]

It is important to realize that risk has a **qualitative** as well as a **quantitative** aspect. One HVLA thrust of the high neck can cause life long, life altering consequences and/or death in a mainly young population, in the prime of their lives, free of risk factors for stroke. A young population who can no longer work at the career of their choice or training, if they are fortunate to be able to work at all.

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[8] U Reuter, M Hamling, L Kavuk, K Einhaupl, E Schielke Vertebral Artery Dissections After Chiropractic Neck Manipulation in Germany Over Three Years, Journal Neurology, 21 Nov 2005

[2] J. Norris, V Beletsky, Z Nadareishvili on behalf of the Canadian Stroke Consortium CMAJ2000;163(1):38-40

Anecdotal claims as to the benefits of an HVLA thrust will simply not do.

It is up to the practitioners of HLA thrust to the high neck / neck manipulation to provide empirical evidence of the benefit of HVLA thrust to the high neck and then define exactly if and when the benefits outweigh the risks.

5.5 Chiropractic Studies in support of an HVLA thrust - Debunked

The chiropractic profession supports their belief in the safety of HVLA thrust of the high neck by continually referring to three specific Canadian studies. All three studies have been debunked in scientific and medical circles.

5.5.1 Internal forces sustained by the vertebral artery during spinal manipulative therapy by W. Herzog. [6]

This study was designed to quantify the strains and forces sustained by the vertebral arteries during spinal manipulative therapy.

The study concluded that under normal circumstances a single HVLA thrust is very unlikely to mechanically disrupt the vertebral arteries

The study was conducted on five, 80-99 year old cadavers. The subjects were dead. The heart was not pumping so there was no pressure in the artery to cause a dissection. There was no blood supply to the artery meaning a clot could not form and embolize causing a stroke and the arteries were not subjected to an HVLA thrust at the C1 C2 level.

Debunked!

[6] W Herzog, T Leonard, B Symons Internal Forces Sustained by the Vertebral Artery during Spinal Manipulative Therapy, J. Manipulative Physiol Ther. 2002 Oct; 25(8):504-10

5.5.2 Effect of cervical spine manipulation on a pre-existing vascular lesion within the canine vertebral artery,[7] by GN Kawchuk, S Wynd and T Anderson

This study on canines was designed to determine if an existing vertebral artery dissection would be made worse by further cervical spine manipulation.

The study concluded that further cervical spinal manipulation did not alter the existing VAD making it worse.

They did successfully produce an artificial lesion in the high neck area at the level of the first and second vertebrae. And the researchers did successfully administer further HVLA thrusts. Unfortunately the subsequent HVLA thrusts were to the fourth cervical vertebrae, NOT to the 1st and 2nd cervical vertebrae.

The study is debunked!

5.5.3 The risk of vertebrobasilar stroke and chiropractic care, by JD Cassidy DC, PhD, E Boyle PhD, P Cote DC, PhD (Attachment 14)

When questioned about the risk of arterial damage and stroke as a result of an HVLA thrust to the high neck, the chiropractic profession worldwide will refer to and quote the conclusion of this 2008 Canadian study led by chiropractor and epidemiologist David Cassidy.

The object of the study was to investigate associations between chiropractic visits and vertebrobasilar artery (VBA) stroke and to contrast this with primary care physician visits and VBA stroke. Note, the study was not designed to determine if HVLA thrust does cause arterial damage and stroke.

The Cassidy study concludes that no evidence was found of excess risk of VBA stroke associated with chiropractic care compared to primary care and that it was head and neck pain as a result of a dissection in progress that caused the patient to visit either the chiropractor or primary care physicians (PCP).

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[7] G Kawchuk, S Wynd, T Anderson S Effect of Cervical Spine Manipulation on a Pre-existing Vascular Lesion within the Canine Vertebral Artery Cerebrovasc Dis, 2008;26(3):304-9

That is exactly what the MCA stated in Complaint #14-10 of the MCA's 2015 Annual Report (Attachment 11)

However, upon close scrutinization by the scientific and medical communities, the conclusions of the study were found to be flawed and not supported by the body of the paper. [1]

1. The study was not designed to determine if HVLA thrust does cause arterial damage and stroke in patients and the study did not try to determine if patients who saw chiropractors had their necks manipulated.

2. The study used hospital discharge codes and found 818 vertebral artery strokes on the basis of those hospital discharge codes

According to medical and scientific experts, discharge codes are not a reliable way to determine the real diagnosis; are sometimes a best guess and often not based on the strictest of criteria. No hospital chart reviews were studied.

3. There was no assessing the reason for the stroke. The study did not differentiate between a stroke caused by a dissection (mainly in the under 45 yrs.) or a stroke cause by other means and more common in the elderly.

4. In patients under 45 years, who visited a chiropractor, there was a strong association with stroke in the 24 hours immediately after the chiropractic visit. However, this finding was diluted by looking at the entire month following the visit.

5. There was an over representation of elderly stroke victims in the study – mean age 63 – thereby increasing the likelihood of stroke after seeing a primary care physician (PCP).

6. The study assumed that all vertebrobasilar artery strokes seen by the chiropractors and PCPs were spontaneous. Unfortunately, there was no evidence / data in the study to support this conclusion.

7. The study does not take into account the patients who suffered minor dissection and/or stroke symptoms after chiropractic neck manipulation and who never presented back to a chiropractor or PCP for diagnosis. These patients are not

[1] Mark Crislip MD. Science-Based Medicine, Chiropractic and Stroke: Evaluation of one paper. July 17, 2008

reflected in the studies chiropractic OHIP billing records or hospital discharge records; and

8. The study does not take into account the patients whose symptoms of dissection and stroke were misdiagnosed. Again, this is particularly true of the under 45 years who are free of stroke risk factors and whose symptoms are misdiagnosed as a simple migraine.

It should be noted that the study did not rule out neck manipulation as a potential cause of some basilar artery strokes and .....

The study actually verifies that in a population of the young, less than 45 years, there was a marked increase in the association with stroke or stroke like symptoms 24 hours after visiting a chiropractor. Unfortunately that finding is not reflected in the summary conclusion of the study.

This study has become very important in the chiropractic defence of HVLA thrust of the high neck. The MCSS feel assured that the MCA will quote the Cassidy study in defense of HVLA thrust and in their seeking authority to perform HVLA thrust to move a joint of the spine within its anatomical range of motion.

A further in-depth analysis of the Cassidy study is available upon request.

6.0 SCIENTIFIC STUDIES, CASE REPORTS & REVIEWS – RISKS OF HVLA THRUST

Where there's smoke, there's usually a fire and for over half a century there has been a smouldering inferno surrounding HVLA thrust of the high neck, arterial damage and stroke. Sixty years of scientific studies, case reports and reviews conclude that HVLA thrust of the cervical spine, in particular the high cervical spine can and does cause arterial damage and stroke.

A very small sampling of those reviews, studies and case reports follow. Further research is available upon request.

6.1 Canadian study **Chiropractic Manipulation and Stroke: a population based case control study** by D. Rothwell, S. Bondy and J. Williams (Attachment 9)

This well respected and very much quoted Canadian study from the Institute for Clinical Evaluative Sciences (ICES) reports:

"Results for those aged less than 45 years showed vertebrobasilar accidents (VBA) cases to be five times more likely than controls to have visited a chiropractor within 1 week of the VBA. Additionally, in the younger age group, cases were five times as likely to have had greater than or equal to three cervical diagnosis in the month before the case's VBA date."

The authors also report that the association between arterial dissections and cervical manipulation has been reported with increasing frequency in the last 20 years, coinciding with the rising availability and popularity of chiropractic. The authors call on the chiropractic community to produce evidence that manipulation of the neck has a medical benefit.

6.2 The **Canadian Stroke Consortium (CSC)**, SPONTADS, a national network of stroke physicians reported in 2001: (Attachment 15)

"Therefore, more than 100 cases of dissection per year in Canada are associated with neck manipulation. It is probable that this is an underestimate of the true

state of affairs due to underreporting of cases and lack of awareness of this condition in other neurological problems such as sudden headache or neck pain."

6.3 Sudden Neck Movement and Cervical Artery Dissection [7] by J Norris, V Beletsky, Z Nadareishvili on behalf of the Canadian Stroke Consortium

"The Consortium had been prospectively collecting detailed information on cases of dissection of the cervical arteries. Seventy-four patients were studied and of those 74, "28% (21/74) had a stroke resulting from neck manipulation."

The paper also states that an asymptomatic dissection will heal when left alone, but further thrusts can dislodge a clot and embolize to the brain.....and it concludes with the statement:

"There is no doubt that chiropractic neck manipulation can result in dissection of the carotid or vertebral arteries leading to stroke."[7]

6.4 A German report – Vertebral Artery Dissections after Chiropractic Neck Manipulation in Germany over Three Years [8] reads:

"We provide evidence that in the cases presented here vertebral artery dissections are caused by chiropractic neck manipulations. A substantial number of subjects had an immediate begin of neurological deficits in accordance with immediate rupture of the vessel wall resulting in cerebral perfusion deficit and stroke. Alternately, the dissection could cause a slowly progressing obliteration of the vertebral artery or thrombus formation followed by infarction within the vertebrobasilar artery territory. This mechanism could account for a delayed onset of clinical symptoms and is in accordance with previous reports from the literature."

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[7] J Norris, V Beletsky, Z Nadareishvili on behalf of the Canadian Stroke consortium , Sudden Neck Movement and Cervical Artery Dissection, *CMAJ2000;163(1):38-40*

[8] U Reuter, M Hamling, L Kavuk, K Einhaupl, E Schielke Vertebral Artery Dissections After Chiropractic Neck Manipulation in Germany Over Three Years, Journal Neurology, 21 Nov 2005

6.5 A French report - A Preview of the Vertebrobasilar Accidents Following Cervical Thrust Manipulations – recommendations of the French Society of Orthopaedic and Osteopathic Manual Medicine] (SOFMMOO)[9] provides for most interesting reading.

Their report begins with the statement:

"It is now a well-established fact that cervical thrust manipulations can harm the vertebral artery."

The report further states that pre-manipulative tests have no value and concludes with five recommendation, one of which is:

"No cervical thrust in rotation in females less than 50 years."

6.6 An Italian 2008 review **Cerebrovascular Complications of Neck Manipulation** by M Paciaroni and J Bogousslavsky concludes[10]:

"There is little evidence on the specific beneficial therapeutic effects of spinal manipulation."

"Evidence shows an association between spinal manipulation and mild adverse effects as well as with serious complications including dissection of cervical arteries most commonly involving the vertebral arteries."

And that "specific risk factors for cervical artery dissection related to spinal manipulation have not yet been identified and for that reason all patients are at risk, in particular those under 45 years."

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[9] Jean-Yves Maigne, MD A Prevention of the Vertebrobasilar Accidents following Cervical Thrust Manipulations – recommendations of the SOFMMOO, 11/23/2007

[10] M Paciaroni, J Bogousslavsky Cerebrovascular Complications of Neck Manipulation Eur Neurolo 2009;61:1112-118

6.7 Craniocervical arterial dissections as sequelae of chiropractic manipulation: patterns of injury and management [24]

By F Albuquerque, Y Hu, S Dashti, A Abla, J Clark, B Alkire, N Theodore, C McDougall

"Object: Chiropractic manipulation of the cervical spine is a known cause of craniocervical arterial dissections. In this paper the authors describe the patterns of arterial injury after chiropractic manipulation and their management in the modern endovascular era."

"Conclusion: Chiropractic manipulation of the cervical spine can produce dissections involving the cervical and cranial segments of the vertebral and carotid arteries. These injuries can be severe, requiring endovascular stenting and cranial surgery. In this patient series, a significant percentage (31%, 4/13) of patients were left permanently disabled or died as a result of their arterial injuries."

6.8 Hill's Criteria of Causation & review Does Cervical Manipulative Therapy cause Vertebral Artery Dissection and Stroke [21] by M Miley, K Wellik, D Wingerchuk and B Demaerschalk

Objective of the Review: Does cervical manipulative therapy (CMT) cause vertebral arterial dissection (VAD) and ischemic stroke? What is the best estimate of the incident of CMT and VAD and ischemic stroke?

Using Hill's Criteria of Causation the results showed:

"Five of the applicable seven criteria for causation were satisfactorily met and supported weak to moderate strength of evidence for causation between CMT and VAD and associated stroke, especially in young adults."

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[24] F Albuquerque, Y Hu, S Dasht, A Abla, J Clark, B Alkire, N Theodore, C McDougall, Craniocervical Arterial Dissections as Sequelae of Chiropractic Manipulation: patterns of injury and management, J *Neurosurg.2011,Dec;115(6):1197-205*

[21] M Miley, K Wellik, D Wingerchuk, B Demaerschalk, Does Cervical Manipulative Therapy Cause Vertebral Artery Dissection and Stroke Neurologist 14(1):66-73, Jan 2008

"Young vertebrobasilar artery territory stroke patients were 5 times more likely than controls to have had CMT within 1 week of the event date."

And the review concluded with the statement that further research is required to uncover both the benefits and the harms associated with CMT.

Virtually all studies, reviews and reports state that:

- HVLA thrust can and does cause arterial damage and stroke. [2] [3] [9]
- The under 45 years of age are at particular risk of VAD and stroke as a result of an HVLA thrust to the high neck. [9] [10] [21] (Attachment 9)
- There is no pre-manipulative test a chiropractor can perform to determine who is at greater risk of suffering a dissection and stroke as a result of an HVLA thrust of the high neck. (Attachment 6)
- Symptoms can manifest themselves days, weeks and even months after an HVLA thrust of the high neck.[8]
- The exact number of adverse events is unknown and under reported as there is no effective method to record adverse events; (Attachment 15)

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[2] J Norris, V Beletsky, Z Nadareishvili on behalf of the Canadian Stroke consortium , Sudden Neck Movement and Cervical Artery Dissection, CMAJ2000;163(1):38-40

[3] U Reuter, M Hamling, L Kavuk, K Einhaupl, E Schielke Vertebral Artery Dissections After Chiropractic Neck Manipulation in Germany Over Three Years, Journal Neurology, 21 Nov 2005

[8] Jean-Yves Maigne, MD A Prevention of the Vertebrobasilar Accidents following Cervical Thrust Manipulations – recommendations of the SOFMMOO, 11/23/2007

[10] M Paciaroni, J Bogousslavsky Cerebrovascular Complications of Neck Manipulation Eur Neurolo 2009;61:1112-118

[21] M Miley, K Wellik, D Wingerchuk, B Demaerschalk, Does Cervical Manipulative Therapy Cause Vertebral Artery Dissection and Stroke Neurologist 14(1):66-73, Jan 2008

- Further research is required to examine both the possible benefits and harm associated with cervical spine manipulation; [14]
- There is little evidence of the efficacy of an HVLA thrust [11] [12]
- The material risk outweigh the benefits and it is up to the chiropractic community to prove otherwise. [14]

6.9 The Canadian Neurologists Statement of Concern (Attachment 16)

In 2002, sixty-two Canadian neurologists, all certified members of the Royal college of Physicians and Surgeons issued a warning to the Canadian public and provincial governments about the dangers of neck manipulation. The signers include private neurologists as well as chiefs of neurology departments of major teaching hospitals.

The neurologists state that stroke and death due to neck manipulation has been reported in the scientific literature for over 50 years and that neck manipulation is one of the leading causes of stroke in the under 45 age group.

They expressed the following concerns:

- There is a need for greater awareness among physicians of the neurological complications that result from HVLA thrust of the high neck – especially in the under 45 free of risk factors.
- There is an urgent need for the public to be fully and properly informed of the dangers of HVLA thrust and of the minor and major symptoms of dissection/stroke.

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[14] M Kapral, S Bondy, Cervical Manipulation and Risk of Stroke CMAJ 2001; 165(7):907-8

[11] *Aetna clinical Policy bulletin: Chiropractic Services, Number 0107*
http://www/aetna.com/cpb/medical/data/100 199/0107.html

[12] Kaiser Permanente Mid-Atlantic States and Mid-Atlantic Permanente Medical Group, Chiropractic Manipulation Medical Coverage Policy (Referral)

- As there can be a significant time delay between the HVLA thrust and symptoms of dissection, the vertebral arteries should be examined during a routine autopsy and suspicious cases referred to a coroner. This will provide a more accurate statistic of adverse events secondary to cervical manipulation.
- They recommend a ban of all pediatric spinal manipulation; and
- They recommend a full inquiry by government health authorities into the dubious claims made as to the benefits of HVLA thrust of the high neck.

6.10 The College of Physicians and Surgeons of Manitoba (CPSM) issued an alert, urging doctors to warn patients about the risks involved in neck manipulation. The College had become alarmed after it found that 6 cases of brain stem injury had occurred in the province in the past three years and in all cases, the patients suffered permanent paralysis. (The Medical Post 1/26). (Attachment 17)

In 1998 the MCA launched legal action against the CPSM claiming that the College historically has acted in a malicious and defamatory manner towards the MCA. The MCA claimed that the CPSM implied that the MCA was unable to regulate its profession and maintain safety standards. File CI 98-06306 pg. 4, para 11. (Attachment 18)

In the CPSM's statement of Defense, the CPSM state that they are reluctant to enter into a professional accord with the MCA due to the persistence of the unscientific, groundless theory of subluxation which the MCA would not formally renounce.

In April 2003, the MCA discontinued their legal action against the CPSM.

In May 2003, the first meeting of a newly formed MCA and CPSM inter-professional relations Committee took place. In an MCA press release, MCA stated that the committee was created with the goal of improving relations between the MCA and the CPSM; would meet a minimum of once a year and would provide a forum for discussion of issues of mutual concern. (Attachment 19)

On behalf of the MCSS, I wrote numerous letters to the CPSM asking the College to bring the topic of neck manipulation, arterial damage and stroke to this inter-professional relations committee for discussion.

I was told by the CPSM that "The College has no authority to intervene in the operations of another legislated and regulated health care profession and that any further correspondence should be directed to the MCA and/or Manitoba Health. (Attachment 20)

THE CPSM HAD EFFECTIVELY BEEN SILENCED !

6.11 American Heart Association / American Stroke Association (AHA / ASA) (Attachment 21)

In August of 2014, the AMH/ASA issued a statement of concern for all health care professionals. The purpose of the Scientific Statement was to review the current state of evidence on the diagnosis and management of cervical artery dissections (CDs) and their statistical association with cervical manipulation therapy (CMT). Stating that in some forms of CMT, a high or low amplitude thrust is applied to the cervical spine by a healthcare professional.

The AHA/ASA's conclusions read as follows:

"CD is an important cause of ischemic stroke in young and middle aged patients. CD is most prevalent in the upper cervical spine and can involve the internal carotid artery or vertebral artery. Although current biomechanical evidence is insufficient to establish the claim that CMT causes CD, clinical reports suggest that mechanical forces play a role in a considerable number of CDs and VAD stroke in young patients and that most population controlled studies have found an association between CMT and VAD stroke in young patients.

6.12 AETNA – clinical policy bulletin: chiropractic services [11]

The policy bulletin states:

"Manipulation is considered experimental and investigational when it is rendered for non-neuromusculoskeletal conditions because the effectiveness of chiropractic manipulation has not been proven by adequate scientific studies, published in peer-reviewed scientific journals."[11]

AETNA goes on to refer to the Whitcomb & the Blair techniques. The Whitcomb technique can allegedly cure patients with fibromyalgia. It entails a quick neck manipulation, 3 times a day, 5 days a week for at least 2 months. Aetna states:

"The number of neck manipulations ranged from 60 to 143. However there is a lack of evidence regarding the clinical value of this method."

The Blair technique focuses attention of the atlas and the axis, the first two vertebrae as they are the most freely moveable vertebrae and the ones most commonly mis-aligned. AETNA states:

"The object of this Blair technique is not to diagnose or treat disease or conditions, but to analyze and correct vertebral subluxations such that the body can repair and maintain health from within. However, there is a lack of evidence regarding the clinical value of this technique."

6.13 Kaiser Permanente Mid-Atlantic States and Mid-Atlantic Permanente Medical Group [12] has revised their Chiropractic Manipulation Medical Coverage Policy to exclude cervical manipulative therapy. Their revised policy states:

"Chiropractic manipulation of the cervical spine is associated with vertebral artery dissection and stroke. The incidence is estimated at 1.3-5 events per 100,000 manipulations. Given the paucity of data related to beneficial effects of

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[11] Aetna Clinical Policy Bulletin: Chiropractic Services Number 0107 http://www.aetna.com/cpb/medical/data/100_199/0107.html

[12] Kaiser Permanente Mid-Atlantic States and Mid-Atlantic Permanente Medical Group, Chiropractic Manipulation Medical Coverage Policy (Referral)

chiropractic manipulation of the cervical spine and the real potential for catastrophic adverse events, it was decided to exclude chiropractic manipulation of the cervical spine from coverage."

6.14 The National Council against Health Fraud (NCAHF) [13]

The NCAHF was a private non-profit voluntary health agency that focused on health misinformation and fraud. Their goal was to enhancing freedom of choice through reliable health information. The NCAHF stated concerns about the justification for HVLA thrust of the neck for whatever reason and were doubtful that the procedure could survive an objective benefit-risk assessment. A quote from the NCAHF News, Jan/Feb 1991, Volume 14, Issue #1 is as follows:

"We are unaware of any condition that can be helped by neck manipulation that merits the serious consequences of paralysis or stroke even if the probability of injury is slight. Neither are we reassured that the risk is only slight."

6.15 The RAND Corporation, the RAND panel for appropriateness of manipulation and mobilization of the cervical spine [18]

The RAND Corporation's web page reads: "The RAND is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous."

An expert multidisciplinary panel of clinicians conducted a review of the appropriateness of manipulation or mobilization intervention of the cervical spine for over 1400 clinical scenarios or indications. 43 % of the indications were rated inappropriate for the intervention with 41% ranking as uncertain and only 16 % considered appropriate. The level of panel disagreement was higher with manipulation than mobilization.

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[13] NCAHF Newsletter Jan/Feb 1991 Volume 14, Issue #1

[18] *RAND Corporation, The use of expert panel results: the RAND panel for appropriateness of manipulation and mobilization of the cervical spine*

6.16 The Cochrane Review – Manipulation and Mobilization for Neck Disorders[19]

The Cochrane web page states that Cochrane is a not-for-profit, global independent network of researchers, professionals, patients and people interested in health from 120 countries working together to produce credible, accessible health information that is free from commercial sponsorship and other conflicts of interest.

A 2015 update assessed the effect of manipulation or mobilization compared with another treatment on adults experiencing neck pain. The Cochrane review states:

"No high quality evidence was found, so uncertainty about the effectiveness of mobilisation or manipulation for neck pain remains. Future research is likely to have an important impact on the effect estimate. Authors of this review encountered many challenges, for example, the number of participants in most trials was small, 80% of the included studies were of low or very low quality and evidence on the optimum dosage requirement was limited."

Cochrane goes go on to conclude:

"Findings suggest that manipulation and mobilization present similar results for every outcome at immediate/short/intermediate-term follow-up."

6.17 The Bone and Joint Decade Task Force on Neck Pain and its Associated Disorders [20]

This 2000-2010 task force composed of international researchers and scientists-clinicians reviewed the published research on neck pain and its associated disorders and concluded that there is an association between chiropractic services and vertebrobasilar artery stroke in persons under 45 years and that there is no practical way to screen neck pain and headache patients for vertebrobasilar stroke.

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[19] Cochrane Manipulation and Mobilisation for Neck Disorders

[20] *The Bone and Joint Decade Task Force on Neck Pain and its Associated Disorders – Summary of Key Findings, Jan 2008*

6.18 The College of Physiotherapists of Manitoba

In an 2007 email from the registrar/executive director of the College of Physiotherapists of Manitoba, I was informed that there are not many physiotherapists who practice cervical manipulation (by their own choice) because of the inherent risks in using this technique in the high cervical area. (Attachment 22)

6.19 Coroner's Reports

In Canada, there have been three high profile coroner's reports into the recent deaths of three young women – [redacted] The conclusions of all three coroner's reports were the same.....death was not natural and death was not undetermined – death was an accident – meaning the coroner's inquest found that all three deaths were a result of chiropractic neck manipulation.

7.0 THE DIAGNOSIS

A regulated health profession seeking authority to perform an HVLA thrust of the high neck must ask themselves:

"What diagnosis or condition of the patient warrants the treatment being an HVLA thrust of the high neck?"

The diagnosis must not be a chiropractic vertebral subluxation, the cause of ill health and body malfunction, and the treatment and HVLA thrust of the high neck.

The diagnosis must not be severe, sudden occipital head and neck pain and/or migraine, the classic symptoms of an arterial dissection, and the treatment an HVLA thrust of the high neck.

The diagnosis must not be simply wellness care, and the treatment and HVLA thrust of the high neck?

What diagnosis is so egregious that the treatment warrants an HVLA thrust to the high neck, risking catastrophic, life altering, lifelong consequences including stroke and death?

Arterial damage, stroke and death as a result of an HVLA thrust to the high neck need not occur!

8.0 CONDITIONS, RESTRICTIONS & LIMITATIONS

As even **one HVLA thrust** of the high neck within its anatomical range of motion presents a material risk, authority to perform an HVLA thrust to the high neck, must come with legislated conditions, restrictions and limitations.

Our suggested conditions, restrictions and limitations are as follows:

1. Infants and children: HVLA thrust of the high neck should never be performed on infants and children for claims to treat such conditions as ear infections, tonsillitis, infantile colic, asthma and gastro-intestinal disorders nor as an alternatives to scientific immunization.

2. Philosophical claims: HVLA thrust of the high neck should never be done for the claim that it is effective to awaken the "innate intelligence of the spinal cord" and thereby provide "wellness or health" of the entire body

3. Repetitive HVLA thrust of the high neck: HVLA thrust of the high neck should not be done on a repetitive basis with claims that this is necessary to "maintain" the neck vertebrae in proper alignment.

4. Infections: HVLA thrust of the high neck should not be done for any claims that it alters in any manner the immune system, to prevent or to treat infections such as Acquired Immune Deficiency syndrome and other bacterial, viral or fungal infections.

5. Body Organs: HVLA thrust of the high neck should not be done for claims that it can have a health benefit upon a body organ such as the heart, lungs, kidneys and liver or as a means of preventing the onset of genetic disorders or cancer.

6. Vertebral Subluxations: HVLA thrust should never be done for the claim that it can remove so called "vertebral subluxations" in the high neck area. It is false to claim that the top vertebrae are out of alignment and that with an HVLA thrust of the high neck one can release the bodies "innate intelligence" and improve the function of the brain stem as well as treat a host of non-musculoskeletal conditions, ex. High blood pressure, Multiple Sclerosis, Parkinson's. There is no neurological or scientific basis for such claims.

9.0 LEGISLATIVE RECOMMENDATIONS

The following are legislative recommendations that, if enacted, would go a long way to prevent the needless, catastrophic adverse events associated with an HVLA thrust to the high neck.

1. Diagnosis by Chiropractic Clinical Examination

Nothing in the Act shall permit a chiropractor to diagnose or advise a patient of a clinical diagnosis by means of a manual examination of the highest neck area of the spinal column for:

(a) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such as the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(b) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(c) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(d) Cancers of the body.

2. Diagnosis by Machine Devices

Nothing in the Act shall permit a chiropractor to diagnose or advise a patient of such a diagnosis listed I items (a), (b), (c) and (d) above, by means of thermographs, heat reading machines, postural analysis and so called "insight subluxation" devices performed on the spinal column.

3. Treatment, Prevention, Influence the Course of a Disease

Nothing in the Act shall permit a chiropractor to advise any patient that HVLA spinal thrust of the high neck / cervical area, from the base of the skull until the bottom of the second vertebrae called the axis, can be used to prevent, treat or in any way influence the following:

(a) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such as the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(b) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(c) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(d) Cancers of the body.

4. The Chiropractic Vertebral Subluxation

Nothing in the Act shall permit chiropractor to claim that "vertebral subluxations" defined in chiropractic literature as vertebral bones that are partly dislocated, can cause:

(a) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such as the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(b) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(c) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(d) Cancers of the body.

5. Adjustment of Vertebral Subluxations

Nothing in the Act shall allow a chiropractor to state to a patient that the removal of the chiropractic vertebral subluxation in the high neck/cervical spine can be used to treat, prevent or influence the course of:

(a) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such as the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(b) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(c) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(d) Cancers of the body.

10.0 CONCLUSION

HVLA thrust of the high neck presents a material risk. One HVLA thrust of the high neck can cause catastrophic, life long, life altering consequences.

An HVLA thrust of the high neck is one of the chiropractic profession's primary treatment techniques and is practiced in support of the pseudo-scientific belief/philosophy that an HVLA thrust of the high neck will remove the illusive chiropractic vertebral subluxation, the cause of all ill health and body malfunction.

This chiropractic subluxation construct is a theoretical concept with no supportive scientific, medical or anatomical evidence that it can be associated with pathology and the disease process. (Attachment 4)

The Manitoba Chiropractors Association is a subluxation based entity. They simply refuse to accept the evidence based conclusions of scientific and medical research that acknowledge - an HVLA thrust of the high neck can and does cause arterial damage and stroke, with the under 45 years of age at a significant risk!

Safeguards against HVLA thrust of the high neck will not come from the chiropractic profession. Safeguards must come from government. Authority to perform an HVLA thrust should be **denied** or, at the very least, subject to legislated conditions, restrictions and limitations.

Remember, risk has a qualitative as well as a quantitative aspect!

The MCSS includes a number of members who have suffered arterial dissection and/or stroke after a chiropractic HVLA thrust to the high neck. All were under the age of 45 years at the time of their dissection/stroke; all were healthy, in the prime of their lives; and all had productive careers and a bright future. All can no longer work at the careers of their choice and training.

The following "My stories " written by chiropractic stroke survivors and members of the MCSS are an apt conclusion for this submission. Heartbreaking!

Arterial damage & stroke as a result of a HVLA thrust to the high neck can be prevented!

Tim Chevrier - "My Story"

My name is Tim Chevrier. I've been asked to come here today to tell my story. To begin with, I'm currently 45 years old. I graduated from the University of Manitoba in 1990 with a Bachelors degree in Electrical Engineering. In 2005 I completed a Masters Degree in Business Admin. I've worked in senior positions at some of Winnipeg's largest companies (Motor Coach Industries, Vansco Electronics). All my life I've been actively involved in all sorts of sports and sporting activities (Ice hockey, floor hockey, golf, dragon boating, sponge hockey, flag football, slow pitch, hiking, swimming, biking, roller blading etc).

In or around 1997 I began to visit a chiropractor for relief of stress and tension. This was a friend of mine and he claimed that he could help. He claimed that I was experiencing something called a subluxation which was inhibiting my body from healing itself, and that he could address this issue naturally without the need for medication. Seemed like a good idea to me since I've always been cautious when taking any type of medication. Within months I began to experience severe headaches accompanied by intense dizziness. I want to preface this by saying that I had never in my life experienced a migraine before. Headaches, yes. But never anything even close to these headaches. They felt like someone was beating the back of my head with a sledge hammer. CT scans showed nothing unusual and doctors just diagnosed it as migraines, even though dizziness was not a classic symptom. Never-the-less I accepted their diagnosis and went about my daily life. My chiropractor claimed the migraines were simply a result of my body's release of stress and the free-flow of energy previously blocked. I kept going to see him on a semi-regular basis, and the treatments on my neck continued. In hindsight I should have realized that something wasn't quite right, because I always walked out of his office feeling quite sore. From cracking my neck to placing his knee in my back and jumping on me with all of his 250 lbs, it was not a pleasant experience. I remember at one point asking him why it hurt so much and he told me that it was because the muscles were so tight that they were basically fighting against his adjustments. I asked him if a massage before hand to loosen the muscles would make more sense. He discouraged this. On a side note, I was on a business trip in the US. After spending 12 hours on a bus, I was very stiff so I visited a chiropractor there. I was very taken aback by their treatment. First of all I spent the first 15 minutes with a heating pad on my back, then 15 minutes on a massage table before he would even touch me. The treatment was very gentle and slow. No neck cracking at all. And before I left, another 15 minutes on the massage table. My sessions here in Winnipeg lasted all of 5-10 minutes max.

On June 6, 2006 while driving home down Pembina Hwy at rush hour, I experienced another, what I thought to be, migraine. I remember I was just crossing over the Pembina/Bishop Grandin overpass and everything started to spin. The first thing that crossed my mind was to get the car stopped and off the road because I knew within seconds I would not be able to keep my head up. Somehow I got the car stopped in a parking lot somewhere, opened the door and sort of tumbled out onto the pavement. Thankfully I wasn't laying there long before someone came by and called an ambulance for me. While in the Victoria Hospital emergency room, they ran another CT scan. This time they noticed something odd at the bottom of the image and decided to send me to Health Sciences for an MRI. The results of the scan were not what anyone expected. A blood clot in my Basilar artery had completely blocked the flow of blood to the back portion of my brain. Now I don't know the exact medical details of how they were able to diagnose the problem, but they basically told me that I had a dissection of the artery and that over time blood had begun to pool and clot around the dissection. They said it appeared to be a slow forming clot that was several years old. Curious as to how they could know that, I asked them and they told me that they could see calcium built up around the clot and that this gave them a reference point as to when they figured the dissection occurred. The next question, naturally, dealt with how to

treat the clot, and this is where it got a little confusing. The doctors suggested that the best course of treatment was to leave the clot alone. Let it completely calcify over. The risks were far higher if they tried to remove it. I think the doctors words were something like, "if you managed to survive to this point with it blocked then it's best we just leave it alone. It can't get more blocked." Considering the Basilar artery is one of the 3 major blood vessels to the brain I didn't understand how I could survive without it. The doctors basically explained to me that because the clot was slow forming over several years, somehow my body managed to develop alternate routes for blood flow. The so-called migraines I was experiencing previously turned out to by mini-strokes as the artery slowly closed. To this date, I still have the blood clot in the base of my brain. Hopefully it is stable and won't give me problems in the future, but nobody can really give me a definitive prognosis. I receive an MRI every 2 years just to make sure everything remains OK.

So how has this affected me today? Well for starters, there's the constant stress and worry this has, and continues to, put my family through. I live every day with this blood clot lodged in the base of my brain. Sometimes I feel like it's a ticking time-bomb, waiting for the clot to dislodge or the artery to spring a leak etc. Aside from that, I still consider myself very lucky. The lasting effects from this incident are minimal especially when you compare it to what other people have experienced. That said, this incident has left me with permanent damage to my vestibular system. Essentially this means my eyes don't track properly as I move my head. This often leaves me extremely tired especially if I've had an active day. Walking through the aisles in a supermarket is not a fun experience. The neurologists call it neuro-fatigue. This makes it virtually impossible to work a normal 9-5 job. As an Engineer and Project Manager I routinely worked 50-60 hours per week. Today that is impossible for me to do. As such I currently work 2 days per week for a construction company as a safety officer. It's pretty much the extent of what I can do. I've applied for CPP Disability but have been rejected twice because I am able to work a few hours. As for my sporting activities, I've had to give up most of them. My doctors strongly advise against any sort of contact sports or activities that might jar or twist my neck and dislodge the clot.

All that said, I have no hard feelings nor blame anyone for what happened. I take responsibility for my own actions. I made my decisions based on the information I had at the time. Unfortunately, I now know better. I now know that stroke is a real and serious risk associated with neck manipulation. I now know that many chiropractors refuse to manually crack necks. I now know that there are very few standards and practices governing chiropractic treatment. I now know that chiropractors don't have medical training despite the Doctor designation. I now know that a chiropractic manipulation shouldn't hurt. And I now know that I shouldn't rely on non-medical people for medical advice and treatment.

Whether it's wrong or right there is an expectation of our government that it will act to protect its citizens from undo harm. I understand that is a huge expectation; however I do not believe it is an unreasonable one, especially in this instance. Especially in an instance where there is a known risk to human life. Now some people might debate this fact and that's only fair; however in such situations where there is uncertainty and the consequences so serious, it should be prudent of the government to err on the side of caution until the issue can be resolved definitively.

The real tragedy is not what happened to me or the other people in the past but rather without action this **is guaranteed to** happen again to other unsuspecting people.

Bill Naherny "My STORY"

pat chevrier

From: [redacted]
Sent: August 26, 2012 10:08 PM
To: pat chevrier
Subject: Minister Oswald

Dear Minister Owald:I am Bill Naherny.I am 51 year old.I have been a victim of chiropractor's neck manipulation.I heard my self say" give me a back adjustment".Instead,the chiropractor rapidly twisted my neck left and right.Since then,2 days further I barely got out the apartment door.The landlord came and dailed for the paramedic.
I was now at the Health Sciences Centre.I couldn't speak for 3.5 months.I worked at Brock White Canada for 21 years.I was a excellent tennis player winning 80 trophies.I have to do again,both the written Driver Licence and the Road Test in Traffic.No easy feat.I have to do spelling and arithmetic again.It to be a 1 year before I could try again.I thought that I was fine.The Rehabilitation Hospital's driving instuctor said"displayed poor control of steering wheel,make poor dicisions on roadway,general poor driving habits.I failed the Driver Licence and the Road Test in Traffic test.The manager was fine.I was proud of myself.([redacted]of Health S.Centre)
The Deer Lodge Centre and Misericordia Health Centre were waiting for me in 2007.[redacted]attempted to do some work with " offer peer support".[redacted]did offer me a Driver Licence Writen Examination (multiple choices).[redacted]did a superb on me.(Rehabilitation Manager)

Yours,Bill Naherny (I did pass the Driver Licence and the Road Test in Trafic)

Laura Brownson - "My STory"

October 13, 2016

To The Health Professions Advisory Council of Manitoba

I was born and raised in the province of Manitoba.

I was a very active, healthy wife and mother of two who owned and operated a successful business for 20 years prior to the injury I received at the hands of a chiropractor.

A high velocity neck manipulation was performed on me without my permission. I was not there for my neck; I was there for my mid back. This HVLA neck manipulation resulted in multiple findings on exam that are consistent with both a posterior circulation infarct (stroke) as well as tearing of the sympathetic fibers of the right internal carotid artery with a partial Horner's Syndrome. Both are well reported complications of cervical manipulation. I also suffered bilateral vestibular hypofunction as a result of damage to my central as well as my peripheral nervous systems resulting in difficulties with my balance among other things. These findings also included extreme muscle, ligament and nerve root damage from the force of the manipulation. My neurologist said the force it took to cause dissections to two arteries in my neck was something I did not need to hear. He also said that he had seen several deaths from one dissection; the fact that how I survived two was something he could answer. The aftermath of this HVLA manipulation has caused issues with multiple areas to my eyes, ears balance and a whole host of other debilitating injuries and complications including horrible pain still to this day. My ear specialist said I was in the top five of worst injuries she has seen. She equaled it to a fall on my head from a height or being in a very bad crash.

March 22, 2010 was the day my life changing horrific journey began. As well as almost losing my life, I lost my 20 year business due the injuries I received and could not be a mom for over three years. This completely unnecessary neck manipulation had also caused my family horrible heartache not to mention the trauma that my two children were forced to watch daily. Their mom was no longer the mom they remembered. I could no longer drive them places; do homework with them or simple chores such as laundry or cooking dinner. I can remember having to wear a toque on my head even in the summer months because of the extreme nerve damage to my ears and that pain that would result even from a slight breeze. You can still to this day feel the scar tissue in my neck that was caused from all the tearing. I was finished, all because the chiropractor took it upon himself and his nonscientific belief and violently manipulated my neck.

These HVLA neck manipulations can be equaled to the force of a hanging.

There are many victims in Manitoba from HVLA neck manipulations; all of them unnecessary. I have met with some and spoken with others. Unlike me most cannot speak well because of the brain damage or because of the emotional and psychological effect this has on a person. There are also at least two

people in Manitoba hospitals requiring constant care due to HVLA manipulations. Are they just forgotten?

Redacted to protect privacy was a healthy 21 year old woman who was going to the chiropractor for a tailbone fall. Her highest neck was manipulated. Why? [redacted] died tragically all because a chiropractor twisted her highest neck because that was his belief system. The Coroner Inquest determined that the damage to the inner lining of her vertebral artery (called an intimal dissection) caused her death; a direct result of the neck manipulation. Where was the scientific standard to protect [redacted]?

I would like to ask the Council why the Manitoba government continues to promote the use of chiropractic care in their advertising on TV or in print, but neglects to issue specific warnings as to the dangers of being subject to a HVLA. The Manitoba government has a 100% responsibility and a duty to protect the citizens of this province to known dangers. Why has no regulations regarding HVLA neck manipulations been acted upon? The province of Manitoba continues to be the only province in Canada which pays a portion of the visits to Manitoba chiropractors; again misleading the citizens of Manitoba to believe that this is safe. This adds up to millions of dollars each year, thus taking away monies from scientifically proven medicine. I also want to comment of the after care of this nonscientific procedure. I know from my own specific experience that the cost to the healthcare system after is in the thousands of dollars if not into the hundreds of thousands and will last many years if not for the rest of the individual's life.

I fully understand that every procedure from chemotherapy to heart operations have their benefits and risks. The use however of high velocity neck manipulation in the highest neck are starting right with newborn babies and for every disease such as autism, cancer, bedwetting and ear infections is not a treatment based on a scientific diagnosis. It is a philosophy based on the belief of one individual going back to 1930. The Manitoba Chiropractic Association having enshrined into law their non-scientific belief in so called vertebral subluxations now wants to enshrine in law the high velocity manipulation they believe in to justify the "release of the innate intelligence of the spinal cord." So the facts remains that whether it is a child with cancer or an adult like myself with mid back pain at some point or another a HVLA neck manipulation will be done that is totally nonscientific and never needed in the first place. That is what happened to me. I never had neck pain; I had mid back pain. That is why a Scientific Standard is needed and why the Manitoba Chiropractic Association will fight this attack on their belief system no matter what the good of the public is. With any other treatment every other scientific regulatory body would have abandoned it long ago.

With regards to our Submission, you will see the pediatric portion is very alarming. How can the Minister or anybody justify a high velocity neck manipulation being done to a baby or child? How can the Minister or anyone justify to parents who are being lied to that their child suffers from a serious neurological disease; vertebral subluxations?

HVLA neck manipulations cause over 22 different types of strokes. One type is the Locked in Syndrome. This type is where all you can move is your eyeballs, but can feel everything. The reason I mention this is

because one of my neurologists told me how lucky I was to be sitting in the chair I was sitting in. Her last patient that had an HVLA manipulation from a chiropractor was a Locked In Syndrome victim. Another type of stroke from HVLA neck manipulation could be ringing in the ears; that is why in a lot of cases people do not realize they have even suffered a stroke.

Aware of this information that I have brought forth to the Council it would be extremely disturbing to me if the Council did not advise the Minister of Health of the proven scientific dangers HVLA manipulations can and do cause.

The Health Professions Advisory Council has the power to be part of a change that has been a long time coming. I feel that without a doubt this change needs to be acted upon as soon as possible to prevent another person from suffering lifelong brain damage and a life where you never feel normal again or worse death.

I have given the Council a very small look into my story and just touched on what my life is like now. I have also let you know that there are many other Manitoba victims out there, some completely incapacitated. Redacted to protect privacy life was taken from her in the worst way imaginable; she was violently killed. I can assure the Council that it was violent, it was vicious and it was 100% unnecessary. All of these stories could have had a different ending and it would not have been necessary for me to write this letter if there would have been a Scientific Standard in place with restrictions regarding the use of highest neck manipulations.

Regards

Laura Brownson

11.0 ATTACHMENTS

1. Pamphlets, Why Should I Go To a Chiropractor & The Vertebral Subluxation Complex
2. Web page print-outs – Who Gets Disease First, & But That's Not Where it Hurts
3. The Report of the Manitoba Chiropractic Health Care Commission, pages 12, 13, & 17-21
4. General Chiropractic Council (GCC) – Guidance on claims made for the chiropractic vertebral subluxation complex
5. An Epidemiological Examination of the Subluxation Construct using Hill's Criteria of Causation by TA Mirtz, L. Morgan, LH Wyatt, and L Greene
6. Chiropractic Clinical Practice Guideline: evidence-based treatment of adult neck pain not due to whiplash , pages 158, 172 and 188
7. Chiropractic Clinical Practice Guideline: adult neck pain not due to whiplash – Summary of Recommendations , pages 2 & 3
8. Patient Safety Handout , Chiropractic: Safe and Effective Health Care, Answering your questions about neck adjustment & Critique
9. DM Rothwell, SJ Bondy & JI Williams, Chiropractic Manipulation and Stroke, a population-based case-control study
10. Patient Safety Handout – Chiropractic Treatment and Patient safety & Critique
11. The 2015 Annual Report of the Manitoba Chiropractors Association – Complaint #14-10
12. Email from Executive Director on behalf of MCA Registrar to P. Chevrier
13. Canadian Chiropractic Protective Association – Informed Consent to Chiropractic Treatment
14. J Cassidy DC PhD, E Boyle PhD & P Cote DC, PhD, Risk of Vertebrobasilar Stroke and Chiropractic Care: Results of a Population-Based Case-Control & Case-Crossover Study
15. SPONTADS May 2001– the Canadian Stroke Consortium
16. Canadian Neurologists Warn against Neck Manipulation - Statement of Concern to the Canadian Public
17. Paralysis following chiropractic manipulation – Alert by the Manitoba College of Physicians and Surgeons.
18. Court of Queen's Bench File No. CI 98-01-06306
19. The MCA/CPSM Interprofessional Relations Committee – Redacted to protect privacy
20. Response from CPSM re: Inter-Professional Relations Committee
21. AHA/ASA Scientific Statement on Cervical Manipulative Therapy and Cervical Artery Dissections
22. College of Physiotherapists of Manitoba - email

Attachment 1

Attachment 1 – Redacted – Subject to Copyright

Attachment 2

Attachment 2 – Redacted – Subject to Copyright

Attachment 3

DRAFT

The Report of the Manitoba Chiropractic Health Care Commission

Dr. Robert Chernomas
Dr. Leslie Carrothers
Dr. John Loxley

2004

Chapter 1

History of Chiropractic

The evolution of the chiropractic profession

Medical historian J. Stuart Moore begins his history of chiropractic in the United States by noting that "it would be logical to assume that chiropractic originated as a back specialty in much the same way that dentist emerged as experts for teeth. Logical but wrong (Moore 1992, xii)." Chiropractic was developed in 1895 by Daniel David Palmer of Davenport, Iowa as a fusion of two healing traditions that had operated on the fringes of nineteenth-century medicine. The first of these was the spiritualist approach to healing that was often associated with the Austrian physician Anton Mesmer, who developed a theory of animal magnetism and human health. These theories held that illness arose from blockages in the flow of an invisible but vital fluid. These blockages in turn could be removed by massaging what Mesmer identified as the body's poles. Palmer trained as a magnetic healer and, prior to developing his theory of chiropractic, operated a Magnetic Cure and Infirmary in Davenport.

The other trend that was incorporated in chiropractic was bonesetting—the manual manipulation of joints. Such an approach dates back at least to the fifth-century BC writings of Hippocrates, which include a work entitled *On the Articulations*. Manual manipulation of the joints, particularly the spine remained a part of orthodox medical practice until the eighteenth century. From that point on it existed largely as a form of folk medicine. In the nineteenth century it was taken up by Andrew Still, who left his practice as a physician to establish the discipline of osteopathy. Reacting to the invasive nature of medicine of the day, which included bleedings, purgings, and the use of drugs, Still claimed to have developed a drugless form of treatment predicated on the concept that ill health arose from obstructions in the flow of blood and other bodily fluids. In 1892 Still established a School of Osteopathy in Kirksville, Missouri, a day's journey from Palmer's home in Davenport. Three years later Palmer announced his discovery of a new, drugless form of healing. According to Moore:

> In chiropractic, the soul cure of magnetic healing meshed with the hand cure of manipulation. Magnetic healing provided the vitalist, spiritualist path to chiropractic; the bonesetting tradition provided the practical, mechanical route. (Moore 1992, 19)

Palmer did not develop chiropractic as a therapy for illnesses of the joints or back—indeed, he claimed that the first chiropractic adjustment cured a man of his deafness of 17 years. It was his belief that subluxations (a concept that will be further examined in Chapter 2) of the joints and in particular the vertebrae were the cause of disease and ill health. These subluxations, Palmer believed,

interfered with the nervous system, there by inhibiting what Palmer termed the Innate Intelligence's ability regulate and heal the body. Chiropractic adjusted the subluxations, thereby allowing for proper nerve transmission, which in turn allowed the Innate Intelligence to restore or maintain health. Moore comments, "D.D. Palmer believed that all humans would be healthy but for the unnatural subluxations of the spine" (Moore 1992, 21).

Palmer established the first school of chiropractic in 1897, which provided its graduates with a license to both practise and teach chiropractic. As the profession developed, it became embroiled in a series of bitter conflicts, including one between Palmer and his son, B.J. Palmer who wrested control of the school from his father in 1906. Following his father's death in 1913, B.J. Palmer became the leading chiropractic figure in North America and the person responsible for defining chiropractic orthodoxy. He divided the chiropractic world into one of straights (orthodox practitioners who viewed vertebrae subluxation as the cause of most illness and treated it by spinal adjustment) and the mixers (who in Palmer's view had abandoned chiropractic's philosophical underpinnings and included other forms of physical therapy in their treatments). Moore suggests that Palmer's categories, which focus largely on the techniques different chiropractors used, ignore the underlying nature of the division. Instead, he argues it is more appropriate to distinguish between those who he terms harmonists and those who followed a mechanical path.

> Harmonial chiropractors in the style of D.D. Palmer viewed themselves as champions of Life, high scientists endowed with the gnosis of health who understood the movement of Spirit within Matter. Many chiropractors, however, while applauding the merits of natural, drugless techniques, became unsettled by the cultist atmosphere and sought scientific respectability by culling from chiropractic a more rational approach, appropriating the values of the mechanical tradition that informed the orthodox medical marketplace of the early twentieth century. (Moore 1992, 49-50)

The contemporary significance of these distinctions is examined further in Chapter 2 of this report. For much of the twentieth century, chiropractic found itself in conflict with the orthodox medical establishment. In 1905 D.D. Palmer was convicted of practising medicine without a licence. His prosecution was the first of many such actions against chiropractors in the United States. These actions were often commenced as the result of a complaint being laid by a member of the local medical community. Chiropractors claimed that they were not practising medicine, arguing that they did not diagnose or treat disease—instead, they analyzed and adjusted subluxations (Moore 1992, 89). The battleground often shifted from the courts to the legislatures as chiropractors lobbied for the adoption of chiropractic licensing acts. This conflict can be framed in several ways: leaders of the medical profession claimed that they were protecting the public from a practice that had no scientific grounding. Others have seen it as a playing out of a conflict between vitalistic and mechanistic views of medicine. The chiropractors charged that the medical profession was simply protecting its economic turf. A turning point in the conflict came in 1987 when an American court convicted the American Medical Association of violating anti-trust legislation on the basis of a multi-year campaign to "contain or eliminate the

Chapter 2

Chiropractic Theory, Practice, Education, and Regulation

[REDACTED]

[REDACTED]

Chiropractic meta-theory

When he developed chiropractic, D.D. Palmer merged two healing traditions—bone-setting and the spiritualist approach associated with Mesmer's theories of animal magnetism. While a new profession in 1895, it was the inheritor of a long philosophical tradition. In a recent monograph on chiropractic philosophy and practices Coulter argues that the meta-theory for chiropractic has historically drawn on five theoretical concepts (Coulter 1999, 37-43).

Vitalism: assumes that humans possess an "innate intelligence" that draws from a broader universal source. The implications for chiropractic theory and method are that the human body possesses an inherent capacity to heal itself.

Holism: means mental, social, spiritual, and physical aspects of the individual are important to health and that these "parts" are dynamically interrelated. Chiropractic theory and method proposes that "the purpose of care is to restore the whole person, not to

treat isolated symptoms or diseases" (Coulter 1999, 40).

Naturalism: assumes that the human body should not be tampered with unnecessarily through the use of invasive procedures or medications that are not products of nature. The implications for chiropractic theory and method are that practitioners should attempt to facilitate natural healing using natural remedies including the use of the hands for therapeutic purposes.

Therapeutic Conservatism: the assumption that a practitioner should "do no harm" in the process of providing therapy and must have the active participation of the patient in all aspects of therapy. The implications for chiropractic theory and method are that patients must be encouraged to do as much as possible to facilitate their return to optimal health.

Humanism: assumes that persons possess immutable rights, including the right to dignity, and are therefore worthy of protection from dehumanizing procedures. The implications for chiropractic theory and method are that the practitioner must recognize the personal and social aspects of illness and respect and care for the person in a co-operative fashion that reinforces the person's dignity rather than diminishing it.

While each of these concepts help define the chiropractic role, vitalism has been the most distinctive and controversial.

Chiropractic theory and the subluxation

Vitalism is intimately related to the chiropractic concept of the subluxation, which was a cornerstone of Palmer's theories. Subluxation is a term that exists both in medicine and chiropractic. In medicine it refers to "the partial dislocation of two joint surfaces" that presents as decreased movement of the affected joint (College of Physicians and Surgeons of Manitoba 1999). In traditional chiropractic theory subluxations are spinal misalignments that impinge on nerves, disrupting the Innate Intelligence (the words are generally capitalized in Palmer's writings) and its ability to perform its vitalistic task of regulating the body's health. While B.J. Palmer modified this position, the essential chiropractic position was that subluxations affected the nervous system, which in turned created ill health. Chiropractic adjustments allowed the Innate Intelligence to restore the body to health.

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Subluxation theory remains central to contemporary Canadian chiropractic. In a document presented to this Commission, the MCA stated that "The major object of most chiropractic adjustive treatment is alleviation of vertebral subluxation" (Manitoba Chiropractors Association 2003d).

On its web page the MCA provides the following definition, developed in 1996 by the Association of Chiropractic Colleges: "A subluxation is a complex of functional and/or structural and/or pathological articular [joint-related] changes that compromise neural

integrity and may influence organ system function and general health" (Manitoba Chiropractors' Association 2004a).

The MCA states that "Chiropractors seek to locate and correct spinal misalignments (also called subluxations). These misalignments can affect the body's ability to heal itself and function optimally." The Association goes on to say "Simply put subluxations are spinal misalignments that cause interference with the transmission of nervous signals. This interference leads to malfunction of the various cells, tissues and organs that the nerves supply, which may cause symptoms to appear." The MCA also states that "Your Chiropractor is the only doctor with specialized training to detect and correct subluxations" (Manitoba Chiropractors' Association 2004a).

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Ongoing debate within the profession

This questioning of traditional chiropractic theory reflects what Coulter identifies as the emergence of critical rationalism in chiropractic discourse. This discourse, largely based on the post-World War II work of philosopher Karl Popper, argues that all knowledge is provisional and must be open to constant testing to determine whether theoretical assumptions and resultant hypotheses are falsifiable. Coulter notes that in addition to forcing questions about D.D. Palmer's original vitalist philosophy, Popper's arguments have provided some chiropractors with a legitimate foundation for the advocacy of the application of mainstream scientific research methods to study the relationship between chiropractic theory and clinical outcomes (Coulter 1999, 42-43). At the level of the profession's meta-theory this questioning is ongoing. Evidence can be found in the conference proceedings of the 2003 biennial congress of the World Federation of Chiropractic (WFC), which featured a paper by David Peters on the scientific basis of vitalism as well as a philosophy forum featuring four commentators on the role of vitalism

in chiropractic philosophy (Peters 2003; also see World Federation of Chiropractic 2003 for a transcript of the Philosophy Forum). At the risk of overgeneralizing the views expressed at this Congress, it is evident that chiropractors view vitalism as having continued importance in chiropractic philosophy.

Coulter argues that the recent emergence of debates about new definitions of vitalism in the context of critical rationalism has brought chiropractic closer to a middle ground in its dispute with mechanistic medical perspectives. He further suggests that mainstream medical research has been moving away from a rigidly mechanistic focus on illness as research findings related to the determinants of health have increasingly suggested the need for a more holistic perspective on population health and health care. (An example of this research can be found in Wilkinson 1996).

These debates have also led the profession to support mainstream research methods in understanding clinical outcomes and the development of evidence-based practices. The following chapter in this report offers a review of recent clinical research that has, in part, been funded by chiropractic professionals.

The impact of critical rationalism should not, however, be overestimated. There has been division in the chiropractic world from the outset, when B.J. Palmer characterized those who embraced a broader range of therapeutic techniques and a wider scope of practice as mixers as opposed to straights. As noted in the last chapter, the underlying division has less to do with technique (as the division into straights and mixers implies) than with one's attitudes towards vitalistic philosophy and subluxation theory and their implications.

In Canada, a group of academic researchers have attempted to capture the attitudes that Canadian chiropractors hold towards these issues. This research group has published two articles based on data contained in a 1994 survey of the opinions of 401 Canadian chiropractors (Biggs, Mierau, and Hay 1997; Biggs, Mierau, and Hay 2002). In their first article, published in 1997, these researchers established a continuum of chiropractic philosophy with "liberal" and "conservative" views at the poles of the continuum. Liberal chiropractors were characterized as those who accepted traditional subluxation theory and viewed chiropractic as an alternative form of medical practice. Conservatives were characterized as supporting scientific validation of treatment methods and, as a result, were more likely to support a scope of practice based on proven methods. The study concluded that 18.6 per cent of the chiropractors surveyed were strongly conservative, 22 per cent strongly liberal, and 59.4 per cent held moderate views. In a second article, published in 2002, these researchers modified their categorization methodology and referred to liberals as "empiricists," on the principle that their assumptions were drawn from clinical practice, while the conservatives were categorized as "rationalists," given that their assumptions were drawn from an experimental science model. Furthermore, they adjusted their previous findings concluding that empiricist accounted for 28.4 per cent of respondents, rationalists for 14.9 per cent, and moderates for 56.8 per cent with the majority trending toward the empiricist end of their continuum. While the researchers concluded there was a large moderate component, it should be noted that in the second study:

- 74.1 per cent disagreed with the proposition that chiropractic should be limited to musculoskeletal problems
- 74.3 per cent disagreed with the proposition

that controlled clinical trials are the best way to validate chiropractic methods

- 51.3 per cent agreed with the proposition that personal experience is the best way to validate chiropractic methods
- 68 per cent agreed with the proposition that most diseases are caused by spinal alignment (although 73 per cent also agreed that many diseases are caused by bacteria or viruses.) (Biggs et al. 1997)

In short, the debate about chiropractic philosophy and theory remains unresolved and, as Carter notes, this lack of resolution may be the profession's Achilles heel (Carter 2000, 10). However, it may well be the case that chiropractic provides efficacious treatment despite the weakness of chiropractic theory. This, in effect, is what Carter argues when he writes that for chiropractic patients, "It is what we do rather than what we believe we do that is important" (Carter 2000, 16). What is it then that chiropractors do?

Chiropractic method

A central feature of chiropractic method is the use of manual therapy. However, manual therapy can take a number of forms. The MCA offered the following definitions to assist in understanding its clinical methods:

Manual therapy: Procedures by which the hands directly contact the body to treat the articulations and/or soft tissues.

Mobilization: Movement applied singularly or repetitively within or at the physiological range of joint movement, without imparting a thrust or impulse, with the goal of restoring joint mobility.

Manipulation: A manual procedure that involves a directed thrust to move a joint past the physiological range of motion, without exceeding the anatomical limit.

Adjustment: Any chiropractic procedure that utilizes controlled force, leverage, direction, amplitude, and velocity, which is directed at specific joints or anatomical regions. Chiropractors commonly use such procedures to influence joint and neuro-physiological function.

While the literature sometimes assumes that manipulation and adjustment are interchangeable terms, the MCA emphasized that the chiropractic adjustment is a specific type of articular procedure using either techniques intended to make specific changes to the mobility of two joint surfaces. In addition, a key physical feature distinguishing chiropractic adjustments from other manual procedures is the delivery of an adjustive thrust of controlled velocity, depth, and direction (Manitoba Chiropractors' Association 2003e).

The MCA indicated that chiropractors expect a subluxation complex will be present in the majority of patients presenting clinically with pain. It also indicated that it is common to find patients presenting with several subluxations but that not all of the subluxated vertebrae detected are adjusted. The reason for this is based on the assumption that the human body possesses an inherent retuperative ability to correct these secondary subluxations. The effectiveness of this self-corrective capacity is assumed to be related to the patient's levels of activity, stress, diet, environment, and other factors.

If a chiropractic adjustment is employed, the patient's joint area will be brought to the end range of passive joint motion and a quick thrust will then be applied to overcome

Attachment 4

Attachment 4 –

Redacted – Subject to Copyright

Can be found at:

http://www.gcc-uk.org/UserFiles/Docs/subluxationstatement2017.pdf

Attachment 5

Chiropr Osteopat. 2009 Dec 2;17:13.

An epidemiological examination of the subluxation construct using Hill's criteria of causation.

Mirtz TA, Morgan L, Wyatt LH, Greene L.

University of South Dakota, Vermillion, South Dakota, USA.
timothy.mirtz@usd.edu

Abstract

BACKGROUND: Chiropractors claim to locate, analyze and diagnose a putative spinal lesion known as subluxation and apply the mode of spinal manipulation (adjustment) for the correction of this lesion.

AIM: The purpose of this examination is to review the current evidence on the epidemiology of the subluxation construct and to evaluate the subluxation by applying epidemiologic criteria for it's significance as a causal factor.

METHODS: The databases of PubMed, Cinahl, and Mantis were searched for studies using the keywords subluxation, epidemiology, manipulation, dose-response, temporality, odds ratio, relative risk, biological plausibility, coherence, and analogy.

RESULTS: The criteria for causation in epidemiology are strength (strength of association), consistency, specificity, temporality (temporal sequence), dose response, experimental evidence, biological plausibility, coherence, and analogy. Applied to the subluxation all of these criteria remain for the most part unfulfilled.

CONCLUSION: There is a significant lack of evidence to fulfill the basic criteria of causation. This lack of crucial

supportive epidemiologic evidence prohibits the accurate promulgation of the chiropractic subluxation.

PMID: 19954544 [PubMed] PMCID: PMC3238291

Free PMC Article

LinkOut - more resources

Attachment 6

Attachment 6 –

Redacted – Subject to Copyright

Can be found at:

The Canadian Chiropractic Association and the Canadian Federation of Chiropractic Regulatory Boards, Clinical Practice Guidelines Development Initiative, Guidelines Development Committee (GDC) comprising, Anderson-Peacock E, Blouin J-S, et al. Chiropractic clinical practice guideline: evidence-based treatment of adult neck pain not due to whiplash. *The Journal of the Canadian Chiropractic Association*. 2005;49(3):158-209.

Attachment 7

Attachment 7 –

Redacted – Subject to Copyright

Can be found at:

Chiropractic Clinical Practice Guideline: Adult Neck Pain Not Due to Whiplash,

The Canadian Chiropractic Association, November 2005

Attachment 8

Attachment 8 – Redacted – Subject to Copyright

CRITIQUE

Chiropractic handout – Chiropractic: Safe and effective Health Care – Answering your questions about neck adjustment ( )

Section – Is neck adjustment safe? This paragraph reads "Yes, it is. The most recent research into the safety of neck adjustment confirms the safety of this procedure."

The research referred to is internal forces sustained by the vertebral artery during spinal manipulative therapy by W. Herzog. Again, the study was done of five cadavers between the ages of 80 and 99. There was no blood flow; there was no pulse....they were dead! One cannot extrapolate results from the dead to the living.

Section – I am worried about the risk of stroke from having my neck adjusted.

This section reads "The findings in the current research literature agree that adverse events such as stroke or stroke like symptoms associated with neck adjustment are very rare." Again, the study referred to is - Chiropractic manipulation and Stroke: a population based case control study by D. Rothwell and S. Bondy. And as we know what this study actually states is that the risks of an adverse event were difficult to study and **"Results for those aged less than 45 years showed VBA cases to be 5 times more likely than controls to have visited a chiropractor within 1 week of the VBA. Additionally, in this young age group, cases were 5 times as likely to have had greater than or equal to 3 visits with a cervical diagnosis in the month before the case's VBA date."**

This same section reads – "By way of comparison, neck adjustment is significantly safer than other commonly used health remedies. For example long tern use of non-prescription pain relievers and the use of birth control pills both carry a far greater risk of serious complications than neck adjustment."

Just because one treatment modality carries risk – it does not negate the risk involved in neck manipulation and does not mean that there are no other treatment options to be used that prove much safer. The chiropractic argument has absolutely no substance.

Section – How do chiropractors know who should not have a neck adjustment?

The handout does not warn the patient that there is no pre-manipulative test a chiropractor can perform to determine who is at greater risk of an adverse event.

Section – Why would neck adjustment have an effect on anything other than neck pain or headache?

A chiropractic explanation as to why if one has a pain in the lower back – they will manipulate the neck! Neck manipulation is the quintessence of chiropractic and one of its primary treatment techniques.

Section – Are all neck adjustment techniques equally safe? – The handout states that there is no evidence to suggest than any of these techniques are less safe than other. UNTRUE – HVLA thrust of the high neck is the MOST dangerous considering the anatomy of the arteries in the high neck.

The patient handouts from the MCA and the CCA are incomplete, inaccurate, misleading and deceptive.

Attachment 9

Attachment 9 –

Redacted – Subject to Copyright

Can be found at:

https://www.ncbi.nlm.nih.gov/pubmed/11340209

Attachment 10

Chiropractic Treatment and Patient Safety

Chiropractic is widely recognized as one of the safest, drug-free, non-invasive therapies available for the treatment of headache, and neck and back pain. It has an excellent safety record. However, no health treatment is completely free of potential adverse effects. Even common over-the-counter medicines carry a risk.

Most patients experience immediate relief following an adjustment, however, some may experience temporary pain, stiffness or slight swelling. Some patients may also experience temporary dizziness, local numbness, or radiating pain. However, adverse effects associated with spinal adjustment are typically minor and short-lived.

Safety of Neck Adjustment: The Most Recent Research

Neck adjustment is a precise procedure, generally applied by hand, to the joints of the neck. Neck adjustment works to improve joint mobility in the neck restoring range of motion and reducing muscle spasm, thereby relieving pressure and tension. Patients typically notice a reduction of pain, soreness, stiffness and improved mobility.

Neck adjustment, particularly of the top two vertebrae of the spine, has on rare occasions been associated with stroke and stroke-like symptoms. This risk is considerably lower than those serious adverse events associated with many common health treatments such as long-term use of non-prescription pain relievers or birth control pills. While estimates vary, a range of one to two events per million neck adjustments is the ratio generally accepted by the research community.

An extensive commentary on chiropractic care, published in the February 2002 issue of the Annals of Internal Medicine, which is the journal of the American College of Physicians, reviewed more than 160 reports and studies on chiropractic. It states the following with regard to the safety of neck adjustment: "The apparent rarity of these accidental events has made it difficult to assess the magnitude of the complication risk. No serious complication has been noted in more than 73 controlled clinical trials or in any prospectively evaluated case series to date."[1]

A Canadian study, published in 2001 in the medical journal Stroke, also concluded that stroke associated with neck adjustment is so rare that it is difficult to calculate an accurate risk ratio.[2] The study was conducted by the Institute for Clinical Evaluative Sciences (ICES) and the authors have stated: "The evidence to date indicates that the risk associated with chiropractic manipulation of the neck is both small and inaccurately estimated. The estimated level of risk is smaller than that associated with many commonly used diagnostic tests or prescription drugs."[4]

The most recent research into the association between neck adjustment and stroke is biomechanical studies to assess what strain, if any, neck adjustment may place on the vertebral arteries. The preliminary findings of this ongoing work indicate that neck adjustment is done well within the normal range of motion and that neck adjustment is "very unlikely to mechanically disrupt the VA [vertebral artery]."[3]

There are many risk factors for stroke including blood clotting problems, hypertension, smoking, high cholesterol, birth control pills, heart problems and trauma such as blows to the head from car accidents, sports injuries or falls. Some strokes happen spontaneously with no obvious cause during activities of daily living such as backing up a car. A patient's health history and activities have to be examined very carefully in order to determine the most probable cause of a stroke.

Informed consent

Prior to starting treatment, all health professionals are required in law to obtain informed consent to treatment from their patients. Health care consumers must receive adequate and accurate information to assist them in evaluating their health care choices, and in balancing the relative risks of treatment options with the benefits. The chiropractic profession takes this responsibility seriously and has been a leader in obtaining informed consent.

Ongoing research

Chiropractic researchers are involved in studying the benefits and risks of spinal adjustment in the treatment of neck and back pain through clinical trials, literature reviews and publishing papers reviewing the risks and complications of neck adjustment. For example, the World Health Organization's Bone and Joint Decade Task Force on Neck Pain and its Associated Disorders is an international, multi-disciplinary, multi-centre study in which the Canadian chiropractic profession is a partner. One of the Task Force studies is focused specifically on the safety of neck adjustment. This is one example of the ongoing research that will ensure that care is provided as effectively and safely as possible.

2005

[1] Meeker WC, Haldeman S. Chiropractic: A Profession at the Crossroads of Mainstream and Alternative Medicine. Annals of Internal Medicine. February 5, 2002, Vol. 136, No. 3.

[2] Rodriwell DM, Bondy SJ, Williams JI. Chiropractic Manipulation and Stroke: A Population-Based Case-Control Study. Stroke, May 2001.

[3] Herzog W, Symons BP, Leonard T. Internal forces sustained by the vertebral artery during spinal manipulative therapy. Journal of Manipulative and Physiological Therapeutics. Oct. 25 2002 (8): 504-10.

CRITIQUE

Handout – Chiropractic Treatment and Patient Safety

Para 6 - handout refers to the well respected and much quoted Canadian study Chiropractic manipulation and stroke: a population based case control study by D Rothwell and S. Bondy (A10)

A quote from the chiropractic handout is as follows:

"A Canadian study, published in 2001 the medical journal Stroke, also concluded that stroke associated with neck adjustments is so rare that it is difficult to calculate an accurate risk ratio. " The handout goes on to say - "The evidence to date indicates that the risk associated with chiropractic manipulation of the neck is both small and **inaccurately** estimated. The estimated level of risk is smaller than that associated with many commonly used diagnostic tests or prescription drugs."

NOW....what the Rothwell & Bondy study actually states and what the chiropractic safety handout neglects to mention is the following – and I am quoting directly from that study.....

"Results for those aged less than 45 years showed VBA cases to be 5 times more likely than controls to have visited a chiropractor within 1 week of the VBA. Additionally, in this young age group, cases were 5 times as likely to have had greater than or equal to 3 visits with a cervical diagnosis in the month before the case's VBA date."

Additionally nowhere in this study does it say that the risk was inaccurately estimated and nowhere in the study does it say "The estimated level of risk is smaller than that associated with many commonly used diagnostic tests or prescription drugs."

The study only states that the **risks were difficult** to study.

Para 7 of the handout refers to a study Internal forces sustained by the vertebral artery during spinal manipulative therapy by W. Herzog (R6). This study was done on 5 cadavers between the ages of 80 and 99. They were dead!! It has been **debunked** in scientific/medical and even chiropractic circles.

Attachment 11

WELCOME

TO THE 2015 ANNUAL REPORT OF THE MANITOBA CHIROPRACTORS ASSOCIATION

MISSION STATEMENT: THE MISSION OF THE MCA IS TO FOSTER AND ENSURE THE HIGHEST STANDARD OF CHIROPRACTIC HEALTHCARE FOR ALL MANITOBANS

The chiropractic profession is self regulated in each province by either a regulatory college or dual purpose association for the purpose of public protection and professional promotion. The MCA is the sole voice and authority of the chiropractic profession in Manitoba. While interprovincial differences exist, it is the provincial scope of practice that dictates the role of a chiropractor in each province.

The Scope of Practice of Chiropractic is the range of responsibilities, education, clinical experience/expertise and standards of practice that determine the boundaries within which a chiropractor practices in the province of Manitoba.

Chiropractic is a health care discipline which emphasizes the inherent recuperative power of the body to heal itself without the use of prescription drugs or surgery. The practice of chiropractic focuses on the relationship between structure (primarily the spine, but also the extremities) and function (as coordinated by the nervous system) and how that relationship affects the preservation and restoration of health and healing.

Since human function is neurologically integrated, Doctors of Chiropractic evaluate and facilitate biomechanical and neuro-biological function and integrity through the use of appropriate conservative, diagnostic and chiropractic care procedures. Chiropractors use a neuro-musculo-skeletal model that is evaluated, diagnosed and managed through the use of chiropractic specific adjustive techniques as well as chiropractic ancillary/adjunctive procedures. Doctors of Chiropractic are primary contact health care providers. They apply their education, knowledge, diagnostic skill, and clinical judgment necessary to determine appropriate chiropractic care and management.

Doctors of Chiropractic establish a doctor/patient relationship and use specific spinal adjustments and other conservative clinical procedures. Through their training, chiropractors recognize and identify when collaborative care with and/or referral to other health care providers is appropriate. Through their education and knowledge of the human anatomy and physiology, chiropractors are uniquely skilled to evaluate emerging techniques and adjunctive therapies and the role they may play in chiropractic clinical practice. Chiropractors incorporate those techniques and adjunctive therapies which play a role in the healing sequel of conditions which are a part of their neuro-musculo-skeletal model of care.

Doctors of Chiropractic are trained to advise and educate patients and their communities in areas of structural and spinal hygiene and healthy living practices.

COMPLAINT 14-08

NATURE OF THE COMPLAINT:

It came to the attention of the Registrar that a member may have committed professional misconduct by allegedly practicing without valid professional liability coverage. As a result the matter was forwarded the Board of Directors who appointed an Investigative Chairperson to review the circumstances.

OUTCOME:

This complaint is the subject of an active investigation.

COMPLAINT 14-10

NATURE OF THE COMPLAINT:

The complaint outlines an allegation that she attended to the member's office and that the treatment resulted in her having a stroke. The crux of the complaint was targeted more at the delay of the member in initiating an emergency response once stroke like symptoms began to present themselves.

The review by the committee did not comment on the allegation related to "causation" of the possible stroke. It is the current researched opinion of the chiropractic community that a chiropractic adjustment cannot cause an arterial dissection, irrespective of the anecdotal comments made by the complainant or any of the attending professionals handling the complainant's treatment.

The prime focus of the complaints committee review therefore was related to whether the member's emergency response met a reasonable standard for chiropractors.

Of note, is that there does not appear to be anything in the member's notes related to the patient advising that she had been involved in a martial arts injury sometime in the weeks preceding the first visit in question. It is notable that the information related to the martial arts injury was disclosed to other health professionals, particularly in the notes received from the emergency department. That information may have been very influential in determining appropriate treatment by the member. It is not entirely clear as to whether the patient was not forthcoming with that information or whether the member failed to question in a manner to illicit that "new" information. Without that information at hand, the member proceeded to treat the patient as if it were a "chronic" condition.

It was observed that the x-rays in this case may not have met the standard in 2012, however the committee made note of a subsequent office inspection which addressed the issue with this member and was adequately addressed in follow up practice.

With respect to the "stroke", it is reasonable for the committee to conclude that it was "coincidental" with the treatment provided by the member.

Chiropractors receive training as part of their pre-licensing training, as well as post-licensing CE training on the issue of recognition of the signs of stroke. After thoroughly reviewing the information, it would appear that there was a period of anywhere from 20 to 37 minutes between the onset of the stroke-like symptoms and the time that the 911 call was made. It is also alleged that the member was not completely forthright in communicating to the first responders concerning the fact that a cervical adjustment was conducted. It is likely that there was some degree of emotional stress on the chiropractor at the time of this communication.

The committee is of the opinion that it is a reasonable expectation that a member would have initiated the 911 call some time sooner than 20 minutes, and certainly earlier than 37 minutes.

There is sufficient evidence in this case to warrant the matter proceeding to an investigation. The committee also found that it would not be contrary to the interests of public protection to recommend an informal resolution.

The terms of the informal resolution proposed included the following:

- A letter of apology from the member to the complainant dealing with the issue related to the manner in which the medical emergency was handled;
- The mandatory attendance by the member at an Emergency First-Aid course which includes dealing with sudden medical emergencies. The committee identified a course named "Emergency First-Aid w/ Level C & AEC (FA1) that would meet this requirement. An equivalent course (in the opinion of the Complaints Chair) would also be acceptable.

OUTCOME:

The member accepted the terms of the proposed informal resolution.

COMPLAINT 13-01

NATURE OF THE COMPLAINT:

The complainant commenced her care with Dr. X in June of 2012. Dr. X proposed a 72 treatment, $3,300.00 plan, for a chief initial complaint of low back pain and hip pain. Complainant only attended for 12 treatments before terminating care.

By way of letter dated February 28, 2013 the complainant forwarded a complaint against Dr. X to the MCA. Her complaint noted dissatisfaction with the level of care received, and she believed that Dr. X was misinformed or lacking in detail with respect to the existence of screws in her hip. She suggested that she was also suffering from a painful neck that was not present prior to the initial treatments.

Complainant attended for care at two other chiropractic clinics at which she believes she received satisfactory care. She suggested that Dr. X's advice conflicted with that received at the other clinics. Complainant contacted Dr. X demanding a refund, and in response Dr. X repaid her the amount $355.00. The complainant was dissatisfied with this amount and believes she is due additional reparations which includes money spent at the other chiropractor, gas for medical trips, exercise supports sold by Dr. X and for hugs that Dr. X provided on each visit which the complainant felt were embarrassing. She itemized a total claim for reimbursement in the amount of $1575.

The complainant was advised by the MCA that our association mandate does not include providing financial compensation.

On April 2, 2013 Dr. X responded to the complaints of the complainant explaining his perspective and dismissing her complaints as being without merit.

The complaints committee reviewed the file material on June 6, 2013. The committee made the following observations and comments:

- both parties were advised that monetary compensation was not within their mandate and should be pursued civilly if still desired;
- the issue of screws on the x-ray was addressed and dismissed;
- the committee noted that with respect to the practice of regularly hugging patients professional boundaries need to be adhered to and hugging should not be performed without permission;
- there were six questions and concerns related to Dr. X's conduct evidenced by this file:
  - a possible neck treatment without the patient stating that as an issue and the subsequent rational for taking x-rays of the cervical spine;
  - clarification of range of motion findings;
  - is there an x-ray report?;
  - are there any recordings of x-ray findings?;
  - is there an x-ray log?;
  - is there a copy of the patient's EMG scan?

Attachment 12

Sincerely,

Redacted to protect privacy

[redacted]

Sent: Monday, June 19, 2006 3:55 PM

[redacted]

Subject: Letter to MCA

At the request of the Registrar, please find his response.

[redacted]

Manitoba Chiropractors' Association
245 Portage Avenue
Winnipeg, MB R3B 2A6
Tel. (204) 942-3000
Fax. (204) 942-3010

[redacted]

Dear Mr. and Mrs. [redacted]

[redacted] You have indicated a concern that his condition may be related to chiropractic care that he received a month before suffering a stroke. It is unlikely that injuries of the sort you describe would be related to treatment. I have attached some information on neck adjustment that you may find helpful in this regard.

You referred to a statement that neck adjustment is a "leading cause" of stroke and death in people under 45. I am not aware of any published research to support that statement. Speculative statements of that nature were made in the media some years ago, however, the neurologist who made those statements later publicly retracted them.

Chiropractic is a healing profession committed to patients' safety and well-being and there is a chiropractic regulatory board in each province charged with protecting the public interest. I would encourage anyone who has a concern with the quality or safety of their care to request that the provincial regulatory board investigate.

[redacted]
Winnipeg, MB
R3B 2A6

Attachment 13

Attachment 13 –

Canadian Chiropractic Protective Association – Informed consent to Chiropractic Treatment

Form L – Redacted – Subject to Copyright

Attachment 14

Attachment 14 –

Redacted – Subject to Copyright

Can be found at:

Cassidy JD, Boyle E, Côté P, et al. Risk of vertebrobasilar stroke and chiropractic care: results of a population-based case-control and case-crossover study. Spine 2008; 33(suppl 4):S176-S83.

Or

http://www.spinejournal.com/pt/re/spine/abstract.00007632-200802151-00019.htm

Attachment 15

Attachment 15 –

Redacted – Subject to Copyright

Spontads May 2001 – The Canadian Stroke Consortium

Attachment 16

Attachment 16 –

Redacted – Subject to Copyright

Can be found at: http://www.chirobase.org/15News/neurol.html

Attachment 17

Attachment 17 –

Redacted – Subject to Copyright

Can be found at:

Paralysis Following Chiropractic Manipulation

Or

https://www.ncahf.org/nl/1991/1-2.html

Attachment 18

File No. 98-01-06306

THE QUEEN'S BENCH

Winnipeg Centre

BETWEEN:

MANITOBA CHIROPRACTORS' ASSOCIATION – plaintiff

- and –

COLLEGE OF PHYSICIANS & SURGEONS OFMANITOBA – defendant

Unfortunately when I initially accessed this court document a number of years ago, I neglected to photocopy the covering page of the Statement of Claim.

However, the complete Statement of Claim is attached, along with the Statement of Defence and the Notice of Discontinuance.

Pat Chevrier

CLAIM

1. The Plaintiff claims:

(a) General damages in an amount to be determined by this Honourable Court;

(b) Punitive damages in an amount to be determined by this Honourable Court;

(c) Interest in accordance with The Queen's Bench Act;

(d) Costs;

(e) Such further and other relief as counsel may advise and as this Honourable Court may permit.

2. The Plaintiff is a body corporate incorporated pursuant to the laws of Manitoba, and continued as a body corporate pursuant to The Chiropractic Act, R.S.M. 1987, c. C100, section 3(b).

3. The Defendant, THE COLLEGE OF PHYSICIANS AND SURGEONS OF MANITOBA (the "College"), is a corporation duly incorporated pursuant to the laws of Manitoba, and continued as a body corporate pursuant to The Medical Act, R.S.M. 1987, c. M90, section 27.

4. The Plaintiff is governed by The Chiropractic Act and has the powers and obligations as set out therein. The Plaintiff is responsible for establishing standards for its members, licensing members, and the investigation of complaints as made by the public against its members, among other functions.

5. As a result of The Chiropractic Act, the Plaintiff states that it has sole discretion over the regulation of practitioners in the field of chiropractic. In addition, the Plaintiff has a duty to its members to promote the advancement of chiropractic education and research in the interest of both the public and the chiropractic profession.

6. The Plaintiff submits that the Defendant and its members have historically acted in a malicious and defamatory manner toward the Plaintiff which has manifested itself in various attempts to discredit the Plaintiff. As an example, the Plaintiff points out that the Defendant forbid its members from associating with a chiropractor or referring any patients to one up until 1995 despite the overwhelming evidence of the medical benefits of chiropractic care. In so doing, the Defendant was stating to its members that the licensing, education, and maintenance of standards of ethics and competence, of chiropractors, as regulated and enforced by the Plaintiff, was deficient.

7. The Plaintiff states that the Defendant has continued to act in a malicious and defamatory manner toward the Plaintiff on an ongoing basis, and pleads more specifically as set out in paragraphs 8 - 17.

8. The Plaintiff states that in or around January, 1997, the Defendant caused to be issued "The Paediatric Death Review Committee Annual Report" (the "report"). It struck a committee for the purposes of authoring this report, and adopted the report, publishing same as a statement of the defendant.

9. Notwithstanding the fact that there have been no recorded paediatric deaths resulting from chiropractic care, on page 33 of the above noted report, and notwithstanding it did not fall within their mandate, in paragraph 8(2) the Committee recommends the following:

> "that chiropractic care of children be based on solid research evidence of effectiveness for each procedure for which it is applied. There is no evidence that spinal manipulative therapy is of benefit in paediatric conditions such as enuresis, asthma, infantile otitis media or as a substitute for immunization."

10. In addition to the above, on page 9 of the report in paragraph 3(4), the Committee states the following:

> "the PDRC reviewed educational material put out by some chiropractors. PDRC had particular concerns about claims that chiropractic care should replace immunization, and also about a number of other child health interventions where chiropractic care is of unproven value in the care of children. The PDRC wrote to the registrar of the College of Physicians and Surgeons urging that the College take the position that chiropractic care of children should be based on hard research evidence of efficacy for each procedure for which is applied."

11. The Plaintiff submits that the passages in the report referred to in both paragraph 9 and 10, juxtaposed as they were to the review of pediatric deaths, disparaged the character and reputation of the Plaintiff, in that the it is the Plaintiff that is responsible for enforcement of standards for the chiropractic profession. The Defendant knew or ought to have known that the innuendo of the passages detailed in paragraphs 9 and 10 were defamatory in that they implied that chiropractic care could result in the death of a child, or even the injury of a child, and that it was necessary for the Defendant to intervene as the Plaintiff was unable to regulate its profession and maintain safety standards. Such innuendo was untrue.

12. The Plaintiff further states that on or about March 19, 1997, the Defendant published an article in "From the College" on page 3 of Volume 33, number 2, which raised the issue of the competence of chiropractors, in general. The Plaintiff states that this is exemplified by the final paragraph of the article wherein the Defendant, under the guise of purporting to establish guidelines for choosing a chiropractor, defames the Plaintiff in that it alleges that the Plaintiff cannot maintain sufficient standards of education, or maintain a sufficient regulatory role over its members so as to prevent the licensing or the continuation of licences of non-scientific chiropractors. Amongst the guidelines are the following statements which the defendant alleged are characteristics of a "scientific chiropractor":

(i) "does not do routine radiographs on every patient";

(ii) "does not extend duration of treatment unnecessarily";

(iii) "does not charge "front end" lump sum for whole treatment program";

(iv) "graduated from a school accredited by the Council on Chiropractic Education";

(v) "is willing to have physician visit the office to observe treatment".

13. The Plaintiff states that the aforesaid statements of the defendant were meant to imply:

(i) that chiropractors do routine radiographs on every patient;

(ii) that chiropractors extend duration of treatment unnecessarily;

(iii) that chiropractors charge their clients inappropriately;

(iv) that chiropractors' educations are suspect;

(v) that it is necessary for a medical doctor to supervise treatment by a chiropractor.

The Plaintiff states that all such innuendoes are false. The Plaintiff states that these innuendoes were designed by the Defendant to suggest, or had the effect of suggesting, that the Plaintiff did not maintain or enforce ethical standards within the profession it was required to oversee.

14. The Plaintiff states that it was clearly the Defendant's intention to disseminate this information to the public, and states that the College knew or ought to have known that the innuendo of the article was defamatory in that it implied that there were a significant number of chiropractors who were incompetent or did not follow competent practices, and such innuendo is untrue. It is neither within the jurisdiction nor mandate of the Defendant to assist the public in the choosing of any other professional services beyond their own. The clear intention underlying this publication was to convey to the public that there were grounds to be alarmed about the competence or practices of some members of the Plaintiff's membership, who were being permitted by the plaintiff to maintain their practices.

15. The Plaintiff states that the defendant has placed the identical language complained of in paragraph 12 hereof on its web site on the world wide web, on the internet, thereby publishing its defamatory language to the world at large.

16. Further, the Plaintiff states that on or about March 21, 1997, the Defendant caused to be issued a proposal to the Manitoba Medical Services Council, which proposal recommended the following:

a) that the Manitoba Medical Services Council pursue this matter, in order that rules of application are in place which will clearly restrict insured benefits for manipulation performed as therapy for acute musculoskeletal conditions involving the lower back.

b) that there be clear rules of application which reflect the best evidence that:

i) manual therapy, as described in this document, is an acceptable medical management for selected musculoskeletal conditions. There is no scientific evidence to support its usefulness with other medical conditions, such as allergic disease or endocrine disease, and its use in children should be limited to mobilization.

17. With regard to the proposal in paragraph 16 of this claim, the Plaintiff states that the Defendant knew or ought to have known that the innuendo of the proposal was defamatory in that it implied that chiropractors were engaging in the practice of unnecessary treatment and receiving compensation from the Manitoba Department of Health for same which innuendo was untrue. Further, the Defendant knew that the Plaintiff was the organization responsible for negotiation with the Manitoba Government relating to chiropractic billing to the Health Services Commission, and the proposal issued and described in paragraph 16 above was designed to, or had the effect of,

conveying to the Government of Manitoba the impression that the Plaintiff was attempting to induce the Government of Manitoba to pay for unnecessary services.

18. Further, on July 29, 1997 [redacted] acting in his capacity as Registrar of the Defendant, wrote and sent a letter to [redacted] Redacted to protect privacy In said letter, [redacted] stated:

> "...It was agreed that there be no direct referrals from chiropractors to radiologists. Further if a patient with a medical problem of any significance is seeing a chiropractor, that patient must be referred to a physician who will determine when diagnostic procedures are indicated."

19. In so stating, as alleged in paragraph 15, the Defendant by innuendo was publishing to the [redacted] the suggestion that the Plaintiff was unable to maintain its statutory obligation to educate its members and maintain standards in the usage of X-Rays. This statement is untrue.

20. The Plaintiff states that on August 11, 1997, the [redacted] acting pursuant to the directive from the Defendant, wrote a letter to representatives of the Plaintiff declining further referrals.

21. The Plaintiff states that all of the above noted passages in paragraph 9, 10, 12, 15, 16 and 18 were defamatory and made with the intention of lowering the Plaintiff in the estimation of the public generally, and were made by the Defendant maliciously, and as part of an overall concerted effort and pattern of conduct, and in a manner calculated to cause the Plaintiff, economic harm, to injure the Plaintiff in its reputation, and to bring it into scandal and contempt in the eyes of the public.

File No. CI 98-01-06306

THE QUEEN'S BENCH
Winnipeg Centre

BETWEEN:

MANITOBA CHIROPRACTORS' ASSOCIATION,

plaintiff,

- and -

COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA,

defendant.

Filed

APR 03 1998

STATEMENT OF DEFENCE

APR 03 1998

TAYLOR McCAFFREY
Barristers and Solicitors,
9th Floor - 400 St. Mary Avenue,
Winnipeg, Manitoba.
R3C 4K5

Redacted to protect privacy

Telephone - 988-0458
Fax - 957-0945

Client File No. 14342-82

THE QUEEN'S BENCH
Winnipeg Centre

BETWEEN:

MANITOBA CHIROPRACTORS' ASSOCIATION,

plaintiff,

- and -

COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA,

defendant.

STATEMENT OF DEFENCE

1. The defendant (*"the College"*) admits the allegations contained in paragraphs 2, 3, 4, 10 and 18 of the Statement of Claim.

2. The College denies the allegations contained in paragraphs 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20 and 21 of the Statement of Claim, except as hereinafter expressly admitted, and denies the plaintiff is entitled to the relief claimed in paragraphs 1 and 22 of the Statement of Claim or to any other relief.

3. In further reply to paragraph 5 of the Statement of Claim, the College says, as the facts are:

(a) the plaintiff is empowered by the provisions of The Chiropractic Act, R.S.M. 1987, c. C100 to regulate the practice of chiropractic in Manitoba;

(b) the practice of chiropractic referred to in (a), above, is defined by s. 1 of The Chiropractic Act to mean:

(g) the PDRC Annual Report 1994 did make the statements referred to in paragraphs 9 and 10 of the Statement of Claim;

(h) insofar as the words referred to in paragraphs 9 and 10 of the Statement of Claim consist of statements of fact the words are true, and insofar as the words consist of expressions of opinion they are fair comment made in good faith and without malice upon facts which are a matter of public interest;

(i) the words referred to in paragraphs 9 and 10 of the Statement of Claim were not understood to refer to the plaintiff, and were not capable of referring to the plaintiff;

(j) in the alternative, if the words referred to in paragraphs 9 and 10 of the Statement of Claim were understood to refer to the plaintiff, which is denied, it is denied that the said words bore, or were understood to bear, or were capable of bearing, the meanings referred to in paragraph 11 of the Statement of Claim or any meaning defamatory of the plaintiff;

(k) further, or in the alternative:

(i) if the words referred to in paragraphs 9 and 10 of the Statement of Claim implied that chiropractic care could result in death or injury of a child, which is denied, such implication is true in substance and in fact;

(ii) if the words referred to in paragraphs 9 and 10 of the Statement of Claim are capable of referring to the plaintiff, which is denied, then any such reference to the plaintiff consists of expressions of opinion that are fair comment made in good faith and without malice upon facts which are a matter of public interest;

(l) further, or in the alternative, the words referred to in paragraphs 9 and 10 of the Statement of Claim were published on an occasion of qualified privilege, particulars of which are:

(i) the College is responsible for establishing and maintaining professional standards of medical practice in Manitoba;

(ii) the PDRC is mandated to maintain and improve quality of paediatric care through education, and to report to the College's Central Standards Committee on issues that may affect quality of paediatric care, including, but not limited to, risks or potential risks of death or injury to children;

(iii) the PDRC Annual Report 1994 was published in good faith in discharge of the aforesaid duties of the PDRC, or alternatively of

the College, and out of a *bona fide* concern for the health and safety of children in Manitoba.

5. In further reply to paragraphs 12, 13, 14 and 15 of the Statement of Claim, the College says, as the facts are:

(a) on page 3 of the April 1997 Edition (Volume 33, No. 2) of 'From the College", the College published the following article ("*the Article*"):

"Guidelines for Identifying a Scientific Chiropractor

Members may have seen the exchange of correspondence between the spokesperson for the Manitoba Chiropractors' Association (MCA) and the College. At issue is the continued reluctance on the part of the College to enter into a professional accord. This reluctance is due to the persistence of the unscientific, groundless theory of subluxation, which the MCA would not formally renounce.

In the view of the College, those who persist in such a baseless theory are also at risk for exaggerating the value of chiropractic manipulation. Members will recall the claims made by some chiropractors that spinal manipulation can treat everything from enuresis to asthma. Some continue to reject the germ theory and argue against the value of immunization.

Several members have noted the recent relaxation of the College position regarding Chiropractic (Guideline #103 *Manual Therapy*, September, 1994). They ask what guidelines can be followed to help discriminate between chiropractors who follow the scientific method and those who do not. The following characteristics of a scientific chiropractor were printed in Family Practice, Vol. 35, No. 5, 1992:

- treats mainly musculoskeletal disorders with manual manipulative techniques
- does not do routine radiographs on every patient
- does not extend duration of treatment unnecessarily
- writes a response to a referral and outlines evaluation and therapy

- does not charge 'front end" lump sum for whole treatment program
- graduated from a school accredited by the Council of Chiropractic Education
- is willing to have physician visit the office to observe treatment
- provides good feedback from patients on care given."

(b) insofar as the words in the Article consist of statements of fact the words are true, and insofar as the words consist of expressions of opinion they are fair comment made in good faith and without malice upon facts which are a matter of public interest;

(c) the words in the Article were not understood to refer to the plaintiff, and were not capable of referring to the plaintiff;

(d) in the alternative, if the words in the Article were understood to refer to the plaintiff, which is denied, it is denied that the said words bore, or were understood to bear, or were capable of bearing the meanings referred to in paragraphs 12, 13 and 14 of the Statement of Claim or any meaning defamatory of the plaintiff;

(e) further, or in the alternative, the words in the Article were published on an occasion of qualified privilege, particulars of which are:

(i) the College is responsible for establishing and maintaining professional standards of medical practice in Manitoba;

(ii) licensed medical practitioners in Manitoba have a duty to their patients to ensure all treatment provided to their patients is performed by qualified and competent individuals;

(iii) members of the College had requested to be provided with the type of information provided by the Article;

(iv) the periodical 'From the College" is forwarded to every licensed medical practitioner in the Province of Manitoba, and was therefore utilized as a means of providing this information to every licensed medical practitioner in Manitoba;

(v) the Article was published in good faith in discharge of the College's aforesaid duty;

(f) the identical words set out in the Article were placed by the College on its website on the worldwide web, on the internet, for a period of three

months, and pursuant to the usual practice of the College were taken off the College's website after the period of three months.

6. In further reply to paragraphs 16 and 17 of the Statement of Claim, the College says, as the facts are:

(a) on or about March 21, 1997, the College submitted a proposal to the Manitoba Medical Services Council ("*the MMSC proposal*"), which stated:

"**SUBJECT:**

Chiropractic Services

BACKGROUND:

Attached is a copy of the College guideline on manual therapy, together with an excerpt from the recently published Annual Report (1994) of the Paediatric Death Review Committee.

The College has been advised that there are clear rules of application which reflect the best evidence that:

> 'Manual therapy, as described in this document, is an acceptable medical management for selected musculoskeletal conditions. There is no scientific evidence to support its usefulness with other medical conditions, such as allergic disease or endocrine disease, and its use in children should be limited to mobilization".

The College recommends that the Medical Services Review Committee pursue this matter, in order to ensure that rules of application are in place which will clearly restrict insured benefits for manipulation where it is performed as therapy for acute musculoskeletal conditions involving the lower back."

(b) insofar as the words in the MMSC proposal consist of statements of fact the words are true, and insofar as the words consist of expressions of opinion they are fair comment made in good faith and without malice upon facts which are a matter of public interest;

(c) the words in the MMSC proposal were not understood to refer to the plaintiff, and were not capable of referring to the plaintiff;

(d) in the alternative, if the words in the MMSC proposal were understood to refer to the plaintiff, which is denied, it is denied that the said words bore, or were understood to bear, or were capable of bearing, the meanings

referred to in paragraph 17 of the Statement of Claim or any meaning defamatory of the plaintiff;

(e) further, or in the alternative, the words in the MMSC proposal were published on an occasion of qualified privilege, particulars of which are:

(i) the College is responsible for establishing and maintaining professional standards of medical practice in Manitoba;

(ii) the Manitoba Medical Services Council is a body established by the Manitoba Medical Association and Manitoba Health, for the purpose of examining ways to curtail health care costs in Manitoba, and to make recommendations to the Minister of Health regarding ways to curtail health care costs in Manitoba;

(iii) in the premises the College and the Manitoba Medical Services Council had a common or corresponding interest in the subject matter of the MMSC proposal and/or the College wrote and published the MMSC proposal to the Manitoba Medical Services Council in good faith and in the reasonable performance of its duty and the Manitoba Medical Services Council had a like interest in receiving the MMSC proposal.

7. In reply to paragraphs 18, 19 and 20 of the Statement of Claim, the College says, as the facts are:

(a) the letter referred to in paragraph 18 of the Statement of Claim was prepared and published by the Registrar of the College ([Redacted to protect privacy] *bona fide*, and therefore by operation of s. 37 of The Medical Act, no action lies in respect of the preparation or publication of the letter referred to in paragraph 18 of the Statement of Claim;

(b) the words referred to in paragraph 18 of the Statement of Claim are true in substance and in fact;

(c) the words referred to in paragraph 18 of the Statement of Claim were not understood to refer to the plaintiff, and were not capable of referring to the plaintiff;

(d) in the alternative, if the words referred to in paragraph 18 of the Statement of Claim were understood to refer to the plaintiff, which is denied, it is denied that the said words bore, or were understood to bear, or were capable of bearing, the meanings referred to in paragraph 19 of the Statement of Claim or any meaning defamatory of the plaintiff;

(e) in the alternative, insofar as the words referred to in paragraph 18 of the Statement of Claim consist of statements of fact the words are true, and insofar as the words consist of expressions of opinion they are a fair comment made in good faith and without malice upon facts which are a matter of public interest;

(f) further, or in the alternative, the words referred to in paragraph 18 of the Statement of Claim were published on an occasion of qualified privilege, particulars of which are:

(i) the College is responsible for establishing and maintaining professional standards of medical practice in Manitoba;

(ii) licensed radiologists in Manitoba have a duty to their patients to ensure that medical problems of any significance which become apparent on examination of x-rays are brought to the attention of the patient's treating physician, who will in turn determine any treatment that should be provided;

(iii) in the premises the Registrar of the College and the [redacted] have a common or corresponding interest in the subject matter of the letter complained of and/or the Registrar of the College wrote and published the letter complained of to the [redacted] in good faith and in the reasonable performance of his duty and the [redacted] had a like interest in receiving that letter;

(g) [redacted] did write a letter to [redacted] and [redacted] Centre on August 11, 1997 advising that the offices of the [redacted] would no longer be accepting direct referrals from chiropractors to radiologists (*"the August 11, 1997 letter"*). The August 11, 1997 letter was written as a result of correspondence including the letter referred to in paragraph 18 of the Statement of Claim, but was not written pursuant to a "directive" from the College, as alleged or at all. Nor was the August 11, 1997 letter directed to "representatives of the plaintiff" as alleged in paragraph 20 of the Statement of Claim.

8. The College therefore requests that the plaintiff's action be dismissed with costs.

THE QUEEN'S BENCH
Winnipeg Centre

BETWEEN:

MANITOBA CHIROPRACTORS' ASSOCIATION,

plaintiff,

- and -

COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA,

defendant.

NOTICE OF DISCONTINUANCE

1. An amended statement of claim in this action has been served on the defendant COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA

2. The plaintiff wholly discontinues this action against the defendant COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA without costs to either party.

3. This discontinuance is to be a Defence to any subsequent action as contemplated by the Court of Queen's Bench Rule 23.02(1).

April 29, 2003

Redacted to protect privacy

TAYLOR McCAFFREY
Barristers and Solicitors,
9th Floor - 400 St. Mary Ave.,
Winnipeg, Manitoba R3C 4K5

988-0448

APPROVED AS TO FORM & CONTENT:

TAPPER CUDDY

Redacted to protect privacy

Solicitors for the Defendant

Attachment 19

Attachment 19 –

Redacted – Subject to Copyright

Can be found at:

Manitoba DCs, MDs Team To Improve Canadian Health Care

Attachment 20

THE COLLEGE OF PHYSICIANS & SURGEONS OF MANITOBA

1000 - 1661 PORTAGE AVENUE, WINNIPEG, MANITOBA R3J 3T7
TEL: (204) 774-4344 FAX: (204) 774-0750
WEBSITE: www.cpsm.mb.ca

January 15, 2008

Mrs. Pat Chevrier

[redacted]

Dear Mrs. Chevrier:

Re: MCA/CPSM Inter-Professional Relations Committee

We are in receipt of your letter on January 4, 2008. The President, [redacted] has reviewed your correspondence. He suggests that you forward your letter to the Manitoba Chiropractic Association. The Committee is not the forum for your concerns.

The College of Physicians and Surgeons of Manitoba has no authority to interfere with another regulated health profession. The avenue for your correspondence is the MCA or Manitoba Health.

Yours sincerely,

COLLEGE OF PHYSICIANS &
SURGEONS OF MANITOBA

[redacted]

Registrar

WDBP:mh

Attachment 21

Attachment 21 –

Redacted – Subject to Copyright

Can be found at:

http://stroke.ahajournals.org/content/early/2014/08/07/STR.0000000000000016

Attachment 22

P Chevrier

From: [redacted]
Sent: Wednesday, January 31, 2007 11:32 AM
To: [redacted]
Subject: Re: Cervical Manipulation

Hello
You had contacted me earlier this week and I had responded to you.

The College of Physiotherapists of Manitoba is the regulatory body for the practice of physiotherapy in Manitoba. Part of our mandate is to protect the public by registering only qualified physiotherapists to practice, setting standards for the profession and handling complaints against members.

The College has not recently changed any practice standards on the practice of manipulation or manual therapy for physiotherapists in Manitoba. From what I understand, there are not that many physiotherapists who practice cervical manipulations (by their own choice) because of the inherent risks in using this technique in the high cervical area. However, the College has not issued any directives to the membership about not practicing this technique.

I do not know where your information came from and therefore cannot verify the veracity of the statement.

[redacted]
Registrar/Executive Director
College of Physiotherapists of Manitoba
211-675 Pembina Hwy
Winnipeg, Manitoba
R3M 2L6

Tel: (204) 287-8502
Fax: (204) 474-2506
[redacted]
Website: www.manitobaphysio.com

SUBMISSION TO THE HEALTH PROFESSIONS ADVISORY COUNCIL OF THE PROVINCE OF MANITOBA

AS REQUESTED BY THE COUNCIL

September 8, 2016 to provide input into the advice you may provide to the Minister regarding a "demonstrable risk to the public" and "administrating a high velocity, low amplitude thrust to move a joint within its anatomical range of motion".

Submission is done at the request of the Manitoba Chiropractic Stroke Survivors, to provide medical and legal expertise to support their position. The MCSS has indicted their complete acceptance of this submission.

We take note that in regard to any therapy, the diagnosis and the claims to be able to treat that diagnosis are an essential part of the public "risk". If parents in particular are being deceived as to the diagnosis a baby or child may be suffering from, such as "vertebral subluxations" and expectation that an "adjustment" using the administration of any form of high neck manipulation would offer some form of treatment for conditions such as autism, immune disorders, cancers, endocrine disorders, lessen the need for immunization, to mention a few, then a deception has occurred. This involves substantial "risk" as it may delay the administration of proper scientific care and confuse the parents as to proper care of their children, It will also divert much needed revenue for valid medical services to those that are not

Our submission asks the real motivation for a professional body would want a "law" to be passed to justify a form of therapy? Our Submission will address the issue of why a law is being requested. Therapies are the result of science and research not laws.

Our Submission and the Scientific Standard we recommend applies to all types of mobilization and or manipulation of the highest neck area.

Our Submission is focused in regard to certain "beliefs" regarding such a maneuver as done by Manitoba and other chiropractors, as there are unique aspects of this done by said chiropractors. However, our submission applies **equally** to chiropractors, physiotherapists, naturopaths, physicians, surgeons and any others holding themselves out to be recognized health care professional.

HERE IN IS OUR SUBMISSION OF SUPPORT PROVIDED PRO BONO

We strongly recommend that the Council seek its own medical and legal opinions consulting legal experts in health care, pediatricians, and neurologists amongst others in order to fully appreciate the contents of our submission and we would welcome any questions from such experts.

Compiled from the documentation and information
from scientific medical and legal experts and literature
by Dr. Murray S. Katz MDCM Graduate, Faculty of Medicine
McGill University, Montreal Quebec October 20, 2016

Montreal, Quebec, Canada
OCTOBER 20, 2016

TABLE OF CONTENTS AND OF DOCUMENTS

Paragraphs	Subject	Details
	Cover letters to the Health Professional Advisory Council.	Scope of submission.
1.	The purpose of the law, to protect the public and to regulate the government.	To protect the public one has to respect science.
2.	The law cannot change the basic anatomy and neurology of the human body. The highest neck area is where the chiropractors want the Minister to endorse the use of the high velocity neck manipulation.	Our "intelligence" is in the brain, not in a three-inch neck area segment of the spinal cord.
3-8	The legal study done by Florida Attorney [Redact to protect privacy] on the various legislative definitions of chiropractic. ***Unfortunately, the practice acts are based on the archaic concepts of early chiropractic as set forth by DD Palmer, its inventor, in 1895: that 'subluxations' impinge on 'nerve flow', adversely affecting organ function, and that chiropractic adjustments are the remedy***	***Because the chiropractic profession seems unwilling to abandon these discredited concepts, reform of the state chiropractic practice acts to eliminate subluxation-based chiropractic practice may be the only viable solution to the perpetration of unscientific and unproved healthcare.***
9-10	What is the real reason the chiropractors want high velocity low amplitude neck written into law? Real therapies do not have to be written into law.	It has NOTHING to do with a therapy but is an attempt to enshrine into law their subluxations belief system. (See Document twelve.)
11-12	The laws recognize two totally different diagnosis and treatment.	One is strictly musculo-skeletal. The second is vertebral subluxations.
12	The beginning of the "hole in one" cause of all disease and the focus on the highest neck area as to the place to apply high velocity low amplitude thrust.	With this focus perhaps over 90% of all highest neck manipulations involving HVLA are no longer a therapy but have become a belief system, especially with babies and children.
13	Nothing has changed in over 100 years.	The law has failed to

		protect the public and other the guise of self-regulation. protects the chiropractors.
14-16	The Health Workforce/ Audits and Investigations Division of the Manitoba Government are presented with evidence of non-scientific claims.	They say the present law permits this type of non-scientific claim and paid the chiropractors out of public funds..
17-18	Pediatric chiropractic. Manipulating the necks of babies and children. The legal endorsement of the high velocity low amplitude thrust will apply to babies and children for all types of conditions. See document 16, the back of the neck of a baby..	Manitoba chiropractors fully support using neck manipulation in infants and children to treat every know condition in pediatrics even including childhood cancer. See documents Four, Five and Six.
19	The endless numbers of chiropractic "studies" are all made up and do not follow any scientific principals. They are the individual case reports of a chiropractor.	For every disease from autism to diabetes, to cancer to bed-wetting, they all have the same diagnosis, a highest neck vertebral subluxation and the same treatment, a high velocity low amplitude neck manipulation.
20	The Chiropractic Cancer Foundation for Children. They even offer it free of charge	www.ccffc.org Document six
20 (A)	The deceptive language used is to say they are not "treating" or "curing" but by removing subluxations they give the body the best chance to "heal" a cancer.	A dance of words meant to deceive. This is offering a "treatment".
21-25	An acid test that needs to be done to show that all these claims about subluxations and adjustments are just a non-scientific deception. Yet chiropractors are allowed to tell anxious parents their babies and children suffer from vertebral subluxations,	They cannot find the same subluxations, the same adjustments and the positive results. The Chiefs of Pediatrics called this all "ineffective and useless".
26-27	Our legal recommendations focus on the highest neck area.	We will not deal with spinal manipulation done to any other areas but the highest neck.
28-29	The testimony of chiropractor [redacted] submitted to the Connecticut State Board of Chiropractic Examiners	They refused to hear the medical doctor who was there to present his submission.
30-36	The issue of risk and benefit. There is no benefit to claim that neck manipulation can	No chiropractor can claim they all use the same

	remove vertebral subluxations and influence the functioning of the body organs. As stated before, the effectiveness or lack of effectiveness for back and neck pain is not the issues for the chiropractors. **IMPORTANT POINT: They need to do it to believe in their philosophy of vertebral subluxations. (Paragraph 35)**	velocity and range of motion of a neck manipulation and remain within the "anatomic" limits. **There are safer alternatives.**
NOTE on paragraph 35-36	The 33 principles of chiropractic and the innate potential. (Document Twelve)	This is the real reason they manipulate the highest neck area for every condition possible.
37	The neurological complications. The chiropractors say you can have a stroke from stargazing but never from a forceful neck manipulation. Makes no sense.	Nerve damage, stroke, death, etc.
38-41	The non-scientific chiropractic studies trying to prove they have never caused a stroke. The Manitoba Chiropractic Association says it does not happen.	Experiments done on dogs and on statistics in which not a single patient is examined.
42--45	They do cause strokes. The opinion of neurologists all across Canada. The results of Coroner Inquests in Quebec, Ontario and Saskatchewan.	The opinion of the Canadian Stroke Consortium.
46.	Stroke in a six year old. The authors state, "there is no need for high velocity neck manipulation". **Document thirteen**	Apart from trying to release the "innate potential of the spinal cord"
47-48	No point arguing with a "belief system that is the very core of chiropractic belief.	The 33 principles are the core belief.
49-50	The myth that highest neck manipulation is being done because of musculo-skeletal pain. While this may help in some cases, there are better alternatives.	While this is done in some cases, the real reason is to awaken the innate potential of the spinal cord.
51	What is the basic anatomy of the neurology and function of the spinal column that makes subluxation "belief" impossible?	Where exactly is the "innate" intelligence of the spinal cord to be found"
52	The basic anatomy of the neurology and function of the spinal cord.	There is no innate intelligence.
53--60	The need and the many advantages of a Scientific Standard.	Removing the "alchemy" of the present law.
61	The Manitoba Chiropractic Association must enforce the Scientific Standard as a matter of licensure.	A Regulatory body acting in the public interest should have NO objection to a scientific standard.

DOCUMENTS

ONE	Legislative alchemy: the US state chiropractic practice acts. [redacted] Attorney. State of Florida	A review of all the legislation that allow chiropractors to claim the ability to detect 'subluxations' causing a myriad of organic illness" when no such cause and effect exists.
TWO	Chart of Effects. Subluxations causing every disease.	Many chiropractic offices in Manitoba, this one from [redacted] Brandon Manitoba.
THREE	Randy L Randell, Front Health Work force/ Audit and Investigations of Manitoba Health.	Letter confirms that Manitoba health pays for vertebral subluxations to treat everything from autism to infections and even cancer.
FOUR	International Chiropractic Pediatric Association..	Child receiving an upper neck manipulation. See also document thirteen
FOUR A	Examples of pediatric chiropractic adjustments from standard chiropractic textbook	Claims to be treating everything by these "adjustments".
FIVE	International Chiropractic Pediatric Association	50 different claims about conditions being treated by chiropractors in infants and children.
SIX See document fourteen as well	Manitoba chiropractors claim to help treat cancer in children. This is part of several Manitoba chiropractic offices. Take a child to a Manitoba chiropractor's office and ask if they can help "treat" cancer and they may very well say, we don't treat cancer but we can help your body give you the best change to beat cancer. Some may even suggest less chemotherapy is needed.	[redacted] is proud to support The Chiropractic Cancer Foundation for Children by providing complimentary quality chiropractic care to children with cancer. For more information please go to http://www.ccffc.org/
SEVEN	Anatomical picture of the highest neck area and the beginning of the spinal cord.	Where is the "innate intelligence" in the spinal cord as chiropractors claim Can you see it? Our intelligence is in the brain above.
EIGHT	Anatomical picture of the base of the skull, the occiput to the bottom of the	This is the area of the highest vertebral area of the neck.

	second vertebrae.	
NINE	Anatomical picture of how the vertebral artery in enclosed by a canal in the first vertebral vertebrae.	The artery is completely entrapped and affected by any movement of the first and second vertebrae.
TEN	The Scientific Standard for the use of manual therapy, mobilization and manipulation of the highest neck area	Outlines the legislative standards restricting the use of highest neck manipulation of any kind to only scientific uses.
ELEVEN	The basic neurology anatomy and function o the human body.	The "belief" of a magnetic healer and his son is complete scientific nonsense and an impossibility.
TWELVE	The Thirty Three Principles of Chiropractic	The "belief in manipulating the highest neck area to release the "innate potential of the spinal cord."
THIRTEEN	Chiropractic Manipulation of the Neck Linked to Stroke in a six-year-old child.	**"There is no role for high velocity low amplitude thrust type maneuvers that cause sudden and intense rotation of the neck for any reason in any patient".**
FOURTEEN See Document Six as well	The deceptive language chiropractors use to claim they do not "treat" cancer or autism or diabetes or infections. This "language" is in regard to every possible condition.	They cannot "ensure" that neck manipulation will cause "cancer "to be healed". However, doing a manipulation "gives the body is best chance at healing"
FIFTEEN	Manitoba chiropractor claiming to treat "special needs children.) Autism, ADHD, Sensory Processing Disorder. All treated by correcting subluxations.	The Journal referred to, Journal of Pediatric and Family health is a chiropractic journal.
SIXTEEN	The back of a baby's head.	In this small space covered with muscle and ligaments and fat tissues, chiropractors claim they can find subluxations and adjust them???

PART ONE
LEGAL CONSIDERATIONS

THE LEGAL ALCHEMY, TURNING WATER INTO GOLD TURNING SCIENCE INTO VERTEBRAL SUBLUXATIONS

1. The purpose of the law is to provide order. The obligation of the law is to regulate government. The law, when dealing with the area of medical science, has a simple task, recognize the basic anatomy, physiology, neurology and principles of medical science.

2. The law cannot change the basic anatomy and regulate that a three-inch segment at the top of the spinal cord (DOCUMENT SEVEN AND EIGHT) is where our "intelligence" resides. It resides in the brain. The law cannot regulate in the public interest that diseases such as cancer, diabetes, autism to name a few, can be influenced in any way by taking the top of the neck and subjecting it to a "high velocity low amplitude" manipulation. Each of these conditions has their cause, diagnosis and treatment in full respect of modern medical science, diagnosis and treatment.

3. Yet, as written in this substantive document by respected Attorney [redacted] (DOCUMENT ONE,) the legislatures have created an anatomy and neurology that does not exist and can never exist. This is exactly what the laws in every Canadian province and every American State and around the world have done. The chiropractors are now asking to legislate this into law by asking specifically for a "high velocity low amplitude" type of manipulation.

4. The Ministry officials simply must read this entire document by Attorney [redacted] We draw particular attention to the Abstract, "Legislative alchemy: the US state chiropractic practice acts fct_1032 [redacted]

5. **The Abstract**

"Chiropractors claim the ability to detect 'subluxations', an ill defined, unproved spinal pathology of no known clinical significance. Patients are advised that subluxations can adversely affect organ function and general health even if the patient is asymptomatic.

6. ***The removal of vertebral subluxations through chiropractic treatment is posited to restore 'neural integrity', facilitating the body's self-healing ability. Despite the deficiencies of these concepts, the 50 state chiropractic practice acts essentially define chiropractic as the detection and correction of subluxations and assume their significance to human health, allowing a broad scope of practice. Because the chiropractic profession seems unwilling to abandon these discredited concepts, reform of the state chiropractic practice acts to eliminate subluxation-based chiropractic practice may be the only viable solution to the perpetration of unscientific and unproved healthcare.***

7. ***As Attorney [redacted] found: "In the USA, the practice of chiropractic is licensed and regulated by the 50 states, and each state defines its scope of practice. Unfortunately, the practice acts are based on the archaic concepts of early chiropractic***

as set forth by DD Palmer, its inventor, in 1895: that 'subluxations' impinge on 'nerve flow', adversely affecting organ function, and that chiropractic adjustments are the remedy. Although the definition of chiropractic has changed over the years, the basic tenets remain true to Palmer's original conception and continue to have wide support within the profession, which enjoys a broad scope of practice.

8. In the Province of Manitoba the Act by allowing the practice of "chiropractic" without any restrictions follows and basically allows every one of the definitions as outlined for every State in Table 1 of the Bellamy report. There is carte blanche for Manitoba Chiropractors to do as they wish and this is exactly what they do.

9. Why do the chiropractors in particular want "high velocity low amplitude spinal manipulation recognized in the legislation?

10. IMPORTANT POINT: The real question is why of all the various manipulation techniques why the focus on this particular type of maneuver??? The answer is that this is the type of maneuver that is the classic way chiropractor claim to use in order to remove vertebral subluxations in the highest neck area so as to release "the innate intelligence of the spinal cord". **(See Document Twelve)** Without this all subIxuation "treatments" are not possible. So the Minister is asked to approve chiropractic subluxation philosophy. This is fully explained below;

STRICT MUSCULO SKELETAL CARE

11. With chiropractic there are two main types of diagnosis; the first is some type of muscular-skeletal restriction or lack of motion. Some may also include headaches as being caused by mechanical restrictions of the neck vertebrae.

VERTEBRAL SUBLUXATION DIAGNOSIS AND "TREATMENT"

12. The second diagnosis is based on the "hole in one" therapy developed in the 1930 by B.J. Palmer, the son of the founder of chiropractic. He declared, **"I have found the only cause of disease. He claimed this to be a "subluxation" of the highest neck area.** He called this the "hole in one" theory; the "hole" being were the spinal cord begins at the base of the skull. Manipulation of this are he declared in so many words, this would **"release the innate intelligence of the spinal cord"** so that every disease could be treated. The specific maneuver done to achieve this is the high velocity low amplitude type, designed to produce a popping sound from the release of gas into the gap. More gentle maneuvers may be used in babies and children but the purpose is the same;

13. This existing laws have done nothing to protect the public and science. This theory of "vertebral subluxations" is taught today in every school of chiropractic and is practiced by well over 90% of all chiropractors. Nothing has changed through 100 years of legislation supposedly to protect the public. The basic known neurology anatomy of the nervous system has been totally denied by politicians and the Law.

14. In 2011 our group of Manitoba Stroke victims submitted to the Health Workforce/

Audits and Investigations Division of the Manitoba Government over 50 claims by Manitoba chiropractors including that taking the neck of a baby or child and twisting it will "treat" or "help" everything from autism, mental retardation, seasonal allergies, bed-wetting, measles, mumps, chicken pox all infections so that immunization is not required, and even cases of cross eyes, etc. etc. the list is endless and it is the same for adults. This was documented from over 20 Manitoba chiropractic offices. The overall belief is illustrated by the "Chart of Effects" of vertebral subluxations and is found in various forms in many offices of Manitoba Chiropractors. (DOCUMENT TWO)

15. The Manitoba government has paid for this. In a letter dated January 19, 2012 from Randy L. Randell, Health Workforce/Audit and Investigations of Manitoba Health fully supported Manitoba Chiropractors claiming to treat all such conditions by spinal manipulation. **(DOCUMENT THREE)**

16. While this official saw as his duty the proper interpretation of the law, he never answered the questions we posed about how the law was in conflict with science, neurology and the basic anatomy of the human body. So he did confirm that the present Act in Manitoba and the licensing body fully supports the Palmer chiropractic subluxation philosophy. This results in room to drive a cash filled truck through to financially benefit with millions of dollars of taxpayer money for what is a non-scientific and anatomical fraud. Now that this issue has been better understood we may make the same complaint again with what should be a responsible decision in the financial interest of the citizens of Manitoba.

PEDIATRIC CHIROPRACTIC

17. Manitoba Chiropractors and their regulators endorse the diagnosis and treatment advocated by the International Chiropractic Pediatric Association. They advocate having parents bring their newborn babies to a chiropractor to have their neck manipulated to treat "vertebral subluxations". They fully support all the claims of the International Pediatric Chiropractic Association. (icpa4kids.org).

18. The ICPA publications show a young baby supposedly receiving a neck manipulation **(DOCUMENT FOUR)**, speaks about "Honoring the Innate Potential" and speaks about conditions treated by chiropractors including Gastro esophageal reflux disease, constipation, birth trauma sequels, chronic otitis media, Erb-Duchesne palsy, enuresis, peripheral neuropathy, failure to thrive in an infant, etc. etc. etc. **(DOCUMENT FIVE)**. (SEE DOCUMENTS FOUR A)

19. All of these supposed "studies" have two non-scientific characteristics in common, they all have the same cause for every disease, a neck vertebral subluxation, they all have the same treatment for everything from autism to cross eyes, a supposed neck "adjustment". This is not how scientific medicine does valid studies. ". With this belief every disease does not have a differential diagnosis, it has one diagnosis, a vertebral subluxation. With this diagnosis there is only one treatment, neck manipulation to treat everything. This is NOT the way medical scientists are taught and practiced and it is 100% not the way the body works. Imagine if a medical scientist produced hundreds

of studies regarding cancer, diabetes, arthritis, pneumonia, autism, ear infections, etc. all claiming to have one cause and one treatment???

20. The chiropractors also endorse many other chiropractic groups even including the treatment of cancer in children by neck manipulation to remove "subluxations". **(DOCUMENT SIX).** Does the Minister intend to authorize this type of neck manipulation for newborn babies? Does this mean that there will be no need for immunization? Research shows that over 40% of all chiropractors oppose routine immunization and offer neck manipulation instead. see website The Chiropractic Cancer Foundation for Children. **See 42 (A) Stroke in a six year old. SEE DOCUMENT THIRTEEN)**

20 (a). Some patients with cancer may have musculo-skeletal pain and some may benefit from treatments from a physiotherapist and/or chiropractor for these pains. Let it be clear that we are not talking about treating musculo-skeletal conditions. Document Fourteen states clearly, However, doing a manipulation "gives the body is best chance at healing". In scientific medicine anything that can help heal a cancer is a treatment.

21. Scientific medicine can demonstrate in an objective manner how a diagnosis can be made using haematology, biochemistry radiology studies, and biopsies, to mention just a few. Scientific medicine can also demonstrate how the treatment, such as insulin for diabetes, can show its effectiveness by lowering the blood sugar.

22. With chiropractic subluxation in regard to organ disease and especially with paediatrics and other disorders, none of this is possible. Bring ten babies or young children into a room and have five different chiropractors write down where the subluxation is in the highest neck area. Have even the same five chiropractors or any others they wish, "adjust" the highest neck area to release the "innate intelligence of the spinal cord". Adjust five but not the others. Then have the chiropractors show, which have been "adjusted" and which have not.

23. They cannot do it. Why, because it is all a non-scientific delusion. There are no vertebral subluxations causing autism, mental retardation, cross-eyes or deafness. The so-called "adjustment" is a fake and does nothing. The eyes do not ever become uncrossed or the child ever hears again. Do this test in front of observers and see what a scam it all is. Look at the picture of the baby of a baby's head. (DOCUMENT SIXTEEN))

24. The type of "adjustment" being done include a sudden "high velocity low amplitude" limited range of motion highest neck manipulation, often done just by holding the side of the face of the child and not even on the vertebral bones, another reasons why they want this enshrined into law. (DOCUMENT FOUR (A) PICTURES).

25. The Chiefs of Pediatrics of all our Canadian Hospitals declared, ". There is no scientific evidence whatsoever that the so-called chiropractic spinal adjustment results in any correction to a child's spine. These "adjustments" are ineffective and useless". Yet in

the absence of a Scientific Standard the law allows chiropractors to tell anxious parents that their babies and children suffer from a disease in their neck. "vertebral subluxations". that does not exist, these subluxations can cause everything from ear infections to cancer if not treated and are told that a neck manipulation will be effective to remove this risk.

THE LEGISLATIVE FACTS AND THE NECESSARY SOLUTION

WE LIMIT OUR LEGAL RECOMMENDATIONS TO THE HIGHEST VERTEBRAL BONES NECK AREA.

26. At the onset our focus in regard to the "high velocity low amplitude thrust" is specific to the highest neck area from the base of the skull and the first two vertebrae, the atlas and the axis. (DOCUMENT SEVEN AND EIGHT). We will not deal with such a procedure applied to any other area of the spinal column.

27. This is important because the evidence shows that over 95% of all patients, starting right with babies will have a chiropractor undertake some type of highest neck manipulation. It is at this area of the neck that all of the chiropractic philosophy of vertebral subluxations is done. As well this is clearly the area which when manipulated is more dangerous than any other joint in the spinal column.

28. As stated by chiropractor [redacted] This ***belief was then enshrined into law by the passage of "chiropractic" Acts and entrusted to the regulatory bodies to protect this false and deadly philosophy. The greatest legal myth has been that the chiropractic Acts protect the public. They do not.*** **(Testimony to the Connecticut State Board of Chiropractic Examiners). They refused to hear his testimony to be presented by a medical doctor who was there to present it.)**

29. **Further,** [redacted] **stated, "T*he answer to all of this is that highest chiropractic neck manipulation is a philosophy, a belief a type of non-scientific religion. This foundational belief is so strong that change can never come from within chiropractic. Chiropractors will never on their own understand or accept the scientific fallacy of their beliefs. So change has to be imposed by the very governments who are part of the problem to begin with. A mature health care profession knows that medical science and treatment change in time. A mature health care profession knows that medical science and treatment change in time. Mature and modern health care does not remain stuck with the pseudoscientific ideas of a magnetic healer over 100 years ago, David Palmer. Mature and modern health care does remain stuck back in 1930 with the non-scientific claims of his son, B.J. Palmer."* (Testimony to the Connecticut State Board of Chiropractic Examiners). They refused to hear his testimony to be presented by a medical doctor who was there to present it.)**

THE ISSUE OF RISK AND BENEFIT

30. All health care providers and members of the public are fully aware that every medication, surgical procedure or form of physiotherapy and manual therapy has its benefits and risks. We all recognize that certain drugs and surgical procedures may have a greater statistical risk than does a neck manipulation. However two points are essential.

There was no need in the first place to manipulate anyone's neck for a vertebral subluxation claiming this can affect the body organs. Secondly the quality of the neurological consequence can be far greater than that almost any drug.

31. In regard to the particular claim of being able to "moving a joint within its anatomical range of motion", there cannot be any guarantee of this whatsoever and the real concern is not just the range of motion but damage that does occur to both the vertebral arteries in the posterior neck region and the carotid arteries in the anterior neck region. **(DOCUMENT NINE).** As well when the chiropractors speak about "low amplitude" what they are saying is that the high velocity neck manipulation is suddenly stopped.

32. The Minister is being asked to support a "high velocity low amplitude" type of neck manipulation. Yet the literature states " *Data on the effectiveness of CMT for neck pain are sparse and questionable.*[73,80–85] *The most recent Cochrane review consisting of some low-quality trials found that the effect of cervical manipulation was comparable to that of mobilization, which does not include a thrust.*[80–82]

33. Is the Minister being asked to support something which is no more effective and may be more risky that simple mobilization, neck exercises, doing nothing and just waiting? Why are the chiropractors asking for this particular type of neck manipulation? Is it because this is the only way to "awaked the intelligence of the spinal cord: in order to treat every thing from autism to bed-wetting?

34. In that regard, we will not focus on the diagnosis, use or effectiveness of upper cervical manipulation for the myriad of chiropractic mechanical techniques (Gonstead), etc. using a high velocity low amplitude manipulation and diagnosis, cervical caused headaches, subluxations, fixations, etc. etc. We would however point out clearly that in almost case we have come upon where there was no neck complaint; nevertheless the highest neck was manipulated time and time again.

35. As stated before, the effectiveness or lack of effectiveness for back and neck pain is not the issues for the chiropractors. IMPORTANT POINT: The real question is why of all the various manipulation techniques why the focus on this particular type of maneuver??? The answer is that this is the type of maneuver that is the classic way chiropractor claim to use in order to remove vertebral subluxations in the highest neck area so as to release "the innate intelligence of the spinal cord".

36. Yes, chiropractors may use some gentle techniques especially with children but the dynamic and psychological importance of the high velocity maneuver making a loud popping sound is the most essential part of the belief system .So the Minister is asked to approve chiropractic subluxation philosophy.

NOTE: The 33 Principles of Chiropractic and the Innate Potential are fully described in a endless number of chiropractic literature articles and this "belief" is the

basis for chiropractors, including almost all in Manitoba, to do highest neck manipulation. (DOCUMENT TWELVE)

THE RISK OF SOFT TISSUE, LIGAMENT, MUSCLE, BLOOD CIRCUCLATION, STROKE AND DEATH

37. In regard to the risk of complications, the Manitoba Chiropractic Association has stated "It is the current researched opinion of the chiropractic community that a chiropractic adjustment cannot cause an arterial dissection, irrespective of the anecdotal comments made by the complainant or any of the attending professionals handling the complainant's treatment," the report said.

38. This is rather odd in that chiropractors claim that over 35 types of high neck motion DO cause strokes, everything from star gazing to working in your garden but refuse to admit that a "high velocity low amplitude" meaning sudden stopping, done totally beyond the control of the patient cannot cause a stroke. Where is the logic in that? There is none.

39: [redacted] *stated, **As a chiropractor let me state clearly that spinal cord injury, stroke and death resulting from chiropractic neck manipulation are not a rare occurrence; this risk is not acceptable and the resulting injuries are totally preventable. They are preventable because almost all these strokes and deaths came about for a condition the chiropractor diagnosed and yet none of the victims had, the so called "vertebral subluxation complex". This diagnosis was a creation not of science but of chiropractors and politicians.***

40. ***We chiropractors say that everyday activities such as turning your head while driving or having your head back in a beauty parlor and even yoga can cause damage to the arteries and a stroke so why do we deny this can happen when we are holding a person's head and then suddenly turning and twisting it in what chiropractors call a high velocity low amplitude neck manipulation? Is every neck manipulation so precise and perfect, with no rotation and no high velocity twisting that this cannot ever happen? I think not and chiropractors know not.***

41. We have no respect for the "studies" done by chiropractor trying to prove that their highest neck manipulation can never cause a stroke or it is a one in a five million event. They do studies on dogs in which they purposely manipulate the neck not in the highest neck region by far below at cervical four or five. They produce statistical studies; one done by a chiropractor who himself admitted he felt he had caused a stroke, claiming the risk is the same if you see a chiropractor or a medical doctor. In his study not a single patient is examined, essential codes are left out and different types of strokes not specific to neck manipulation fill the data with nonsense. Should the Minister request it we can provide him with a detailed criticism of this report by chiropractor [redacted] Redact to protect privacy

42. We do not need to argue if the chiropractic high velocity low amplitude

manipulation of the highest neck area does or does not cause strokes. Sixty-four neurologists all across Canada said it does. They stated:

"Our concerns are significant: Stroke and death due to neck manipulation has been reported in the scientific literature for over 50 years. **(1,2,3,4,5,6,7,8,9,10).** New deaths, in the past few years, have been reported to the Canadian Stroke Consortium. **(11).**

43. In terms of Court based evidence, the Coroner's Inquest into the death of [redacted] a 20-year-old girl from Saskatoon concluded that her death was the direct cause of a neck manipulation. The Coroner concluded this. The jury was so concerned that its first recommendation was that there be a warning posted in a prominent place in the office of every chiropractor. In that regard, the longest and most extensive Coroner's Inquest in Canada, that of [redacted] concluded five to zero that the death was caused by chiropractic highest neck manipulation. The same was the conclusion of the Coroner's Inquest into the death of [redacted] Redact to protect privacy

44. We respect the excellent work of the Canadian Stroke Consortium. the work of neuro-radiologists who study these real patients with arterial dissections shortly after the neck manipulation and the clinical neurologist who examine them. The concluded "Stroke resulting from neck manipulation occurred in 28% (21/74) of our cases"

45. Four larger case-control studies found an association between CMT and VAD/vertebrobasilar artery territory stroke in young patients (<45 years of age) with reported ORs of 3 to 12,[67] 5.5,[84] 6.6,[117].

46. The highly respected Yale Professor of Neurology, [redacted] was recently part of group who published a commentary recently, June 05, 2015 about "Chiropractic Manipulation of the neck linked to Stroke in a Six year old Child. The report stated amongst other things, **"There is no role for high velocity low amplitude thrust type maneuvers that cause sudden and intense rotation of the neck for any reason in any patent".**

47. There is no point arguing it because this is the most fundamental "Belief" system so deeply entrenched that it is impossible to argue with scientific facts and basic anatomy against a non-scientific belief system. This "belief is just as entrenched as is the belief in neck manipulation to release the "innate intelligence of the spinal cord". The fact is if we were taking about reported side effects of any prescribed medication of this nature, the medical profession would have abandoned its use long ago and quickly.

48. If there is any doubt in the mind of the Minister the choice must be on exercising caution in order to protect the public.

49. We repeat the finding of chiropractor [redacted] that almost all of the victims of stroke and death and other nerve complications NEVER HAD NECK PAIN TO BEGIN WITH. They were being treated for non-existent vertebral subluxations. This is NOT therefore an issue of risk versus benefit. It is an issue that there was no need for any risk to begin with.

50. The second biggest myth is that highest neck manipulation is being done because people have musculoskeletal complaints. Even in that regard chiropractors believe that if they "adjust" the highest neck area that somehow all the vertebrae, attached by muscles and ligaments, will automatically align themselves and even treat low back pain. No scientific professional believes such a thing. As we saw with [Redact to protect privacy] *she fell on her tail bone and yet her highest neck was manipulated over 50 times over the course of her visits.* [redacted] *of Connecticut, I am advised, was also told she had vertebral subluxations.*

What is the basic anatomy of the neurology and function of the human spinal column that makes the subluxation "belief" impossible?

51. Documents seven and eight show anatomical drawings of the beginning of the spinal column in the occipital to second vertebral area and below. Where exactly is the "innate intelligence". Is it at the base of the occiput, the joint between the first and second vertebrae, below the second vertebrae? Does the spinal cord in the highest neck area show a sudden increased mass or bulge in that area? Is there no intelligence in the brain, obviously not because there are not vertebrae there to manipulate.

52. If there is any doubt as to the impossibility of the chiropractic "vertebral subluxation" being part of anatomical and neurological truth, Document Eleven as well as Seven and eight fully outlines the reality of the known and existing anatomy and neurology of the human body. The Minister can present this to any scientific neurological association; any professor of anatomy and all will agree that this is the way the anatomy and neurology of the human body works and how this makes it totally impossible

THE NEED FOR A SCIENTIFIC STANDARD

53. We therefore repeat again that scientific limitations have to be placed upon high velocity low amplitude neck manipulation in the highest neck area and by this we expect that over 95% of such manipulations will cease thus reducing the risk of stroke and death.

54. In the interest of public safety, the obvious legal solution is to apply scientific standards to the use of any type of manipulation to the highest neck area. This will make a clear distinction between the proper use of manual therapy to treat some musculo-skeletal conditions of a mechanical nature and chiropractic subluxation philosophy. This will not interfere in any way of the right of a Manitoba citizen to seek relief from a chiropractor for a musculo-skeletal condition.

55. With a scientific standard for medical care, there are an endless number of valuable guidelines, clinical indication and restrictions of what a medication or procedure can or can be used for. One cannot claim that penicillin can be used to treat or influence every type of infection, every cardiac condition, and every type of cancer, every type of

mental abnormality and every type of any condition whatsoever.

56. The present Manitoba legislation as well as that of every Province in Canada and every American State is a "legislative alchemy" as written to by respected attorney [redacted] The chiropractors specifically want "high velocity low amplitude" neck manipulation to place on legal stamp on its use to manipulate the highest neck area to "release the innate intelligence" of the spinal cord.

57. We maintain that the adoption of the legal statutes as outlined (**DOCUMENT TEN**) below will resolve in the public interest the current "alchemy" in the Manitoba Chiropractic Act. The Province of Manitoba has the unique opportunity to protect the health of the public and the integrity of the use of public health care funds that will set an example for other Canadian Provinces and American States to follow.

58. Nothing in this standard will impact in any way of the right of a citizen of Manitoba to seek the help of a chiropractor for a a musculo-skeletal complaint. In fact it will assure the citizen of the highest standard of scientific care.

59. For this standard to be effective, every Manitoba chiropractor as a means of obtaining licensure, immediately upon the adoption of this standard and with no grandfather exception, must in writing agree to abide by this standard and the Manitoba Chiropractic Association.

60. It is all really very simple; a chiropractor cannot claim to in any way treat everything from autism to cancer by subjecting the baby, child or adult highest to any form of highest neck manipulation. In order to be registered in the Province of Manitoba each chiropractor must sign their agreement in writing and the Regulatory body must enforce this. (DOCUMENT TEN)

61. If the Manitoba Chiropractic Association maintains that there are no chiropractors in Manitoba who practice the 33 principles of "innate intelligence", then they know this is NOT true. If they still maintain this then they should have no objection whatsoever to a scientific standard, one, which they must, enforce.

Document 1

Document 1 –

Redacted – Subject to Copyright

Can be found at:

Bellamy, J. J. (2010), Legislative alchemy: the US state chiropractic practice acts. Focus on Alternative and Complementary Therapies, 15: 214–222. doi:10.1111/j.2042-7166.2010.01032.x

Document 2

Document 2 –

Redacted – Subject to Copyright

Vertebral Subluxation and Nerve Chart

Document 3

DOCUMENT THREE

Manitoba
Health
Health Workforce/Audit & Investigations
3069 - 300 Carlton Street
Winnipeg MB R3B 3M9

Our File: 2011/804

January 19th 2012

PERSONAL & CONFIDENTIAL

Ms. Laura Brownson

Redacted to protect privacy

Dear Ms Brownson:

Re: Chiropractic Complaint

Thank you for your letters dated November 30th and December 5th 2011.

The chiropractic adjustment has been an insured service through Manitoba Health since 1969. As well, the diagnosis of subluxation has been an acceptable diagnostic billing code with Manitoba Health since the inception of public funding through Medicare. The latest contract signed between Manitoba Health and the Manitoba Chiropractors Association that is in effect until March 15th 2015 states, "all residents in the Province of Manitoba shall be insured under the Chiropractic Act and the Chiropractic Services Regulation (M.R. 45/93) during the currency of this agreement". Regulation #45/93, Section #2 states: "except as provided in the Excluded Services Regulation, Manitoba Regulation 46/93, the adjustment of the human spinal column, pelvis and extremities are insured chiropractic services whether provided in or outside Manitoba". Neck adjustments/manipulations are included in spinal column adjustments that are also covered by Manitoba Health. Manitoba Health recognizes that there are beneficial effects of chiropractic treatments. However, we are also aware of the controversy surrounding chiropractic spinal manipulation.

A subluxation has different meanings depending on the profession/specialty involved. Orthopaedics, Ophthalmology, Dentistry and Chiropractic all use the term subluxation but for various different reasons. The World Health Organization's definition of the chiropractic vertebral subluxation is: "**a lesion or dysfunction in a joint or motion segment in which alignment, movement integrity and/or physiological function are altered, although contact between joint services remains intact. It is essentially a functional entity, which may influence biomechanical and neural integrity**".

There may be a misconception or faulty premise that the only thing chiropractors do is adjust. Patients seek out chiropractic care for a large variety of reasons. Many present with conditions that either require a medical referral or because the patient is not satisfied with the result of their current care and would like a differing opinion/viewpoint. Chiropractors, for example, may utilize various ancillary techniques like acupuncture and active release therapy. As a profession Chiropractors educate patients on diet and exercise in the promotion of healthy living practices. Various forms of physical therapy modalities are also often incorporated into everyday chiropractic practice. The adjustment is but one component of the care that a chiropractor may provide a patient. Often times these medical conditions improve not because the chiropractor is treating them directly, but rather because the body is functioning better and healing itself.

The Scope of Practice of Chiropractic in Manitoba is the range of responsibilities, education, clinical experience/expertise and standards of practice that determine the boundaries within which a chiropractor practices in the Province of Manitoba. For ease of reference I have provided you with a document that clearly describes the Scope of Practice of Chiropractic in Manitoba.

It is important to note that the content and nature of advertising is regulated by the Manitoba Chiropractors Association. Their Code of Ethics clearly articulates the standard for Manitoba chiropractors in this regard. Article 4(a) states: "chiropractors shall conduct all advertising and promotional activity in accordance with applicable legislation and this code". Chiropractors may advertise provided the advertising:

- Is demonstrably true and accurate
- Is not misleading or deceptive or likely to mislead or deceive
- Is of dignified nature and otherwise such as not to bring the profession into disrepute
- Does not claim or imply any superiority of the advertising chiropractor or clinic over any other member of the association

As a point of historical reference it is important to note that the chiropractic profession was granted self-regulatory status by the government of Manitoba in 1945 under the Chiropractic Act of Manitoba. The Manitoba Chiropractors Association is the Regulatory Board that registers and licenses chiropractors as well as sets the standards of practice and code of ethics for the profession in Manitoba. The MCA is also responsible for investigating complaints and disciplines those members who have committed acts of professional misconduct.

Manitoba Health finds no evidence, after reviewing the pattern of practice for the chiropractors listed in your two letters, to support your suspicion that the diagnosis and treatment identified/performed and subsequent billing to Manitoba Health is fraudulent. Therefore our office will cease any further investigation into this matter.

In the matter of advertising on the internet, I would suggest that if you feel strongly about your convictions that you make a formal complaint to the Manitoba Chiropractors Association. Manitoba Health has no control over any advertising initiated by Manitoba Chiropractors and any issues you may have in this regard should be directed to the appropriate governing body.

Manitoba Health considers this matter now closed.

Yours Truly

Randy L. Randell
Audit & Investigations

Document 4

Document 4 –

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Document 4A –

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Can be found at: Anrig, Claudia and Gregory Plaugher, Pediatric Chiropractor. Lippincott Williams and Williams, 2012

Document 5

Document 5 –

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Chiropractic Pediatrics

Document 6

DOCUMENT SIX

THE CHIROPRACTIC CANCER FOUNDATION FOR CHILDREN

Free chiropractic healing for kids with cancer worldwide

Click on one of the CCFFC member icons to get a detailed map view.

Larger World View

Welcome to the Chiropractic Cancer Foundation for Children. Our foundation is led by Canadian Doctor of Chiropractic [redacted] has a strong belief in the human body's innate ability to combat cancer cells and other diseases. He has first-hand experience with cancer since [redacted] himself, was diagnosed with Leukemia at the age of eleven. Stress and poor circulation can undermine the body's natural healing powers and interfere with the central nervous systems's ability to communicate effectively. At the foundation, we believe that chiropractic adjustments and other natural healing techniques can mitigate or reverse stresses that lead to poor health and even life threatening diseases such as cancer.

Unfortunately, there are many victims of cancer who cannot afford chiropractic treatment. The mission of the foundation is to ensure that all children with cancer have access to free chiropractic care so that cost is not a factor in the decision obtain this important care for all those in need. We are very grateful to the over 100 chiropractors who believe in our cause and who have dedicated their time to helping others. We have members in more than six countries and are we are continuing to expand.

[redacted] on Supporting Chiropractic Educational Institutions

Complimentary chiropractic care for all children with cancer, worldwide!

Our Mission:	To provide Complimentary Quality Chiropractic care to children with cancer throughout the world.
Our Goal:	To enrich the lives of children suffering from cancer by helping to ease their pain and nurture a process of self healing.

Find us on facebook

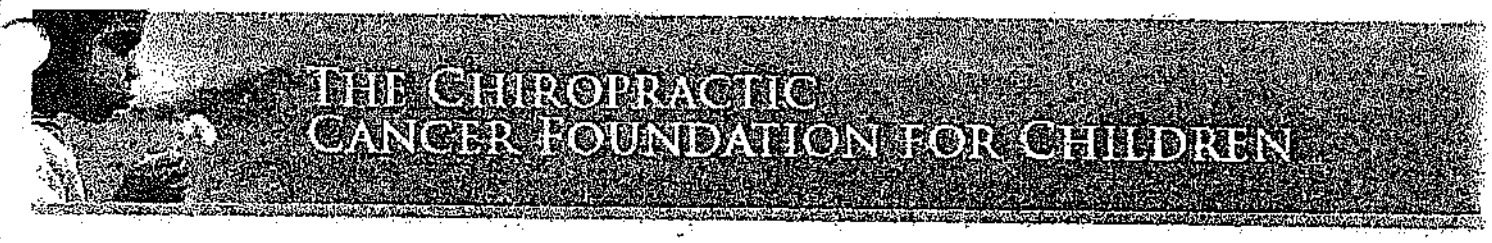
Join our Cause - Membership is Free

There is no cost for chiropractors to be members of CCFFC. All we require is that you help us promote our foundation by providing a link from your website.

To become a member, please follow these steps:

1. Read our Articles of Practice.
2. Add a link to us from your website.
3. Fill out the CCFFC Membership Application.

Redacted to protect privacy



Send an Email to this CCFFC Chiropractor

This form will send an email to: Redacted to protect privacy

All fields indicated with an * are required.

Your Name: *

Phone Number: *

Email Address: *

Please provide a description of your requirements below...

*

I consent to being contacted electronically by The Chiropractic Cancer Foundation for Children about the specific matter at hand. I understand that my contact information provided herein will not be used for any other purposes.

Submit

The Chiropractic Cancer Foundation for Children is a network of chiropractors who are are committed to offering free chiropractic healing to kids with cancer.

JOIN CCFFC Redacted to protect privacy

Business Websites by We Think Solutions

Document 7

Document 7 –

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Illustration of Brain Stem, Cranial Nerves, Mesencephalon

Document 8

Document 8 –

Redacted – Subject to Copyright

Illustration of Cerebrum: Medial Views

Document 9

Document 9 –

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Illustration

Document 10

DOCUMENT TEN

SCIENTIFIC STANDARD FOR THE USE OF MANUAL THERAPY, MOBILIZATION/ MANIPULATION OF ANY TYPE OF THE HIGHEST NECK AREA.

DEFINITION: THE HIGHEST NECK/CERVICAL AREA IN THE SPINAL COLUMN. The highest neck area is from the base of the skull where it makes contact with the body of the first cervical vertebrae called the atlas and from there to the bottom of the second cervical vertebra called the axis. Chiropractors refer to this as the Upper Cervical Complex".

DEFINITION: CHIROPRACTIC VERTEBRAL SUBLUXATIONS

The chiropractic term **"vertebral subluxations"** maintains that the vertebral neck bones, especially the area from the base of the skull to the first vertebrae, called the atlas and then the space between the atlas and the second neck vertebrae, the axis, **are partly dislocated** and that this pinches nerves between the vertebrae going to all the body organs, liver, heart, bowel, immune system and even backwards up to the brain and this is an underlying cause of all illness and diseases including but not limited to medical conditions such as ear infections, bed-wetting, autism, season allergies, gastro-intestinal illness, crossed eyes and AIDS.

DEFINITION: CHIROPRACTIC ADJUSTMENT

The chiropractic term **"adjustment/ manipulation"** means chiropractors can locate areas of vertebral subluxations place these dislocated spinal vertebrae back into place by a neck manipulation and that this will treat the conditions caused by such vertebral subluxations.

DIAGNOSIS BY CHIROPRACTIC CLINICAL EXAMINATION:

Nothing in the act shall permit a chiropractor to diagnose or advise a patient of a clinical diagnosis by means of a manual examination of the highest neck area of the spinal column of:

(1) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(2) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(3) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(4) Cancers of the human body.

DIAGNOSIS BY MACHINES DEVICES

Nothing in this shall permit a chiropractor to diagnose or advise a patient of such a diagnosis listed in items (1), (2), (3) AND (4) by means of thermographs, heat reading machines postural analysis and so called "Insight subluxations" performed on the spinal column.

TREATMENT: PREVENTION: INFLUENCE THE COURSE OF A DISEASE

Nohing in this Act shall permit a chiropractor to advise any patient that spinal manipulation of the highest neck-cervical area, from the base of the skull until the bottom of the second vertebra called the axis, can be used to prevent, treat or in any way influence"

(1) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such as the lungs, heart, liver, spleen, gastro-intestinal system, reproductive organs and renal system.

(2) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(3) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(4) Cancers of the human body.

CHIROPRACTIC VERTEBRAL SUBLUXATIONS

Nothing in this act shall permit a chiropractor to claim that "vertebral subluxations", defined as in chiropractic as vertebral bones that are partly dislocated can cause

(1) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such the lungs, heart, liver, spleen, gastro-intestinal system reproductive organs and renal system.

(2) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(3) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(4) Cancers of the human body.

ADJUSTMENT OF VERTEBRAL SUBLUXATIONS

Nothing in the Act shall allow a chiropractor to state to a patient that the removal of chiropractic "vertebral subluxations" in the highest neck-cervical area can be used to treat, prevent or influence the course of:

(1) Organic diseases of the body specifically involving the endocrine organs such as the thyroid gland, the pituitary gland, the adrenal gland or organic illness in the major organs of the human body such the lungs, heart, liver, spleen, gastro-intestinal system reproductive organs and renal system.

(2) The immune system of a child or an adult so as to suggest in any way that such a system may be deficient in any manner.

(3) Infectious disease such as Acquired Immune Deficient syndrome, fungal infections, viral and bacterial infections.

(4) Cancers of the human body.

As a matter of being able to have licensure, to practice the chiropractor must sign his/her acknowledgment that they fully support this Scientific Standard. The Registrar of the licensing body must co-sign.

Document 11

DOCUMENT ELEVEN

The basic neurology, anatomy and function of the human body.

If there is any doubt as to the impossibility of the chiropractic "vertebral subluxation" being part of anatomical and neurological truth. Document Eleven as well as Seven and eight fully outlines the reality of the known and existing anatomy and neurology of the human body. The Minister can present this to any scientific neurological association, any professor of anatomy and all will agree that this is the way the anatomy and neurology of the human body works and how this makes it totally impossible for any aspect of the chiropractic philosophy and neurology to be scientific.

11 A. CHIROPRACTIC PHILOSOPHY HAD TO TRUMP ANATOMICAL REALITY. . We now turn to the obvious problems that arose in terms of the actual anatomy and neurology of the human body. It is essential to realize that the chiropractic approach to all of this was markedly different from that of the anatomy specialists or that of a first year medical student in the dissecting room. Medical science starts with an examination to see what the actual facts may be. Chiropractic started with the philosophy of vertebral subluxations and then had to fit everything into that. It was a question of a total belief system opposing anatomical reality. Medicine starts with a differential diagnosis of all the possibilities. Chiropractic starts with the treatment of spinal manipulation and then works backwards. As many have said, if every diagnosis is a nail than all one needs is a hammer.

11 B. The Claim of chiropractic that the health of the body is controlled by the spaces between the spinal vertebrae is clearly a philosophy. It had to be there is order to be able to be "treated" by spinal manipulation. It could not be anywhere else or the philosophy would not fit the treatment.

11 C. The body does not grant superiority to any one system. How does the nervous system between the vertebrae control the developing embryo? How does the nervous system between the vertebrae control chromosome division and the thousands of genetic diseases? How does this space control the endocrine system that by definition is hormonally regulated in the blood circulation? How does this space between the vertebrae connect back up to the master gland of the body, the pituitary? Chiropractors say the nerves control the heart but one could just as easily say the heart controls the nerves for without an oxygen supply the nerves will die.

THE NEUROLOGICAL REALITIES: THE BRAIN:

11.D. The most obvious anatomical problem for chiropractic was the existence of the human brain located within the skull and not between the vertebrae. Brain mapping began in the 1930 from the work of Dr. Wilder Penfield at the Montreal Neurological Institute in Montreal Canada. Since that time until today with sophisticated radiological examinations it is very clear that the control of the nervous system begins in the brain.

not the space between our vertebrae.

11 **E.** The overall function is also determined by the 12 cranial nerves, also inside the skull and which do not exit between the vertebrae. The cerebellum, brain stem and all the other controlling aspects of the brain also do not exit between the spinal vertebrae. In order to get around this chiropractic had to falsely claim that whatever the brain did was controlled by the spaces between the vertebrae but they cannot account for the basic function of the 12 cranial nerves.

11, F. CHIROPRACTIC PHILOSOPHY IGNORES THE BASIC FACT THAT THE VAST BULK OF NERVES EXITING BETWEEN THE VERTEBRAE ARE THE NERVES THAT SUPPLY THE MUSCLES OF THE BODY ESPECIALLY THE ARMS AND THE LEGS: The vast bulk of nerves exiting between the vertebrae are in fact the ***motor nerves*** to the limbs. These control the arms and the legs as well as the other motor muscles of the human body. If the vertebrae were displaced, there would have to be first and foremost some very apparent effect on the limbs.

11. **G.** Basic testing such a motor strength, pain and reflex testing would easily demonstrate this. This anatomical fact and the ease with which it could be tested had to be ignored. Simple testing of muscle reflexes taught to every second year medical school would have meant the end of chiropractic philosophy had it been allowed to be taught to chiropractic students. With all the claims about displaced vertebrae harming nerves between the vertebrae chiropractors have never been able to explain how these large motor nerves are not affected.

11 H. BONES THAT CANNOT BE MANIPULATED: There were other basic anatomical facts that had to be ignored. There are 31 pairs of spinal nerves but only 26 of these passes through movable spinal vertebrae. Five pass though the solid bone openings in the sacrum. Despite this, the Chart of Effects attributes organic disorders to these nerves including claims that the tailbone can cause haemorrhoids.

11. I WHERE DOES THE SPINAL CORD END? Chiropractic philosophy does not even know where the spinal cord ends. The chiropractic philosophy has the spinal cord extending the entire length of all the vertebrae. In fact because the vertebral column grows longer than the spinal cord, spinal cord segments do not correspond to vertebral segments in adults, especially in the lower spinal cord. In the adult the spinal cord ends around the L1/L2 vertebral level, forming a structure known as the conus medullaris. For example, lumbar and sacral spinal cord segments are found between vertebral levels T9 and L2.

11 **J.** The spinal cord cell bodies end around the L1/L2 vertebral level and then form a tail like string of nerves called the "cauda Equina" because it looks like the tail of a horse. These then drop down so that the spinal nerves for each segment exit at the level of the corresponding vertebra. For the nerves of the lower spinal cord, this means that they exit the vertebral column much lower (more caudally) than their roots. Spinal nerves, with the

exception of C1 and C2 form inside intervertebral foramen (IVF).

11. K. THE NERVE ROOTS THAT EXIT BETWEEN THE VERTEBRAE: With the fascination of chiropractic of the occipital area it is also an anatomical fact that all of the spinal nerves with the very exception of C-1 and C-2 form inside the intervertebral foramen. The C-1 spinal nerves exit between the occipit and the C-1 vertebrae and not between two spinal vertebrae. The C-2 nerve exits between the posterior arch of C-1 and the lamina of C-2 vertebrae. The lamina is the name of the part of bone that is actually posterior behind the intervertebral foramen.

11 L. While chiropractic philosophy believes there is one magical nerve exiting between the vertebrae, there are in fact four main nerve roots, two in the front and two in the back as well as multiple small filament nerves that then form the nerve. Some of the parts of the spinal cord that contribute to these nerves ascend up the spinal cord, others descend and still others go in both directions. Some are sensory, some are motor and some are both.

11. **M.** As well, the parasympathetic portion of the autonomic nervous system is well protected at its body outlets and cannot be affected by imaginary dislocations. Spinal nerves may be pinched by herniated discs causing musculoskeletal problems yet the autonomic nervous system shows no effect on the visceral organs. Even with a complete severing of the spinal cord below the level of the fourth cervical vertebrae in the neck, paralysis of the muscles occurs but the autonomic system continues to function normally.

11 O. THE AUTONOMIC GANGLIA: Another anatomical fact was apparent. While there are some ganglia in the area of the vertebrae, the final ganglia or nerve cluster that determines the organ distribution for this autonomic nervous system lie outside the space between the vertebrae. The ganglia are usually placed immediately outside the points where the nerve roots perforate the dura mater, but there are exceptions to this rule; thus the ganglia of the first and second cervical nerves lie on the vertebral arches of the atlas and axis respectively, those of the sacral nerves are inside the vertebral canal, while that on the posterior root of the coccygeal nerve is placed within the sheath of dura mater. All the facts about these ganglia had to be ignored in order to comply with chiropractic philosophy.

Document 12

Document 12 –

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Document 13

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Can be found at:

https://sciencebasedmedicine.org/chiropractic-manipulation-of-the-neck-linked-to-stroke-in-a-6-year-old-child/

Document 14

Document 14 –

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Can Chiropractors Cure Cancer?

Document 15

Document 15–

Redacted – Subject to Copyright

Document 16

THE BACK OF A BABY" NECK
They claim to be able to find "subluxations" in this area and to "adjust them" thus releasing the innate positional of the spinal cord.