IN THE SUPREME COURT OF NEWFOUNDLAND AND LABRADOR
TRIAL DIVISION

Citation: *Gallant v. Patten*, 2010 NLTD 1
Date: 20100104
Docket: 200301T4312

BETWEEN:

ABRAHAM GALLANT

PLAINTIFF

AND:

DEBBIE BRAKE-PATTEN

DEFENDANT

Corrected Decision: The text of the original decision was corrected on January 13, 2010, and a description of the correction is appended.

Before: The Honourable Mr. Justice Michael F. Harrington

Place of hearing:	St. John's, Newfoundland and Labrador
Dates of Hearing:	March 2, 3, 9, 12, 17, 18, 25 & 26, 2009; May 11 & 12, 2009; September 2, 2009

Summary: Plaintiff suffered permanent hearing loss and impaired balance function on his right side following a cervical manipulation by the Defendant chiropractor. Plaintiff claims that he was not properly informed of the risks from the procedure and if properly informed, would not have consented to treatment. Defendant claims the Plaintiff's symptoms more likely arose from viral rather than vascular origins and, in any event, the Plaintiff consented to treatment having been fully informed of the potential risks.

HELD: The Defendant breached her duty to disclose the nature of the procedure, and the associated risks and consequences. The Plaintiff, properly informed of the risks, would not have undergone the procedure. The Plaintiff established on a balance of probabilities that his symptoms and injuries were caused by the cervical manipulation. The Defendant is liable in negligence to the Plaintiff with damages to be assessed.

Appearances:

Lois J. Skanes, Q.C. & Valerie A. Hynes	Counsel for the Plaintiff
David F. Hurley, Q.C. & Andrew Fitzgerald	Counsel for the Defendant

CASES CONSIDERED: **Reibl v. Hughes**, [1980] 2 S.C.R. 880; **Hopp v. Lepp**, [10980] 2 S.C.R. 192; **Hollis v. Dow Corning Corp.**, [1995] 4 S.C.R. 634; **Arndt v. Smith**, [1997] 2 S.C.R. 539; **Mason v. Forgie**, [1984] N.B.J. No. 48 (N.B.Q.B.); aff'd [1986] N.B.J. No. 104 (N.B.C.A.); **Snell v. Farrell**, [1990] 2 S.C.R. 311; **Athey v. Leonati**, [1996] 3 S.C.R. 458; **Olsen v. Jones**, [2009] A.J. No. 774 (ABQB); **R. v. Mohan**, [1994] 2 S.C.R. 9; **R. v. J.(J.-L.)**, [2000] 2 S.C.R. 600; **White v. Turner** (1981), 15 CCLT 81 (ONHC); **Leung v. Campbell** [1995] O.J. No. 10; (ONCJ); **Snell v. Farrell** [1990], 2 S.C.R. 311; **Sentilles v. Inter-Caribbean Shipping Corp. (1959)**, 361 U.S. 107 (USSC).

TEXT: *Canadian Tort Law*, Linden and Feldshusen, (Butterworths: 8th ed 2006).

REASONS FOR JUDGMENT

HARRINGTON, J.:

BACKGROUND

[1] On the afternoon of December 10, 2001 the Plaintiff, Abraham Gallant ("Mr. Gallant"), left work as a maintenance supervisor at the former

newsprint mill at Stephenville in Western Newfoundland and Labrador to attend an appointment with the Defendant, Debbie Brake-Patten ("Dr. Brake-Patten"), a chiropractor. Mr. Gallant was seeking relief from neck pain which he had been enduring following the hanging of outdoor Christmas lights along the exterior of his dwelling two or three days earlier.

[2] As she had on prior occasions since Mr. Gallant had become her patient in 1994, Dr. Brake-Patten performed a cervical manipulation or adjustment which was a high velocity, low amplitude thrust of a specific area of Mr. Gallant's lower cervical spine to relieve Mr. Gallant's discomfort. Subsequent to the procedure, Mr. Gallant began to encounter symptoms of dizziness, tinnitus (ringing in the ears), nausea, and loss of balance. He received hospital emergency room treatment the same evening after the manipulation. He also suffered vomiting after leaving the hospital.

[3] Mr. Gallant was then confined to his home for the next two days dealing with continuing symptoms which will be discussed later in these reasons. Following further medical investigation by specialists including testing procedures, Mr. Gallant was diagnosed as having permanent impairment of balance function on his right side, complete functional hearing loss of his right ear and tinnitus.

[4] The diagnosis had serious negative consequences for Mr. Gallant's employment since it was found that he was permanently disabled in terms of fulfilling his supervisory duties at the newsprint mill which required good balance and hearing while working around heavy industrial equipment. He was earning an annual base income of approximately $80,000.00. As the result, he was required to retire from his employment on a long term disability pension at the age of forty-six. He was also unable to continue conducting the maintenance of a thirty room, long term personal care home which he and his spouse with his brother-in-law had constructed in late 1993.

[5] An important backdrop to this case is the debate, well documented in published literature, regarding the medical risks associated with cervical manipulations. Within the chiropractic profession itself there has been extensive dialogue concerning the necessary disclosure of risks to patients and the extent of serious medical consequences to patients from such treatment.

[6] There is conflict in this case over the nature and extent of the disclosure of risk by Dr. Brake-Patten to Mr. Gallant. There is also conflict over whether, applying the reasonable patient standard, Mr. Gallant would have consented to the cervical manipulation if he was in possession of additional information about the risks. Finally, there is conflict over whether or not the expert medical evidence provided by the otolaryngologists (otherwise known as ear, nose and throat "ENT" specialists) and the evidence of specialists in neurology proves, on a balance of probabilities, that Mr. Gallant's medical problems resulted from the cervical manipulation performed by Dr. Brake-Patten.

[7] For the reasons which follow, the Court has determined (i) that the Defendant was negligent in failing to properly disclose the risks associated with cervical manipulation to the Plaintiff; (ii) that if properly informed, the Plaintiff would not have consented to the treatment; and (iii) the medical evidence has established that the Plaintiff's cervical manipulation by the Defendant was causative of his injuries.

ISSUES

[8] The issues in this proceeding are:

(i) Was Dr. Brake-Patten negligent by failing to disclose the material risks associated with cervical manipulation to Mr. Gallant including the serious consequences that might result?

(ii) Applying the modified objective test, has Mr. Gallant established that he would not have consented to the manipulation had the risk and consequences of cervical manipulation been properly disclosed by Dr. Brake-Patten?

(iii) What weight should be given to the neurological opinion evidence of Dr. Bradley Stewart?; and

(iv) Even if the Court finds that Mr. Gallant would not have consented to treatment, does the expert medical evidence establish on a balance of probabilities that Mr. Gallant's injuries resulted from Dr. Brake-Patten's treatment?

LAW AND ANALYSIS

Duty to Disclose Risks to the Patient

[9] In assessing whether Dr. Brake-Patten was negligent with regard to the disclosure of material risks in the process of seeking oral consent to treatment, it is necessary to review the history of the relationship between the parties.

[10] In 1994, Dr. Brake-Patten opened her clinic in Stephenville as a recent graduate of the Canadian Memorial Chiropractic College. On the recommendation of fellow employees at the newsprint mill, Mr. Gallant arranged an appointment to see Dr. Brake-Patten. At the clinic Mr. Gallant completed a patient intake form dated October 24, 1994 which noted that Mr. Gallant was a millwright employed at the newsprint mill and whose chief complaint was neck pain. He had reported that he had been suffering from neck and lower back pain over the previous 2 ½ to 3 years as a result of injuring himself while weightlifting at the gym. He also reported that he had previously undergone 8 to 10 weeks of physiotherapy as well as stretching exercises.

[11] During the course of the first examination, Mr. Gallant's chart indicated that Dr. Brake-Patten conducted a Houle's test while Mr. Gallant was lying on a treatment table in a supine position. According to Dr. Brake-Patten, she would stand behind the patient and mobilize the neck bilaterally. The neck would be turned in one direction first and be held in that position for a period of 45 to 60 seconds after which it would be mobilized in the opposite direction and held for the same period of time.

[12] The purpose of this test is a key aspect of the appropriateness and completeness of the disclosure of risk by Dr. Brake-Patten. Dr. Brake-Patten testified that she would advise patients like Mr. Gallant that the mobilization of the neck was a screening test to determine if the patient was at risk of stroke from cervical manipulation. Dr. Brake-Patten testified that she would be looking for any abnormal signs of dizziness, blurred vision, or involuntary eye movement that might be indicative of a pre-existing condition which might be linked to the risk of stroke.

[13] At the end of the testing procedure, Dr. Brake-Patten would have the patient sit up on the treatment table. If she did not detect any abnormal symptoms, Dr. Brake-Patten would tell her patient that he or she had not shown any adverse signs during the test and that the patient would be "a good candidate" for cervical manipulation. She also testified that she would advise the patient that there was only "a very slight risk of stroke". She would then ask for a verbal consent to conduct the manipulation procedure.

[14] Dr. Brake-Patten testified that if the patient indicated a lack of comfort with consenting to the procedure, she would suggest alternative treatment such as soft tissue therapy or massage as alternatives. It appears such treatments would only be suggested if the patients expressed doubts on their own initiative about the manipulation procedure.

[15] The recollections of the parties differ as to what took place on the first visit. This would not be surprising with respect to an event that occurred fifteen years ago. There was no written consent to treatment presented, explained and signed by Mr. Gallant prior to the manipulation which took place at the next visit.

[16] Dr. Brake-Patten was asked whether she had given Mr. Gallant any information on how a stroke could result from the manipulation. She suggested that she would have mentioned that she was checking the arteries of the neck but she had no recollection of her initial examination of Mr. Gallant. Her clinical notes only recorded that she performed a Houle's test which was noted as negative. This notation was a confirmation for Dr. Brake-Patten that Mr. Gallant had consented to the manipulation. Dr. Sharon Hynes, a chiropractor, practicing in St. John's testified that this type of practice had been used by other chiropractors including herself for a time up to the early 1990's to record any oral consent to treatment.

[17] However, there was no evidence that Dr. Brake-Patten explained to Mr. Gallant the type of stroke that might result, its possible location, its cause as well as its effect. She simply testified that the reference to being a "good candidate" for manipulation resulting from the Houle's test mobilization and confirmation of its negative results was a standard communication that she made to her patients before seeking verbal consent. She testified that she would not have specifically identified the vertebral artery on either side of the patient's neck as the part of the anatomy that would be at risk of injury which could in turn lead to a stroke.

[18] Mr. Gallant recalled very little about the description of the neck manipulation and in particular could not recall any reference to the risk of stroke. He did recall the conduct of the mobilization procedure described by Dr. Brake-Patten as the Houle's test.

[19] When Dr. Brake-Patten opened her clinic in 1994, she acknowledged that she was aware that a stroke was a potential adverse risk to a patient as a result of cervical manipulation. The Canadian Chiropractic Association (the "CCA"), the national professional organization for chiropractors, had conducted a consensus conference in April, 1993 which led to the formulation of a set of "Clinical Guidelines for Chiropractic Practice in Canada".

[20] The overview section of the guidelines contained the following statements:

> As a matter of ethics in law there is an obligation, prior to examination and treatment, to disclose any material risk to the patient in order to obtain a valid and informed consent. This legal duty has been established by case law and, in some provinces, by legislation.
>
> The need for full disclosure of material risk is an important new reality from all health care professionals. Based on increased recognition by society and the law that patients have a right to know about risks and their health care options before consenting to examination or treatment. It represents a rejection of the paternalistic approach to "the physician knows best" that has shaped attitudes and responsibilities in the past.

[21] In a section entitled "Literature Review", the CCA advised its members:

> However, where there is risk for significant harm from the treatment proposed, this risk must be disclosed, understood and accepted by the patient.
>
> [Emphasis added]

[22] The Literature Review outlined the disclosure requirements discussed in the decisions of the Supreme Court of Canada in **Hopp v. Lepp**, [1980] 2 S.C.R. 192 and **Reibl v. Hughes,** [1980] 2 S.C.R. 880. The CCA alerted chiropractors to two principles arising from these decisions: (i) that the test of what is a material risk is wide; and (ii) the need for disclosure is to be judged from the viewpoint of the reasonable patient and not the chiropractor.

[23] The Literature Review also drew attention to the 1984 decision of the New Brunswick Queens Bench in the case of **Mason v. Forgie**, [1984] N.B.J. No. 48 (and its 1986 affirmation by the Court of Appeal), in which the trial judge had found that the chiropractor was negligent and liable for failure to disclose the risk of stroke arising from a cervical manipulation.

[24] This communication, which was known to Dr. Brake-Patten, made clear that the legal duty of disclosure to patients that had been formulated with regard to the medical profession also applied to chiropractors. It quoted the reasons of the trial judge where he held:

> I am satisfied that (Dr. Forgie) when he carries out a neck manipulation to another is of the class of persons who are obligated, if such treatment involves material risk, to obtain the informed consent of the patient.

[25] The clinical guidelines referred to the following statement of Supreme Court of Canada in **Reibl**:

> A risk which is a mere possibility ordinarily does not have to be disclosed, but if its occurrence may result in serious consequences, such as paralysis or even death, then it should be treated as a material risk and should be disclosed.

The guidelines set out an important admonition:

> This decision is a good illustration of how the perspective of the patient, and the patient's right to know, have become more dominant than professional evidence on the matter of what amounts to material risk.

[26] CCA recommended with regard to disclosure that:

> Chiropractors must disclose to the patient, or the guardian of a minor patient, the nature of the proposed treatment or procedure and any material risk including those that may be of a special or unusual nature. Even though a certain risk may be a very remote possibility, but carries a risk of serious harm, it is a material risk and requires disclosure.

[27] Dr. Brake-Patten, in her testimony, acknowledged that from her academic training she knew that death was known to be a risk though rare. In the commentary outlined before the recommendations, CCA noted that the New Brunswick Court of Appeal in **Mason v. Forgie** had opined that even though the risk of paralysis was very remote, it was still a material risk which should be disclosed. Further, CCA recommended that while a

consent may be given orally or in writing, “the best record of consent is one that is subjectively documented”.

[28] It is significant that the CCA recommended a form of written consent for use, a key provision of which read:

> Doctors of chiropractic, medical doctors, and physical therapists using manual therapy treatments for patients with neck problems such as yours are required to explain that there have been rare cases of injury to a vertebral artery as a result of treatment. Such an injury has been known to cause stroke, sometimes with serious neurological injury. The chances of this happening are extremely remote, approximately one per one million treatments.

[29] Mr. Gallant had no recollection of any disclosure of risks including the risk of stroke at the first visit while he was being questioned by Dr. Brake-Patten about his medical history or during or after the conduct of the Houle’s test. He does have a very clear recollection about the history of his treatments by Dr. Brake-Patten as well as a detailed recollection of the events that occurred in December, 2001 when he was stricken with the medical symptoms that have given rise to this proceeding. Dr. Tony Batten, an ENT specialist, who examined Mr. Gallant in the spring of 2002, confirmed in his first written report and in his trial testimony that Mr. Gallant’s recollections of his medical history were vivid and detailed.

[30] The evidence of Dr. Brake-Patten at best confirmed that she conducted a patient history and made notations. She then performed the neck mobilization test previously described. Dr. Brake-Patten testified that following the negative results from the Houle’s test, she would have told Mr. Gallant that he was a “good candidate” for cervical manipulation, followed by the comment that “there is a slight risk of stroke” and then put the question to the patient as to whether he consented to the treatment.

[31] There is no evidence of any explanation having been provided to Mr. Gallant as to the manner in which cervical manipulation may cause stroke. There was no explanation as to whether a stroke would occur in the brain or neck flowing from injury to the vertebral artery and what the potential consequences would be from a stroke in the brain or a vascular event arising from an embolus causing a blockage in the blood supply to the inner ear.

[32] It is troubling that Dr. Brake-Patten acknowledged that she did not specifically explain the nature of the risk of injury to the vertebral artery which could cause a stroke. It is also clear that none of the potential

negative consequences from stroke were disclosed whether it be visual, hearing or balance impairments, paralysis or death.

[33] Dr. Brake-Patten's evidence raises a further concern in that the Houle's test was determined in the late 1990's to be of no value. The CCA essentially rejected the test as a useful diagnostic or assessment tool for patients in terms of risk of stroke flowing from cervical manipulation. This development should have raised doubt in Dr. Brake-Patten's mind as to whether Mr. Gallant and other existing patients remained (or ever were) "good candidates" for manipulation therapy if the screening test which was a key aspect of the patient intake assessment had been discontinued.

[34] In assessing the manner in which Dr. Brake-Patten performed her initial assessment and sought verbal consent to treatment, the Court is troubled by the absence of any specific notation in her patient files that she obtained even an oral consent to treatment. She simply relied on the notation that she had conducted a bilateral Houle's test on Mr. Gallant during an initial intake session as confirmation she had informed him about the nature of the cervical manipulation and the associated risks. She claimed to have obtained a verbal consent to treatment which she relied upon for all cervical manipulations and other treatment of Mr. Gallant up to and including 2001.

[35] The Court heard evidence from Dr. Michael Carstensen who is a former practicing doctor of chiropractic and is now a practicing physician. He testified that Dr. Brake-Patten's record keeping of Mr. Gallant's medical history and ongoing course of treatment were less than adequate and also was deficient by the absence of a treatment plan for Mr. Gallant during the period that Mr. Gallant was her patient. Dr. Carstensen was giving opinion evidence on behalf of Mr. Gallant. Additionally, Dr. Sharon Hynes, a doctor of chiropractic, who was also a former registrar of the provincial licencing body did acknowledge that the medical chart of Dr. Brake-Patten did not, in her opinion, contain a treatment plan for Mr. Gallant. She acknowledged that this omission was at odds with what she would normally have expected in the clinical notes of a chiropractic practitioner.

[36] All of the foregoing factors raise doubt in the Court's mind on Dr. Brake-Patten's diligence and thoroughness in dealing with the important issue of disclosure of risk to patients like Mr. Gallant in accordance with the requirements outlined by the Supreme Court of Canada in its decisions as

well as the decisions of the New Brunswick Court of Queens Bench and the Court of Appeal in **Mason v. Forgie**.

[37] The Court is particularly troubled by the prospect that Mr. Gallant may have been misled by the manner in which the first visit was conducted by Dr. Brake-Patten. Any patient in the position of Mr. Gallant, having been exposed to such a sparse discussion about the nature of the proposed treatment and potential risks, would have been improperly assured about the lack of serious risks and consequences by virtue of a "successful" completion of the Houle's test and by the statement of Dr. Brake-Patten to the effect that "you have been tested for the risk of stroke for which there is a very slight risk of occurrence and you have been found to be a good candidate for cervical manipulation". If the Defendant's testimony is accepted as it was given, this is essentially what was communicated to Mr. Gallant expressly and impliedly. The Court concludes that the manner in which Mr. Gallant's patient history was taken and the nature of the neck mobilization test conducted before he was invited by Dr. Brake-Patten to consent to the manipulation was perfunctory and misleading. Dr. Brake-Patten's duty to disclose was not properly discharged in October, 1994.

[38] However, the analysis of this first issue does not end with the events of October 24, 1994. Mr. Gallant continued to be a patient at various intervals from 1994 until the cervical manipulation of December 10, 2001. Mr. Gallant would only attend Dr. Brake-Patten's clinic when he felt the need to do so.

[39] By May 19, 1997 Mr. Gallant had had 37 chiropractic treatments from Dr. Brake-Patten. They were not always cervical manipulations. They could have been soft tissue therapy, or trigger point therapy. A hiatus ensued regarding visits by Mr. Gallant to Dr. Brake-Patten for a period of 14 months until he visited her clinic again on July 10, 1998. Mr. Gallant also did not see Dr. Brake-Patten for a second period exceeding eight months from June, 2000 to March, 2001. Mr. Gallant was not a chronic sufferer of neck and back pain seeking relief on a regular basis. The Court is satisfied that Mr. Gallant's treatment fell into an "elective" category which was described as being an important consideration in the case of **White v. Turner** (1981), 15 CCLT 81 (ONHC).

[40] In **White v. Turner**, Linden, J. wrote:

> Where an operation is elective, as this one was, even minimal risks must be disclosed to patients, since "the frequency of the risk becomes much less material when unnecessary for his medical welfare". Videto et al v. Kennedy (1980), 27 O.R. (2d) 747 at 758 (ONHC), a decision of Grange, J.

[41] This Court has concluded that reference by Dr. Brake-Patten to the slight risk of stroke without reference to possible damage to the vertebral artery of the neck supplying blood to the head and neck and to the possibility of hearing loss, loss of balance, paralysis or even death rendered completely inadequate the disclosure to a chiropractic patient like Mr. Gallant seeking relief from neck pain when other forms of alternative treatment may have adequately and effectively assisted him.

[42] By late 1995, the Canadian Chiropractic Protective Association ("CCPA") were circulating newsletters to chiropractors recommending not just the need for informed consent from patients, preferably in writing, but also that their members obtain new consents from patients who had been away from their care for more than one year. The rationale for the renewed consent was concern that the medical condition of patients may have changed in a material way in a period of 12 months or more from the last treatment and that it would be prudent to update the consent and preferably obtain that consent in writing. This process would likely involve an update of the patient's medical history and the disclosure of risk.

[43] Notwithstanding these recommendations, Dr. Brake-Patten testified that she did not begin to use a written consent form until the late 1990's. She limited the use of the forms to new patients. She chose not to obtain written consent forms for existing patients regardless of whether they had or had not been seen for a period exceeding twelve months. She also did not conduct further examinations of returning patients with regard to their medical history.

[44] Dr. Brake-Patten continued using the Houle's test as part of her initial interview or intake process with new patients even though it had been rejected as a reliable testing procedure for the risk of stroke. She justified her position on the basis that she felt that it was still useful to determine whether new patients showed signs of dizziness, nausea or nystagmus (involuntary movement of the eyes) which would automatically preclude them from consideration for cervical manipulation.

[45] Dr. Brake-Patten confirmed that she would not have carried out a new consent process with Mr. Gallant at the time he returned to her as a patient in July, 1998 nor would she have advised him that the Houle's test was no longer a test that was being used to assess whether or not a patient was a good candidate for cervical manipulation in the context of the risk of stroke.

[46] While the defence throughout the trial took the position that the guidelines of the CCA, its newsletters and the communications of the CCPA were recommendations and were not mandatory, it is clear that the objective of these advisory communications was to sensitize chiropractors to the need to be as thorough as possible in their patient disclosure of the nature of the procedures available to their patients, the risks and consequences of the procedures such as cervical manipulation and the need to advise them of the alternative treatments which were available.

[47] There is nothing in Dr. Brake-Patten's clinical file covering her treatment of Mr. Gallant from 1994 to 2001 which indicated that the risk of injury to the vertebral artery from cervical manipulation and the consequences of such damage including stroke was disclosed. Dr. Brake-Patten was not even certain at the time of the trial from her clinical notes whether she had actually performed a cervical manipulation on Mr. Gallant on December 10, 2001.

[48] The medical literature, long before December, 2001, had reported the risk of impaired vision, sudden sensorineural hearing loss, loss of balance function and in rare cases death as the result of cervical manipulation. By March, 2001 a study published in the New England Journal of Medicine reported on estimates "that as many as 1 in 20,000 spinal manipulations causes a stroke".[1]

[49] The Court has concluded, having assessed all of Dr. Brake-Patten's evidence relating to this first issue, that she carried out nothing more than a perfunctory and inadvertently misleading process of assessing Mr. Gallant as a candidate for cervical manipulation. The performance of the Houle's test in relation to the minimal disclosure to Mr. Gallant would have given him an unjustifiably high level of comfort that the risks of harm from this type of treatment were virtually non-existent. I can only conclude that Dr. Brake-Patten was negligent in the discharge of her duty of disclosure as defined by

[1] See *Spontaneous Dissection of the Carotid and Vertebral Arteries*, New England Journal of Medicine, Walter Schieviak, M.D., Vol. 344: 898-906, March 22, 2001, No. 12

the Supreme Court of Canada and followed in the chiropractic cases by the New Brunswick courts in **Mason v. Forgie** and the Ontario Court of Justice in **Leung v. Campbell** [1995] O.J. No. 10.

Would Mr. Gallant as a reasonable patient have declined cervical manipulation if properly advised of the risks and consequences of such treatment?

[50] Mr. Gallant was 39 years of age on the date of his first visit to Dr. Brake-Patten in October, 1994 and 46 years of age at the time of the December 10, 2001 cervical manipulation. He was working as a millwright in 1994 and a mechanical supervisor in 2001 in the newsprint mill where special ear protection was required to be worn. He was required to be in close proximity with heavy industrial equipment, climbing and working in confined spaces. By 2001, he was continuing to conduct the physical maintenance of the seniors' home co-owned with his spouse.

[51] When Mr. Gallant had first visited Dr. Brake-Patten's clinic in 1994 he was suffering from both neck and lower back pain. He did obtain relief from the cervical manipulations carried out by Dr. Brake-Patten. Over a period of 31 months from October 24, 1994 to May 19, 1997 he had obtained 37 treatments, not all of which involved cervical manipulation. Approximately 23 cervical manipulations occurred between October 26, 1994 and September 9, 1996 with only 5 in 1996. Dr. Brake-Patten's medical chart for Mr. Gallant recorded no cervical manipulation in 1997, one in late 1998, three in 1999, two in 2000, and four in 2001 including the December, 2001 treatment.

[52] Mr. Gallant went through a 14 month period from May, 1997 to July, 1998 in which he received no treatments from Dr. Brake-Patten. The medical charts actually suggest that the last cervical manipulation before 1999 of Mr. Gallant occurred on January 18, 1995. This clinical record indicates that Mr. Gallant did not suffer from a chronic neck condition. He was not a perennial patient of Dr. Brake-Patten.

[53] The clinical chart kept by Dr. Brake-Patten indicated that instances of cervical manipulation were quite sporadic from early 1999 until the last treatment on December 10, 2001. There does not appear to be more than

eight recorded cervical manipulations for that period which indicates a considerable reduction in the desire by Mr. Gallant to seek treatment.

[54] On December 10, 2001 Mr. Gallant was seeking relief from neck pain as a result of some physical work installing Christmas lights on the eaves of the roof at the front of his house while standing on a ladder. There is no evidence that prior to that time he was in dire need of immediate treatment or seeking treatment from multiple chiropractors which were the facts in the recent decision of the Alberta Court of Queens Bench in **Olsen v. Jones**, [2009] A.J. No. 774 cited by the defence. In this case, Mr. Gallant attended Dr. Brake-Patten's clinic during a work day near the end of his work shift. He was not absent from work.

[55] There is a useful commentary in *Canadian Tort Law*, by Linden and Feldshusen (8th ed. Butterworths: 2006) with regard to the duty to disclose to a patient the nature of the procedure, its risks and consequences but also the obligation to disclose alternative methods of treatment so that the patient can make an informed choice even if the physician or chiropractor does not favour these alternatives.

[56] At page 184 the authors commented:

> A doctor must disclose to a patient the various alternative treatments that are available to a patient, even though the doctor may not favour them. As Justice Doherty has explained in VanDyke v. Grey Brooks Regional Health Centre:
>
> > The extent to which a doctor must disclose and discuss alternative treatments will depend on a myriad of factual circumstances. The proper approach to the scope of the disclosure obligations can, whenever, be stated in a generalized way. The ultimate decision whether to proceed with a particular treatment rests with the patient and not the doctor. The doctor must equip the patient with the information necessary to make an informed choice. Where there is more than one medically reasonable treatment and the risk/benefit analysis engaged by the alternatives involves different considerations, a reasonable person would want to know about the alternatives and would want the assistance of the doctor's risk/benefit analysis of the various possible treatments before deciding whether to proceed with a specific treatment. But differently, a reasonable person could not make an informed decision to proceed with treatment "A" if that patient was unaware of the risks or benefit associated with treatment "b", a medically appropriate alternative treatment.

[57] Dr. Brake-Patten had options with regard to treatment of Mr. Gallant. One form of treatment is the cervical manipulation, which appears to be a primary treatment tool regarded by many chiropractors for the goal of immediate neck pain relief for patients. But as Dr. Sharon Hynes noted in her testimony and in the published literature before the Court, the cervical manipulations or adjustments are just one form of treatment. There are other forms of treatments such as mobilization, soft tissue therapy and massage that may not be as effective as the cervical manipulation in providing immediate pain relief but may, nevertheless, be a safer alternative for a patient to consider.

[58] Dr. Brake-Patten recognized that there were alternative treatments which could be considered by patients if they decided to reject cervical manipulation. However, the practice was to discuss alternative treatments when and if the patient expressed concerns about cervical manipulation. There is no written documentation, consent form or otherwise, recording that these alternatives were ever presented to Mr. Gallant and acknowledged.

[59] We have only a chart notation that Dr. Brake-Patten performed a Houle's test which clearly would have misled Mr. Gallant about his susceptibility to the risk of stroke. This situation became acute when Dr. Brake-Patten testified that the Houle's test was explained as an initial screening test of the patient's arteries prior to proceeding with the adjustment.

[60] Dr. Brake-Patten's breach of her duty of disclosure would have recurred when she failed to tell Mr. Gallant as a patient still receiving cervical manipulation in 2001 that the Houle's test was no longer reliable as a screening test and thus required a re-evaluation accompanied by written consent to treatment acknowledging the properly disclosed risks of such treatment.

[61] By early 2001 CCPA was recommending the following revised written consent which provided further disclosure of the extent of risk associated with manipulation therapy techniques:

> Doctors of chiropractic, medical doctors and physiotherapists who use manual therapy techniques such as spinal adjustments are required to advise patients that there are and maybe some risks associated with such treatment. In particular you should note:

> (a) while rare, some patients have experienced rib fractures or muscle or ligament sprains or sprains following spinal adjustments;
>
> (b) there have been reported cases of injury to a vertebral artery following cervical spinal adjustments. Vertebral artery injuries have been known to cause stroke, sometimes with serious neurological impairment, and may on rare occasions result in serious injury. The possibility of such injuries resulting from cervical spinal adjustment is extremely remote;
>
> (c) there have been rare reported cases of disc injuries following cervical and lumbar spinal adjustment although no scientific study has ever demonstrated such injuries are caused, or may be caused, by spinal adjustments or chiropractic treatment.

[62] Justice Cory, writing for the Supreme Court of Canada, in the case of **Arndt v. Smith**, [1997] 2 S.C.R. 539 re-affirmed the principles set out in **Reibl** for assessing whether or not the reasonable patient would have consented to treatment. While recognizing that there had been some disagreement among members of the Court with regard to a manufacturer's duty to disclose in the context of the manufacture of breast implants in **Hollis v. Dow Corning Corp.**, Justice Cory felt that both the majority and the minority judgments had explicitly endorsed the continued application of the modified objective test from **Reibl** in a negligence claim by a patient against a doctor to determine whether a reasonable patient, properly informed, would have consented to treatment.

[63] Justice Cory wrote at paragraph 9:

> Some of the criticisms directed at the **Reibl** test may stem from confusion as to what Laskin, C.J. intended in his adoption of the modified objective test. The uncertainty surrounds the basic premise that the test depends on the actions of a reasonable person in the plaintiff's circumstances. Which aspects of the plaintiff's personal circumstances should be attributed to the reasonable person? There is no doubt that objectively ascertainable circumstances, such as the plaintiff's age, income, marital status, and other factors should be taken into consideration. However, Laskin, C.J. didn't stop there. He went on and stated that "special considerations" affecting the particular patient should be considered, as such any specific questions asked of a physician by the patient. In my view, this means that the "reasonable person" who sets the standard for the objective test must be taken to possess the patient's reasonable beliefs, fears, desires and expectations. Further, the patient's expectations and concerns will usually be revealed by the questions posed. Certainly, they will indicate the specific concerns of the particular patient at the time consent was given to a proposed course of treatment. The questions, by revealing the patient's concern will

> provide indication of the patient's state of mind, which can be relevant in considering and applying the modified objective test.

[64] Mr. Gallant would have been concerned about protecting his physical ability to work in his chosen occupation, the substantial income he was earning and his business interests with his wife. He would have wanted to fully enjoy his outdoor activities as an active participant who would not be inhibited in any significant way by the neck and back symptoms he presented to Dr. Brake-Patten.

[65] With regard to any "special considerations" which may have given rise to any specific questions that the patient may have asked, it appears that Mr. Gallant did not ask any questions that he can recall nor is there any indication that questions were asked and an attempt made to answer them by Dr. Brake-Patten.

[66] In attempting to distinguish **Mason v. Forgie**, defendant's counsel submitted that the risk of stroke was disclosed to Mr. Gallant while it was not in the New Brunswick case. However, the Court's concern is that even if the risk of stroke was mentioned by Dr. Brake-Patten, it was done in such a perfunctory way with such contraindications of any risk that Mr. Gallant was placed in no better position than the plaintiff in **Mason v. Forgie**.

[67] The submission by the defence that further elaboration of risks was not required as long as the risk of stroke was identified ignores the fact that there is a range of risks or perhaps more properly stated, consequences, from cervical adjustments outlined in the 2001 version of the CCPA recommended consent form (Exhibit HMC # 15). The possibility of a disc injury as well as stroke are set out. Stroke is said to be potentially causative of "serious neurological impairment" and "on a rare occasion resulting in serious injury". This form was recommended to CCA members before Mr. Gallant's December 10, 2001 treatment. Even the written consent form approved by CCA in 1993 stated:

> Doctors of chiropractic, medical doctors, and physical therapists using manual therapy treatments for patients with neck problems such as yours are required to explain that there have been rare cases of injury to a vertebral artery as a result of treatment. Such an injury is known to cause stroke, sometimes with serious neurological injury.
>
> [Emphasis added]

[68] The medical literature admitted into evidence documented cases, though sometimes rare, of impaired vision, loss of hearing, tinnitus and impaired vestibular or balance function. The evidence supports a finding that Mr. Gallant's cervical manipulation was elective and, if properly informed, he may well have had questions about the potential consequences of stroke in relation to the types of injuries he claims to have sustained. Dr. Brake-Patten knew the nature of his employment when Mr. Gallant presented as a patient for treatment. Simply to report verbally a slight risk of stroke without the patient being asked to apply his signature to a written consent form that contained a fulsome disclosure of risk is a serious deficiency in terms of meeting the reasonable patient test governing consent to treatment.

[69] As an intelligent management employee of the newsprint mill as well as a business partner with his spouse, Mr. Gallant ought to have been better informed than he was. The fact that there is no evidence of specific questions being asked of Dr. Brake-Patten has more to do with the incomplete and somewhat misleading information that he was processing. Mr. Gallant underwent a rather benign Houle's test that was a gentle mobilization of the neck while being told it was an investigative procedure to evaluate the risk of stroke. Without any explanation, he was told that he was a good candidate for cervical manipulation and that there was only a very slight risk of stroke.

[70] Justice Cory's reasons in **Arndt** at paragraphs 15 and 16 put the considerations to be weighed in perspective:

> **Reibl** is a very significant and leading authority. It marks the rejection of the paternalistic approach to determining how much information should be given to patients. It emphasizes the patient's right to know and ensures that patients will have the benefit of a high standard of disclosure. At the same time, its modified objective test for causation ensures that our medical system will have some protection in the face of liability claims from patients influenced by unreasonable fears and beliefs, while still accommodating all the reasonable individual concerns and circumstances of plaintiffs. The test is flexible enough to enable a court to take into account a wide range of the personal circumstances of the plaintiff, and at the same time to recognize that physicians should not be held responsible when the idiosyncratic beliefs of their patients might have prompted unpredictable and unreasonable treatment decisions.
>
> The **Reibl** test has had the desired effect of ensuring that patients have all the requisite information to make an informed decision regarding the medical procedure they are contemplating. Members of the medical and legal professions

> are familiar with its requirements. It strikes a reasonable balance, which cannot be obtained through either a purely objective or a purely subjective approach. A purely subjective test could serve as an incitement for a disappointed patient to bring an action. The plaintiff will invariably state with all the confidence of hindsight and with all the enthusiasm of one contemplating an award of damages that consent would never have been given if the disclosure required by an idiosyncratic belief had been made. This would create an unfairness that cannot be accepted. It would bring inequitable and unnecessary pressure to bear upon the overburdened medical profession. On the other hand, a purely objective test which would set the standard by a reasonable person without the reasonable fears, concerns and circumstances of the particular plaintiff would unduly favour the medical profession.

[71] By 2001, Mr. Gallant was 46 years of age. He was an active male at that time. He was pursuing further training to enhance his work opportunities. He had a major business investment with his wife. His desire for the services of Dr. Brake-Patten related to recent neck pain associated with physical activity while working overhead on a ladder. His condition did not cause him to be absent from work.

[72] No new physical history was taken nor physical examination performed by Dr. Brake-Patten when he was seen in 2001. It appears that Mr. Gallant was, according to some of the medical literature before the Court, at greater risk of stroke from cervical manipulation than when he began the treatment in 1994. These factors would have justified the necessity for a written consent to be obtained in 2001 from Mr. Gallant of the type recommended by CCPA in the winter of 2001. Ironically, Dr. Brake-Patten began seeking written consent from patients in the late 1990's but limited this protocol to new patients.

[73] Though the facts in **Mason v. Forgie** vary from this case, there are useful comments made with regard to the modified objective test. Jones, J. at trial held that the risk of a rupture of the vertebral artery as a result of neck manipulation was a material or special and unusual risk associated with the performance of neck manipulation. The Court found that although the possibility of stroke was rare, the seriousness of the consequence required that the chiropractor advise the patient of the risk. In this case, we are arguably at the next level of the analysis in determining whether the simple reference to the "very slight risk of stroke" by Dr. Brake-Patten is sufficient to meet the disclosure requirements identified in **Mason v. Forgie**. This Court's view is that it does not.

[74] The Court concludes that a person in the position of Mr. Gallant would not have consented to the cervical manipulation either at the first visit in October, 1994 or upon the resumption of treatments in July, 1998 or on the day of treatment that is at issue in this case in December, 2001 if properly informed of the risks and consequences.

What Weight Should be Given to the Opinion Evidence of Dr. Bradley Stewart?

[75] Regardless of the findings in favour of Mr. Gallant with regard to the first and second issues in this proceeding, the Plaintiff may not recover damages from the Defendant unless the Court is satisfied that cervical manipulation of December 10, 2001 was causative of the hearing loss, tinnitus and the impairment of vestibular or balance function allegedly sustained.

[76] The determination of this issue requires the assessment of a considerable amount of expert medical testimony that was presented during the course of this trial. The focus of the debate with respect to causation depends on whether or not the symptoms exhibited by Mr. Gallant after the visit with Dr. Brake-Patten resulted from a vascular event or a viral episode.

[77] The Court heard evidence from Doctors Charles Cron and Tony Batten, ENT specialists as well as Dr. Bradley Stewart, a neurologist who gave opinion evidence on behalf of Mr. Gallant. The Court also heard testimony from Dr. Alan McComisky, the general practitioner who treated Mr. Gallant initially at the Stephenville hospital in 2001. Dr. David King, a neurologist gave opinion evidence on behalf of Dr. Brake-Patten. The Court also had copies of reports by Dr. Swannie, an ENT specialist who first treated Mr. Gallant but was not available to testify due to personal circumstances.

[78] Before assessing the expert medical evidence as a whole, I am obliged to address the concerns raised by the defence regarding the weight to be given to the testimony of Dr. Bradley Stewart, the neurologist who provided two reports and oral testimony during the trial on behalf of Mr. Gallant.

[79] The defence asserted at the end of a *voir dire* to qualify Dr. Stewart as an expert witness that his evidence, including his two reports, should be ruled inadmissible on the ground of bias.

[80] Dr. Stewart was retained by counsel for Mr. Gallant regarding "total right-sided hearing loss he sustained following a manipulation of the cervical spine by a chiropractor". His services were sought to give an "opinion of a neurologist on causation – i.e., relationship of the hearing loss to the chiropractic adjustment".

[81] Dr. Stewart had been advised that the defence had retained Dr. David King. Dr. King had prepared a written report dated February 27, 2007. Dr. Stewart prepared an initial opinion dated September 15, 2008 with the benefit of access to the reports of Drs. Cron and Batten but apparently without a copy of Dr. Swannie's initial report.

[82] Dr. Stewart prepared a report dated September 15, 2008 expressing the opinion that the symptoms manifested by Mr. Gallant on December 10, 2001 and during the following days and weeks were most likely caused by the cervical manipulation. Dr. King prepared a rebuttal report December 20, 2008 with respect to Dr. Stewart's initial report. Dr. Stewart followed up with a rebuttal report dated February 20, 2009. The trial commenced March 2, 2009. All of these reports were entered in a joint book of documents by the parties.

[83] Counsel for Mr. Gallant sought qualification of Dr. Stewart to give opinion evidence in the area of neurology including the diagnosis and treatment of disease or trauma involving the central, peripheral and autonomical nervous systems including their coverings, blood vessels and effector tissue such as muscles and also including opinion evidence on strokes and vertebral artery dissections.

[84] Without any challenge to Dr. Stewart's academic or clinical credentials, the defence sought disqualification on the basis of bias. The bias issue was based on the allegation that Dr. Stewart had made critical comments about the chiropractic profession in his second report in which he suggested, among other things, that the chiropractic community was in denial with regard to the risk of serious injury to patients arising from manipulation therapy of the neck. Dr. Stewart attributed this state of affairs to what he believed was inadequate training of chiropractors in neurology. He was also critical of the quality of research by the chiropractic community with regard to the potential adverse consequences from cervical manipulation.

[85] The defence specifically directed the Court's attention to a book published in 2000 entitled *"Spin Doctors: The Chiropractic Industry Under Examination"*, (The Dundurn Group: Toronto, 2002), the foreword of which was authored by Dr. Stewart. The foreword contained criticism by Dr. Stewart of the chiropractic profession similar to those discussed in his rebuttal to Dr. King's second report.

[86] The Court rejected the application of the defence to declare Dr. Stewart's reports and his *viva voce* evidence inadmissible. The Court ruled that Dr. Stewart had expertise as a neurologist to provide expert opinion evidence with regard to vascular events associated with injury to the vertebral artery which was beyond the ordinary knowledge of the Court and could provide assistance to the trier of fact.

[87] There was testimony from Dr. Stewart that he had participated, since the publication of the foreword, in interdisciplinary dialogue between the neurological community and other physicians with the chiropractic community as part of a joint effort to identify and characterize the medical risks associated with chiropractic treatment of the cervical and lumbar spine.

[88] The Court determined that the critical commentary in Dr. Stewart's second report, while somewhat strident and inappropriate for an expert report, did not detract from the value of the analysis and commentary made by Dr. Stewart from a medical viewpoint in response to Dr. King's opinion that the symptoms demonstrated by Mr. Gallant were more consistent with a viral origin than a vascular event. The Court specifically ordered that the remainder of his second report would stand as an admissible opinion for the benefit of the Court. In assessing the weight to be given to Dr. Stewart's testimony, the Court concluded that Dr. Stewart could give objective opinion evidence that could be of assistance to the Court.

[89] A further issue arose while Dr. Stewart was being cross-examined by the defence. The retainer letter from Mr. Gallant's counsel was entered into evidence at this stage by defence counsel. The letter indicated that Dr. Stewart was advised by Mr. Gallant's counsel that they had received supportive opinions from ENT specialists. During cross-examination, it was also confirmed that Dr. Stewart had not received a complete copy of the medical chart of Mr. Gallant at the Stephenville hospital when he was treated by Dr. McComisky and subsequently by Dr. Swannie. Dr. Swannie had given a provisional diagnosis that indicated the possibility of viral labyrnthitis (an inner ear infection) while acknowledging the need to

evaluate the effect of the cervical manipulation which had been revealed to Dr. Swannie prior to his first examination of Mr. Gallant in January 7, 2002. Dr. Stewart had not been provided with a copy of Dr. Swannie's report.

[90] While the Court will comment further about the overall impact of these revelations with regard to the retention of Dr. Stewart and the data provided, the Court regards the process of retaining Dr. Stewart as somewhat incomplete and inappropriate, particularly with regard to the characterization of the reports from Drs. Cron and Batten and particularly in light of the failure to include the report of Dr. Swannie.

[91] In **R. v. Mohan**, [1994] 2 S.C.R. 9 the Supreme Court of Canada reviewed the criteria for the admission of expert evidence. The Court said the admission of such evidence was dependent on the application of the following criteria:

(i) relevance;

(ii) necessity in assisting the trier of fact;

(iii) the absence of any exclusionary rule;

(iv) a properly qualified expert.

[92] Applying the criteria to Dr. Stewart, the Court is satisfied that the evidence of Dr. Stewart is clearly relevant given the neurological perspective on the question of causation given by Dr. King in an area where the risks to the vertebral artery from manipulation of the cervical spine are documented but are alleged to be rare in their occurrence.

[93] Dr. Stewart's evidence is also relevant and necessary in assisting the Court with regard to the fact finding process. Dr. Stewart has demonstrated that he has academic and clinical knowledge as a neurologist to give opinion evidence regarding strokes resulting from injury to the vertebral artery. The only issue is whether there is a reason for exclusion of his testimony on the grounds that his independence and objectivity has been contaminated by the way in which he was retained and by his critical written commentary with regard to the chiropractic profession.

[94] The Court is conscious of the concern that has been raised that judges may tend to take the path of least resistance in dealing with the issue of the admissibility of expert evidence by the admission of the evidence and

compensating for its inherent weaknesses by attaching less weight. The Supreme Court of Canada in a decision written by Binnie, J. in **R. v. J.(J.-L.)**, [2000] 2 S.C.R. 600 at para. 28, emphasized that a trial judge should take seriously the role of "gatekeeper". However, in that case the Court was dealing with the precautions that are necessary in a criminal case with regard to the introduction of opinion evidence that ultimately constitutes "junk science".

[95] Binnie, J., writing for the Court, stated:

> The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all other frailties could go at the end of the day to weight rather than admissibility.

[96] The mischief that is intended to be addressed by the criteria outlined by the Supreme Court of Canada in **Mohan** is the spectacle of purported expert witnesses in effect behaving as partisan advocates for the party on whose behalf they appear to give testimony. They may be professional claims analysts who are frequently involved in construction claims. They may be forensic fire experts who depend to a large degree on retainers from insurance companies for their livelihood. There are also purported "hired guns" who are quite prepared to step outside of their field of expertise by giving what amount to legal interpretations of contractual terms underlying a dispute. Such reports have the effect of usurping the function of the trial judge on legal as well as factual questions instead of providing opinion evidence of a specialized nature that is beyond the ordinary knowledge of the trier of fact.

[97] Notwithstanding Dr. Stewart's criticism of the chiropractic community and the issues surrounding the manner of his retention, the Court has determined that he was able to give useful testimony with regard to the probabilities surrounding whether Mr. Gallant's symptoms occurred as the result of a vascular event or a viral condition. The criteria outlined in **Mohan** has been met for the purpose of consideration of his testimony. In reaching this conclusion, I have considered the core material of both of Dr. Stewart's reports as well as his trial testimony, both on direct and cross-examination. I am satisfied that Dr. Stewart was sufficiently neutral and objective in explaining and defending his opinion that the admissibility of his evidence is justified.

Weighing the Expert Medical Opinions

[98] The competing theories of causation are linked to the question of whether or not the weight of evidence supports the provisional diagnosis of viral symptoms existing on the day of the manipulation of Mr. Gallant's neck or a diagnosis of a vascular event resulting from Dr. Brake-Patten's cervical manipulation. Underlying the analysis is the significance of the seemingly close temporal relationship between the cervical manipulation and the manifestation of symptoms thereafter and whether it is sufficiently compelling to support the vascular event theory of causation. The defence contended that the onset of symptoms was not sufficiently "sudden" thus supporting an opinion that Mr. Gallant's symptoms were due to an idiopathic or uncertain chain of causation more akin to a viral origin.

[99] At the risk of oversimplification, the expert opinion evidence is focused on the interaction of the blood supply and vascular systems of the head and neck with the balance and hearing functions and organs contained within the inner ear. The ENT specialists deal with diseases of the ear, nose and throat and in the case of Drs. Cron and Batten, they have tended to specialize in diseases of the ear, both in training and in clinical experience. Their discipline includes studies of the effects of trauma to the head and neck which may have negative effects on hearing and vestibular functions. The neurologist specializes in disorders of the nervous system which will include the diagnosis and treatment of diseases affecting the blood vessels and tissue of the nervous system. Their expertise also focuses on the effects of trauma on the proper functioning of the vascular system.

[100] A fulsome summary of the events reported by Mr. Gallant to a physician within a reasonably short time after the events giving rise to this proceeding is found in the initial report of Dr. Tony Batten. Dr. Batten, whose practice has concentrated mainly on diseases of the ear, conducted a consultation on May 1, 2002 with Mr. Gallant at the request of the occupational medical advisor to Mr. Gallant's employer.

[101] The mandate given to Dr. Batten was to assess Mr. Gallant's medical condition in the context of his role as a mechanical supervisor at the newsprint mill in Stephenville where his position required him to interact with heavy machinery and equipment at close quarters and where initial concerns related to "ear-related dizziness". Dr. Batten was asked to comment upon a future diagnosis and whether further treatment would assist Mr. Gallant in improving his hearing and balance deficiencies.

[102] In his report dated May 7, 2002 Dr. Batten reported:

> … As you know, he was in good health and working as a mechanical supervisor with Abitibi Price. He had problems with his neck periodically over the year and went to the chiropractor periodically for treatment. On Monday, December 10, 2001, he was feeling fine from a dizziness point of view and went to the chiropractor at around 3 o'clock in the afternoon and had a manipulation performed on his neck. At around 5 p.m. when he was getting out of the shower he noticed some right-sided tinnitus [hissing or ringing sound in the ear] and a sensation of water in his ears. It worsened over that evening and he went to see his family doctor that evening and his ear looked fine. By 9:30 that evening he had vertigo with nausea and vomiting which left him bedridden for approximately two days. He went to his family doctor on Wednesday which was two days afterwards; he was still having problems with his right-sided hearing loss and had his ears syringed. He continued to have dizziness over the Christmas holidays and had his first audiogram done on January 7, 2002, by Dr. Swannie. At that point he was found to have a profound hearing loss in his right ear. Dr. Swannie felt that he may have suffered a viral labyrinthitis possibly although he did note that he was unsure as to whether the neck manipulation had any effect.
>
> Mr. Gallant did not report any preceding viral-like illness, nor was there any pain in his ear which is often seen with viral infections of the cranial nerves. There were no other associated neurological symptoms at the time to suggest other brain stem involvement. From Mr. Gallant's description it sounds like he may have had some benign positional vertigo following the injury which is common after an insult such as this and that repositioning maneuvers appear to have helped settle that part down.
>
> Mr. Gallant did have a CT Scan of his head done in St. Anthony which was negative for intercranial pathology and he did have an electronystagmogram performed which showed a severe loss of caloric function on the right side.
>
> Mr. Gallant is otherwise well. Of interest he did have radiotherapy to his right nose for a carcinoma last summer although the temporal bones were not in the field of the radiation.
>
> Mr. Gallant still reports dizziness with quick movement and some unsteadiness on walking. He still reports right-sided tinnitus. As well, he has occasional hyperacucis when exposed to loud sound.
>
> Examination today, May 1, 2002, shows his ears to be normal. There's no spontaneous nystagmus. His nose and throat were unremarkable. His gait was normal, however, his Unterberger stepping test was quite positive to the right side which would indicate a loss of vestibular function on the right. Dix-Hallpike testing is negative in both head hanging positions ruling out benign positional vertigo.

> I have reviewed Mr. Gallant's audiograms and he has essentially a mild high frequency sensorineural hearing loss in his left ear at 4 KHz which is a typical noise induced type sensorineural hearing loss which is not unexpected given his occupation. On the right, however, he does have a profound sensorineural hearing loss with 0% word discrimination. It's essentially a dead ear.
>
> In summary, Mr. Gallant has a sudden severe sensorineural hearing loss of his right ear with loss of vestibular function. This would indicate a catastrophic event to his right labyrinth. There are no associated symptoms that would support the diagnosis of a viral infection, nor has there been any recovery of his hearing which you may see with viral infections. His hearing loss has remained profound. This event occurred several hours after neck manipulation and should ischemia have been induced during that manipulation, I think the time period would be correct in that the onset of his symptoms would be delayed. The reports of neurologic deficit after chiropractic manipulation have recently appeared as I am sure you are aware of and certainly injury to his vertebral artery may have occurred. The labyrinthine artery is a branch of the vertebral artery and it's not unlikely that an embolus or vasospasm could have occurred resulting in a sudden dead ear on that side.

[103] Dr. Batten went on to report that Mr. Gallant was now left with a permanent disability both with regard to the hearing loss in his right ear and balance function deficiency on his right side. He reported that his balance function would improve somewhat but he would remain permanently unsteady on his right side. This condition would manifest itself with quick movement and Mr. Gallant would be expected to encounter problems maintaining his balance when challenged with quickly moving objects. Dr. Batten opined that it would not be safe for Mr. Gallant to return to his occupation. Dr. Batten indicated that Mr. Gallant would have to avoid occupations that would require him to be around dangerous equipment and working from unprotected heights.

[104] The intake form completed by the nurse at the time that Mr. Gallant arrived at the emergency department of the Stephenville hospital at about 8:30 p.m. on December 10, 2001 recorded that he was suffering not only dizziness and balance problems but also a loss of hearing. The type of the symptoms demonstrated within the first 24-48 hours after the events of December 10th are significant since there is a difference of opinion between Drs. Cron, Batten and Stewart with Dr. King as to the extent to which the symptoms displayed by Mr. Gallant within the timeframe in which they were manifested was sufficiently "sudden" to support Mr. Gallant's theory of causation. That theory is tied to a vascular event arising from the neck manipulation in the form of an embolus or clot which blocked the blood

supply to organs of the inner ear resulting from sudden sensorineural hearing loss and impairment of vestibular or balance function.

[105] Dr. Cron was requested to give an opinion to the disability insurer of Mr. Gallant's employer. He saw Mr. Gallant on January 23, 2003. Dr. Stewart was retained later after the first report of Dr. King was obtained. The three doctors testifying on behalf of Mr. Gallant based their opinions on the premise that there was no substantive evidence to support a diagnosis that Mr. Gallant's symptoms resulted from a viral condition that existed on December 10, 2001.

[106] Mr. Gallant testified that he was in good health and did not have any symptoms of a cold or a flu on the date of the treatment. This is corroborated by Mr. Gallant's spouse who testified that there was no illness in the household in the days preceding her husband's visit to the clinic.

[107] Dr. McComisky, the general practitioner who saw Mr. Gallant at the hospital at approximately 9:30 p.m. on December 10th, diagnosed a wax deposit in Mr. Gallant's ears and prescribed olive oil to be applied for the purpose of softening the wax with a view to having it subsequently removed by syringe.

[108] When Mr. Gallant returned to Dr. McComisky with the persisting symptoms on December 12, Dr. McComisky syringed the ears and removed the wax and recorded that the appearance of some redness. At that stage he was suggesting an otitis media (a middle ear viral infection). In his testimony before the Court Dr. McComisky acknowledged having abandoned this diagnosis when he realized the extent of Mr. Gallant's persisting loss of hearing and balance function which resulted in his subsequent referral of Mr. Gallant to Dr. Swannie, the ENT specialist in Corner Brook.

[109] Dr. Swannie arranged for an audiogram to be performed in early January, 2002 which showed a severe sensorineural hearing loss in the right ear. At the same time, the test showed absence of nystagmus (or involuntary eye movement) which would have been reflective of the lack of interference with vestibular or balance function caused on a bilateral basis by a viral condition such as viral labyrinthitis or otitis media. Dr. Swannie seems to have ultimately concluded that the cause of Mr. Gallant's symptoms was uncertain.

[110] The defence asserted that it is significant that Dr. Swannie had provided a provisional diagnosis of viral labyrinthitis. This is countered by the opinions of Drs. Cron, Batten and Stewart that such viral conditions should have been manifested bilaterally and should have been subsiding and responding to medication without permanent impairment to either of the hearing or vestibular function by the time Dr. Swannie was treating Mr. Gallant. Dr. Swannie had noted that the residual postural dizziness was a danger for employment and that he should only return to work when his balance returned to normal. It became clear that his balance function did not return to normal which had been Dr. Swannie's expectation when postulating a viral origin to Mr. Gallant's problems.

[111] Doctors Cron, Batten and Stewart suggest that it is likely that the high velocity low amplitude thrust or adjustment of Mr. Gallant's neck would have caused a sufficient strain on the vertebral artery when stretched against the lower cervical vertebrae on the right side of the neck to cause a tear or a "shearing" of the inner lining of the artery known as the intima. The tearing of the intima would generate a deposit of small proteins adhering to the intima as the artery lining started to repair itself. This process would lead to the formation of a small embolus or clot in the area of the tear. The pressure of the blood flow in the vestibular artery could then force the release of the embolus from the area of the tear causing it to migrate to the anterior inferior cerebellar artery. The embolus could enter the labyrinthe artery (a hair-like artery in size) causing a blockage of blood supply to the inner ear particularly to the hearing organ known as the cochlea and to the vestibular or balance organ.

[112] Since the tear of the intima of the vertebral artery was postulated be a relatively minor one and would take some time to cause the build up of the protein-based embolus and its migration to the inner ear, Doctors Cron, Batten and Stewart opined that this would account for the lapse of a few hours from the actual manipulation, the tear of the intima and the occurrence of the loss of balance function and hearing resulting from the blockage of the labyrinthe artery commencing and progressing through the evening and into the following day.

[113] These doctors suggest that if there had been a more severe tear or rupture of the artery, the onset of symptoms would likely have been more sudden and dramatic which in turn could have lead to more serious consequences including a stroke in the brain as opposed to damage limited to hearing and balance functions in the ear.

[114] There was debate about whether Mr. Gallant had encountered sudden and distinct pain after the manipulation. Mr. Gallant testified that he always had some neck pain each time he visited Dr. Brake-Patten and had cervical manipulation applied. He testified that pain would remain immediately after the manipulation and he would be given an ice pack to apply and would rest for a period of time before leaving the clinic. The only distinct recollection he had was that Dr. Brake-Patten pressed on the lower portion of his lower cervical spine on that occasion, the purpose of which was not explained to him. This was unusual to Mr. Gallant. Dr. Brake-Patten recounted that Mr. Gallant reported pain that was more bilateral than right sided.

[115] Dr. King was of the opinion that any significant injury to the vertebral artery as a result of the manipulation should have resulted in sudden, bilateral, distinct and intense pain being encountered by Mr. Gallant. However, the three doctors testifying on behalf of Mr. Gallant suggest that because the likely ischemic or vascular event involved a small tear of the intima, no significant increase in pain would have been detected by Mr. Gallant who always felt some pain both prior to and after each manipulation.

[116] Dr. King further opined that the high velocity of the blood flow through the vertebral artery after a build up and release of proteins in the form of a small clot would not have inhibited the ability of the clot to migrate away from the vertebral artery through the anterior cerebellar artery and ultimately lodge in the labyrinthe artery. Dr. King did acknowledge that this was a possible but not probable scenario in this case. Doctors Cron, Batten and Stewart were satisfied that this scenario is a probable one based on their clinical experience and the medical literature which they tendered in evidence.

[117] Dr. King also suggested that if there had been a clotting scenario arising from injury to the vertebral artery there should have been evidence of the blockage and its subsequent damage to the cochlea (hearing organ) detectable by appropriate and timely imaging studies of Mr. Gallant, particularly through magnetic resonance imaging. Dr. King believed a timely MRA (a magnetic resonance angiogram) could have established whether Mr. Gallant had suffered a blockage of the labyrinthine artery.

[118] However, we know from the medical history that the diagnostic imaging that occurred after the episode which included a CT scan and a MRI did not detect any sign of clotting or occlusion or demonstrate any damage to the cochlea.

[119] Dr. Cron did not agree with Dr. King's view that imaging studies would have shown damage to the cochlea. Dr. Cron testified that in his experience a short term deprivation of blood supply to the cochlea could in fact cause significant permanent damage to the cochlea in the high tones which would make the ear virtually useless for hearing function while still having some integrity in the low tones which would reflect a still subsisting cochlea but without a meaningful hearing function for Mr. Gallant.

[120] Doctors Cron, Batten and Stewart testified that if there had been a full dissection of the vertebral artery then there would have been a greater likelihood that imaging studies identified by Dr. King might have detected the effects of such a vascular event. However, it was their collective view that there was no dissection but rather a tearing of the intima which would constitute an ischemic event manifested by a small clot that would ultimately have lodged in the labyrinthe artery interrupting blood flow long enough to cause permanent damage to the hearing and balance functions while dissolving relatively quickly and thus being undetectable by timely imaging studies. Doctors Cron and Batten further opined that a viral initiated hearing loss should have been a bilateral and conductive one in nature and not a sensorineural unilateral hearing loss.

[121] The absence of viral symptoms and the close time sequence between the cervical manipulation and the symptoms of dizziness, imbalance, nausea, vomiting, tinnitus, and loss of hearing function reported by Mr. Gallant, confirmed by his spouse and recorded in various clinical records, caused Doctors Cron, Batten and Stewart to conclude that it was highly probable that Mr. Gallant's injuries were caused by the cervical manipulation. Drs. Cron and Batten were very strong in their opinions that the notion of a viral origin of Mr. Gallant's symptoms and permanent disability was very low in terms of likely diagnostic outcomes.

[122] Dr. Cron testified that while he could not completely exclude viral infection, it was highly unlikely. He put the ischemic event or "a stroke in evolution" scenario as being ahead of all other probable causes "by a wide margin". Dr. Batten expressed the view that he was "90% sure the event was vascular". Both Dr. Cron and Dr. Batten said the history of symptoms and the compressed time frame involved were critical aspects of their opinions as they are in most medical diagnoses particularly when major symptoms are manifested after a distinct event such as a cervical manipulation or a motor vehicle event which may cause a quick snap or turn of the head and neck.

[123] Dr. Cron felt that there were striking similarities of the types of symptoms and their delayed onset following a cervical manipulation between Mr. Gallant's case and the second case study discussed in a 1985 paper by four doctors entitled "Sudden Sensorineural Hearing Loss Following Manipulation of the Cervical Spine" presented at an annual meeting of the American Laryngological, Rhinological and Otological Society.[2] (Exhibit CCC # 7)

[124] Dr. Stewart estimated the probability of linkage between the manipulation and the injuries at 70%. The fact that he did not have Dr. Swannie's report when he reviewed the file and wrote his first report would not have changed his assessment of the degree of probability of causation except to the extent of reducing the percentage of probability to 65%. He gave the same opinion as Doctors Cron and Batten regarding the diagnostic importance of the short time span between the manipulation and the onset and progress of symptoms.

[125] Dr. King expressed concern that insufficient attention was paid to the original assessment by Dr. McComisky at the hospital on the evening of December 10, 2001. He felt more attention should have been paid to the diagnosis of the original referral specialist, Dr. Swannie and his provisional diagnosis of viral labyrinthitis. He believed that the absence of any distinct and severe pain having been endured by Mr. Gallant after the cervical manipulation was inconsistent with a dissection of the vertebral artery or any other significant vascular damage. He felt that the absence of timely and appropriate imaging studies and test results weighed heavily against the degree of comfort that the physicians testifying on the behalf of Mr. Gallant could justify in reaching their opinions that the likely causation scenario was linked to the cervical manipulation.

[126] Dr. King did concede that the scenario postulated by Doctors Cron, Batten and Stewart with respect to a tear of the intima with the absence of pain and the potential for an early dissolution of the clot or occlusion that may have occurred within the labyrinthe artery was possible although he felt that such a scenario was not probable. Dr. King's view was that Mr. Gallant's condition was a result of an idiopathic or uncertain chain of events which could very well have been viral as suggested initially by Drs. McComisky and Swannie and cannot be discounted on a balance of

[2] Published February, 1986 in Laryngoscope, Journal of the American Laryngological, Rhinological and Otological Society, Inc.

probabilities in the absence of reliable and timely imaging studies following Mr. Gallant's treatment by Dr. Brake-Patten.

[127] The assessment of expert medical evidence respecting causation in complex cases occurs with the realization that medicine is not an exact science and that physicians deal in differential diagnosis as a matter of daily practice. The objective of achieving a "definitive diagnosis" reflects the reality of weighing a host of factors in detecting medical conditions and their cause in the context of the complexities of the human anatomy.

[128] While the evidence in this case provides special challenges given the crossover between the medical disciplines of otolaryngology and neurology, it is nevertheless clear that specialist physicians working in either of these disciplines have a significant degree of knowledge of the vascular systems affecting the head and neck and how they can be affected by disease or trauma.

[129] In **Athey v. Leonati** [1996] 3 S.C.R. 458, the Supreme Court discussed the general principles of causation. Justice Major, writing for the Court, commented at paragraph 16:

> In *Snell v. Farrell*, *supra*, this Court recently confirmed that the plaintiff must prove that the defendant's tortious conduct caused or contributed to the plaintiff's injury. The causation test is not to be applied too rigidly. Causation need not be determined by scientific precision; as Lord Salmon stated in *Alphacell Ltd. v. Woodward*, [1972] 2 All E.R. 475, at p. 490, and as was quoted by Sopinka J. at p. 328, it is "essentially a practical question of fact which can best be answered by ordinary common sense". Although the burden of proof remains with the plaintiff, in some circumstances an inference of causation may be drawn from the evidence without positive scientific proof.
>
> [Emphasis added]

[130] The Supreme Court of Canada in **Snell** had previously held at paragraph 35:

> It is not therefore essential that the medical experts provide a firm opinion supporting the plaintiff's theory of causation. Medical experts ordinarily determine causation in terms of certainties whereas a lesser standard is demanded by the law.
>
> [Emphasis added]

[131] At paragraph 37 of **Snell**, the Supreme Court also cited with approval the following passage from a United States Supreme Court decision in

Sentilles v. Inter-Caribbean Shipping Corp. (1959), 361 U.S. 107 at pp. 109-110:

> The jury's power to draw the inference that the aggravation of petitioner's tubercular condition, evident so shortly after the accident, was in fact caused by that accident, was not impaired by the failure of any medical witness to testify that it was in fact the cause. Neither can it be impaired by the lack of medical unanimity as to the respective likelihood of the potential causes of the aggravation, or by the fact that other potential cause of the aggravation existed and were not conclusively negated by the proofs. The matter does not turn on the use of a particular form of words by the physicians in giving their testimony. The members of the jury, not the medical witnesses, were sworn to make a legal determination of the question of causation. They were entitled to take all the circumstances, including the medical testimony, into consideration.
>
> [Emphasis added]

[132] These references are significant in medical negligence cases not only with respect to the standard of scientific proof required to prove causation but also the relevance of the temporal relationship between the procedure under review and the timing of the manifestation of symptoms by the patient when weighing the expert medical opinion evidence.

[133] Notwithstanding questions raised by Dr. Swannie's report and Dr. King's reports and testimony as to whether the proper diagnosis was idiopathic in nature, the opinions of Doctors Cron, Batten and Stewart have enabled Mr. Gallant to meet the causation test set out in **Snell** that a vascular event resulted from the cervical manipulation.

[134] The Court is satisfied the Plaintiff has met the burden of proof that Dr. Brake-Patten's cervical manipulation was causative of the injuries and permanent disabilities described in this proceeding.

SUMMARY AND DISPOSITION

[135] The Court has found:

(i) that the Defendant breached her duty of disclosure to the Plaintiff;

(ii) that the Plaintiff, properly informed, would not have consented to treatment; and

(iii) that the cervical manipulation performed on the Plaintiff by the Defendant caused his injuries.

[136] The Defendant is therefore liable to the Plaintiff in negligence with damages to be assessed.

COSTS

[137] The Plaintiff shall be entitled to costs on a party and party basis for first and second counsel to be taxed.

MICHAEL F. HARRINGTON
Justice

APPENDIX

Corrections made January 13, 2010:

1. In paragraph 133, at the second line,
   a. the word “to” was inserted after the word “as”; and
   b. the word “is” was removed and replaced with the word “was”.

2. In paragraph 133, at the third line, the words “was causation” were removed and replaced with the words “in nature”.