

Chiropractor, Mr B

**A Report by the
Deputy Health and Disability Commissioner**

(Case 07HDC20616)



Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Overview

In November 2007, Mrs A, aged 33, was a fit and well mother of two. She consulted Mr B, a qualified chiropractor, because she had been suffering from headaches for approximately two and a half months.

Mrs A saw Mr B on four occasions. He performed a range of manipulations of her neck and back. Following the fourth treatment, Mrs A suffered a stroke caused by a dissection of a vertebral artery.

Complaint and investigation

On 28 November 2007, the Health and Disability Commissioner (HDC) received a complaint from Mrs A about the services provided by Mr B. The following issue was identified for investigation:

The appropriateness of the care and the adequacy of the information provided to Mrs A by chiropractor Mr B in 2007.

The investigation was delegated to the Deputy Commissioner. The parties involved were:

Mrs A	Consumer
Mr B	Provider/chiropractor

Information was obtained from:

Mrs A
Mr B
The district health board
A medical centre

Independent expert advice was obtained from chiropractor Dr Margie Blacklow (see Appendix A).

Information gathered during investigation

Background

In October 2007, Mrs A had been experiencing headaches and a sore neck for approximately two and a half months. She had recently started a new job where she spent much of her time typing and answering phones. Her headaches generally became worse when she was at work.

On 31 October 2007, Mrs A consulted her general practitioner (GP) in relation to her headaches. Following his examination, the GP assessed Mrs A's headaches as originating from her neck. His notes show that he recommended she see a physiotherapist and an optometrist, and he prescribed amitriptyline.¹

Mrs A recalls the GP advising her to see a "physiotherapist or a chiropractor". She denies he ever advised her to consult an optometrist.

Mrs A decided to consult a chiropractor and made an appointment with Mr B. She found Mr B in the Yellow Pages telephone directory.

Mr B is a registered chiropractor who operates in private practice. Mr B has worked in private practice since 1987, having graduated with a Bachelor of Applied Science (Chiropractic) in 1986.

1 November 2007

Mrs A first consulted Mr B on 1 November 2007. He states that Mrs A presented with recurring headaches and pain in her neck and shoulder area, which had been present for the last few months. Mrs A described the pain to him as a "nagging, intense, burning" pain which became worse when she was at work. None of the medications she had tried gave her any relief. Mr B noted that her symptoms were relieved with sleep.

On palpation of Mrs A's neck, Mr B found evidence of "cervical and cervico-thoracic dysfunction".² He also noted some swelling around her throat area, which he queried may have been related to her thyroid gland. Mr B took X-rays.

Mrs A told Mr B that she had no history of vertebral artery insufficiency.³ Because Mrs A was adopted, Mr B was unable to establish any family history. Mr B then carried out a number of orthopaedic tests, including "cervical compression, maximum cervical compression, distraction, shoulder compression, and Maigne's [Vertebral

¹ Amitriptyline is a tricyclic antidepressant drug which is commonly used to treat migraines and chronic pain.

² Impaired functioning of the cervical and cervico-thoracic vertebral joints.

³ Vertebral artery insufficiency is caused by decreased blood flow in the vertebral artery, which may lead to stroke.

Artery Insufficiency test]”.⁴ Mr B stated that all these tests were “unremarkable”, and he concluded that Mrs A had “bi-lateral cervico-thoracic discomfort with pain radiating into the trapezius areas”.

Following his assessment, Mr B explained his findings to Mrs A, advising her that she had a “mechanical dysfunction, causing nerve, muscle [and] joint irritation in a cyclical manner”. He discussed treatment with Mrs A, advising her that there was a “slight risk of a possible vertebral artery insufficiency due to spinal manual therapy”. There is no documentation of this discussion. However, Mr B and Mrs A both signed a consent form stating that the risk of manipulation had been discussed. This stated:

“In extremely rare circumstances, some treatments of the neck may damage a blood vessel and give rise to stroke or stroke-like symptoms ... If any adjustments (manipulations) are required you will be tested beforehand ...”

Mrs A agrees that Mr B briefly discussed his diagnosis. She recalls Mr B stating that she had “vertebral subluxation complex”⁵ which was caused by “years of bad posture and abuse of her neck”. She recalls that Mr B then discussed treatment and advised her that there was a risk that the proposed treatment could result in her becoming a paraplegic. However, she cannot recall any further detail about this discussion. Mrs A found Mr B’s explanation frightening and felt that if she did not have the treatment her headaches would never get better.

Mr B advised that his initial treatment consisted of adjusting Mrs A’s spine and occiput. He stated: “The right occiput was adjusted in a lateral manner, the [fifth cervical] vertebra was adjusted in a left lateral manner, and the nuchal lines were massaged.”

Mr B advised Mrs A to book another appointment for the next day.

2 November 2007

Mr B advised that when Mrs A presented for her next appointment on 2 November, she had experienced slight relief following treatment from the previous day, but her headache was still present.

Mr B then proceeded to manipulate Mrs A’s spine. This included manipulation to the cervical and thoracic spine, as well as the sacro-iliac joint. Following treatment, Mr B asked Mrs A to return in three days’ time.

⁴ Maigne’s is a chiropractic test for vertebral artery insufficiency. A positive test would elicit signs of dizziness, headaches, slurring of speech, tinnitus, vertigo, nystagmus or nausea.

⁵ “Vertebral subluxation complex” is a chiropractic term used to describe a range of signs and symptoms that are thought to be caused by vertebral joint dysfunction or misalignment.

7 November 2007

Mrs A's third appointment was on 7 November. Mr B noted that Mrs A was better. He advised that at the beginning of the treatment, he explained his findings to date. He stated:

“[I] provided [Mrs A] with a more thorough description of her problem as being a mechanical dysfunction syndrome with associate nerve irritation, myospasm and joint dysfunction.”

Mr B advised that he gave Mrs A a written handout which provided information about chiropractic care, together with a photocopy of her X-rays.

In contrast, Mrs A recalls that this discussion occurred during the previous consultation. She advised that Mr B discussed the expected recovery pathway, advising her how many treatments she would likely need to fix her problem. Mrs A also recalls that she was given a copy of her X-rays during the second visit.

Mr B manipulated joints in the cervical and thoracic spine. He advised Mrs A to make another appointment for two days' time.

9 November 2007

On 9 November, Mr B advised that Mrs A reported that she was feeling well, although she was a little sore in her cervical spine. Mr B advised that treatment included manipulation of joints in the cervical and thoracic spine. Mrs A was advised to return in another two days.

Mr B recalls that, following the last manipulation of her neck, Mrs A sat up from lying on her back and complained of some dizziness. He explained that this was not unusual and should subside. This discussion is not documented in the clinical records.

Mr B advised that Mrs A was escorted to the waiting room, where she saw the receptionist, and then she left. He provided no further instructions or advice at that time.

In contrast, Mrs A recalls that the last manipulation felt unusual — “like a snail being squashed”. She immediately complained that she felt “strange” and saw spots in her eyes. Mrs A agrees that Mr B advised her that this was normal and would get better, and says that he then “jollied her out of his office”. Mrs A recalls that she “fumbled” for her glasses and wallet and “staggered” to the door, having to hold the walls and surrounding objects to steady herself. Mrs A stated:

“I walked down two or three steps and my husband saw me and asked me if I was okay, he thought I was drunk as I was wobbly on my feet. I then got in the car and told him I felt weird and that I couldn't see him out of my right eye, but [Mr B] said it was normal ...”

Mrs A went to work but her symptoms became worse; she lost sight in her right eye and she was unable to concentrate, forgetting things like her computer password. One of her work colleagues advised her to call Mr B, which she did. She recalls that she outlined her symptoms to Mr B and that he advised that her symptoms were not unusual, but to go to an accident and emergency clinic (A&E) for further assessment.

Mr B's record of the telephone conversation states:

“A bit dizzy after treatment, poor concentration (upset). Told to go to hospital, told ‘sometimes people get a bit dizzy after treatment, not unusual’, difficult vision with blurriness. No rotation with treatment. Said had problem logging onto computer and couldn't remember password.”

This is handwritten on a blank sheet of paper dated 9/11/07. There is no other indication when the note was written.

After Hours Medical Centre

Mrs A immediately contacted her husband, who took her to an after hours medical centre where she was seen at 5.59pm by a doctor. The doctor's assessment record states:

“Has had neck manipulation again today however suddenly felt dizzy. Associated loss of vision in right eye lasting over 30 minutes to one hour. Difficulty recalling. Short term memory and concentrating. No paraesthesia. No weakness.”

The doctor queried whether Mrs A had had a transient ischaemic attack (a stroke) and referred her to hospital for further assessment. She stated:

“In view of acute presentation of loss of vision. Altered perception and memory changes needs to have CT scan and further assessment.”

Emergency Department

Mrs A was subsequently taken to the Emergency Department (ED) at the public hospital. The ED record states:

“Went to chiropractor today ~ 1600. Was having neck manipulation — sudden loud snap at [right] neck. [Associated with] sudden visual loss [right] eye, vertigo, unsteadiness, slurring of speech [and] transient disorientation — couldn't remember login.”

A MRI⁶ was carried out, which showed “non-occlusive dissection of the distal left non-dominant vertebral artery at the level of C1/2. Small acute/recent infarctions are present superiorly in the left cerebellar hemisphere and within the left hippocampus.”⁷

⁶ Magnetic resonance imaging (MRI) is a diagnostic technique that provides detailed images of the body part being imaged.

Mrs A stayed in hospital and was treated conservatively with anticoagulant medication. She was discharged on 16 November 2007 on warfarin⁸ with the plan for a repeat MRI with review in the neurology clinic in three months' time.

Mrs A was also referred for speech language therapy owing to some residual speech problems.

ACC

On 30 November 2007 a treatment injury claim was accepted by ACC. The ACC report indicated that vertebral artery dissection is a known, but unusual, injury caused by neck manipulation. It found that a causal link could be established. It concluded:

“In this case, the artery that dissected was a vertebral artery, which is more likely to be prone to dissection because of anatomy and the action of the neck manipulation. The personal injury was present within 9 days of treatment. Other than tension headaches, there is no reliable evidence to identify any underlying disease that would be implicated in the dissection of the artery. On balance, the personal injury is determined to have been caused by the neck manipulation performed on 09/11/2007.”

Ongoing care

On 3 December 2007, Mrs A attended an outpatient speech language therapy assessment. She was assessed as having almost fully recovered her cognitive and language functioning.

In February 2008, a repeat MRI showed evidence that the clot in the vertebral artery had slightly reduced in size and had not moved. However, because it had not fully dissipated, Mrs A remains on warfarin.

Mr B

Mr B believes that he provided Mrs A with the appropriate standard of care. On behalf of Mr B, in response to Mrs A's complaint, Mr B's lawyer stated:

“[Mr B] carried out an appropriate initial assessment including the taking of [Mrs A's] details and history before diagnosing [Mrs A's] presenting problem. [Mr B] then administered standard treatment for the presenting problem, having previously warned [Mrs A] of the risks involved with the treatment to be administered by him. [Mrs A] was also provided with detailed literature in relation to chiropractic adjustments. Following an adjustment and when contacted later that

⁷ The MRI may be more simply interpreted as showing a split in the wall of one the vertebral arteries in the upper part of the neck. Small areas of necrosis (dead cells) in the upper part of the cerebellum (the area of the brain responsible for balance and coordination) and hippocampus (the area of the brain responsible for memory) were noted.

⁸ An anticoagulant medication.

day by [Mrs A], [Mr B] appropriately suggested that [Mrs A] seek a medical assessment of her condition. In all circumstances [Mr B] provided the appropriate care and level of information to be expected of a chiropractor presented with a patient complaining of the conditions that [Mrs A] did.”

Mrs A

Mrs A feels “disappointed and let down” as a result of Mr B’s treatment. On reflection, Mrs A feels as if Mr B bullied her into treatment, making her feel that something bad would happen if she did not have the treatment. Mrs A felt confused by the complicated explanations and big words Mr B gave her about her problem. She also felt that he rushed through the explanations and treatments, not giving her time to absorb what he was saying. Mrs A recalls that a normal treatment would consist of him asking if she still had a headache. He would then touch around the back of her neck and manipulate her spine in about three or four different areas. Mrs A advised that on average each treatment would last about seven minutes.

Mrs A does not believe Mr B should have manipulated her neck. She feels that he ignored her concerns when she clearly told him that she felt strange following the last manipulation. She stated:

“[I] feel that [Mr B] firstly may have [misdiagnosed] my neck problem to gain benefits ... He didn’t even acknowledge me when I told him I felt weird and could not see, when I rang him he didn’t acknowledge or apologise to me.”

Mrs A advised that she and her husband have had to use all their sick and annual leave. They have been left with a number of bills that need to be paid, as well as “credibility issues being on ACC”. She has been advised that she is unable to have any more children while she remains on warfarin, and she is unable to play contact sports. Mrs A feels that this incident has ruined her life and she wants Mr B to take some responsibility.

Code of Health and Disability Services Consumers' Rights

The following Rights in the Code of Health and Disability Services Consumers' Rights are applicable to this complaint:

RIGHT 4

Right to Services of an Appropriate Standard

- (1) *Every consumer has the right to have services provided with reasonable care and skill.*
 - (2) *Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.*
-

Other relevant standards

The Chiropractic Board of New Zealand *Code of Ethics and Standards of Practice* (2004):

“4.6 Records

...

4.6.3 In addition to the initial case history and examination information, a Chiropractor should keep a record of patients' progress. Records must be capable of being interpreted by the Chiropractor's colleagues, and should include:

...

6. Significant concerns the Chiropractor may have about the findings or the patient's progress.
 7. Advice given to the patient. ...”
-

Opinion

This report is the opinion of Rae Lamb, Deputy Commissioner, and is made in accordance with the power delegated to her by the Commissioner.

Opinion: No Breach — Mr B

Diagnosis

Mrs A presented to Mr B with a history of headaches, and shoulder and neck pain. Following his initial assessment, Mr B concluded that her pain was of a mechanical origin. I note the advice of my expert advisor, Dr Margie Blacklow, that Mr B's diagnosis of vertebral subluxation complex (refer to footnote 5) "would not be uncommon in chiropractic practice".

Overall, I am satisfied that Mr B's diagnosis was appropriate for Mrs A's presentation.

Information

There is limited documentation about the discussions that occurred between Mr B and Mrs A. However, Mr B has provided copies of the written information he provided to Mrs A. While Mrs A commented that she felt confused by the information she was given, she agrees that throughout the treatment sessions Mr B did discuss her condition, the proposed treatment, and the associated risks. She also agrees that Mr B provided her with a large amount of written information about chiropractic treatment. Overall, I am satisfied that Mr B took adequate steps to inform Mrs A of her condition and the proposed treatment, including the associated risks. However, I will remind him of the need to ensure that clients clearly understand the information being provided to them, and to explain complicated medical and chiropractic terms in a manner that lay people can understand.

Vertebral artery insufficiency testing

Prior to treatment, as part of his initial assessment, Mr B obtained a history from Mrs A in order to assess her risk of vertebral artery compromise. Mr B also carried out the Maigne's test to assess the presence of vertebral artery insufficiency symptoms. Prior to each subsequent treatment, Mr B carried out an assessment and adjusted his treatment accordingly.

Dr Blacklow stated:

"Of prime concern should be the collection and interpretation of data for chiropractic management purposes including detecting contraindications to care. According to [Mr B's] clinical notes he has performed appropriate gathering of data and testing to eliminate the risk of vertebral compromise at the initial consultation. As the symptom pattern appears to have been improving between visits there are no identifying risk factors, red flag alerts to warrant more aggressive vascular testing protocols to be referred to."

Furthermore, Dr Blacklow advised that because the standard tests for vertebral artery insufficiency have poor sensitivity, they would normally only be used prior to a new treatment procedure, not as routine prior to every neck manipulation. Dr Blacklow stated:

“... the accepted standard as currently taught by NZ Chiropractic Tertiary Institutes is that the test should be performed at the initial assessment if no arterial insufficiency signs have been found in the history and not at each subsequent visit until the re-exam.”

I accept that it is not standard chiropractic practice to carry out vertebral artery insufficiency testing prior to every treatment session. I note that from the documentation provided, Mrs A’s symptoms appeared to be improving and that she presented with no new risk factors or red flags that would have prompted Mr B to carry out further testing. Overall, I am satisfied that Mr B carried out appropriate testing in accordance with chiropractic practice.

Opinion: Breach — Mr B

Response to symptoms

Following treatment on 9 November 2007, Mrs A complained of dizziness, spots in her eyesight and unsteadiness while walking. Mr B has agreed that Mrs A complained of dizziness. However, he advised her that this was “not unusual and that the dizziness should subside in a short period of time”.

In contrast, Mrs A has indicated that her symptoms were so severe that her husband thought she was “drunk”.

Dr Blacklow confirmed that it is not uncommon for patients to have some sort of reaction as a result of a spinal manipulation. She stated that “reactions are normally slight and short lived, hence a red flag was not raised”. However, given Mrs A’s symptoms, Dr Blacklow believes that Mr B should have investigated further. Dr Blacklow views Mr B’s lack of follow-up as a mild deviation from the standard of care.

I acknowledge that Mr B appropriately advised Mrs A to go to an A&E for further assessment when she telephoned him and indicated that her symptoms had become worse. However, I am concerned that Mr B took no steps to assess Mrs A’s symptoms immediately following his treatment. I accept that it is not unusual to experience some sort of reaction following a manipulation. However, Mr B knew there was a risk of stroke associated with cervical manipulation. He discussed this risk with Mrs A and co-signed a consent form stating this. From Mrs A’s description of her husband’s reaction, it appears that her symptoms were marked. At the very least, it would have been prudent for Mr B to have given Mrs A advice about what to do if her symptoms did not dissipate and to have asked her to stay briefly in the waiting room so he could check whether her symptoms abated.

This case demonstrates the importance of following up symptoms to ensure that nothing more serious has occurred. By failing to respond appropriately to Mrs A's symptoms immediately after the treatment, Mr B failed to provide services with appropriate care. Consequently, he breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).

Documentation

Mr B, using an assessment form, has documented Mrs A's presenting complaint and medical history, including recording whether Mrs A had any known signs of vertebral artery insufficiency. In his response to the complaint, Mr B stated that he carried out a number of orthopaedic tests including cervical compression, maximum cervical compression, distraction, shoulder compression, and Maigne's test. Mr B states that these tests were unremarkable. However, the only documentation about this is what appears to be an initialled signature next to the list of tests. There is no information about the results.

Furthermore, the only documentation about the treatment provided is largely illegible. In order for the notes to be understandable, Mr B was asked to transcribe his records. This confirmed that there is no contemporaneous record of any discussions Mr B had with Mrs A, nor is there any documentation of any post-treatment assessment after any of the consultations.

Good documentation of the services provided is important to ensure quality and continuity of services. All health service providers, including chiropractors, have a professional obligation to clearly document the services provided to consumers. The minimum standards for chiropractors are set out in the Chiropractic Board of New Zealand's *Code of Ethics and Standards of Practice* (2004) under clause 4.6.3, which states that "records must be capable of being interpreted by the Chiropractor's colleagues and should include ... significant concerns the Chiropractor may have about the findings or the patient's progress ... [and] advice given to the patient".

As noted in another HDC opinion, 07HDC05410:

“Medical records need to be full, accurate and legible so that they can be accessed by the patient, and by other health professionals who may subsequently treat the patient.”

Overall, it is my view that Mr B failed to adequately document the care he provided to Mrs A. By not keeping adequate records of the services he provided to Mrs A, Mr B failed to provide service that complied with relevant standards and breached Right 4(2) of the Code.

Other comment

During the course of my investigation I have been made aware of some differences in the guidelines for chiropractors and physiotherapists in relation to when and how often vertebral artery insufficiency should be tested.

As stated above, it is accepted practice in chiropractic care for the provider to carry out standard screening tests for vertebral artery insufficiency prior to the initial cervical manipulation. These tests are not generally repeated unless there is a change in the patient's presentation.

In contrast, the Australian Physiotherapy Association guidelines, which have been adopted by the New Zealand Manipulative Physiotherapy Association, state:

“Because a patient's vascular status may change between treatment sessions, testing should be undertaken on **every occasion** a cervical manipulation or any procedure involving end-range rotation is to be performed in an attempt to detect the patient for whom such treatments would be inappropriate as a result of provocation of symptoms or signs indicative of [Vertebral Artery Insufficiency].”

As previously stated, there are a number of risks associated with cervical manipulation. It is for this reason that it is a restricted activity under the Health Practitioners Competency Assurance Act (HPCAA) (2003). Both physiotherapy and chiropractic are amongst the specialties allowed to practise cervical manipulation under the HPCAA (2003). However, I am surprised that the two specialties have such differing practice in relation to cervical manipulation. While this matter falls outside the scope of this investigation, I intend to bring this to the attention of the Ministry of Health and the respective regulatory bodies.

Recommendations

I recommend that Mr B:

- provide Mrs A with a written apology for his breach of the Code. This should be sent to this Office to be forwarded to Mrs A;
- ensure that his consultations are legible and appropriately documented, including details of discussions with consumers. Mr B should provide me with a copy of his documentation policy outlining these requirements;
- develop a policy and procedure for monitoring clients in-house following cervical manipulation. This should include a procedure for managing patients experiencing post-treatment side effects, as well as advice to be given routinely to patients post-manipulation. Mr B should provide me with a copy of this policy.

Follow-up actions

- A copy of this report will be sent to the New Zealand Chiropractic Board.
- A copy of this report, with details identifying the parties removed, will be sent to the Director-General of Health, the New Zealand College of Chiropractic, the Physiotherapy Board of New Zealand, and the New Zealand Manipulative Physiotherapy Association, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A

Advice from Dr Margie Blacklow

Thank you for giving me the opportunity to review and give advice on case 07/20616. I have read and agree to follow the Commissioner's guidelines for independent advisors. I agree there is no conflict of interest with the case in question. My professional clinical opinion will be provided; this is based on my professional history. I am a registered Chiropractor in New Zealand and have been in practice for nearly 20 years. I have an undergraduate Bachelor of Applied Science (Chiropractic) degree from Phillip Institute of Technology (Melbourne) and have a Master of Applied Science (Musculoskeletal Management), RMIT (Melbourne). I have practiced both in Perth, Western Australia and Christchurch, New Zealand. My passion is sport and chiropractic and now practice in a multi-disciplinary Sports Medicine clinic in Christchurch, New Zealand. I have held executive positions with the Chiropractic Associations both in New Zealand and Australia, where my portfolios have included developing ethical and standard of practice guidelines. Since my return to New Zealand I have had the opportunity to consult with both NZQA and HDC on various matters.

Please find below the responses for the advice required by your office as requested in correspondence dated 25 March 2008:

1. Please comment on the standard of care provided by [Mr B] and the adequacy of assessment on visits dated 1 November, 2 November, 7 November and 9 November 2007:

From the information provided it is my opinion that in this case there is a mild departure from accepted standards even though the care resulted in a severe adverse outcome for [Mrs A]. I base this opinion from a number of facts I have been presented with.

Upon reviewing [Mr B's] clinical records I see a health history has been completed by [Mrs A] and clinical information has been ascertained to give any clues with regard to contraindications to management of this case especially with regard to vertebral artery insufficiency. Also sighted, an informed consent document signed by [Mrs A] and dated 1 November. This document does outline possible adverse risks including 'stroke'. This form states that discussion had taken place and [Mrs A] has given consent for treatment, this document is co-signed by [Mr B], normally this co-signing takes place after verbal discussion of the contraindications to care have been explained and acceptance has occurred for treatment. Upon reviewing [Mrs A's] notes it would appear that some sort of verbal conversation to explain risks has taken place.

In alignment with the current New Zealand Chiropractic Registration Board's Code of Ethics and Standards of Practice a chiropractor must develop a diagnosis

and/or differential diagnosis for every patient prior to treatment being instigated. Upon reviewing [Mr B's] correspondence his working diagnosis was vertebral subluxation complex. As the symptom pattern initially appears to be improving, with the symptom pattern ranging from slight relief headaches still present on the visit 2/11/07 to good but still aches a bit at the visit of 9/11/08, there were no identifying risk factors to red flag the visit of the 9th November.

This diagnosis reached appears to be due to information gathered from the initial case history and examination. [Mr B] used a model of vertebral subluxation complex as his diagnosis, which is a model of motion segment dysfunction (subluxation) which incorporates the complex interaction of pathological changes in nerve, muscle, ligamentous, vascular and connective tissues and may influence organ system function and general health. In [Mrs A's] case giving rise to neck pain and associated headache pattern. This diagnosis would not be uncommon in chiropractic practice.

Initial Examination and Re-Assessment at each subsequent chiropractic consultation. Case Management of [Mrs A's] case and any client's case relies on performing a logical sequence of actions each one based on prior information, making a clinical decision from the data obtained, forming a management plan and evaluation of progress. It appears from [Mr B's] report of findings he has formulated a management plan which was being discussed with [Mrs A] at ongoing levels at subsequent consultations. This process would not be considered to be a departure from the standard.

Of prime concern should be the collection and interpretation of data for chiropractic management purposes including detecting contraindications to care. According to [Mr B's] clinical notes he has performed appropriate gathering of data and testing to eliminate the risk of vertebral compromise at the initial consultation. As the symptom pattern appears to have been improving between visits there are no identifying risk factors, red flag alerts to warrant more aggressive vascular testing protocols to be referred for.

2. Please comment if [Mr B] should have carried out vertebral insufficiency tests prior to commencing each treatment.

As the standard provocation tests for vertebral insufficiency have poor sensitivity and specificity at best, normally these would be specifically tested at each initial examination or change in clinical treatment procedure. Clinical presentation of the client showing vertebral insufficiency risk factors would determine further evaluation and referral protocols. As there were improving symptoms in this case the vertebral insufficiency risk factors were not queried.

It is not the standard for Maigne's testing to be done at every visit prior to cervical spine manipulation as this standard provocation test has poor sensitivity and specificity.

3. Please comment on the adequacy of information both written and verbal provided to [Mrs A].

Upon reviewing the written documentation provided and the verbal explanation described by [Mrs A] it appears the information provided would be within the accepted standards of care.

4. Comment on [Mr B's] response to [Mrs A's] reported symptoms following the treatment on 9 November including telephone advice.

Upon reviewing the documentation it appears [Mr B] was unaware of the severity of the issue and has had the level of concern as if the incident was a transient reaction. It is not uncommon for patients to have some sort of reaction as a result of spinal manipulative therapy, reactions that are normally slight and short lived, and hence a red flag alert was not raised.

From the information I am unable to determine at what level [Mrs A] communicated her concerns to [Mr B]. Although she feels she made "a big deal of it" [Mr B] has interpreted her reaction as normal and not unusual with regard to a transient reaction.

[Mrs A] says that she told [Mr B] that she felt weird and that her "eyesight is all funny" and that [Mr B] responded that what she felt was "quite normal".

The incident is recalled by [Mr B] (Lawyer letter 1 Feb) that [Mrs A] felt dizziness post treatment.

There is no record in the clinical notes of the immediate post treatment conversation, only the later telephone conversation is recorded. As [Mr B] has no clinical notes for me to review I can only go on what [Mrs A] recalls. And given the visual loss and balance issues [Mr B] should have investigated further.

I would say this is a mild deviation from the standard of care. Even if [Mr B] had reassessed [Mrs A] and sent her to the hospital directly the outcome would have been the same. Also if [Mr B] had commented in his clinical notes that she had felt dizziness post treatment then I would know he had assessed [Mrs A's] comments and regarded the incident as transient. (I believe that [Mr B] probably did regard [Mrs A's] incident as a transient reaction but he hasn't noted this in his clinical records.)

With regard to the telephone advice given I would not consider this a deviation from appropriate care advising a patient if they had concerns to go to the Emergency Department.

5. Adequacy of documentation and general comments.

There is a slight deviation from standards in [Mr B's] note taking. Specifically while his recording of his examination and treatment procedures is adequate. There are no notes on the concerns raised by [Mrs A] after the treatment. Both parties agree there was some reaction to treatment reported by the patient but [Mr B] has failed to note it on the patient records.

It would be my recommendation that [Mr B] make the following policy and procedural additions to his current clinic guidelines:

- as well as recording manipulative procedures record any verbal concerns re post manipulation concerns or discussion,
- create a policy and procedure for clients with post treatment issues to be monitored in house before leaving the clinic and appropriate care administered,
- create a policy and procedure for better communication with clients with post treatment issues e.g. staff to ring and check clients post adjustment treatment pattern concerns the night of care.

Further advice

[Following is additional comment made by Dr Blacklow in response to a request for her to provide a copy of the chiropractic guidelines for cervical manipulation.]

Should the vertebral insufficiency test be done prior to each chiropractic treatment?

The short answer is, not normally.

In chiropractic there are no specific guidelines for arterial insufficiency testing. The protocols are under review because the tests themselves are shown to be non-predictive and possibly provocative and therefore there is some debate as to whether they should be used at all.

However the accepted standard as currently taught by NZ Chiropractic Tertiary Institutes is that the test should be performed at the initial assessment if no arterial insufficiency signs have been found in the history and not at each subsequent visit until the re-exam.

A re-test is done with each re-evaluation. This is normally 6+ visits depending on the patient's symptoms and clinical presentation at each visit.

Additionally in normal practice if a patient presented with signs of arterial insufficiency the provocation tests should not be performed and appropriate investigation undertaken.