PHYSIOTHERAPIST, MR B

A Report by the

Health and Disability Commissioner

(Case 00HDC03138)

Physiotherapist, Mr B

Parties involved

Ms A	Consumer
Mr B	Provider / Physiotherapist
Mr C	Consumer's partner

Complaint

On 23 March 2000 the Commissioner received a complaint from Ms A regarding physiotherapy services provided by Mr B. The complaint is that:

- *Physiotherapy treatment provided by Mr B to Ms A on 4 October 1999 resulted in her suffering bilateral vertebral artery dissection.*
- *Mr B did not fully explain the treatment he was to provide.*
- *Ms A returned to Mr B's rooms on 4 October after experiencing a temporary loss of vision, tingling throughout her body, vomiting and dizziness. Mr B did not ensure a full medical assessment was undertaken before commencing further physiotherapy treatment.*

An investigation was commenced on 11 April 2000.

Information reviewed

- Copies of Ms A's physiotherapy notes from Mr B.
- Copies of relevant medical notes from Ms A's general practitioner at a public hospital, Dr D, and an Accident and Medical Centre [the Medical Centre].
- A copy of Ms A's accident file from an insurance service.
- Expert advice from an independent physiotherapist, Mr Darren Rivett.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

Information gathered during investigation

Background
In April 1999, Ms A slipped and fell at an airport, landing on her left hip and ankle. Ms A fell a second time in June 1999 while roller-blading. This time she landed on her right hip. Ms A did not require medical attention for either of these incidents and advised that she had no subsequent problems or pain.

On 19 August 1999 Ms A had a further fall at work. Ms A advised:

> "In August 1999 I had an accident at work. I fell off my chair and landed on my right hand, injuring my wrist and arm. I went to [the Medical Centre] and after having x-rays they found no break but put my arm in a sling and told me to rest for the next four days. My arm and right shoulder continued to ache still after a few days so I went back to [the Medical Centre]. They told me more rest was needed and it would be a good idea to see a physiotherapist. I did not rest at this time and continued to come to work and worked only with the use of my left arm.
>
> I have never really been to a physiotherapist before and so I did not go. After about six weeks the pain became too intense so I gave up and contacted [Mr B]."

Visit one
Mr B first saw Ms A on 30 September 1999. Mr B obtained full details of Ms A's medical and injury history, including details of her falls. Mr B advised me that while taking Ms A's history he asked whether she had "any Vertebral-Basilar Artery symptoms, such as dizziness, nausea, visual disturbance or drop attacks, and she replied in the negative".

Ms A recalled Mr B asking her questions. She could not recall what all of them were, but remembers that he asked her about the location of her pain, and whether she had had physiotherapy before.

Mr B advised me that when Ms A presented to him, her symptoms included pain in the neck, scapular and interscapular area (around and between both shoulder blades), pain in her lumbar region (lower back), and pain accompanied by occasional pins and needles and tingling in her right arm.

Ms A said the back pain was not significant. Her main problem had been intense pain in her right shoulder.

Ms A advised me that in addition to asking her questions, Mr B told her he wanted to manipulate her neck. Ms A said she told him "she was not keen on this idea and did not want that to happen". She could not remember Mr B's

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

response to this. She said, however, that Mr B asked if he could massage her neck, and she agreed to this. He started the massage, and explained what he was doing as he did it. Ms A said that on 30 September 1999, her neck was too painful for anything but massage. According to Ms A, Mr B did not do any manipulation at this appointment.

Mr B said he did manipulate Ms A's spine on 30 September 1999. Mr B advised that after obtaining details of Ms A's medical and injury history, he examined her neck, spine and pelvis, and explained details of his examination findings to Ms A. Mr B continued:

> "Firstly, I explained what I was going to do. I obtained her consent and successfully manipulated the left sacroiliac joint [an area in the lower back]. Following manipulation I retested her lumbar active movements and established that she now had no pain in her lumbar spine, and that she now had a full range of motion in flexion and extension in her lumbar spine.
>
> I then examined the upper thoracic and cervical spine. I found that there was limited extension (posterior glide) of the lower segments of the cervical spine and of the upper four segments of the thoracic spine. Active or passive movement created pain in the upper thoracic spine from C7/T1, T2/3. I tried to use SNAG's (sustained natural apophysial glides) on T1, C7, C6 and to increase jointly gliding and increase cervical range of extension and rotation to relieve her pain. There was too much pain so I stopped immediately. There was no difference to the patient's range of motion.
>
> I then explained and obtained her consent to manipulate the 4th and 5th thoracic levels [an area in the middle of the spine] as I felt these were hypomobile and limiting her thoracic rotation and contributing to her interscapular pain. I commenced treatment. The joints were manipulated successfully with the patient sitting using the Nelson technique using a rolled towel to localise the manipulation to the targeted joints. Following manipulation the patient had pain free left and right rotation in the thoracic spine. …"

Mr B went on to examine Ms A's neck. He further advised:

> "… I found that all the soft tissue around the neck was tender, stiff and had palpable trigger points and spasm in trapezius, levator scapulae, rhomboids and splenius captitus. I told the patient that she was too tender for me to treat the neck that day and that she needed medication, rest and heat to reduce the pain. I suggested a wheatbag and anti-inflammatories and said I would review her the following week."

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

Visit two

Ms A returned to Mr B the following Monday morning, 4 October 1999, at 8:30am. Ms A said she advised Mr B that her pain was no better. She told Mr B that she had applied the heated wheat bags, taken Voltaren and rested all weekend.

Ms A said that on her second visit, she did not mention again that she did not want manipulation, but expected Mr B would remember that she had told him this on her previous visit.

Mr B advised me:

> "I asked her how the lumbar pain was. She told me there was no longer a problem and she had no pain since treatment. I re-examined active flexion and extension which was full with no pain evident.
>
> [Ms A] told me that the neck was better but the pain between the shoulder blades was still there. She also said the arm pain had gone but the previous evening the pain had been there between 9 and 11pm. She also had some pain on the interior/superior border of the humerus, but that had gone as well.
>
> There was no pain in the arm on 4/10/99."

Ms A said that after she arrived at Mr B's rooms:

> "He laid me on a table and applied heat pads for about 15 minutes. After this he started to massage my upper arm and shoulder. He then started to massage my neck, which was incredibly sore."

Ms A advised me that Mr B did ask for her consent before he started massaging her.

Mr B advised me that he carried out his examination and treatment of Ms A before he applied the heat pack. He said he examined Ms A's neck first, and this showed a general improvement in mobility, pain and spasm reduction. Mr B continued:

> "As her neck was not as painful as her first visit (when I had determined that her neck was too painful to treat), I then tested the vertebral-basilar arteries. This test is performed by:
>
> - end range rotation being sustained for 10 seconds on each side of the neck (left and right)
> - extension

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

HDC

Physiotherapist, Mr B

- extension and rotation on each side of the neck (left and right).

> Other than the pain in the interscapular and cervical thoracic junction region there were no symptoms or signs of vertebral artery pathology on testing.
>
> Treatment consisted of repeating the manipulation of the 4th and 5th thoracic joints with the patient's consent. Once again thoracic rotation returned to normal post manipulation."

Mr B said he then examined Ms A's cervico-thoracic junction (an area between the base of the neck and the spinal level below). Mr B advised:

> "Extension was improved slightly but I considered that improvement would be further facilitated by manipulating the cervico-thoracic junction with a gapping technique and that a Nelson technique would be appropriate. The reason for this was that I believed that an element of traction would unload the joint and this type of indirect technique would not put pressure on the painful spinous processes. I had successfully used this technique on patients with similar presentations in the past.
>
> I told [Ms A] that this area of her spine was too jammed together and that gapping the fixed joints would assist normal glide. I obtained consent from [Ms A] and placed a rolled towel on the T2 level and applied the technique twice. No cavitation was made. I found that active extension was only marginally better and that this area was not benefiting from treatment and ceased this technique."

Mr B continued:

> "I moved attention now to the neck again. I explained to the patient that I wished to assess her joints in her neck and was it acceptable. She agreed. I mobilised the right facet joints at the C1/2 and 2/3, 3/4, 4/5, 5/6 levels at end of joint range using small amplitude end range mobilisations. Levels 5/6 and 6/7 were still too painful and I stopped at 5/6, as it was too painful to do anything.
>
> The mobilisation technique uses what is called a cradle hold with the joint to be mobilised localised by a combination of side bending and rotation. Both hands are cradled around the head and across the ears of the patient.
>
> The end range of the joint is approached and explored. It is used as an assessment and treatment technique. I did 2 series of 10 individual

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

mobilisations at each level. The feel of each joint is evaluated and compared with adjacent and contra-related joints for:

- pain;
- stiffness/restriction;
- range of motion.

On 4 October 1999 the upper cervical spine was very different from 4 days before. There was no peripherisation of pain into the scapulae or arm on rotating to the left as there had been on the previous visit. However, the pain was still present at C5/6, 6/7, 7/1 levels."

Ms A described this aspect of Mr B's treatment by advising me that he took her head in his hands and started rolling her neck from side to side. Ms A said he didn't ask for specific permission to do this, but said something like "I am just rolling your neck to get it moving". Ms A advised me:

> "After about five minutes of [Mr B's] massage he turned my head and neck quickly to the left and it made a loud cracking noise. A chiropractor, not a physiotherapist, normally carry out this kind of work I believe. I did feel okay at the time but I did get a fright."

Mr B advised:

> "While mobilising the patient's neck to the left on the C1/2 joint the patient's neck did click, or what is known as cavitation did occur. This was not from a deliberate manipulation but from a repeated end range mobilisation. These cavitations can occur spontaneously. I had gained consent from the patient to mobilise to end-range prior to treatment and did not attach any importance to the cavitation at the time as it was remote from the area of pain. [Ms A] did not appear to consider it important at the time."

Ms A advised me that the "loud cracking noise" came after Mr B did "one quick twist" of her neck. Mr B did not ask her if he could do this first. Ms A said she asked him what that noise was, and he replied "that was me manipulating your neck". He asked Ms A if she felt OK, and she told him she did, because she did feel OK at that stage. She left shortly after this and returned to work.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

Physiotherapist, Mr B

Visit three
Ms A advised me:

> "I went to work afterwards and at 09:15am I lost my vision. I could not see at all for about 2 minutes and had come over all nauseous. I sat down with the help of my work colleagues, as I was unable to walk by myself. I then had a tingling sensation in my hands and it slowly moved up my arms and through my body. I started vomiting and over the next 30 minutes my sight continued to come and go. I was very dizzy and was unable to stand alone and could not walk straight."

Ms A's colleagues contacted Ms A's partner, Mr C, and he contacted Mr B on Ms A's behalf. Mr C advised that he called Mr B and told him Ms A had blurred vision, and had been sick. Mr B told him that he should bring Ms A back.

Mr B advised me that after he received the call to tell him that Ms A was returning:

> "I reviewed my treatment but discounted VBI pathology as most of the treatment had focused on the thoracic spine and cervico-thoracic junction. …"

When Ms A returned to Mr B's rooms she told him of her nausea and vomiting, loss of vision, tingling in her arms, and that she could not walk straight. Mr B asked Ms A to lie down on the examination table. Mr C was not present at this stage, but waited in the waiting room. Mr B advised:

> "Examination revealed no nystagmus [involuntary movement of the eyeball], no pupillary difference or deviation. I decided that a migraine could be responsible for her symptoms. Examination showed no weakness, numbness to light touch in the upper limbs and full reflexes."

Ms A said that Mr B started gently rubbing the back of her neck as she lay on her back. He did this for a few minutes. He then put a heat bag at the back of her neck and left the room for about ten minutes.

Mr B continued:

> "I told [Ms A] that I wanted her to be medically reviewed. I rang her GP, [Dr D], immediately and told her that I wanted her to be reviewed medically. [Ms A] was taken directly to her GP's surgery by her boyfriend, [Mr B].
>
> She was at my clinic for 15 minutes. During that time I applied some slight upper cervical traction for 5 minutes which relieved the nausea.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

At this point I did not consider VBI pathology as:

(a) The main problem initially appeared to be the lower cervical and upper thoracic spine, typically the upper cervical spine is the site of VBI pathology.

(b) There were no symptoms to indicate its presence until 1½ hours post treatment;

(c) There were no symptoms or signs despite testing for this pathology other than pain felt in the cervico-thoracic junction and the upper thoracic spine.

(d) Problems with vision were confined to the left eye which was to a side which received no direct treatment, mobilisation or even assessments.

The patient's history was unremarkable regarding direct trauma to the neck. Falling 3 times in the last 2 months had injured the back and hip, principally with the right arm injured in the latest fall at work.

While falls are rapid deceleration episodes and mimic whiplash in some ways with shearing forces and hyperextension force movements, I did not feel an arterial pathology as likely with somatic pain referred to the right arm and interscapular area. However, repeated falls can initiate insidious pathology which is not obvious on examination initially."

Ms A advised me that Mr B did not ask her if he could massage her neck before he did it. She could not recall whether he explained why he was doing it.

In response to the question whether he obtained consent from Ms A prior to applying cervical traction, Mr B advised:

"In my experience it is difficult to apply traction unless the patient is relaxed and comfortable with the procedure, and therefore understands what it is the therapist is trying to achieve. It is therefore always my practice to explain the intended treatment and obtain consent prior to carrying it out. Not only is it appropriate to obtain the patient's consent to the treatment, but the explanation facilitates the treatment.

For these reasons I believe I did obtain [Ms A's] consent for that further treatment."

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

HDC

Physiotherapist, Mr B

Mr B also provided a copy of a form signed by Ms A and dated 30 September 1999, stating she consented to have physiotherapy treatment.

Diagnosis of vertebral artery dissection
Mr C took Ms A to her general practitioner, Dr D, who examined Ms A and arranged for her to be sent to the public hospital. Ms A was admitted as an acute patient to the neurosurgery day ward. Further tests were arranged, including MRI (Magnetic Resonance Imaging) and MRA (Magnetic Resonance Arthrogram). These tests showed that bilateral vertebral artery dissection had occurred (two small tears had occurred in Ms A's vertebral artery). Ms A was commenced on an anticoagulant, to stop blood clots from forming. She was also given warfarin to thin her blood. Ms A was admitted to hospital on 4 October and remained there until 10 October 1999.

Ms A remained on warfarin therapy until March 2000. The warfarin therapy involved frequent hospital visits for blood tests, and caused Ms A problems such as tiredness and uncontrollable menstruation.

In letters to Ms A's GP (Dr D), Dr E, neurology registrar, and Dr F, neurologist (both of whom had seen Ms A at the public hospital), expressed their uncertainty as to the cause of the symptoms Ms A had experienced. Dr E and Dr F both noted that Ms A had symptoms of migraine as well as vertebral artery dissection.

In her letter to Dr D dated 13 October 1999, Dr E said that after hearing about Ms A's history of falls "... we [Dr E and Dr F] feel that it is more likely her vertebral artery dissection came as a result of her fall, and that the manipulation by the physiotherapist (which sounded from all accounts as if it was gentle massage), was probably coincidental".

In his letter to Dr D dated 28 February 2000, Dr F advised:

> "I discussed with [Ms A] in detail my considerable uncertainties about the diagnosis and the cause of the presumed vertebral artery dissection. I explained to her that I thought it unlikely that the nature of the physiotherapy that she had could result in damage to both vertebral arteries, let alone to one side and that the symptoms she came along with, which sounded very migrainous, were somewhat unusual for the consequences of vertebral artery dissection. What is more, she did have some symptoms that preceded physiotherapy, the cause of which also remain uncertain."

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

Independent advice to Commissioner

The following expert advice was obtained from Mr Darren Rivett, an independent expert physiotherapist:

"Was the treatment provided by [Mr B] appropriate given [Ms A's] presenting symptoms?

In relation to the treatment of the region in question (cervical spine and upper thoracic spine) there is no evidence that this was in anyway inappropriate given the presenting symptoms. The treatment was justified by the clinical presentation and there were no clinical 'red flags' to indicate that the vertebral arteries were at risk of iatrogenic injury.

Please comment on the likelihood of [Ms A's] bilateral vertebral artery dissection being caused by the treatment administered by [Mr B].

Given the close temporal relationship of the treatment on the 4th October 1999 and the onset of symptoms caused by the dissecting vertebral arteries, it is likely that the treatment provided by [Mr B] partly contributed to the vertebral artery pathology. However, it is also likely that the previous trauma sustained in falls (notably in August 1999) by [Ms A] initiated the damage to the intima (inner lining) of the arteries and that the subsequent treatment just worsened the pathology. There is increasing evidence in the scientific literature that prior trauma to the neck can occasionally predispose patients to vertebral artery dissection when they subsequently undergo physical treatment. This trauma may occur up to several months before symptoms first manifest. The half hour time delay between the treatment on the 4th October 1999 and the onset of symptoms is also quite typical of these incidents, as formation of the pseudoaneurysm (and hence vessel obstruction) caused by the dissecting intima does not occur immediately. That [Ms A] injured her cervical spine when she fell off her chair is supported by her initial clinical presentation to [Mr B] and by his clinical findings, both of which are consistent with neuromusculoskeletal trauma to the neck.

The treatment provided by [Mr B] was fairly generalised and almost all cervical spine levels were treated, although this is within accepted professional practice. Nevertheless, the specific procedure which may have worsened the already injured artery cannot be determined with any confidence. The MRA scan suggests that the inadvertent manipulation (cavitation or click) at C1-C2 was unlikely to be responsible as it occurred several levels above the area of arterial pathology. Such

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

HDC

inadvertent manipulations are not uncommon whilst mobilising or passively moving the neck of younger patients and cannot be anticipated. In addition, the direction of rotation of the C1-C2 mobilisation/manipulation (to the left) was not in the direction most likely to damage the left vertebral artery which was the site of the primary lesion.

Please comment on what professional standards are relevant with regard to selection of treatment, explanation to the consumer, informed consent, and record keeping.

There are no strict professional standards or protocols with respect to the selection of treatment. Treatment choice is usually made on the basis of the therapist's clinical reasoning following a clinical examination. The clinical reasoning evident in this case appears acceptable and there are reasonable grounds for interventions applied at both treatment sessions.

It is expected practice that the physiotherapist would explain to the patient the likely benefits and potential risks of any proposed treatment and any alternative treatments. The patient should be given the opportunity to ask any questions and these should be answered fully by the practitioner. Following this, the patient is asked to indicate verbally whether they agree or not to the proposed treatment. [Mr B] claims in his letter that informed consent was sought for the administered treatments, although this is not indicated in his clinical notes. Nevertheless, the intended treatment applied to the cervical spine was cervical mobilisation for which there has only been one documented case of vertebral artery injury recorded in the medical literature. As such, it is not standard practice to warn patients of this risk as the incidence rate of vertebral artery injury following mobilisation would be 1 in many million treatments. Furthermore, the specific technique applied is regarded within the physiotherapy profession as being safer than some other alternative procedures because the degree of neck rotation involved is minimal.

The clinical records clearly indicate that appropriate clinical testing was undertaken for insufficient blood flow through the vertebral arteries (vertebrobasilar insufficiency) and that the patient was asked about any warning symptoms indicative of vertebral artery pathology. All findings were normal and negative. That is, there is no way [Mr B] could have predicted that the patient was undergoing or about to undergo vertebral artery dissection. Further, there is nothing in the clinical records to indicate that [Mr B] intentionally performed a cervical manipulation, only that he mobilised the cervical spine. He

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

manipulated the cervicothoracic junction immediately adjacent to the cervical spine, but there are no known risks of vertebral artery injury with the technique he used.

As mentioned above, the gaining of verbal informed consent for treatment was not recorded in the clinical notes contrary to professional standards.

Please comment on the appropriateness of [Mr B's] response/treatment when [Ms A] returned to his rooms on October 4 1999 after experiencing the symptoms described above.

[Mr B] saw [Ms A] immediately after she returned, at which time he asked appropriate questions and performed appropriate physical examination. He immediately rang her GP which is an acceptable response, particularly considering the delayed onset of symptoms and the strong possibility of migraine as the cause of the symptoms. However, given the nausea, visual disturbances, dizziness and other sudden neurological symptoms, it was also distinctly possible that vertebral artery pathology may have been present and the patient was experiencing vertebrobasilar insufficiency (lack of blood flow to the brain) leading to these symptoms. The administration of gentle cervical traction was not therefore not advisable, because further passive movement of the neck could have possibly worsened the arterial pathology. This does not appear to have happened and because the traction was gentle it does not constitute a serious mistake on his part.

It is difficult to say whether an ambulance should have been called as there was a certain degree of ambiguity about the symptoms, as evidenced by the subsequent differing medical opinions. It was probably a satisfactory response to have immediately telephoned the patient's doctor.

Any other matters relating to professional or ethical standards that you believe are relevant to this complaint?

I have not found any other potential matters pertaining to these standards."

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

HDC

Physiotherapist, Mr B

The following clarificatory advice was obtained from my physiotherapy advisor in relation to Mr B's response when Ms A returned to his rooms on 4 October 1999:

> "I was asked whether [Mr B] had demonstrated reasonable care and skill and acted in accordance with professional standards in his response when [Ms A] returned. After due consideration it is my opinion that [Mr B] failed to act with reasonable care and in accordance with professional standards. [Ms A's] symptoms on her return visit on the 4th October 1999 were of a sufficiently serious nature to indicate that further physiotherapy treatment should not be pursued and that immediate medical investigation was urgently needed. The symptoms, which included visual disturbances, dizziness, nausea, vomiting, unsteadiness and light-headedness, are potentially associated with vertebral artery trauma leading to vertebrobasilar insufficiency. Given the close temporal relationship between the treatment half an hour earlier and the onset of these symptoms, [Mr B] should have been aware of the possibility of vertebral artery pathology and not undertaken any further treatment. This is because further passive treatment (including the applied cervical spine traction) could have worsened the local arterial pathology (intimal dissection) and possibly dislodged a thrombus (blood clot) which may have then led to a life-threatening stroke. However, there is no evidence that the traction treatment actually resulted in any exacerbation of the patient's condition. The prudent course of action would have been to have just sought immediate medical help and continue to observe and monitor the patient. Although the symptoms could possibly also have been interpreted as being due to a migraine, the seriousness of vertebral artery injury dictates that this is the presumed diagnosis until proven otherwise and the patient should be managed accordingly."

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Physiotherapist, Mr B

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.*

RIGHT 6
Right to be Fully Informed

1) *Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive ….*

RIGHT 7
Right to Make an Informed Choice and Give Informed Consent

1) *Services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this Code provides otherwise.*

Opinion:
No Breach

Rights 6 and 7(1)

Ms A was entitled to the information that "a reasonable consumer, in that consumer's circumstances would expect to receive". She also had the right to make an informed choice about her treatment, and give informed consent. I have noted the consent form signed by Ms A, dated 30 September 1999. A consent form of this nature is not sufficient in itself to indicate that informed consent has been given, and consideration must be given to the verbal information provided to Ms A.

I have received conflicting information from Mr B and Ms A with regard to the information that he provided at her appointments on 30 September and 4 October 1999. Mr B advised me that throughout the time he spent with Ms A, he continuously explained to her what he was doing and why. He further

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

advised me that Ms A was informed on each occasion that he wished to manipulate her, and consent was obtained on each of the five occasions.

Mr B informed me that two of the manipulations he performed occurred on 30 September 1999. He first manipulated Ms A's left sacroiliac joint, and then manipulated her 4th and 5th thoracic levels. Ms A informed me that when she first saw Mr B on 30 September 1999, he told her that he wanted to manipulate her neck. Ms A told him she did not want this. Ms A said that Mr B did not do any manipulation on 30 September 1999. He did, however, massage her neck with her consent, and explained what he was doing as he did it.

Ms A further advised me that when she saw Mr B again on 4 October, she did not mention again that she did not want manipulation, but expected that he would remember this from their previous consultation. She confirmed that Mr B did obtain consent prior to "massaging" her again on 4 October. According to Mr B, on 4 October he obtained consent from Ms A to manipulate her 4th and 5th thoracic joints, and then to manipulate her cervico-thoracic junction twice.

Ms A informed me that Mr B did not ask for specific consent prior to "rolling her neck from side to side" on this date. She advised me that at one stage, Mr B "turned my head and neck quickly to the left, and it made a loud cracking noise". He did not request her permission prior to doing this. Mr B confirmed that a "cavitation" did occur when he was mobilising Ms A's neck to end range. Mr B advised that "this was not from a deliberate manipulation, but from a repeated end range mobilisation". My advisor confirmed that there is nothing in the clinical records to indicate that Mr B intentionally performed a cervical (neck) manipulation, although he did manipulate the cervico-thoracic junction, which is immediately adjacent to the cervical area. Mr B stated that he had obtained Ms A's consent to "mobilise to end range".

Mr B believed that he explained what he was doing, and obtained consent, prior to applying "traction" to Ms A's neck when she returned to him the second time on 4 October 1999. Ms A advised me he did not obtain consent for this, but she could no longer remember whether he explained why he was doing this or not.

There were no witnesses to Ms A's consultations with Mr B. Mr B did not make a record of consent being obtained in his notes. My advisor informed me that this is contrary to professional standards.

Ms A does not appear to have been aware that some of the treatment performed by Mr B was manipulation. Ms A advised me that she informed Mr B that she "was not keen" on her neck being manipulated on 30 September, but did not repeat this on 4 October.

I am faced with a conflict of evidence. There are no witnesses to substantiate Ms A's or Mr B's version of events.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

Mr B did not make a written record of consent being obtained. Even if he had, it would not be conclusive. Ms A confirmed that Mr B did obtain consent from her on a number of occasions during his treatment and "explained what he was doing as he did it".

It is possible that Mr B did not make it sufficiently clear to Ms A that some of the treatment he was performing constituted "manipulation". Nevertheless, there is not sufficient evidence for me to conclude that Mr B failed to provide the information that a reasonable consumer would expect, or that he did not obtain Ms A's informed consent for the treatment he administered. Nor do I think that it is realistic to expect a physiotherapist to seek specific consent for each and every touching of a client, provided that an adequate explanation of what is proposed is given at the start of the consultation, and the client agrees to the therapy. In these circumstances I am satisfied that Mr B did provide sufficient information to, and obtain consent from, Ms A and accordingly did not breach Right 6(1) or 7(1) of the Code.

Right 4(1)

Visits one and two

Ms A was entitled to have services provided with reasonable care and skill, in accordance with Right 4(1) of the Code.

Ms A presented to Mr B on 30 September 1999, and again at 8.30am on 4 October 1999, with pain in her neck, back, right arm and shoulder, following a number of falls in the previous two months. My physiotherapy advisor informs me that "there is no evidence that [the treatment] was in anyway inappropriate given the presenting symptoms" on either of these occasions.

I have noted Ms A's concern that Mr B caused her artery dissection. In the opinion of my advisor, Mr B's treatment may have partly contributed to the artery dissection occurring, by worsening pathology that had already been initiated by a series of falls.

I have reviewed Mr B's notes, which clearly show that he asked appropriate questions to ascertain whether there were warning signs of vertebral artery pathology. At that stage there were no such signs. My advisor informed me that "there is no way Mr B could have predicted that [Ms A] was undergoing or about to undergo vertebral artery dissection".

My advisor informed me that prior trauma to the neck can occasionally predispose patients to vertebral artery dissection when they later undergo physical treatment. The time delay between the treatment on 4 October and the onset of symptoms is supportive of this scenario. My advisor also informed me that the "cavitation" or "click" that occurred was noted to be at C1-C2, and was

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name

HDC

Physiotherapist, Mr B

therefore unlikely to be responsible for the vertebral artery dissection, as the cavitation occurred several levels above the area of arterial pathology.

I have also taken note of the comments made by Dr E, neurology registrar, and Dr F, neurologist, in letters to Ms A's GP, Dr D. Both doctors expressed uncertainty as to the cause of the dissection, and pointed to the ambiguity of Ms A's symptoms, which could also have been indicative of migraine. Dr E referred to Ms A's history of three falls, and stated that the dissection may be related to these. Dr F also spoke of unusual symptoms that preceded the dissection. In Dr F's opinion, the dissection was unlikely to relate to Ms A's physiotherapy.

The possibility that the treatment performed by Mr B may have contributed to Ms A's vertebral artery pathology is, in any event, not determinative of whether Mr B breached the Code. Mr B was required to provide treatment with reasonable care and skill, in accordance with professional standards. I accept the opinion of my physiotherapy advisor that "the treatment was justified by the clinical presentation and there were no clinical 'red flags' to indicate that the vertebral arteries were at risk of iatrogenic injury". In my opinion, it is clear that Mr B acted with reasonable care and skill in his assessment and treatment of Ms A on 30 September 1999, and at 8.30am on 4 October 1999, and accordingly he did not breach Right 4(1) on those occasions.

Opinion: Breach

Right 4(1)

Visit three

When Ms A returned to Mr B's rooms after her treatment on 4 October 1999 with symptoms including visual disturbances, vomiting and unsteadiness on her feet, Mr B asked her questions and performed a physical examination. My advisor informed me that this was an appropriate response. Mr B immediately called Ms A's general practitioner, which was also appropriate.

However, Mr B also administered gentle "cervical traction", which in the opinion of my advisor was not advisable. Mr B informed me that after examining Ms A, he decided that a migraine could be responsible for her symptoms. My advisor agreed that migraine was a strong possibility. However, because of Ms A's neurological symptoms, it was also distinctly possible that vertebral artery pathology may have been present. Mr B should have been aware of this possibility, in view of the close temporal relationship between the

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

HDC

treatment and the onset of symptoms, and that further passive treatment could possibly dislodge a thrombus (blood clot), leading to a life-threatening stroke.

Although there is no evidence that the traction treatment did exacerbate Ms A's symptoms, I accept the opinion of my advisor that Mr B should not have undertaken any further treatment when she returned to him. Although the symptoms could possibly have been interpreted as being due to a migraine, the seriousness of vertebral artery injury dictated that this should be the presumed diagnosis until proven otherwise, and the patient should be managed accordingly. I accept the opinion of my advisor that Mr B did not demonstrate reasonable care in his response when Ms A returned to him. Although Mr B's traction was gentle, and did not constitute a serious mistake on his part, it was nonetheless a breach of Right 4(1).

Actions

In response to the Commissioner's provisional opinion, Mr B:

- Forwarded a written apology to Ms A for his breach of the Code.
- Advised that since this incident he has adopted a Manipulation Screening Protocol based on updated guidelines from the Australian Manipulative Physiotherapists Association (adopted by the New Zealand Association in July 2001).

Other Actions

A copy of this report will be sent to the Physiotherapy Board of New Zealand.

Names have been removed to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name