General Practitioner, Dr C

A Report by the

Health and Disability Commissioner

(Case 02HDC18871)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Mr A	Complainant
Mrs A	Complainant's wife
Mrs B	Consumer
Mr B	Consumer's husband
Dr C	Provider / General Practitioner
Ms D	Practice nurse

Complaint

On 13 December 2002 Mr A complained to this Office about the standard of service provided to his mother, Mrs B, by Dr C. Mrs B confirmed that she supported the complaint. Mr A's complaint was summarised as follows:

Dr C, general practitioner, did not provide services to Mrs B of an appropriate standard. In particular:

- *Dr C did not diagnose that Mrs B was suffering from a subarachnoid haemorrhage on 18 November 2002*
- *Dr C did not diagnose that Mrs B was suffering from a subarachnoid haemorrhage on 21 November 2002.*

An investigation was commenced on 20 January 2003.

Information reviewed

- Mrs B's general practice clinical records
- Mrs B's clinical records relating to her admission to the first public hospital
- Independent expert advice from general practitioner Dr Niall Holland

Information gathered during investigation

Overview

Mrs B, aged 78 years, suddenly developed a severe headache, with vomiting and disorientation, on the morning of 18 November 2002. Her family reported her symptoms to Dr C, Mrs B's general practitioner, and asked him to visit. Dr C was busy in his surgery and sent his practice nurse, Ms D, to assess Mrs B. Dr C visited Mrs B at 7.30pm that evening,

and made a provisional diagnosis of a viral illness, gave her an anti-emetic and pain relief and advised the family to call him if her condition deteriorated. On 21 November Mrs B's son took her to see Dr C at his surgery because, although her headache had diminished, she was still unwell. Dr C believed his examination that day confirmed his earlier diagnosis. When Mr A queried the possibility of a brain haemorrhage, Dr C reassured him and referred Mrs B to a geriatrician. Three days later Mrs B's symptoms were unchanged, so her son took her to a public hospital, where it was confirmed that she was suffering from a subarachnoid haemorrhage.

Background

Sudden onset of head pain
On 18 November 2002, Mrs B left her house around midday intending to go shopping. When she reached the front gate she experienced a sudden onset of head pain. She recalled:

> "It was like being hit over the head with an axe. The pain was dreadful. I have never known pain like it. I felt like my head had been smashed in. How I got back to the house I don't know."

Mrs B's husband helped her back into the house and into bed. Mrs B was vomiting and later recalled that "I hardly knew where I was". Mr B telephoned their daughter-in-law, Mrs A, for assistance. Mrs A immediately went round to her parents-in-law and found Mrs B lying in bed. When Mrs A asked what was wrong, Mrs B replied, "My head. My head. I have never had a headache like it." Mrs A informed me that she had to shut the blinds in her mother-in-law's bedroom because the light hurt her eyes and she was not able to focus properly. Mrs A propped up Mrs B on pillows to make her more comfortable, but her neck was stiff and she was not able to lift her head easily.

Mrs A telephoned the doctors' surgery and spoke to Ms D, the practice nurse. Mrs A explained that her mother-in-law had collapsed, vomited a bit and had a terrible headache. Mrs A thought the nurse conveyed this information to Dr C, because she said that someone from the Clinic would visit to give Mrs B an injection to stop her vomiting.

Dr C recalled that he received a telephone call from a family member, who told him that Mrs B had become ill within the last half hour with a headache and vomiting. He said: "On questioning I determined that she seemed to be hot, to be conscious and able to speak sensibly and able to move all limbs."

Dr C was busy at the surgery at that time and arranged for Ms D to visit to assess Mrs B, administer Stemetil 12.5mg intramuscularly (to control the vomiting) and advise the family to contact the surgery if her condition worsened.

Ms D recalled that when she arrived at the family's house she found Mrs B in bed. She was in severe pain, but was totally lucid and told Ms D that she had suffered from migraines some years previously but they had long ceased. Ms D administered the Stemetil according to Dr C's instruction before returning to the surgery.

Mrs B informed me that she had never suffered from migraines, but had suffered from Ménière's disease some years previously.

Dr C's clinical records for Mrs B show that he had been checking her blood pressure for the preceding 12 months. On 23 November 2001 her blood pressure was elevated at 180/90. Her blood pressure was checked weekly during December 2001 (when it remained elevated) and again in January and February 2002. In August and the beginning of October 2002 her blood pressure had dropped to 140/90 and 128/80 respectively, but when she saw Dr C on 31 October 2002 it had risen to 168/80. Dr C was not treating Mrs B for her elevated blood pressure.

Ms D telephoned the family about two hours later, around 3.45pm, to enquire about Mrs B's condition. Ms D was told that the vomiting had stopped and, although Mrs B still had a headache, she was more comfortable. Ms D relayed this information to Dr C.

18 November visit
Dr C visited Mrs B that evening around 7.30pm and recalled that she was in bed, drowsy, and complaining of a headache. She could talk sensibly and it appeared that the Stemetil had had some effect as her vomiting had ceased. Dr C examined Mrs B and, although there was no thermometer available to take her temperature, he assessed that she had a low-grade fever. She had no respiratory symptoms, rash or neck stiffness. Dr C stated that there was no cardiovascular or gross neurological disturbance. (However, as the notes of this visit are not detailed it is difficult to assess the extent of the physical examination Dr C performed.) Dr C's notes state:

"Notes	Plan and Treatment
Acute fever/vomit 2X/heachache today.	Fluids.
Stemetil 12.5 IM improved symptoms – slept.	Observe overnight.
a/ sleepy not confused Rash^{o} C/S✓ Abd✓ Fever mild headache.	Panadol ii 6hrly."

Mrs A stated that her mother-in-law told Dr C that she had a terrible headache, and that when Dr C leaned Mrs B forward off the pillows to feel the back of her neck, she appeared to be in some discomfort and complained about her headache. Mrs A said that Dr C removed the bedclothes to check Mrs B's legs and joints. He moved Mrs B's legs and asked her if her joints were painful. She replied that they were. Dr C discussed Mrs B's recent reaction to antibiotics and felt her abdomen, but Mrs A does not recall him taking her mother-in-law's blood pressure.

Dr C remembered opening his bag and using the torch and tongue depressor. Mrs B lacked the clinically significant cerebral signs to make him consider that she was suffering from a life-threatening event. He was unable to remember Mrs B's exact description of her headache except that she did not tell him that it was like being hit over the head with an axe, and he was not alarmed by her description of her symptoms.

Dr C believed that Mrs B was suffering from an evolving viral illness, possibly gastritis, and advised her to take regular fluids and Panadol, and Buccastem (an anti-emetic for control of

nausea and vomiting) as needed. He requested that the family report her progress to him in the morning.

Mrs B informed me that Ms D telephoned the next day. Mrs B said that the pain in her head had eased, and the sickness had gone, but she "just didn't want to get up". She stayed in bed for two days.

Mr A was concerned about the continuation of his mother's headache and general malaise and sought advice from a medical friend. Mr A was advised that his mother's symptoms were consistent with a cerebral bleed and that a CT scan was advisable in the circumstances.

21 November visit
On 21 November Mr A accompanied his mother to a clinic. Dr C examined Mrs B. Mrs B reported that she had developed a mild to moderate headache and a stuffy nose the previous night, but generally her headache had improved from the severity of the previous days. Dr C recorded that Mrs B had no fever, sore throat, cough, nausea or vomiting. She had no neck stiffness or neurological deficit, and his impression was that she was suffering from a sinus headache related to a viral illness. There is again no record that Dr C took Mrs B's blood pressure. Mrs B was prescribed Otrivine decongestant spray and Paradex pain relief, and was advised to contact Dr C after a few days if she was no better.

After the consultation, Mr A asked to see Dr C privately. He asked Dr C if he thought that Mrs B could be suffering from a cerebral haemorrhage. He recalled that he insisted that the symptoms his mother was presenting were consistent with a cerebral bleed and that a CT scan was required. Dr C told him that there was no strong clinical evidence for this and that it was his view that further investigation was not warranted at that time. Mr A requested a referral for his mother to a geriatrician. His impression was that Dr C was reluctant to consent to the referral.

Dr C informed me that although he did not think that a referral to a geriatrician was clinically indicated, he agreed to Mr A's request and suggested that Mr A contact a gerontologist. Dr C also ordered blood tests for Mrs B with the specialist referral in mind. He said that he had a basic action plan in place when he suggested a further review of Mrs B if her condition did not improve over the next week.

Dr C stated that because his "index of suspicion" was not aroused at the initial visit and because her clinical status improved over the next few days, at the follow-up visit on 21 November he had no clinical reason to suspect another diagnosis like subarachnoid haemorrhage.

Subsequent events
Mr A visited his mother on 24 November and found that she was still in bed, which was out of character. He told her that he was taking her to the public hospital for further assessment.

Mrs B was admitted to the Neurosurgical Unit at the public hospital, after a lumbar puncture examination in the Emergency Department showed a significant abnormality. An angiogram revealed a right-sided cerebral aneurysm and she was assessed to be "post bleed

day 9". Mrs B was transferred to another public hospital for treatment because of a radiographers' strike in the first public hospital.

Dr C's response
Dr C recalled that Mr A telephoned him to advise that his mother's condition had worsened during the weekend, and that she had been admitted to the first public hospital and diagnosed with a subarachnoid haemorrhage. Dr C contacted Mr B several days later to enquire about Mrs B's progress.

Dr C stated:

> "I do apologise to the family for not making the diagnosis of subarachnoid haemorrhage, but I believe in [Mrs B's] case, it was not a straightforward GP diagnosis to make."

Additional information

Subarachnoid haemorrhage
Subarachnoid haemorrhage is bleeding into the subarachnoid space surrounding the brain, which causes severe headache with stiffness in the neck. The usual source of such a haemorrhage is a cerebral aneurysm that has burst. The diagnosis is confirmed by CT scan or by finding blood-stained cerebrospinal fluid at lumbar puncture. Identification of the site of the aneurysm, upon which decisions about treatment will be based, is achieved by cerebral angiography.

Independent advice to Commissioner

Initial advice
The following independent expert advice was obtained from general practitioner Dr Niall Holland:

> "***Papers Received and Considered***
> Letter and Complaint particulars, [Mr A], 13/12/02
> Interview notes of 13/2/03
> Response, Medical Notes, Test results, Clinical Summary [of the first public hospital] 27/11/02, Operation note [of the first public hospital] 29/11/02, Transfer letter to [the second public hospital] 27/11/02, Discharge Summary [from the second public hospital] 29/11/02, all apparently supplied by [Dr C], 11/02/03
> Letter, [Ms D] practice nurse [at the clinic], 28/2/03
> Letter and statement, [Mr A and his mother] 12/3/03
> Specific Advice request [HDC] 10/3/03
> (Note: Hospital records for the admission at the time of operation are absent. However, except as noted at the end these are not relevant to my advice.)

The Complaint
That [Dr C] failed to diagnose subarachnoid haemorrhage.

Advice Required:

What are the symptoms of subarachnoid haemorrhage?

The typical story is of sudden onset of severe headache that tends to be located at the back of the head. It may start out in one place and then quite rapidly involve the whole head. Vomiting, collapse and loss of consciousness are common. Neck symptoms of pain and stiffness follow. In about a third of patients there is a smaller warning headache, sometime before the main event. On examining the patient, a stiffness of the neck can often be detected and pain elicited by putting tension on the spinal meninges through flexing the cervical spine and/or extending the knee with the hips fully flexed (Murtagh).

Only 25% of patients presenting to general practice with severe sudden headaches will have subarachnoid haemorrhage (SAH). (Hope et al)

However, SAH can be quite variable in presentation. Sometimes there may be only a brief sharp headache that would be difficult to take seriously and sometimes there is immediate collapse and death. There may be any degree of severity between these extremes.

Were [Mrs B's] reported symptoms indicative of a subarachnoid haemorrhage?

It is by the description at the time of presentation that the doctor has to assess the patient's condition. This has to be inferred from the information now available and separated from later recollection.

From the response to the Commissioner by [Dr C], he was aware that [Mrs B] 'had become ill within the last ½ hour with headache and vomiting and was in a state of collapse in bed …'.

At the time he questioned a family member by phone and determined that 'she seemed hot, to be conscious and able to speak sensibly and able to move all limbs'. He sent out the nurse who treated the vomiting with Stemetil by injection and then he visited her at the end of his surgery. The contemporaneous notes of 21/11/02 for this visit describe 'Acute fever/vomit 2x/headache today' Examination: 'Sleepy Not confused Rash✓ C/S✓ Abdo✓ Fever Mild headache.'

Clearly he has considered this to be a significant event as he sent out the nurse, he later visited, the nurse followed up the next day with a call and she came to the surgery three days later.

[Dr C] must have been aware that the headache was severe and associated with collapse and vomiting. These symptoms should alert a doctor to the possibility of SAH in someone of this age group.

He has put weight on the presence of a fever. Fever was not confirmed by the use of a thermometer. Fever does not exclude a bleed. He has considered meningitis as a possible cause. This was sensible, given the current incidence and his belief there was a fever. However meningitis is not common in this age group whereas bleeding is. The notes give little indication of a neurological examination and I cannot assess what was done in this regard. [Dr C] in his response indicates that 'C/S✓' is his shorthand for checking for cervical stiffness, a symptom of both meningitis and subarachnoid bleeding.

The symptoms as reported in [Mrs B's] interview of 13/2/03 do emphasize the suddenness and the severity of the onset of headache. This description is so indicative of sub-arachnoid haemorrhage that the diagnosis should immediately be considered by every doctor hearing it. These are symptoms that could not be confused with viral headache or migraine. Therefore I doubt that this clarity of description was provided to the general practitioner at the acute presentation. It is possible that [Mrs B] may not have been able to be so clear at the time due to the effect of the bleed on her mental state.

It is also important to be mindful that this is a description made when the patient was no longer naive to the condition. As patients go through the various diagnostic filters in the management of a major event, there is a training process occurring that informs them as to the symptoms and signs doctors value most. Any symptom description given late in the process must be weighted accordingly.

On the other hand, when another doctor was given a description of the symptoms by her son, this diagnostic possibility was raised by that doctor.

It is clear that [Dr C] understood [Mrs B] to have sudden onset severe headache associated with vomiting and some degree of collapse. Subarachnoid haemorrhage is more common in this age group and should certainly be in the differential diagnosis. Migraine becomes very much less common as people age. Viral illness does not tend to be as sudden or severe. Nor were there any supporting signs of viral illness.

On balance, I do think [Mrs B's] symptoms should have prompted consideration of subarachnoid haemorrhage. [Dr C] has fallen short of the standard of care to be expected of an independently practising general practitioner in not being mindful of this diagnosis.

Were [Dr C's] actions reasonable when he visited [Mrs B] on 18th November 2002?

When already committed to a full appointment book it is very difficult for a general practitioner to visit immediately. It is a sensible and commonly used alternative to assess by phone, send the nurse to confirm the patient's status and provide holding treatment. [Dr C] visited in the evening, presumably as soon as he could after completion of his surgery. I cannot fault this process.

Then the key issues re reasonableness of management to me seem to be:

1. What were the symptoms [Dr C] was presented with and was his interpretation of these symptoms reasonable?

2. Was an adequate examination for clinical signs performed at this time?

The Symptoms

Subarachnoid haemorrhage is not always easy to diagnose. The incidence is 12 per 100,000 and about 40% of patients die before treatment (Murtagh). With an average practice size of 1,500 patients a GP can therefore expect to have a patient with this once every 5-6 years. As many sufferers would present straight to hospital due to the clear severity of the event, in practice the opportunity for a GP to diagnose it will be a lot less than this. Nevertheless it is a diagnosis of which a GP must always be mindful.

Given that headache is a very common presentation in general practice and sub-arachnoid bleeding is not a common event, it is not necessarily the first diagnosis a GP might consider. This would be especially so if the patient was known to be prone to headache, but there is no indication of this in [Mrs B's] case. [Dr C] does not provide any explanation based on the patient's past history to indicate why he might have had reason to discount the symptoms presenting at this time.

Most headaches are due to self-limiting conditions and it is usual to use the passage of time to help determine what is serious and what is not. The presentation of SAH does vary greatly – from relatively minor sentinel signs to a single catastrophic event. The ability of the patient to describe the symptoms, when the brain has been compromised by the disease process, can also vary greatly. The patient may exhibit any level of consciousness from fully conscious, to mildly confused to comatose. Therefore the diagnosis depends very much on the doctor being primed with a high index of suspicion.

By the time the doctor saw [Mrs B] she had started to settle. I imagine that at this time he would have reviewed her symptoms as she recollected them. This would have been his best chance to make the diagnosis. With the symptoms settling over the next few days, he would have had less reason to consider bleeding.

I can find no indication that [Dr C] has considered subarachnoid haemorrhage in his differential diagnosis. As noted previously, there were sufficient grounds to say this should have been considered as a diagnostic possibility.

The Clinical Signs

Neither the nurse nor the doctor has recorded pulse or blood pressure readings on the 18th November. These are important clinical signs with this presentation. I also note high systolic blood pressure readings on the notes provided during the period 16/3/02 to 31/10/03. These have been regularly monitored and have been shown to resolve to readings as low as 128/80. However eight of the readings have shown a systolic pressure in the range of 170-188. No treatment has been instigated.

Even if there is some debate as to whether these levels of hypertension warrant treatment, they do indicate that a check of the blood pressure at this visit was important.

The notes of 18th November do not indicate that a neurological examination was done. A minimum neurological examination under these circumstances should comprise: Level of alertness (consciousness), check for neck stiffness, check for papilloedema using an ophthalmoscope, and a check for weakness, increased tone or altered reflexes in the limbs.

To not do this examination (with the possible exception of the check for papilloedema which many general practitioners are not good at) is to fall well short of the standard of care to be expected of an independently practising general practitioner.

Were [Dr C's] actions reasonable when [Mrs B] consulted him on 21 November 2002?

[Dr C] has conscientiously followed up with a further consultation at the surgery. At this point [Mrs B's] symptoms were settling and there was no new reason to prompt reconsideration of a sinister cause.

However her son raised the possibility of SAH after this consultation. I can see that, with the patient's condition settling, it would be natural for the doctor to continue to make a 'wait and see' response. It is important to note that only about a third of patients can expect to have a good response to surgery for SAH. At 78, [Mrs B] is at increased risk from surgery and less likely to have a good outcome.

It is difficult to make a judgement as to the appropriateness of [Dr C's] response at this point as some of the facts are in dispute. He was provided with the opportunity to review his diagnosis, as he was given an alert to the major differential diagnosis for which, up to this point, there is no indication from his notes or actions that he had considered. On the other hand his patient did seem to be improving. He did agree to a referral, which would have led to further investigation and the diagnosis being made. There is no indication other than the word of the son that he was at all obstructive in this process. In fact he made the effort himself to arrange the appointment with a respected geriatrician.

I note that there is again no record of a pulse, blood pressure or neurological examination at this consultation. Given the past and immediate history these remain important observations.

Once the possibility of SAH had been raised, it would have been useful to describe to the patient a course of action to follow should further symptoms of bleeding occur before the consultation with the geriatrician.

Apart from the examination and action-plan omissions, I believe that [Dr C's] actions were reasonable at this consultation. There was no clear benefit to be gained from more urgent action even once the possibility of SAH had been raised.

If not, what actions should have been taken, or investigations performed?

On balance, given the suggestion from the son and the known symptoms, the most reasonable action at this point would have been to discuss the options if this were SAH. This would include presenting the risks and benefits of remaining at home while awaiting geriatric advice versus immediate hospitalisation and to refer the patient to hospital if this is what she then wanted.

A further option might have been to arrange an urgent private CT scan but this is not common in general practice as the cost is a barrier for many patients. In this case the CT scan did not clarify the diagnosis when it was performed in hospital.

General

I note on checking the Register that [Dr C] is not vocationally registered in general practice and presumably is practising under General Oversight to enable independent practice. There are no other professional, ethical or relevant standards, other than those noted above that I am aware of needing consideration in this case.

NB: It is important for the family to understand that the delay of a week in presenting for surgery has in all probability played absolutely no part in the outcome for this patient. She does not appear to have had another bleed in the interim. The notes do not indicate that the stroke symptoms were present prior to surgery though I do not have hospital records to confirm this. They are in all probability a consequence of the surgery. We know that only one third of patients can expect a good outcome from surgery (Murtagh).

In addition it is also clear that not all the delay was caused by the failure of the doctor to diagnose SAH. Some was attributable to strike action and technical difficulties.

References: 1. General Practice (2nd edition), John Murtagh, McGraw Hill 2001)
2. Oxford Handbook of Clinical Medicine, 4th Ed, Hope RA, Longmore JM, McManus SK, Wood-Allum CA."

Further advice
Dr Holland provided the following additional advice:

"***New Papers Received and Considered***
Hospital clinical records for admission 24/11/02

The Complaint
That [Dr C] failed to diagnose subarachnoid haemorrhage.

Advice Required:
Further commentary in the light of the hospital clinical notes.

The notes indicate that [Mrs B] presented to hospital with headache of sudden onset lasting for a week and nausea/vomiting for three days. The patient was in a healthy

neurological state at admission with a Glasgow Coma Score of 15/15 indicating no loss of consciousness. She was mildly hypertensive BP 160-210/100 and had a temperature of 37.6, which is just above the normal range. In view of the history of sudden onset headache the admitting doctor hypothesised that this could be a subarachnoid haemorrhage. This was confirmed by a lumbar puncture on the day of admission though no change was evident on CT scan. Angiogram eventually revealed a middle cerebral artery MI, M2 aneurysm and a small right internal carotid artery aneurysm.

Clearly there were no stroke symptoms present prior to surgery.

These notes do not cause me to change the advice to the Commissioner that I have already provided."

Response to Provisional Opinion

In response to the provisional opinion Dr C stated:

"1) The precise clarity of [Mrs B's] description of the onset of her headache was not given to me at the time I first saw her on 18/11/02, presumably because she was drowsy when I examined her. Had I been given such a clear description of her headache as you quote in your report I would most certainly have thought of a sudden cerebral event like subarachnoid haemorrhage (SAH) had occurred and would have admitted her to hospital. Without the benefit of this precise description and because her condition had improved by the time I saw her the possible diagnosis of SAH did not occur to me.

2) With respect to my apparent failure to perform a cardiovascular or neurological examination when I first saw her, this is not true. As stated in my report to you, I certainly did perform such examinations briefly and could detect no cardiovascular or gross neurological disturbance. I regret however that I failed to record these observations, as I would normally, and this is an oversight I apologise for.

3) Prior to this illness I did not regard [Mrs B's] blood pressure as requiring treatment.

4) There <u>was</u> subtle evidence at follow-up check on 21/11/02 of an evolving viral illness in the form of her stuffy nose. The absence of any stronger sign or symptom did not exclude this diagnosis in my mind because the manifestations of viral illnesses can be quite mild and vague.

5) At the follow-up check on 21/11/02 I certainly did suggest further review if her condition did not continue to improve over the next week, so there was a basic action plan in place."

Further independent advice to Commissioner

The following additional advice was received from Dr Holland:

"***Papers Received and Considered***
'[Dr C] – A Report by the Health and Disability Commissioner' – provisional opinion
Letter from [Dr C] to the Commissioner dated 30/07/93
Notes of meeting with [Mrs B] dated 15/8/03
Copies of previously supplied documents

Further Advice Required:

Are there any aspects of the additional information that cause you to review your earlier advice?

[Dr C] has provided no new information in his letter that would cause me to change my advice.

In particular: Please comment on [Dr C's] diagnosis and clinical documentation in light of the additional information provided by [Mrs A].

I am reluctant to be swayed by the contents of an interview some nine months after the event in question. However [Dr C's] records do not provide any evidence to contradict the assertions by [Mrs B] or her family as to the severity of the symptoms or the nature of the examination he performed.

Due to the absence of specific detail in the notes, [Dr C] is unable to verify the extent of his physical examination. He has not stated that he took a blood pressure reading, an important part of an examination at the time irrespective of the differential diagnosis, and has not recorded one. I would expect the family to recall a neurological examination, as it usually requires the use of a tendon hammer and ophthalmoscope. Though, having said this, it is common to improvise with a stethoscope as a crude substitute for a tendon hammer when doing a house visit. The procedures involved in a neurological examination may also seem unusual to those unfamiliar with them and therefore should be memorable. Therefore I am forced to conclude that there was only a minimal if any neurological examination.

Note-keeping when visiting patients is often difficult for a general practitioner. Usually the notes are not taken out of the surgery due to the risk of leaking or losing confidential information. So the doctor has to remember to record a note on return to the surgery. Omissions of all or part of a record are therefore very common, even in the best of hands.

[Dr C] does not appear to have included sub-arachnoid haemorrhage in his differential diagnosis."

Additional response from Dr C

"Thank you for the opportunity to comment on your letter [of 18 November] concerning this complaint ….

In my view the pivotal piece of information that caused me to miss the diagnosis of subarachnoid haemorrhage was my unawareness of the description of the headache in the terms you quote [Mrs B] as saying 'It was like being hit over the head with an axe etc.' I stand by my statement that had such a clear concise description been given to me at the time then I would have immediately suspected a cerebral event and admitted her forthwith. When I first saw her on 18/11/02 she was drowsy but lacked clinically significant meningism to make me consider a life threatening event. I cannot remember [Mrs B's] exact description of her headache to me except that it was not the description as quoted above and it did not alarm me at the time.

I did open my bag and remember using the torch and tongue depressor. Because my index of suspicion was not aroused at the initial visit and because her clinical status improved over the next few days, at the follow up visit on 21/11/02 I had no clinical reason to suspect another diagnosis like subarachnoid haemorrhage. She subsequently worsened again, was admitted and the diagnosis made."

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.*

Professional Standards

New Zealand Medical Association 'Code of Ethics' (1989)

"**Standard of Care**

…

3. Ensure that every patient receives a complete and thorough examination into their complaint or condition.

4. Ensure that accurate records of fact are kept."

Opinion: Breach – Dr C

Consultation on 18 November 2002
Mrs B suffered an acute onset of severe headache around midday on 18 November 2002. She was assisted into bed by her husband, and a family member contacted Dr C's surgery to request medical assistance. Dr C was in the middle of a busy surgery, but asked questions about Mrs B's condition and ascertained that although she had a severe headache and was vomiting, she was able to move all limbs and speak sensibly. Dr C responded appropriately, arranging for his practice nurse to call at the house to assess Mrs B and give her an injection of Stemetil to settle her vomiting.

Mrs B's family describe her as reporting a severe headache unlike anything she had experienced previously, a stiff neck and sensitivity to light. Her daughter-in-law stated that she accompanied Dr C when he examined Mrs B and could not recall Dr C taking her blood pressure as part of the physical examination. She recalled that when he leaned Mrs B forward to feel the back of her neck she complained of the pain in her head. Mrs A said that Dr C then tested Mrs B's legs for joint stiffness and felt her abdomen.

Dr C stated that when he saw Mrs B at her home on the evening of 18 November 2002 he found her drowsy and complaining of a mild headache, but her vomiting had settled with the Stemetil. Dr C was unable to take Mrs B's temperature, but assessed that she had a low-grade fever, and no respiratory problems, rash or neck stiffness. He noted that she was sleepy but was not confused, and that he believed she was suffering from an evolving viral illness, possibly gastritis. Dr C advised the family to ensure that Mrs B took regular fluids, Panadol and an antiemetic as required.

Dr C recalled that he was not given a precise description of the onset of Mrs B's headache when he saw her on 18 November, as she was drowsy when he examined her. He briefly performed a cardiovascular and neurological examination but could not detect any cardiovascular or gross neurological disturbance. Dr C regrets that he did not record his observations. If he had been given a clear description of her headache, he would "most

certainly have thought a sudden cerebral event like subarachnoid haemorrhage (SAH) had occurred and would have admitted her to hospital".

My independent general practitioner advisor stated that Dr C must have understood that Mrs B had a sudden onset of severe headache associated with vomiting and some degree of collapse. His immediate response in sending around his practice nurse, and his home visit later that evening, support this view.

Migraine is less common in Mrs B's age group, whereas subarachnoid haemorrhage is more common and should have been included in the differential diagnosis. Although subarachnoid haemorrhage is not always easy to diagnose and only 25% of patients presenting to general practice with severe sudden headache will have subarachnoid haemorrhage, Mrs B had what my expert described as symptoms "so indicative of sub-arachnoid haemorrhage that the diagnosis should immediately be considered by every doctor hearing it". She did not have any supporting signs of a viral illness and, in my expert's opinion, the sudden and severe onset of her symptoms should have prompted Dr C to consider subarachnoid haemorrhage as a differential diagnosis.

My expert stated:

> "I do think [Mrs B's] symptoms should have prompted consideration of subarachnoid haemorrhage. [Dr C] has fallen short of the standard of care to be expected of an independently practising general practitioner in not being mindful of this diagnosis."

My expert advised that although Mrs B's symptoms had started to settle when Dr C saw her on the evening of 18 November, this would have been his best opportunity to review her symptoms as she recollected them, and make the diagnosis.

Dr C's records do not provide any evidence to contradict the assertions made by Mrs B or her family as to their reports of the severity of the symptoms or the nature of the examination he performed, and he is unable to verify the extent of his physical examination of Mrs B. My expert acknowledged that it is sometimes difficult for a doctor when making a home visit to make accurate notes. However, Dr C has not stated that he took a blood pressure reading, an important part of the examination, and has not recorded a reading. My expert noted that he would expect Mrs A to recall a neurological examination even if Dr C had improvised by using a stethoscope instead of a tendon hammer to test Mrs B's reflexes, and he is therefore forced to conclude that there was only a minimal if any neurological examination.

My expert also noted that Mrs B had a recent history of a high systolic blood pressure and commented that, although it is open to debate whether this should have been treated, it did indicate that her blood pressure should have been checked when she reported the sudden onset of headache and vomiting. A minimal examination under these circumstances should comprise checking for mental alertness, neck stiffness, ophthalmic papilloedema and checking for altered limb tone and reflexes. Dr C's notes for 18 November do not indicate that a neurological examination was done.

My advisor stated:

> "To not do this examination (with the possible exception of the check for papilloedema which many practitioners are not good at) is to fall well short of the standard of care to be expected of an independently practising general practitioner."

The New Zealand Medical Association's Code of Ethics states that every patient should receive a complete and thorough examination into their complaint or condition. While I note the conflicting evidence on this point, in the absence of independent verification and comprehensive clinical records, I accept my advisor's opinion that Dr C's examination of Mrs B was neither complete nor thorough, because it did not include a detailed neurological examination or a check of her blood pressure. In addition, while it is clear that Dr C does not recall the description of Mrs B's symptoms with the clarity the family do, he was aware that Mrs B had a sudden onset of severe headache, some degree of collapse and had been vomiting.

In my opinion, in failing to take into account the symptoms described to him, both by the family and Mrs B; to consider a subarachnoid haemorrhage in the differential diagnosis; to perform an adequate examination on 18 November 2002; and to appropriately document the examination, Dr C did not treat Mrs B with reasonable care and skill, or in compliance with relevant professional standards, and therefore breached Rights 4(1) and 4(2) of the Code.

Consultation on 21 November 2002
When Mrs B presented at Dr C's surgery on 21 November her symptoms were settling, her headache had improved, and she had no fever, sore throat, cough, nausea or vomiting. She was reported as having no neck stiffness or neurological deficit.

Mr A asked to see Dr C following his mother's consultation on 21 November. He discussed with Dr C the possibility that Mrs B might have suffered a subarachnoid haemorrhage. Mr A said that he insisted that the symptoms were consistent with a cerebral bleed and that a CT scan was required. Mr A recalled that Dr C advised that there was no evidence to suggest a haemorrhage. Mr A requested that Dr C refer Mrs B to a specialist.

Dr C agreed to refer Mrs B to a geriatrician, and arranged an appointment himself, even though he did not at that stage think it was necessary. He also suggested a further review of Mrs B if her condition did not improve over the following week.

My expert commented:

> "[Dr C] has conscientiously followed up with a further consultation at the surgery. … [T]here was no new reason to prompt reconsideration of a sinister cause. However her son raised the possibility of SAH after this consultation. I can see that, with the patient's condition settling, it would be natural for the doctor to continue to make a 'wait and see' response.
>
> …

> However he was provided with the opportunity to review his diagnosis, as he was given an alert to the major differential diagnosis for which, up to this point, there is no indication from his notes or actions that he had considered. On the other hand his patient did seem to be improving. He did agree to a referral, which would have led to further investigation and the diagnosis being made.
>
> …
>
> Once the possibility of SAH had been raised, it would have been useful to describe to the patient a course of action to follow should further symptoms of bleeding occur before the consultation with the geriatrician. This would include presenting the risks and benefits of remaining at home while awaiting geriatric advice versus immediate hospitalisation and to refer the patient to hospital if this is what she then wanted."

I accept that Dr C's actions were reasonable when he saw Mrs B on 21 November, because there was no obvious deterioration in her condition at that time. However, in my view, Dr C should have re-evaluated his initial diagnosis when questioned by Mr A, even though Mrs B had not deteriorated in the intervening days. I also note that Dr C did not take Mrs B's blood pressure and pulse (which are standard observations in this situation) or perform a neurological examination. I accept my expert advice that, "[g]iven the past and immediate history these remain important observations".

Mrs B had experienced a sudden, severe and uncharacteristic headache three days earlier necessitating immediate practice nurse intervention and a home visit. While the best window of opportunity for diagnosis was at the earlier consultation, careful and systematic assessment and review was necessary at the appointment three days later, in view of the unresolved and continuing headache. This should have included blood pressure monitoring and comprehensive neurological examination, and a discussion with Mrs B about "next steps". As my expert commented: "The most reasonable action at this point would have been to discuss the options if this was a sub-arachnoid haemorrhage and the actions to take if further symptoms occurred."

In my opinion, Dr C's examination and advice at the consultation of 21 November 2002 was not adequate in the circumstances, and amounted to a breach of Right 4(1) of the Code.

Recommendations

I recommend that Dr C take the following actions:

- Apologise in writing to Mrs B. This apology is to be sent to the Commissioner and will be forwarded to Mrs B.
- Review his practice in light of this report.

Further actions

- A copy of this report will be sent to the Medical Council of New Zealand.

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

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