Surgical Registrar, Dr B

A Public Hospital

A Report by the

Health and Disability Commissioner

(Case 03HDC06095)

Parties involved

Mrs A	Consumer
Dr B	Provider, Surgical Registrar
Dr C	Consultant colorectal and general surgeon
Dr D	Surgical registrar
Dr E	General practitioner
Mr F	Surgeon
Dr G	General practitioner
Dr H	House surgeon
Dr I	Neurologist
Mr J	Consultant plastic and reconstructive surgeon
Dr K	Anaesthetic specialist, Pain Clinic
The First Public Hospital	Provider, public hospital
The Second Public Hospital	Second public hospital

Complaint

On 1 May 2003 the Commissioner received a complaint from Mrs A about services she received at the first public hospital from Dr B. The following issues were identified for investigation:

- *The circumstances and adequacy of Mrs A's surgery on 7 June 2002, including the information provided to her prior to surgery.*
- *The appropriateness and adequacy of Mrs A's postoperative care.*
- *The appropriateness of Mrs A's discharge and the adequacy of her follow-up care and support post discharge.*

An investigation was commenced on 17 October 2003.

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Information reviewed

Information was obtained from the following sources:

- Mrs A
- Dr B, surgical registrar
- Dr C, consultant colorectal and general surgeon
- Dr D, surgical registrar
- The First Public Hospital
- ACC

Independent expert advice was obtained from Mr Kenneth Menzies, a colorectal and general surgeon.

Information gathered during investigation

Overview

This case concerns the care Mrs A received for her neck condition at a public hospital in June and July 2002. The complaint centres on the standard of care provided by Dr B during exploratory surgery on 8 June 2002. Mrs A experienced severe pain and reduced movement in her right shoulder after the operation, as a result of Dr B severing the right accessory nerve in her neck. She now has permanently reduced right shoulder function.

Chronology

In July 2001 Mrs A discovered a small submental lump (below the chin), had reduced appetite and noted she was losing weight. She visited Dr E, her general practitioner, who referred her to the surgical outpatients clinic at the second public hospital. Mr F, surgeon, reviewed Mrs A and recorded a 0.5cm submental gland under her chin, slightly to one side, but no other problems. He noted that "[t]his is a common site for gland enlargement, and toxoplasmosis can occasionally be a cause". He referred Mrs A for an ultrasound scan of her neck, and a full blood screen. The only abnormality shown in the scan subsequently taken on 17 August 2001 was "a small nodule in the lower pole of the right lobe of the thyroid, consistent with a colloid nodule". Subsequent serology of her blood ruled out toxoplasmosis. Mr F re-examined Mrs A on 10 September 2001 and noted that the nodule under her chin was probably a normal gland, and was in a common site for a gland. Mrs A was returned to the care of Dr E, for a review and thyroid scan in 12 months.

Mrs A returned to see Mr F in February 2002 about another gland in the right side of her neck, which had been increasing in size. He recorded: "On examination, found in the posterior triangle of her neck, mid-point, behind the sternomastoid, there is a 1cm well defined mobile gland." Arrangements were made to excise the gland for histology under local anaesthetic,

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and this took place at the second public hospital on 28 May 2002. The histopathology report of the gland showed mild sinus histiocytosis,[1] but no evidence of malignancy.

On 2 June 2002 the sutures were removed by Dr G, general practitioner, who noted that the wound at the biopsy site was swollen and tender. He prescribed flucloxacillin for infection.

On 7 June 2002 Mrs A returned to Dr G as she was feeling generally unwell. She reported that the lump at the wound site had become progressively bigger over the week, and more painful. Mrs A was concerned she had an abscess. Dr G found she was febrile with the wound site fluctuant[2] and tender to light touch. He referred her to the surgical registrar at the first public hospital for further investigation.

Mrs A was admitted to the first public hospital by Dr H, the surgical team's house surgeon, with a diagnosis of postoperative wound collection. Dr D, the surgical registrar on call, reviewed Mrs A at 6pm, and his impression was of a possible partially treated infection at the biopsy site, with an underlying collection of fluid. Dr D discussed Mrs A's condition with Mr C, consultant colorectal and general surgeon. Mrs A was placed on the acute surgery list under the care of Dr C's surgical team for exploration and possible drainage of an abscess. Mr C informed me:

> "I recall hearing about a patient who had had a neck biopsy operation done one week earlier, who now presented with a wound infection that required incision and drainage. I was satisfied that any of our registrars could cope with this level of surgery."

Dr D stated:

> "I explained to Mrs A that the likely diagnosis in her case, based on the history and physical examination, was a wound infection with possible collection of pus and given the fact that she was deteriorating despite treatment with antibiotics, the most appropriate next step would be to explore the wound and drain the collection, if present. I explained the procedure and talked to her about possible risks of infection and damage to structures in the neck, including nerves."

Dr H obtained Mrs A's consent for the surgery. The consent form that Dr H and Mrs A signed records that the risks explained to Mrs A included "pain, bleeding, risk of infection, risk of damage to other surrounding structures".

As Mrs A's surgery did not happen during the day, Dr D handed over the case to the night duty registrar, Dr B. Dr D briefly described to Dr B Mrs A's history, the physical findings, and his impression of a possible underlying abscess that needed incision and drainage.

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[1] A disorder of the lymph nodes.

[2] Producing a characteristic wave-like sensation or motion felt on digital examination of a fluid-filled part of the body (usually an abscess or cyst).

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Dr B met Mrs A before the operation. Dr B stated that he gave her "all the necessary information and explained the risks and benefits, including a small risk of nerve damage".

However, Mrs A stated that no one told her that the risks of her planned surgery included severing nerves or nerve damage in the neck. She recalls being advised only of the risks of bleeding and risks related to the general anaesthetic. She said she would not have had the surgery if she had been advised of the risk of nerve damage or permanent disability.

Dr B stated that the intense pain was not well addressed before the operation, and the preoperative assessment and the decision to explore the biopsy wound were made by another clinician, Dr D.

Mr C stated in a letter dated 16 October 2002 to the first public hospital's Complaints Liaison Advisor:

> "The fact that [Dr D] saw this patient and diagnosed the patient and yet [Dr B] performed the surgery is not unusual. With the regulations underpinning registrar working hours it is quite common for patients to be seen by a registrar on one shift and be operated on by a different registrar. It is the responsibility of the incoming registrar to familiarise him or herself with the requested operation. If they are not happy either with the consent as it has been obtained or any aspect of the proposed surgery then it is their responsibility to review the situation and if need be, ring the consultant and discuss the problem."

Dr B advised ACC:

> "I have operated on the posterior triangle of the neck for lymph node removal and for other reasons many times, probably I have done more than 40 lymph node biopsies on that[.] I have a good knowledge of the anatomy of the posterior triangle and particularly the relationship of the accessory [n]erve to the sternomastoid muscle and to the lymph nodes in the posterior triangle."

At 1.22am on 8 June 2002 Mrs A underwent exploratory surgery performed by Dr B. Dr B recalled:

> "On exploration of the wound, no abscess was found and the whole area of the operation site was plastered with dense adhesions, a biopsy was taken since the original biopsy was not available, and the dense growth of the scar tissue was more than what we expect for a previously small uncomplicated operation. The procedure went smoothly with no intra-operative concerns at the time.
>
> In retrospect probably the [right accessory] nerve was caught by all the dense adhesions, which made it vulnerable to surgical injury."

The first public hospital has not provided any information on why the operation on 8 June occurred in the early hours of the morning. However, Dr B stated:

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> "As a surgical basic trainee we often do nights where some times do operate on patients who have been assessed by other people, we are obliged to operate after midnight to provide the service and to clear the back log in a busy hospital, there is evidence that risk does increase when operating at that time and I think operating after 10-11 pm should be addressed by the council and professional bodies to be saved for life saving or limb saving operations."

After surgery Mrs A suffered from severe pain and numbness down the right side of her cheek, jaw-line, neck and shoulder, and experienced decreased movement. Mr C saw Mrs A during the weekend of 8 and 9 June and although she was examined more than once, no obvious cause for her pain could be found. He stated:

> "[T]he wound itself and the surrounding area was unremarkable with no evidence of a wound collection, post-operative bleeding or infection. I was anticipating discharge within 48 hours of her surgery but due to her pain requirements, it was clear that she was not ready to go home."

Mrs A has complained about the time she had to wait for pain relief from the nursing staff postoperatively, and that when pain relief was given, it was not always sufficient. She said the attitude of the nurses was very poor and that pain relief did not appear to be a priority for them. At one stage she "hobbled" down to the nurses' station to request pain relief and was told to go back to bed. She received painkillers almost two hours later. Mrs A said she cried a lot as she was in so much pain.

The clinical notes record Mrs A's reports of pain and numbness in her neck, and that regular analgesia was given.

Mrs A said that Dr B visited her a couple of days after surgery. When she questioned him about what he had done during the surgery and told him that she was in severe pain, his response was that it was swelling from the operation. However, Dr B informed me that he was not involved in Mrs A's postoperative care as the night of her surgery was his last at the first public hospital.

Mrs A was reviewed by the Acute Pain Service and Mr C on 13 June. Mrs A continued to report a lot of pain, and on examination Mr C noted weakness in her right trapezius muscle, and requested an opinion from a neurologist.

On 14 June Mrs A was assessed by Dr I, neurologist. Dr I noted that Mrs A had localised pain after the biopsy on 28 May. After the operation on 8 June she had "numbness with dysthesia on the right posterior neck to the occiput (back of the head) and deep aching pain at the top of the shoulder with a tender trapezius". Her pain increased with shoulder movement. Dr I confirmed that it was likely that Mrs A had suffered an injury to the right accessory nerve as well as injury to superficial sensory nerves in the upper part of the neck during the second surgery. Mr C arranged for Mrs A to be transferred to a city hospital for exploratory surgery by Mr J, consultant plastic and reconstructive surgeon.

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On 15 June 2002 Mr J conducted exploratory surgery on Mrs A's neck. Mr J reported in his letter of 16 June 2002 to Mr C:

> "What we found was complete division of the spinal accessory nerve. The cervical plexus was however completely intact and I could demonstrate an intact greater auricular and lesser occipital nerve. There were two very fine branches of the lesser occipital nerve or its equivalent found divided and coursing within the wound but nothing that I would not have expected with any sort of incision within the neck. The spinal accessory nerve was microsurgically repaired."

The medication regimen for Mrs A at the city hospital was ketamine infusion, tramadol SR, morphine PCA, amitriptyline, paracetamol, Gabapentin, zopaclone, and Voltaren, plus an antiemetic.

After the operation Mrs A continued to experience severe pain in the right side of her neck and reduced mobility in her right shoulder. Mrs A was transferred back to the first public hospital on 24 June 2002.

On 25 June an MRI scan was taken of Mrs A's neck and brachial plexus, which showed that the right trapezius muscle was minimally smaller than the left, with some findings suggestive of denervation atrophy. Minor anterior cervical lymphadenopathy was also shown. There was no collection demonstrated.

Over the next three weeks Mrs A was reviewed by the pain team at the first public hospital on most days, and she was weaned off intravenous opiates and ketamine, and commenced on oral opiates. During this time she was seen by a social worker, on three occasions, and twice by a doctor from Liaison Psychiatry.

On 10 July 2002 Mrs A was discharged. She was still experiencing pain and was given prescriptions for methadone, tramadol, amitriptyline, a clonidine patch, Sevredol, zopiclone and metaclopromide. Mrs A was given an appointment to see Dr K at the outpatient pain clinic on 23 July, and she was given a referral for ongoing physiotherapy at the second public hospital outpatient clinic.

Mrs A complained of the lack of support and follow-up care from the first public hospital after her return home. She said she was called by a social worker twice after her discharge. Letters on the file indicate that Mrs A was reviewed by Mr J on 25 July 2002. She saw Dr K for steroid block injections on 23 July, 6 August and 3 September 2002. Dr K also referred Mrs A to the Regional Pain Service, and she was seen on 22 August 2002. Mrs A attended the outpatient pain clinic on 28 August for a further steroid block injection.

Mrs A continues to suffer ongoing incapacity and loss of career opportunities as a result of the damage to her spinal accessory nerve.

Dr B is no longer working at the first public hospital and is now lecturing, researching and studying. He performs minimal clinical work.

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ACC
Mrs A's claim to the Medical Misadventure Unit was accepted as medical mishap on 24 September 2002. After further advice was obtained from a head and neck surgeon, the Unit amended its finding to a medical error on 30 September 2003. The head and neck surgeon stated in his report to ACC:

> "Unfortunately, error is the only possible finding under these circumstances. [Dr B] should have been aware of the anatomy of the accessory nerve. He should have looked for the nerve. He should have taken trouble to have formally identified it and he should have taken precautions to make sure that it was not damaged."

Medical Council
Dr B provided me with a copy of a letter he received from the Medical Council of New Zealand dated 15 December 2003, stating:

> "I am pleased to advise that the Medical Council of New Zealand is not going to be carrying out a review of your competence to practise medicine.
>
> At its meeting on 11 December 2003, Council considered the ACC error report, and your letter dated 18 October 2003, and resolved that you are not required to undertake a competence review, as the procedure that gave rise to the finding of error was a difficult one, and this was a one-off incident with some mitigating circumstances, including hospital systems. Council also took into account that you are currently employed as a lecturer and research fellow at [a city university], and have upskilled in your knowledge of anatomy."

The Medical Council subsequently advised me that the systems issues that the Council took into consideration were:

> "1. The requirement for surgical trainees to operate after midnight to provide the services and clear the backlog in a busy hospital.
>
> 2. Difficulties dealing with and asking for help from on call theatre staff not wishing to be disturbed at night."

The Council also emphasised that these systems issues were only one of the factors it took into account in deciding not to conduct a review of Dr B's competence.

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Independent advice to Commissioner

The following expert report was obtained from Mr Kenneth Menzies, colorectal and general surgeon:

"**COMPLAINANT:** **[Mrs A]**
YOUR REFERENCE: **03/06095/WS**

Thank you for your letter dated 28 May 2004 in which you request that I provide Medical/Professional Expert Advice to the Health and Disability Commissioner. I am asked to advise the Commissioner whether the services provided to [Mrs A] by [Dr B] and [the first public hospital] were of an appropriate standard. I have read and agree to follow the Commissioner's guidelines for independent advisors.

I graduated from the University of New South Wales Medical School in 1967. I worked as a House Surgeon at the Prince Henry and Prince of Wales Hospitals, Sydney, in 1967 and 1968. I was employed by the University of New South Wales as a Lecturer in Anatomy in 1969. I then undertook a training programme in general surgery. I obtained the Fellowship of the Royal Australasian College of Surgeons in 1975 and I was granted vocational registration in General Surgery by the Medical Council of New Zealand in 1975. I have worked as a Consultant General Surgeon in New Zealand since 1975. Currently I am employed as a General Surgeon at Wellington Hospital by Capital and Coast District Health Board. I am also the Clinical Leader for General and Vascular Surgery at Wellington Hospital.

Expert Advice Required:

To advise the Commissioner whether, in my professional opinion, the care [Mrs A] received from [Dr B] and [the first public hospital] was of an appropriate standard. In particular:

- What was the likely cause of the swelling and tenderness in [Mrs A's] neck after the first biopsy?
- Was it appropriate to undertake further exploratory surgery in the area within two weeks?
- What precautions, if any, should be taken when operating in the same area within a short period of time?
- Should [Dr B] have specifically identified the nerves around the operation site to ensure that they were not damaged?
- Did [Dr B] take appropriate care when operating on [Mrs A's] neck?
- Was [Dr B] sufficiently qualified to undertake such an operation on his own?
- Was [Dr B] given adequate support and supervision by the senior consultant in this case?
- Was the management of [Mrs A's] pain, numbness and decreased mobility appropriate and timely?
- Was the damage to [Mrs A's] nerve diagnosed in a timely manner?

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- Was the damage to [Mrs A's] nerve managed appropriately?
- In your opinion, were [Mrs A's] discharge and arrangements for her follow-up care appropriate? If not, in what way?
- Are there are any other matters which you believe to be relevant to this complaint?

Supporting information used in this report is as follows:

- Letter to the Commissioner from [Mrs A] with enclosures, dated 25 February 2003, marked 'A', and numbered 1-11.
- ACC file received on 18 June 2003, marked 'B', and numbered 12-36.
- Further ACC information dated 18 July 2003, marked 'C', and numbered 37-62.
- Further information from ACC received on 2 October 2003, marked 'D' and numbered 63-64.
- Investigation letter to [Dr B] dated 17 October 2003, marked 'E' and numbered 65-67.
- Letter to the Commissioner dated 10 November 2003 from [Dr B], marked 'F', and numbered 68-71.
- Response from [the first public hospital] dated 12 November 2003, marked 'G', and numbered 72-343.
- Further information received from [Dr B] on 24 February 2004, marked 'H', and numbered 344.
- Letter dated 23 March 2004 from [Mr C], marked 'I', and numbered 345.
- Letter from [Dr D] received on 7 May 2004, marked 'J', and numbered 346-347.

Background:

In late 2001 [Mrs A] discovered a lump on her neck. She visited [Dr G], her general practitioner, who diagnosed possible toxoplasmosis and referred her to [Mr F] at [the second public hospital]. On 28 May 2002 [Mrs A] underwent a lymph node biopsy performed by [Dr F]. Histology showed mild sinus histiocytosis.

On 2 June 2002 the sutures were removed by [Dr G], who noted that the wound was swollen and tender. He prescribed Flucloxacillin for [Mrs A].

On 7 June 2002 [Mrs A] returned to [Dr G] as she was feeling generally unwell. She reported that the lump at the wound site had become progressively bigger over the week, and more painful. [Mrs A] was concerned she had an abscess. [Dr G] found her to be febrile with wound site fluctuant and tender to light touch. He referred her to the [first public hospital] Emergency Department.

[Mrs A] was admitted by [Dr H], the team's house surgeon, with a diagnosis of post-operative wound collection. [Dr D], the registrar on call, reviewed [Mrs A] and after discussion with [Mr C], colorectal and general surgeon, she was placed on the acute surgery list under the care of [Mr C's] surgical team. [Dr H] obtained [Mrs A's] consent for the surgery, and the consent form records that the risks of the procedure, including

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nerve damage, were discussed. As [Mrs A's] surgery did not happen during the day, [Dr D] handed over the case to the night duty registrar, [Dr B].

[Dr D] stated that he briefly described [to] [Dr B], [Mrs A's] history, the physical findings and his impression of a possible underlying abscess that needed incision and possible drainage. [Dr B] met [Mrs A] before the operation. [Dr B] stated that he gave her all the necessary information and explained the risks and benefits, including a small risk of nerve damage. At 1.22 a.m. on 8 June 2002 [Mrs A] underwent exploratory surgery performed by [Dr B]. A hard lump was noted, no abscess was found, and a biopsy was taken for histiopathology. No complications were noted.

After surgery [Mrs A] suffered from severe pain and numbness down the right side of her cheek, jaw-line, neck and shoulder, and experienced decreased movement. No obvious cause for the pain could be found.

[Mrs A] has complained about the time she had to wait for pain relief from the nursing staff postoperatively.

[Dr C] reviewed [Mrs A] on 14 June 2002 and noted weakness in her right trapezius muscle, and requested an opinion from a neurologist. On 14 June [Mrs A] was assessed by [Dr I], neurologist. He confirmed that it was likely that [Mrs A] had nerve damage, and arranged her transfer to [a city hospital] for exploratory surgery.

On 15 June 2002 [Mr J], consultant plastic and reconstructive surgeon, conducted exploratory surgery on [Mrs A's] neck. [Mr J] discovered that her right accessory nerve and two fine branches of lesser occipital nerves were divided. The accessory nerve was microsurgically repaired.

After the operation [Mrs A] continued to experienced severe pain in the right side of her neck and reduced mobility in her right shoulder. [Mrs A] was transferred back to [the first public hospital] on 24 June 2002.

Over the next three weeks [Mrs A] was weaned off intravenous opiates and Ketine, and transferred onto oral opiates.

On 10 July 2002 [Mrs A] was discharged. She was still in considerable pain and was given medication to attempt to control it. [Mrs A] was referred to the pain clinic in 2 weeks and she was given a referral for ongoing physiotherapy. No other discharge information appears to be on her file.

[Mrs A] was called by a social worker twice after her discharge. She has complained of the lack of support and follow-up care since her return home.

Letters on the file indicate [Mrs A] was seen again by [Mr J] on 25 July 2002, and by Dr K on 23 July, 6 August, and 3 September 2002. Dr K also referred [Mrs A] to [The Regional Pain Service], and she was seen on 22 August 2002.

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Opinion:

1. *What was the likely cause of the swelling and tenderness in [Mrs A's] neck after the first biopsy?*

The initial operation was performed on 28 May 2002 by [Mr F]. The histology report issued on 30 May 2002 indicated that the excised lymph node showed *mild sinus histiocytosis.* This diagnosis is often indicative of a mild inflammatory process frequently of viral origin. When [Mrs A] was seen on 2 June by her general practitioner for removal of sutures, the wound site was noted to be swollen and tender. A provisional diagnosis of a wound infection was made and she was commenced on Flucloxacillin. Despite this antibiotic the lump in the right side of the neck at the wound site progressively became larger and more painful. In her letter to the surgical registrar dated 7 June, [Dr G] states 'she is febrile today with wound site fluctuant and tender to light touch ? collection'. The House Surgeon, [Dr H] noted when [Mrs A] was admitted that there was a fluctuant lump measuring 3 x 2 cm lying superficial to the sternomastoid on the right side of the neck. He noted that it was tender and that the overlying skin was red and warm. Similar findings were noted by the Surgical Registrar, [Dr D] who also documented that her temperature was 37.5°C. These documented observations are suggestive that the swelling and tenderness in the right side of [Mrs A's] neck when she was seen on 7 June 2002 was the result of a wound infection. Other possible diagnoses would include a wound haematoma.

The histology report on the tissue excised at the second operation on 8 June indicates that the specimen consists of 'fibro-fatty tissue in which there is prominent new scar tissue formation. Focally there may be some associated fat necrosis.' It is interesting that the pathologist makes no mention of inflammatory changes in this biopsy.

2. *Was it appropriate to undertake further exploratory surgery in the area within two weeks?*

The main indication to undertake further exploratory surgery would be if there was clinical evidence of a wound abscess. By that I mean a collection of pus. A diffuse wound infection would be unlikely to benefit from further surgery, however if there was a collection of pus within the swelling, then drainage of that pus would be required to facilitate resolution of the infective process. I would agree with the comment of [ACC's advisor] (General Surgeon) in his report to the ACC Medical Misadventure Unit in which he states 'if there was doubt as to the presence of an abscess an ultrasound examination may have been helpful.' If an ultrasound examination had been undertaken and if this had not shown any evidence of a collection of pus, then further exploratory surgery at this time would not have been necessary. It is documented that the operation performed by [Dr B] was commenced at 1:22 a.m. on 8 June 2002. I would question whether it is necessary for such an operation to take place after midnight.

An alternative course of action could have been that the patient was given adequate analgesia to keep her comfortable overnight. She could then have been reassessed by more senior staff the following morning.

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3. *What precautions, if any, should have been taken when operating in the same area within a short period of time?*

There is inevitably swelling, distortion and scarring when a wound is re-explored. These features are likely to be most marked about two weeks after the initial surgery. This is not usually an issue. However, the letter sent to [Dr E] by Surgeon, [Mr F], dated 18 February 2002, states 'on examination, in the posterior triangle of her neck, mid-point, behind the sternomastoid, there is a 1 cm well-defined mobile gland.' This site description almost exactly corresponds to the anatomical position of the spinal accessory nerve. Therefore, because of the timing of the second operation and the location of the wound swelling, extreme care was required to avoid damage to the spinal accessory nerve.

4. *Should [Dr B] have specifically identified the nerves around the operation site to ensure that they were not damaged?*

In my opinion two separate nerve injuries were sustained by [Mrs A]. There is documentation that [Mrs A] started to develop pain in the right side of her neck some five to seven days following the initial operation on 28 May 2002. When she was admitted on 7 June, the main presenting symptom was pain in the right side of the neck. It was presumed at the time that this pain was due to infection and the development of a wound abscess. However, subsequent events proved that there was no abscess present and histology on the biopsies taken at the time of the second operation on 8 June showed scar tissue, however inflammatory changes were not reported. Pre-operatively it was noted that there was some numbness in the upper posterior triangle of the right side of the neck. This evidence suggests therefore, that there may have been some injury to sensory nerves (*ie* the cervical plexus) at the time of the initial operation on 28 May. This is confirmed by the operation report of [Mr J] (Consultant Plastic Surgeon) in which he states 'there were two very fine branches of the lesser occipital nerve or its equivalent found divided and coursing within the wound'. Damage to sensory nerves is common in many surgical operations; however in this case the resulting pain was much greater than would usually be expected.

There is irrefutable evidence that complete division of the spinal accessory nerve occurred at the second operation on 8 June. This is confirmed by [Mr J] in his letter to [Mr C] dated 16 June 2002. 'Just to let you know that I explored this young woman's neck on 15 June. What we found was complete division of the spinal accessory nerve.' The spinal accessory nerve is a motor nerve supplying muscles of the shoulder.

There was no evidence of shoulder weakness prior to [Mrs A's] admission on 7 June. One must therefore presume that the division of the right spinal accessory nerve occurred during the second operation of 8 June 2002.

Dr B should have made every endeavour to identify the spinal accessory nerve when he explored the wound swelling on 8 June. If I could quote from the report of [ACC's advisor] (ENT Surgeon) to the Medical Misadventure Unit of the ACC dated 5 May 2003. 'The accessory nerve is at risk in any operation in the posterior triangle of the neck. It is a large nerve about 3 mm in diameter. It unfortunately runs a very superficial course

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through the posterior triangle and it is well recognised that it can be readily divided unless care is taken to formally identify it'. Such identification is usually straightforward; however it would have been quite difficult to identify this nerve two weeks after previous surgery at this site. This is acknowledged by [ACC's advisor] in a second letter to the ACC dated 10 July 2003 in which states 'this was a revision operation with scar tissue in the wound and I accept that identification of the nerve would have been more difficult'.

In the operation note dated 8 June 2002 by [Dr B], no reference is made to attempting to identify the spinal accessory nerve. In a letter dated 1 July 2003 addressed 'Dear Madam', [Dr B] states 'I did not think I have to identify the accessory nerve as the operation was so superficial to involve only the skin and subcutaneous tissue and a small biopsy from the scar was taken. At the time of the operation I thought I was far away from the nerve so there was no concern to take any precautions against injuring the nerve, as the procedure that I did was so minor and superficial given the fact that we opened the previous wound to find any evidence of infection.' These comments by [Dr B] would imply that he was not aware at the time that he performed the operation on [Mrs A] of the potential risk of injury to the spinal accessory nerve and his comments also imply that he did not think it was necessary to try and identify the nerve.

5. *Did [Dr B] take appropriate care when operating on [Mrs A's] neck?*

I have, to some extent, dealt with this question in my answer to question No. 4. The operation note on [Mrs A] by [Dr B] dated 8 June 2002, gives little in the way of detail under the subheading *procedure* it states 'incision made above the lump … The lump was examined and a biopsy taken for histopathology.' It is difficult to make a judgement from this operation note as to the operative technique or indeed the operative findings. In a separate handwritten operation note which is included with the clinical notes it states the following 'Findings – a hard lump – no abscess. Biopsy taken. Subcutic Moncryl for the skin.' I wish to point out that the operation note does not necessarily reflect whether appropriate care was taken during the operation.

[Dr B] was faced with a situation that he had not expected. He had anticipated that he would encounter a wound abscess for which he could perform incision and drainage. In the event instead he found a mass of dense scar tissue. With the value of hindsight it is evident that at this stage he would have been wise to either abandon the procedure or to contact his Consultant ([Mr C]) for advice.

6. *Was [Dr B] sufficiently qualified to undertake such an operation on his own?*

In his letter dated 1 July 2003, [Dr B] states 'I have good operative experience to suit my level of training. I have operated on the posterior triangle of the neck for lymph node removal and for other reasons many times, probably I have done more than 40 lymph node biopsies on that region. I have good knowledge of the anatomy of the posterior triangle and particularly the relationship of the accessory nerve to the sternomastoid muscle and to the lymph nodes in the posterior triangle. I did not have any previous problem with regard to complication related to the accessory nerve.' It is unlikely that [Dr B] had performed an

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operation in the posterior triangle of the neck when there had been a previous operation two weeks beforehand.

In his letter addressed to [the Complaints Liaison Advisor at the first public hospital], dated 16 October 2002, [Mr C] (General Surgeon) states 'Both [Dr D] and [Dr B], who was the Night Registrar, at that time, had worked in this Hospital for several months and both myself and all other surgeons had full confidence in their ability to do minor acute procedures including the drainage of abscesses or exploring infected wounds.'

[Mr C] was obviously confident that [Dr B] was sufficiently qualified to drain an abscess or to explore an infected wound. A crucial factor in this case is the site of the infected wound and its anatomical relationship to the spinal accessory nerve. It may well be that the importance of this factor was not adequately appreciated by [Dr B] and by [Mr C]. An alternative explanation in regard to [Mr C] is that he had not been informed of the precise location of the wound swelling.

7. *Was [Dr B] given adequate support and supervision by the senior consultant in this case?*

It is usual for operations such as drainage of abscess and exploration of infected wounds to be undertaken by the registrar on call. Information in the correspondence indicates that [Dr B] was in the last day of a six month appointment to [the first public hospital]. The supervising consultant for this case, [Mr C], would have had adequate opportunity over the preceding six months to determine the capabilities of [Dr B]. If [Dr B] had had any concerns about doing the operation it would have been appropriate for him to contact [Mr C] and either to ask him for advice or to request him to come in and assist.

The evidence suggests that [Dr B] had no particular concerns. He did not request assistance and therefore I would conclude that he was given adequate support and supervision by the senior consultant in this case.

8. *Was the management of [Mrs A's] pain, numbness and decreased mobility appropriate and timely?*

The nursing notes for the period from 8-13 June indicate that the patient's main concern during this period was pain and numbness in the region of the wound and the right side of the neck. The pain appeared to be out of proportion to what would normally be expected following such an operation. The patient was not able to tolerate Tramadol as it caused nausea and vomiting. She was given regular parenteral injections of Morphine. On 13 June the Acute Pain Service was called in to advise. She was seen by [an anaesthetic specialist]. [The anaesthetic specialist] diagnosed right superficial cervical plexus neuropathy post surgery. He discussed the management with Dr K. Combined modality therapy to obtain adequate analgesia was then instituted. In my opinion the management of [Mrs A's] pain was exceedingly difficult and the treatment which she received was appropriate and timely.

On 14 June, [Mrs A] was seen on referral by a Neurologist, [Dr I]. His assessment was 'she has two types of nerve injury related to second surgical procedure. 1) Injury to

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sensory nerves to the upper part of neck. 2) Right accessory nerve injury.' The following day (ie 15 June 2002) [Mrs A] was referred to [Mr J], Consultant Plastic Surgeon from [the city hospital].

9. *Was the damage to [Mrs A's] nerves diagnosed in a timely manner?*

The diagnosis of the nerve damage was made within one week of the operation of 8 June. I believe that this diagnosis was made in a timely manner.

10. *Was the damage to [Mrs A's] nerves managed appropriately?*

As soon as the diagnosis of an injury to the spinal accessory nerve was made, Mrs A was referred to [Mr J], Consultant Plastic Surgeon, so that exploration of the nerve could be undertaken. [Mr J] (Consultant Plastic Surgeon) explored [Mrs A's] neck on 15 June 2002. He found that there had been complete division of the spinal accessory nerve. The spinal accessory nerve was microsurgically repaired. He found that the cervical plexus was completely intact. There were two very fine branches of the lesser occipital nerve or its equivalent which were found to be divided.

In my opinion the damage to the right spinal accessory nerve was managed appropriately.

11. *In your opinion, was [Mrs A's] discharge and arrangements for her follow-up care appropriate? If not, in what way?*

[Mrs A] remained in [the city hospital] for approximately one week following the operation on her divided right accessory nerve by [Mr J] on 15 June. She was then transferred back to [the first public hospital] (as this was more convenient for her family). During the period from 23 June until her discharge on 10 July, the main problem was control of the severe pain which she was getting in the right side of her neck. During this period she was predominantly under the care of the Pain Team, in particular, Dr K. During much of that time she was on an intravenous infusion consisting of Ketamine, Morphine, and Methadone. She was also receiving active physiotherapy. She was also given a cervical plexus block. Her main requirement following her discharge was ongoing management of her pain. Following her discharge she was seen in the Pain Clinic by Dr K on 23 July, 6 August and 9 August. Another anaesthetist saw her on 22 August when a further right superficial cervical plexus block was performed. She was subsequently seen again by Dr K on 3 September.

Her other requirement following discharge was ongoing physiotherapy. I have not been able to ascertain, despite careful examination of the hospital records, whether arrangements were made for her to be seen by a physiotherapist following her discharge from hospital on 10 July. She was certainly receiving physiotherapy while in hospital prior to that date. There was some delay in her Claim being accepted by the ACC Medical Misadventure Unit, but once the Claim had been accepted, the ACC arranged appropriate physiotherapy.

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12. *Are there any other matters which you believe to be relevant to this complaint?*

This is a very complex case. The predominant feature has been ongoing severe pain. The spinal accessory nerve is a motor nerve, by that I mean it is a nerve which supplies muscles. Division of this nerve resulted in weakness of her right shoulder. However, one would not expect division of a motor nerve to cause any significant pain. I can only interpret that her pain was originating from the cervical plexus which is a plexus of ramifying sensory nerves. I am not a pain specialist and I cannot adequately explain why [Ms A] had such severe and ongoing pain in the right side of her neck."

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, including –

…

(b) An explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option; …

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Opinion: Breach – Dr B

Standard of surgery
Under Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code) patients are entitled to have services provided with reasonable care and skill.

Mrs A has complained that the surgery performed by Dr B at the first public hospital on 8 June 2002 was not provided in accordance with that standard.

There is no dispute that Mrs A's spinal accessory nerve was completely severed by Dr B during the 8 June operation. This has caused Mrs A permanent loss of function in her right shoulder, and ongoing pain. My surgical advisor, Mr Menzies, stated:

> "There is irrefutable evidence that complete division of the spinal accessory nerve occurred at the second operation on 8 June."

My investigation has focused on the operation on 8 June and the spinal accessory nerve, as it is unclear when the branches of the occipital nerve were damaged.

Care during the operation
Dr B stated that he did not think he had to identify the accessory nerve, as the operation was superficial and involved only a small biopsy taken from the scar. He also believed he was not near the nerve, so was not concerned about taking any precautions against injuring it.

Dr B also stated that the operation on 8 June was made more difficult because Mrs A had had an operation less than two weeks previously. This meant that the anatomy was obscured with dense fibrous tissue and a lot of scarring. He stated that the underlying tissues were tethered by contraction of the scar, which can mean the accessory nerve is even more superficial and may even be encased by the scar tissue. Dr B stated that, with the benefit of hindsight, the nerve was probably trapped in this scar tissue.

Mr Menzies commented that Dr B discovered dense scar tissue rather than the abscess he was expecting and, in hindsight, he would have been wise to abandon the procedure or contact the consultant, Mr C, for advice.

Mr Menzies stated that Dr B should have identified the spinal accessory nerve when he explored the wound. As the second operation occurred within two weeks of the first, and given the location of the swelling in the neck, extreme care was required to avoid damage to the spinal accessory nerve. When a wound is re-explored in such a short timeframe there is inevitably swelling, distortion and scarring. Mr Menzies believes Dr B's comments that he was not aware he needed to identify the nerve, indicate he was not aware of the potential risk of injury to the nerve.

I note that the ACC advisor, (ENT surgeon), advised:

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> "[Dr B] should have been aware of the anatomy of the accessory nerve. He should have looked for the nerve. He should have taken trouble to have formally identified it and he should have taken precautions to make sure that it was not damaged."

Dr B had done approximately 40 similar operations before Mrs A's, and his consultant, Mr C, appears to have been confident that Dr B was sufficiently qualified and trained to carry out the procedure. However, my advisor noted that Dr B is unlikely to have undertaken an operation in the posterior triangle of the neck when the patient had previously undergone a surgical excision in the same area only two weeks earlier, causing the operation site to be more complicated than usual. Dr B found a mass of dense scar tissue instead of the wound abscess he had anticipated.

Both Mr Menzies and ACC's advisor stated that it would have been difficult to identify the nerve after the first operation. However, Dr B should still have attempted to do so. I accept that advice and consider that a person of Dr B's experience should have recognised that this was necessary. I am not satisfied that he did so.

Summary

Dr B stated that he did not attempt to identify the nerves in the neck area during the operation, and that he did not believe it was necessary to do so, because of the superficial nature of the operation. However, he should have been aware of the importance of identifying such structures because the area was distorted by the previous operation, and taken extra care during the procedure. In addition, Dr B should have been put on alert when, on opening the wound, he found no infection. He should have reconsidered continuing the procedure. Dr B failed to exercise appropriate care and skill. It is clear that significant and permanent damage to Mrs A's accessory nerve resulted from the operation on 8 June. In my view, Dr B's failure to identify the nerve and exercise sufficient caution fell below an appropriate standard of care. In these circumstances, Dr B breached Right 4(1) of the Code.

Opinion: The First Public Hospital – No Breach

Information about risks

Mrs A stated that she was never told there was a risk of nerves being severed during the operation Dr B was to perform. Dr D and Dr B have both stated that the risk of damage to surrounding structures in the neck, including nerves, was discussed, and the consent form records "risk of damage to other surrounding structures". The consent form was signed by Mrs A and Dr H. I note Dr B was only one of three clinicians who gave Mrs A information prior to the procedure.

On balance, I am satisfied from the evidence obtained that the risk of nerve damage was explained to Mrs A prior to surgery on 8 June, and that Right 6(1) of the Code was not breached.

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Pain relief
Mrs A reported that her pain relief was not always given when she needed it, or in sufficient quantities to meet her needs. She was also concerned about the length of time it took medical staff to assess that the spinal accessory nerve had been severed.

The clinical records show the many steps taken to provide Mrs A with pain relief and find the cause for her pain and numbness between 8 June and 15 June, including reviews by the Acute Pain Service, Mr C, Dr I, and Mr J.

Mr Menzies stated that the extent of Mrs A's pain would not usually be expected after such an operation. He stated:

> "In my opinion the management of [Mrs A's] pain was exceedingly difficult and the treatment which she received was appropriate and timely."

Mr Menzies commented that the diagnosis of nerve damage was made in a timely manner, within one week of the 8 June operation, and that the damage to the nerves was managed appropriately. I accept my expert advice that Mrs A's postoperative pain management was appropriate. Although Mrs A continued to suffer pain, it appears that the the first public hospital responded appropriately to a difficult situation, and did not breach the Code.

Follow-up
Mrs A complained about the follow-up care she received from the first public hospital. The notes record that on discharge, Mrs A was given appointments at the outpatients and pain clinics for ongoing physiotherapy and pain management, prescriptions for pain medication, and information regarding follow-up. Correspondence in the medical records from Mr K confirms that Mrs A attended the pain clinic.

My advisor noted that this was a very complex case and that Mrs A had a very complicated pain issue. He advised that she appeared to have received appropriate pain relief and management at the city hospital and the first public hospital. She also received physiotherapy at both hospitals. There was some delay with Mrs A's ACC claim being accepted but once that occurred, ACC arranged appropriate ongoing physiotherapy.

I accept my expert advice that Mrs A received appropriate pain management and physiotherapy from the first public hospital, and conclude that the first public hospital did not breach the Code.

Vicarious liability
Employers are responsible under section 72(2) of the Health and Disability Commissioner Act 1994 for ensuring that employees comply with the Code. Under section 72(5) it is a defence for an employing authority to prove that it took such steps as were reasonably practicable to prevent the employee from breaching the Code.

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Mr C stated that it was up to the individual registrar to familiarise himself or herself with the operation required. If the registrar is not happy with the requested operation or the consent, it is the registrar's responsibility to review the situation and, if necessary, contact the consultant.

Mr Menzies stated that draining abscesses and exploring wounds are common procedures for surgical registrars. Dr B had worked at the first public hospital for six months, and during that time Mr C would have made an assessment of Dr B's capabilities: "If Dr B had had any concerns about doing the operation it would have been appropriate for him to contact Mr C and either to ask him for advice or to request him to come in and assist." It appears that Dr C had no reason to doubt Dr B's ability to perform this procedure, and expected that Dr B would request his assistance if necessary.

I am satisfied that there were appropriate systems in place if Dr B had concerns about the decision to perform the procedure. Dr B chose to go ahead with the operation and did not seek assistance. In these circumstances, the first public hospital is not vicariously liable for Dr B's breach of the Code.

Other Comments

Non-urgent surgery after midnight

I note the comment of my advisor, Mr Menzies, that he "would question whether it is necessary for such an operation to take place after midnight". The Medical Council also commented that it noted, as a "systems issue", "the requirement for surgical trainees to operate after midnight to provide the services and clear the backlog in a busy hospital".

I share the implicit concern expressed by Mr Menzies and the Medical Council about undertaking non-urgent exploratory surgery in a public hospital at 1.22am. It seems probable that the risk of error is heightened when surgery is undertaken during night hours, with reduced back-up available. Patients should not be exposed to this additional level of risk unless the surgery is urgent and cannot safely be postponed. I draw these comments to the attention of the Chief Executive and Chair of the first public hospital.

Action taken

In response to my provisional opinion, Dr B provided a written apology for Mrs A.

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Recommendations

- I recommend that Dr B review his practice in light of this report, if he returns to surgical practice.
- I recommend that the first public hospital review the practice of undertaking non-urgent surgery during night hours, in light of this report.

Follow-up actions

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

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