Oral Surgeon, Dr B

A Report by the

Health and Disability Commissioner

(Case 03HDC08542)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Parties involved

Ms A	Consumer
Dr B	Provider/Oral surgeon
Dr C	Ms A's dentist
Dr D	Ms A's general practitioner
Dr E	Oral surgeon
Dr F	Ear, nose & throat surgeon

Complaint

On 11 June 2003 the Commissioner received a complaint from Ms A about the dental services she received from Dr B, oral surgeon. The complaint was summarised as follows:

Dr B extracted Ms A's wisdom teeth on 30 October 2002. Between 30 October 2002 and 13 February 2003 Dr B did not provide dental services of an appropriate standard. In particular Dr B:

- *did not identify a piece of bone lodged in Ms A's sinus as a result of the surgery*
- *failed to establish the cause of her ongoing symptoms of severe pain, constant dripping and smell, within a reasonable time frame.*

An investigation was commenced on 25 July 2003.

Information reviewed

- Transcript of an interview with Ms A
- Dr B's response to the Commissioner, including patient notes
- Ms A's dental records and correspondence from her dentist, Dr C
- Ms A's medical records and correspondence from her general practitioner, Dr D
- Dr E's correspondence including report of Ms A's CT scan
- Dr F's correspondence concerning Ms A's letter to Dr B
- Independent expert advice from Dr Gerard Thyne, oral and maxillofacial surgeon.

Information gathered during investigation

After discussion with her dentist, Dr C, Ms A consulted oral surgeon Dr B for the removal of two wisdom teeth, the upper left 28 and lower right 48. Ms A attended a preliminary appointment with Dr B on 1 October 2002, where she gave a relevant history. Ms A's history included several episodes in hospital during which she would have received numerous courses of antibiotics. She had an allergy to erythromycin, which Dr B recorded in her notes. Because of Ms A's medical history and existing heart condition she also attended a preliminary appointment with a consultant anaesthetist on 2 October. Dr B extracted the wisdom teeth on 30 October 2002 and repaired "the oral-antral communication which was through the socket". Postoperatively Dr B prescribed Ms A Ceclor, an antibiotic, Buccastem, Panadeine and four tablets of Kapanol (morphine) for pain.

Following the extraction Ms A took the prescribed medication but it proved inadequate for pain relief and she continued to experience considerable pain.

Discussion of complications and decision to travel overseas
On 4 November 2002 Ms A telephoned Dr B for review of her analgesia, and at an appointment later that day Dr B prescribed three more Kapanol capsules. On 7 November Ms A returned to Dr B for removal of her stitches.

Ms A advised me that at this time she was experiencing a burning sensation in her mouth and a lot of pain. She was concerned about the business trip overseas planned for 8 November. She was prepared to postpone the trip if there was any threat to her health, and discussed this with Dr B.

Ms A's visits to Dr B on 4 and 7 November are recorded as two separate entries in his notes. The first, dated 4 November, records the prescription for Kapanol. The date of the second entry appears to have been changed from "4" to "7". Both entries are connected by an arrow. The second entry (7 November) records the removal of stitches placed when tooth 48 was removed, prescription of more antibiotics (Amoxil and metronidazole) and Atrovent, and "blown OAC L". It appears that there was a communication between the sinus and the tooth 28 extraction site. Dr B stated that on 4 November he informed Ms A of the presence of an oral-antral communication, and advised her that "flying [overseas] probably would not help this".

Ms A's recollection of these discussions differs from Dr B's. Ms A said that Dr B never mentioned to her the complication of an oral-antral communication. She asked Dr B several times if it would be OK to fly, and on each occasion he encouraged her to take the trip, even saying it would be good for her, and wished her a good time. Ms A said that it was on the basis of Dr B's advice that she went overseas on 8 November.

Symptoms while overseas
While overseas Ms A experienced excruciating facial pain and developed ulceration and blisters. She was so ill that she was unable to attend to the business or social activities planned for her trip. On 12 November she phoned Dr B from overseas. He diagnosed an

allergic reaction to the antibiotics he had prescribed. He advised Ms A to stop taking the antibiotics and to obtain antihistamine tablets to treat the allergic reaction, and to take them regularly. There is no record of this consultation in Dr B's notes.

The treatment was unsuccessful, and Ms A's painful symptoms continued.

Continuing pain and discharge
On 18 November, after Ms A returned from overseas, she had a further consultation with Dr B. As well as the ulceration and blisters, Ms A remained in severe pain, and had a constant dripping down the back of her throat and an awful taste in her mouth. She reported that her breath "smelt like a sewer".

Dr B informed me that the upper third molar removal site had broken down and the oral-antral communication he had noted on 4 or 7 November remained. However, since it was small, and they most often heal spontaneously, he initiated no other treatment. He removed the sutures from the area of tooth 28 and made an appointment to review Ms A in a month (16 December). There is no record of his explanation of the situation to Ms A.

Ms A's symptoms continued. On 27 November she returned to Dr B, who recorded that she was complaining of "pain in the lower left and arising in the left neck region". On examination he found her lower left second and third molars were tender to percussion, and concluded that this was the cause of her pain. He advised Ms A that the pain she was experiencing was nothing to do with the removal of her wisdom teeth, that she needed a root filling in one of her teeth, and that she should return to her own dentist.

Accordingly, Ms A consulted Dr C on 27 November. Dr C's notes confirm that he conducted an examination, took X-rays, and treated one of Ms A's lower molars, undertaking a restoration of a carious tooth. Ms A advised me that, contrary to Dr B's diagnosis, Dr C informed her that no root filling was needed. He suggested that Ms A had a "sinus problem" and referred her back to Dr B. On 28 November Dr B prescribed doxycycline.

Diagnosis of Ms A's lip ulceration, swelling and pain
On 28 November Dr B wrote to Ms A's general practitioner (GP), Dr D, stating that he believed Ms A's symptoms were a result of "a number of drug allergic responses" associated with the antibiotic therapy amoxycillin or metronidazole prescribed after her surgery, and that she had developed "what appeared to be a severe oral reaction to these, with oral ulceration and oedema of the lips, etc". He referred her back to Dr D for follow-up.

Dr B also advised Dr D that following Ms A's return from overseas he had seen her again for an unrelated problem and prescribed Ceclor, and "lo and behold this precipitated a similar result". There is no record in Dr B's notes of Ceclor being prescribed at this time. (It was only prescribed immediately postoperatively.)

On 2 December Ms A phoned Dr B because of a recurrence of the ulceration. He diagnosed an allergic reaction to the doxycycline he had prescribed on 28 November. He referred Ms A to her GP.

Dr D diagnosed the remnants of a primary infection with herpes simplex, which had caused symptoms of oral ulceration, pain, blisters and swollen lips. She wrote to Dr B to advise him that these symptoms were not an allergic reaction to any antibiotics but a viral infection. She stated that in her opinion the oral ulceration Ms A experienced overseas was the start of the infection, and that in her experience Ms A was allergic to no antibiotics other than erythromycin, as was stated in her clinical notes. The GP prescribed acyclovir to treat Ms A's virus, and medication for pain and inflammation, as well as Kenalog in Orabase, lactulose and temazepam.

Specialist consultation
Dr B reviewed Ms A on 16 December as arranged. He advised that he took an OPG radiograph which, in his opinion, showed reasonable repair of the maxillary and mandibular areas at the surgery site, and "certainly no evidence of bone pieces or bone infection". From his examination he concluded that the oral-antral communication had healed as anticipated but, in view of Ms A's history, he decided to refer her to an Ear, Nose and Throat (ENT) surgeon, Dr F, for review. Dr B's notes do not record a diagnosis or reason for referral.

Ms A advised me that she phoned Dr B's surgery on 20 December because the symptoms (pain, dripping, smell and taste in her mouth) remained unchanged. She received a prescription for antibiotics, faxed through by the receptionist. There is no record of this consultation or prescription in Dr B's notes.

On 23 January 2003 Ms A consulted Dr F, who diagnosed "left chronic maxillary sinusitis" following the wisdom tooth removal. Dr F's report noted that an oral-antral communication (fistula) repaired during the extraction in October was not detectable on examination. He indicated some confusion about the source of the "dripping", noting that Ms A thought that it originated from the socket, but in his opinion it may have been a postnasal discharge. Ms A advised me that Dr F told her that she would "probably need an operation" but prescribed doxycycline antibiotics for one month, prednisone for two weeks, and a regular steroid nasal spray, and requested a CT scan. He advised Ms A to delay the scan until after she had completed the prednisone and checked back with him in two weeks' time.

In his letter to Dr B, Dr F suggested that if in fact there was a small fistula, and if Ms A did not respond to medical therapy (prednisone, doxycycline and steroid nasal spray), he could carry out a combined procedure to repair the fistula and the chronic maxillary sinusitis.

Dr F referred Ms A back to Dr B to ensure that there was no fistula present.

Ms A did not see Dr B immediately. She advised me that on the many occasions she had telephoned Dr B's surgery she had often been advised that he was "in surgery and unavailable", and her concerns were addressed by Dr B's staff. Even when she did see Dr B, she felt he was dismissive of her pain and her worry, often "covering up with funny little jokes that are not funny if you look at them from my point of view". By the end of January

she felt so debilitated by her deteriorating condition that she felt unable to cope with what she described as "being fobbed off, brushed aside, put in the too hard to handle basket".

Continued leaking from the tooth area
Despite the treatment prescribed by Dr F, Ms A's condition did not improve. By 12 February 2003, her tooth was still leaking and she felt "at the point of physical collapse". She phoned Dr B, but he was away. Ms A called Dr F's rooms and was advised to proceed with the CT scan, which was organised for the next day, 13 February.

CT scan
The CT scan, reported by a radiologist, described "a sliver of apparently displaced bone sitting within the soft tissue opacity filling and extending out of the left maxillary antrum. The appearances would be consistent with a bone injury from recent maxillary surgery."

The radiologist arranged for an urgent referral to an oral and maxillofacial surgeon, Dr E. Ms A went directly to his rooms.

Surgery
On examination Dr E found a small discharging sinus present. He told Ms A that there was a hole in her sinus floor containing a piece of foreign matter, and that her left sinus was completely blocked with infection. He advised immediate surgery. The following day, 14 February, Dr E excised the discharging area, cleared several small fragments of bone from the maxillary sinus and evacuated copious amounts of pus. He curetted and cleaned the whole area, closed it with a graft and prescribed the antibiotic clindamycin. Dr E noted that there was significant oedema associated with the maxillary sinus lining.

Dr E advised me that the surgical removal of wisdom teeth often involves fragmentation of bone, and it can be extremely difficult to find all small fragments. However, when left, these small fragments may cause infections. In his opinion the piece of bone in Ms A's sinus was the most likely cause of her ongoing symptoms. When Dr E reviewed Ms A on 21 February, he reported that everything was healing well.

Dr B's response

Bone fragments
Dr B advised me that he did not identify the bone lodged in Ms A's sinus because the X-ray examination (of 16 December) failed to detect it. He said: "It was only identified following a course of conservative therapy conducted by specialist ENT surgeons and following a CT scan. Due to the sinus inflammation it would not have been identifiable prior to this."

Diagnosis of symptoms in a reasonable time frame
Dr B denied that he failed to establish the cause of Ms A's symptoms in a reasonable time frame and submitted that he "made a diagnosis of an oral antral communication and using current accepted therapy guidelines treated this appropriately. When the symptoms failed to settle he referred [Ms A] for a second opinion to a specialist colleague."

Independent advice to Commissioner

Expert advice was obtained from an expert oral and maxillofacial surgeon, Dr Gerard Thyne.

Information reviewed

- The complaint letter to the Commissioner
- Transcript of an interview with Ms A
- Dr B's response to the Commissioner, including patient notes
- Information leaflets from Dr B
- Dr B's operation note dated 30 October 2002
- X-rays from Dr B dated 19 December 2002
- Dr B's letter to Dr C dated 4 November 2002
- Dr B's letter to Dr D dated 28 November 2002
- Dr D's notes of Ms A's consultation on 2 December 2002
- Dr D's letter to Dr B dated 2 December 2002
- Dr B's letter to Dr D dated 6 December 2002
- Patient notes from Dr C
- X-rays from Dr C
- Dr B's letter to Dr F dated 17 December 2002
- Dr F's letter to Dr B dated 23 January 2003
- Radiology Group report of CT scan dated 13 February 2003
- Dr E's letter to Dr F dated 27 February 2003
- Dr E's letter to Dr F dated 25 March 2003
- Dr F's letter to Dr D dated 3 April 2003
- Dr E's response to the Commissioner dated 22 August 2003

Initial expert advice

"*1. Has [Dr B] provided an appropriate standard of care to be expected in the circumstances?*

[Dr B] obtained informed consent for the procedure and provided the patient with pre-operative information relating to the surgery. The surgical procedures appear to have been performed to an appropriate standard of care. Apart from a period of time when he was overseas, [Dr B] has been available to see the claimant and arranged for referral to another oral and maxillofacial surgeon when he was unavailable. [Dr B] diagnosed an oro-antral communication at the first follow-up appointment and instituted standard medical therapy to prevent sinus infection and to facilitate healing.

He appears to have failed to diagnose an episode of acute primary herpetic gingivo-stomatitis which he thought was antibiotic allergy. This was clarified by the claimant's general medical practitioner, but I do not think the change of prescribing of antibiotics has affected the outcome in this case. The claimant subsequently

developed chronic sinus infection which [Dr B] thought likely in December 2003 and arranged referral to an ENT specialist.

The ENT Surgeon, [Dr F], confirmed chronic sinus infection and instituted medical therapy. This is a standard approach to chronic sinus infection which often responds to a long course of antibiotic therapy, avoiding sinus surgery in cases where it is not necessary.

In the present case, sinus infection did not resolve with antibiotic therapy and surgical intervention was required to remove infected bone fragments and infected material from the sinus.

2. *How frequently does it occur that fragments of bone are left behind in the mouth when wisdom teeth are extracted?*

   It is common for fragments of bone to be displaced with removal of upper wisdom teeth. These fragments of bone are generally left in situ unless they are detached from surrounding tissue or extremely mobile. Healing in these situations is generally uneventful. Removal of bone in this case may have increased the size of the antral communication.

3. *What steps would [Ms A] expect an oral and maxillofacial surgeon to take to investigate symptoms such as those experienced by [Ms A] in the circumstances?*

   An oral and maxillofacial surgeon would be expected to perform a clinical examination consisting of intra-oral inspection for the presence of redness, swelling, fistula formation, pus drainage. An extra-oral investigation for swelling, tenderness and lymph node enlargement. Plain x-rays would also generally be obtained. A CT scan could also have been obtained, but in the circumstances of the current case, [Dr B] elected to arrange a direct referral to an ENT surgeon which as an alternative is appropriate.

4. *Did [Dr B] take reasonable steps to establish the cause of [Ms A's] on going symptoms in a reasonable time frame?*

   [Dr B] diagnosed a problem with an oro-antral fistula at the follow-up appointment on either 4 November 2002 or 7 November 2002. His subsequent clinical findings suggested to him that this area had spontaneously healed. He diagnosed likely clinical sinus infection and arranged an ENT referral on 16 December 2002. This was approximately one month following the patient's return from [overseas] when he had seen her for a review on 18 November 2002. This four week time period to allow the clinical situation to unfold is not unreasonable in the circumstances. Despite problems with possible antibiotic allergy, the patient had been given repeat supplies of antibiotic therapy to control possible symptoms from sinus infection. The ENT referral around 17 December 2002 seems appropriate.

Chronic sinus infection following surgical removal of an upper wisdom tooth is a rare consequence of this surgery. It is often difficult to make the diagnosis which relies on clinical examination and CT scanning. When chronic sinusitis does occur as a result of wisdom tooth surgery, it is not uncommon for some weeks or months to elapse before the diagnosis is confirmed, medical management is instigated and a decision regarding possible surgery can be made.

Summary

The claimant underwent surgical removal of wisdom teeth including an upper left wisdom tooth on 30 October 2002. The post surgical course was complicated by an infection with primary herpetic gingivo-stomatitis. An oro-antral fistula developed at the time of surgery but this appeared to spontaneously close. The claimant subsequently developed chronic maxillary sinusitis, probably from infected bone fragments in the posterior floor of the maxillary sinus. Standard medical therapy failed to resolve the problem which required surgical intervention.

I do not believe there has been an issue of significant delay in assessment and diagnosis or treatment by any of the health professionals involved in this case."

Dr Thyne also noted the following:

- The panorex radiograph dated 16 December showed that the lower tooth socket was healing appropriately, and that the upper left socket area had the appearance of healing, but that it is difficult to make a diagnosis of sinus infection from a panorex radiograph.

- It is common for fragments of bone to be displaced with removal of upper wisdom teeth. These fragments of bone are generally left in situ unless they are detached from surrounding tissue or extremely mobile. Healing in these situations is generally uneventful. Removal of bone in this case may have increased the size of the antral communication.

Further expert advice
The following additional expert advice was obtained from Dr Thyne:

"*In view of the complication that had been identified, the burning sensation in [Ms A's] mouth and her level of pain, what would your advice have been about travel [overseas]?*

I do not think the travel [overseas] would significantly have worsened her condition. It appears that the level of pain increased during the [overseas] trip mainly as a result of developing a viral infection, primary herpetic gingivo-stomatitis.

Did [Dr B's] actions, given [Ms A's] severe pain, demonstrate an adequate standard of care in the circumstances?

The diagnosis of primary herpetic gingivo-stomatitis can be difficult to make and could appear similar to oral ulceration that develops as a result of an allergy to antibiotics. In the circumstances, I do not feel that [Dr B's] failure to diagnose primary herpetic gingivo-stomatitis represents an inadequate standard of care.

The antibiotics he prescribed would have been needed for treatment of sinus infection.

The referral to her dentist was to check the need for a root canal treatment. [Ms A] had been complaining of pain in the lower left jaw at the time of this referral. A restoration was subsequently placed by a dentist in a carious tooth in this area.

I note that as a result of this course of action (referral to an ENT surgeon) there was a delay of eight weeks, 17 December 2002 to 13 February 2003, in obtaining the CT scan.

The claimant, [Ms A], was seen by [Dr F], Ear, Nose and Throat Surgeon, on 23 January 2003. [Dr F] noted that she had been troubled by pain and pressure in her left cheek but does not state that this was severe. He noted her medical history including possible ischaemic heart disease and cerebrovascular disease. His diagnosis was of a chronic maxillary sinusitis and he favoured a trial of maximal medical therapy initially. He proposed to arrange a CT scan following this medical therapy and to discuss further management. [Dr F] did not consider that the presenting clinical situation suggested the need for an urgent CT scan.

I am not aware that chronic maxillary sinusitis could necessarily cause deterioration of the existing heart condition, which appears to be ischaemic heart disease, but an opinion from a cardiologist would be required to confirm this.

At no time in December 2002 or January 2003 did either [Dr B] or [Dr F] consider that [Ms A's] condition was serious or required urgent intervention.

Management of chronic maxillary sinusitis is often protracted as standard medical therapy needs to be carried out for several weeks. This is because the majority of cases resolve without the need for surgery. In [Ms A's] case, the infection failed to resolve with medical therapy and a CT scan was then arranged. This showed the rather rare and unusual finding of necrotic bone fragments. These were subsequently removed."

Code of Health and Disability Services Consumers' Rights

The following Right in the Code of Health and Disability Services Consumers' Rights is 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

Opinion: No breach – Dr B

Identification of bone fragment
Ms A complained that the bone fragment in her sinus was not discovered until 15 weeks after the operation "despite all the physical signs that something was seriously wrong". She asserted that "the timeline for diagnosis and treatment was damning, demonstrating the attitude of a functionary rather than embracing total professional patient care".

Dr B took X-rays on 16 December, which in his view showed reasonable repair of the area and no evidence of bone pieces or bone infection. He informed me that it would not have been possible to have identified bone fragments because of the inflammation present. He arranged referral to an ENT specialist, stating in his referral letter that he was suspicious of sinus infection.

Both my independent expert and Dr E advised that it is common for fragments of bone to be displaced with removal of upper wisdom teeth. My expert informed me that it can be extremely difficult to find all small fragments. They are generally left in situ unless they are detached from surrounding tissue or extremely mobile, and healing in these situations is usually uneventful.

My independent expert confirmed Dr B's interpretation of the 16 December X-ray, that the lower socket was healing appropriately and that "the upper socket had the appearance of healing", but qualified this by adding that "it is difficult to make a diagnosis of sinus infection from a panorex radiograph". He commented that appearance of necrotic bone fragments is a rather rare and unusual finding.

It appears that Dr B did not identify the bone fragments because they were not visible on the X-ray he took on 16 December. He made a diagnosis of sinus infection and referred Ms A to an ENT specialist which, according to my expert, was appropriate in the circumstances. Therefore, in my opinion, Dr B did not breach the Code in this respect.

Establishing a diagnosis in a reasonable time frame
Ms A's extraction took place on 30 October 2002 and her painful symptoms were not finally resolved until 14 February 2003, when Dr E removed bone fragments that had been displaced during the extraction, lodged in her sinus and become infected. In the meantime, Ms A experienced ongoing severe pain, constant dripping and smell, her general health deteriorated and she was at the point of physical collapse. She had three separate conditions to contend with subsequent to the removal of her wisdom teeth: primary herpetic gingivo-stomatitis (herpes simplex infection, or shingles), an oral-antral communication and chronic maxillary sinusitis.

1. Oral-antral communication
Dr B diagnosed Ms A's oral-antral communication problem at the follow-up appointment on either 4 or 7 November 2002, and believed it had resolved spontaneously with conservative treatment. Dr F could not detect it on examination on 23 January 2003.

2. Shingles
Ms A asserted that Dr B failed to diagnose shingles, resulting in 24 days of unnecessary severe pain. He saw her ulcerated and blistered mouth at her consultation on 18 November, but did not alter his diagnosis of antibiotic allergy. My advisor confirmed that Dr B failed to diagnose an episode of acute primary herpetic gingivo-stomatitis. However, in view of the fact that Ms A's condition was further complicated by subsequent chronic sinus infection, it does not appear that the failure to diagnose shingles affected the timeframe required for diagnosis of the sinus infection.

3. Chronic sinusitis
At her consultation with Dr B on 18 November, Ms A complained of pain, dripping and a foul taste in her mouth. Following unsuccessful treatment with antibiotics, Dr B arranged ENT referral at her review on 16 December. My expert advised me that "this four week time period to allow the clinical situation to unfold is not unreasonable in the circumstances … it is often difficult to make the diagnosis which relies on clinical examination and CT scanning. When chronic sinusitis does occur as a result of wisdom tooth surgery, it is not uncommon for some weeks or months to elapse before the diagnosis is confirmed, medical management is instigated and a decision regarding possible surgery can be made." In his opinion, "there has not been significant delay in assessment and diagnosis or treatment."

I have no doubt that the ongoing symptoms of chronic sinus infection were distressing and debilitating for Ms A. However, it is evident that in the event of the rare complication of oral surgery where chronic sinusitis occurs as a result of necrotic bone fragments, establishing a diagnosis for the cause of the symptoms can be a lengthy process. On the basis of the available information, I have formed the opinion that Dr B did take reasonable steps to establish the cause of Ms A's symptoms in a reasonable time frame, and consequently did not breach the Code.

Other comment

Standard of dental records
In the course of this investigation there were several inconsistencies between information provided by Ms A and by Dr B. The material contained in Dr B's account was not always corroborated by the documentation he provided. Keeping accurate, clear, comprehensive and contemporaneous records underpins professional practice. Notes should report relevant clinical findings, the decisions made, the information given to the patient and any drugs or other treatment prescribed. I recommend that Dr B reflect on his note-taking practices in light of these comments.

Adequacy of communication with Ms A
Although this investigation focused on Dr B's standard of care to Ms A, transcripts of an interview with Ms A clearly reveal her feeling that her condition and concerns were not taken seriously by Dr B and, consequently, were not effectively addressed. The perception that Dr B was dismissive of her very real distress in the face of an ongoing and seemingly unresolveable problem, without adequate explanation of the situation, served to exacerbate Ms A's distress and feeling of vulnerability in the situation.

Follow-up actions

- A copy of this report will be sent to the Dental Council of New Zealand.
- A copy of this report, with identifying features removed, will be sent to the New Zealand Dental Association and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for education purposes.