

**Mr Ian Breeze**

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

**(Case 03HDC19273)**



Health and Disability Commissioner  
*Te Toiāhu Hauora, Hauātanga*



## Parties involved

Mr Ian Breeze	Provider/General surgeon
Ms A	Consumer's daughter
Mrs B	Consumer/Complainant
Dr C	Surgical registrar
Mr D	General surgeon
Dr E	General practitioner

---

## Complaint

On 12 December 2003 the Commissioner received a complaint from Mrs B about the care and treatment she received from Mr Breeze in 1999. An investigation was commenced on 4 March 2004, as part of a Commissioner-initiated inquiry into the quality of care provided by Mr Breeze to a number of patients on whom he performed surgery. The issue the Commissioner investigated was:

- *whether Mr Breeze provided services of an appropriate standard to Mrs B, on whom he performed a left hemicolectomy at Tauranga Hospital in February 1999, and who developed postoperative complications.*
- 

## Information reviewed

- Letter of complaint from Mrs B, dated 12 December 2003
- Transcript of interview with Mrs B on 23 March 2004
- Transcript of interview with Ms A on 22 March 2004
- Mr Breeze's response to the complaint, dated 25 March 2004
- Further information from Mr Breeze, dated 17 May 2004
- Information from a house surgeon, received 4 June 2004
- Information from Mr D, general surgeon, dated 26 May 2004
- Information from Dr C, registrar, dated 16 May 2004
- Information from an anaesthetist, dated 10 May 2004
- Information from Dr E, general practitioner, dated 5 May 2004
- Mrs B's general practitioner records
- Mrs B's clinical records from Tauranga Hospital
- Additional information from Mrs B, dated 6 September 2004
- Mr Breeze's response to the provisional opinion, dated 28 September 2004.

Independent expert advice was obtained from Mr Mischel Neill, colorectal and general surgeon.

## Information gathered during investigation

### *Diagnosis of condition and referral to Surgical Outpatient Department*

On 5 August 1998 Mrs B consulted a doctor at a Medical Centre (her usual GP at the Medical Centre was Dr E). She reported that she had lost half a stone over the preceding three months, and her bowel motions had changed – three to four times a day with mucous. It was recorded that she had suffered rectal bleeding the previous November, but not since then. On examination, her abdomen was soft with no masses. No masses were identified on rectal examination. The GP ordered blood tests and a midstream urine. Three faecal samples were taken. An urgent outpatient barium enema was arranged, and Mrs B was asked to re-present the following Monday for her blood to be re-checked.

Mrs B's blood tests indicated that she had mild leucopenia. Her mid-stream urine was unremarkable, and no abnormalities were identified in her faecal samples.

The barium enema was performed on 13 August 1998. The report noted:

“Barium flowed freely into the caecum. Moderately extensive changes of diverticular disease are noted within the sigmoid colon with florid diverticular formation and associated smooth muscle hypertrophy. Minor scattered diverticula are noted further proximally in the distal descending colon. No other abnormality is seen, in particular, no polyp formation, mucosal ulceration or other abnormality noted.”

Mrs B consulted Dr E on 18 August 1998. He noted that he understood the barium enema indicated diverticular disease, but at that time he did not have a copy of the final report. He arranged to review Mrs B the following week.

Mrs B consulted Dr E again on 25 August 1998. He noted that the barium enema revealed diverticular disease, but her other test results were normal. His plan was to refer Mrs B to Tauranga Hospital for further investigation/surgery.

On 1 September Dr E referred Mrs B to the Surgical Outpatient Department. In his letter of referral he noted that Mrs B had suffered from weight loss, a change in bowel motion, and rectal bleeding. Dr E noted that a rectal examination was normal, and no abdominal masses were palpable. The barium enema taken on 13 August 1998 showed marked diverticular disease. He also recorded in his letter of referral that Mrs B had a past history of cancer of the cervix and cancer of both breasts.

### *Outpatient appointment – 13 October 1998*

Mrs B consulted Mr Breeze on 13 October 1998. Following the consultation, Mr Breeze wrote to Dr E and advised him that Mrs B had an episode of severe pain in her abdomen in February 1998, which subsided over three days. Following that episode she developed intermittent diarrhoea, a burning discomfort in the abdomen and distension. She also suffered from clotted blood per rectum, and urinary frequency. On examination no masses or organomegaly were identified, and rectal examination with sigmoidoscopy to 15cm was normal. Mr Breeze noted that Mrs B had no anaemia, lymphadenopathy or jaundice. He

also recorded his awareness of her history of cervical cancer and breast cancer. He noted that her barium enema showed moderately severe diverticular disease largely confined to the sigmoid colon. Mr Breeze recommended a colonoscopy to further investigate her rectal bleeding, in case it was due to a bowel cancer that had not been detected on barium enema. He advised:

“I suspect a lot of her symptoms are due to an inflamed segment of sigmoid in contact with the dome of her bladder and she may become a candidate for an elective sigmoid resection for diverticular disease.”

#### *Diagnostic investigations*

On 17 November 1998 Mrs B was admitted to Tauranga Hospital for a colonoscopy. However, Mr Breeze was able to examine only the distal 25cm of her bowel, because of an acutely angulated colon. He arranged to review Mrs B a month later.

Mrs B consulted Mr Breeze on 5 January 1999. Following the consultation he wrote to Dr E, and advised him of the results of the colonoscopy. Mr Breeze noted that Mrs B was experiencing symptoms of a colovesical fistula<sup>1</sup> with pneumaturia (flatus in the urine) of several months' duration, and probably faecaluria (faeces in the urine). Mr Breeze advised me that those symptoms are recognised complications of diverticular disease. Treatment for diverticulitis focuses on clearing up the infection and inflammation in the colon. An attack of diverticulitis without complications may respond to antibiotics if treated early and, if the diverticulitis is mild, it may be treated conservatively with a high-fibre diet and pain medication. In cases where there is an acute attack of diverticulitis or severe infection, or attacks are severe and frequent, surgery may be necessary. I understand that the suspicion that Mrs B had a colovesical fistula strengthened the indication for surgery. Accordingly, Mr Breeze recommended an elective resection for diverticular disease. During the consultation, Mr Breeze advised Mrs B that it was a major operation with a one percent operative mortality and a ten percent chance that she would need a temporary three-month stoma. He noted that she had good general fitness.

Mrs B recalled that Mr Breeze informed her that the operation would be major, and that because she had suffered from cervical cancer and had had radiotherapy, there could be complications. Mrs B understood that Mr Breeze was going to discuss her risk of complications with another practitioner, but she could not recall who.

---

<sup>1</sup> A fistula is an abnormal passage or communication, usually between two internal organs or leading from an internal organ to the surface of the body. A colovesical fistula is a fistula between the colon and the bladder interior. Fistulas are usually the result of trauma or surgery, but can also result from infection or inflammation. Treatment of a bladder fistula requires surgery. If the fistula is caused by a disease (such as diverticulitis), surgical removal is usually done in conjunction with removal of the primary disease.

*Surgery – 15 February 1999*

On 14 February 1999 Mrs B was admitted to Tauranga Hospital under Mr Breeze for a left hemicolectomy for her severe acute diverticulitis. Her bowel was prepared for surgery with oral laxatives (fleets) – one in the morning and one in the evening.

The operation was performed on 15 February 1999 by Mr Breeze, with the house surgeon assisting.<sup>2</sup> The anaesthetist advised me that anaesthesia was uneventful apart from a very brief period of bradycardia and hypotension – probably a “vagal effect” due to manipulation of the bowel, which would have been occurring at the early stage of surgery. The operation note records:

“Indication: Severe acute diverticulitis, February 1998. Subsequently has observed clotted blood passed PR and I could also elicit the symptom pneumaturia. Barium enema show moderately severe diverticular disease, largely confined to the sigmoid colon. Colonoscopy was possible only to 25cms because of an acutely angulated colon. Past history of carcinoma of the cervix over 20 years ago treated by cone biopsy and cobalt. Has also undergone bilateral mastectomy and bilateral THR. Elective resection recommended.

*Procedure:* Thromboprophylaxis with Fragmin and intermittent calf compression. Antibiotic prophylaxis with Gentamicin [one hour preoperatively and 160mg intravenously] and Fasigyn [2 grams orally two hours preoperatively] pre-emptive analgesia with a Marcin wound infiltration. Midline incision. There were changes of recent severe acute diverticulitis of the sigmoid colon but certainly no colovesical fistula at present. Examination of the remaining large bowel revealed no abnormality and general laparotomy was unremarkable. The sigmoid colon was restored to its primitive mesentery, and the upper rectum was mobilised. The splenic flexure was then fully mobilised and the bowel prepared for division in the descending colon and distally in the upper rectum. This segment of bowel was then removed and continuity was restored using a double staple technique using a 60mms traverse and the 28mms ILS. This produced a tension free, well perfused anastomosis that was air tight on insufflation with two intact doughnuts. The gap in the mesentery was then closed. A redivac drain was inserted and the abdomen was closed with 0 Novafil to the linea alba and stapes to skin.”

Mr Breeze explained that a segment of bowel comprising the sigmoid colon and rectum, containing diverticular disease, was excised during surgery. The bowel was reconnected (anastomosed) using a double stapling technique. The join was tested intra-operatively, and was “demonstrably air-tight”. Mr Breeze advised that there were no technical difficulties with the surgery. He noted:

“In surgery for diverticular disease, the aim is not to remove the entire diverticular bearing segment of bowel, but rather to remove that segment that is prone to develop diverticular complications, i.e. the sigmoid colon.”

---

<sup>2</sup> The house surgeon was a first-year house surgeon, nearing completion of his first rotation.

The resected bowel specimen was reported as:

“Description: The specimen consists of a segment of large bowel measuring 350mm in length and up to 30mm in diameter with a generous portion of attached mesentery. A 100mm length of the segment, approximately 50mm from one margin shows a markedly thickened wall and tight stenotic lumen measuring less than 10mm in diameter. In this region, multiple diverticula are found. The bowel, presumed proximal to this region, is dilated up to 75mm in circumference. No tumours or polyps are identified ...

Microscopic: Representative sections of the stenotic area confirm diverticular disease of the colon. There is markedly hyperplastic muscularis propria with pulsian mucosal diverticula extending through the muscle coats. No complicating diverticulitis or pericolic abscesses are evident in the sections. The more proximal colonic bowel wall shows less striking hyperplasia of the muscularis propria. Section of the mesentery shows only two small lymph nodes. There is no evidence of malignancy. The appearances are of uncomplicated diverticular disease of the colon.”

Mr Breeze advised me:

“My view is that because of the stricture described 10mm in diameter, that this is **complicated** diverticular disease. The pathological findings, especially the absence of a fistula, were milder than I had expected. I considered that the stricture was the basis of her symptoms of distension, abdominal pain and diarrhoea, and that the presence of this obstruction satisfied the indications for surgery.”

The anaesthetist advised me that Mrs B had an uneventful post-anaesthesia recovery.

*Postoperative care and treatment in Tauranga Hospital*

At 10pm on 15 February Mrs B’s observations were stable and her Redivac drain contained 450mls.

On 16 February Mrs B was reviewed by the house surgeon on call, who noted that she had a low urinary output, with a total fluid input of 1250mls, and a total output of 303mls. It was also noted that Mrs B felt thirsty and had a dry tongue, but was in very little pain. Due to her dehydration, the plan was to give her 500mls of saline over the following 30 minutes and to record urinary output hourly. The house surgeon made a note to be called if there was no improvement in Mrs B’s urinary output.

At 10pm the house surgeon was contacted by the nursing staff because of Mrs B’s poor fluid output. Diuresis was increased.

On 17 February Mr Breeze reviewed Mrs B during a ward round. His plan was to continue with IV fluids. The morning nurse recorded that Mrs B was doing well, and that her Redivac had been left in as it had drained 90mls of dark fluid over the previous 24 hours.

The night nurse recorded that on the morning of 18 February there had been no further drainage in the Redivac. Mrs B was reviewed by the house surgeon, who noted that she was well, afebrile, and still had significant drainage from her drain. The plan was to leave in her drain and IDU (indwelling catheter), continue with IV fluids, and to watch the indwelling catheter for blocking.

On 19 February the night nurse recorded that there had been 20mls of drainage in the Redivac, and her pad contained small amount of dark blood from the rectum. That morning Mr Breeze saw Mrs B during a ward round. He advised me that one episode of rectal bleeding is not necessarily a complication, and can occur “from time to time after the surgical procedure of a stapled rectal anastomosis as a result of instrumentation of the ano-rectum with the stapling device which is 28 millimetres in diameter”. During his review of Mrs B, Mr Breeze noted that the drain was still draining, and she had a sore abdomen. The plan was to check her white blood cell count and, if it was normal, he advised that she could eat. Mr Breeze noted that her drain was to remain in place. Later that day the nurses noted some improvement in Mrs B’s condition, but that she was still sore on the left side of her lower abdomen. It was recorded that she had haematuria at times, and her Redivac was still draining. On 19 February she was also reviewed by a house surgeon, who noted that she had had a low-grade fever over the past two days, had haematuria, and was “tender ++” in her lower left abdomen. The weekend plan was to take a urine specimen and, if normal, for her catheter to be removed in the morning, her patient controlled analgesia (PCA) to be stopped when she was reviewed by the pain team, and for her drain to be removed in the morning if the drainage was 50mls or less in 24 hours. The nursing notes record that a catheter specimen was sent to the laboratory at 4.30pm because of haematuria.

On 20 February Mrs B’s Redivac drain was removed, and the PCA taken down. It was noted that her bowels had opened twice, her observations were satisfactory, she was afebrile, and her wound was satisfactory.

On 21 February it was noted that she had a sore lower abdomen, and paracetamol was given.

On 22 February Mrs B was seen by Mr Breeze during a ward round. He noted that she was eating and drinking, and that she had had a bowel motion that morning. Mr Breeze recorded that on observation Mrs B’s abdomen was slightly distended. The plan was for her to be discharged home on 24 February and to have her clips out in 10 days’ time. Later that day it was reported that her midstream urine had cultured *E. coli*, and antibiotics (Triprim) were commenced. Mr Breeze considered that Mrs B’s urinary tract infection accounted for her abdominal pain and fevers.

Mrs B was reviewed by Mr Breeze on 23 February during his ward round. He noted that she had had some diarrhoea on the evening of 22 February, but that on observation she was afebrile and her abdomen soft.

Mr Breeze reviewed Mrs B again on 24 February. He noted her significant diarrhoea and considered that it was caused by the Triprim. He discontinued the Triprim and commenced



her on Gentamicin (another antibiotic). Mrs B's daughter, Ms A, recalled that her mother was not getting any better, but had expressed a desire to go home, because she was "not getting any better [in hospital]". Mr Breeze advised that Mrs B could be discharged, and arranged an outpatient appointment for the following Tuesday.

A District Nursing referral was arranged, and Mrs B was given 300mg of Gentamicin and discharged that afternoon. The Nursing Discharge Summary noted that Mrs B was not to lift or strain for four to six weeks, and she was to avoid constipation. Mrs B hoped that her condition would improve when she got home, but it did not.

*Postoperative condition, care and treatment following discharge*

Mrs B consulted Dr E on 25 February complaining of nausea, diarrhoea, postoperative urinary tract infection, weakness and lethargy. On observation, her abdomen was soft and her chest clear. Her blood pressure was 140/70, pulse 78 beats per minute, and temperature 36.5 degrees. Dr E noted that he would await the results of blood tests and a midstream urine test.

Mrs B's midstream urine was normal, but her blood tests indicated an elevated ESR<sup>3</sup> (108), mild neutrophilic leucocytosis, and moderate thrombocytosis. The report noted, "? Post operative infection".

On 2 March Mrs B was reviewed in the Outpatient Department by Dr C, surgical registrar. Mrs B was accompanied by her daughter, Ms A. It is unclear whether Dr C had a copy of the blood test results from 25 February at this appointment. Dr C noted that histology following the operation had confirmed diverticular disease. Mrs B's main problem was diarrhoea, and she was having to get up three to four times a night because of this. Dr C noted in a letter to Mrs B's GP, dated 2 March, that she explained to Mrs B the possible reasons for this, including overgrowth of *Clostridium difficile* or that the rest of her bowel had not yet compensated for the loss of a section of large bowel. Dr C also noted that Mrs B was nauseous but her abdomen was soft, non-tender and not distended. Her wound had healed well. She was given Stemetil for her nausea and a laboratory form for a faeces specimen. An outpatient review in two weeks' time was arranged. Dr C advised Dr E: "If the results are all negative then I think it would be worthwhile starting [Mrs B] on something like Imodium to just help slow things up for the moment."

The faeces specimen showed a large number of white blood cells.

Mrs B consulted Dr E on 5 March. He recorded that she was suffering from diarrhoea several times a day, and nausea. Her abdomen was soft with mild tenderness. He recorded

---

<sup>3</sup> ESR is a measurement of blood sedimentation rate. The rate depends on the amount of certain proteins in the blood. Conditions that may cause an elevated sedimentation rate include: infections; inflammatory diseases, such as rheumatoid arthritis and lupus; blood cancers, such as leukaemia and lymphoma; and cancers that have spread (metastasized) to the lungs, kidneys, breast or colon. An elevated sedimentation rate may be a sign of an underlying problem, and further testing is needed to identify the problem.

her blood pressure as 140/80, pulse as 80 beats per minute, and temperature as 36.8 degrees. He queried whether her diarrhoea was due to malabsorption, and prescribed Isogel.

Mrs B consulted Dr E again on 15 March. He noted that she had an offensive watery anal discharge, malaise, a soft abdomen, but no abdominal pain. She had urinary frequency, but her bowels had settled. Her blood pressure was 140/80, pulse 80 beats per minute, and temperature 37.3 degrees. No abnormalities were detected on rectal examination. Dr E queried whether Mrs B had a stomal infection. He arranged to repeat her blood tests, and prescribed Augmentin. He noted that she had an outpatient appointment at Tauranga Hospital the following day.

Blood tests taken on 15 March showed that Mrs B had "slight normochromic normocytic anaemia", and an iron test noted: "Low serum iron with normal or low iron binding capacity (or transferrin) may be associated with a broad differential diagnosis including acute and chronic infections, inflammatory disorders, malignancy, chronic renal failure, cirrhosis and protein malnutrition."

On 16 March Mrs B was reviewed in the Outpatient Department by Dr C. Dr C wrote to Mrs B's GP and noted:

"Postoperatively she has not recovered as fast as we would have hoped. Initially she had diarrhoea and this has now settled. No cultures grew anything here. Her urines have also been clear.

Now, however, she has a putrid per anal discharge which is brown in colour. She has also been having hot and cold temperatures."

Dr C recorded that the blood tests taken by Dr E on 15 March were all normal except for a slightly low haemoglobin of 112. Mrs B was also seen on 16 March by Mr Breeze, who considered that she might have developed an abscess. An urgent CT scan of the pelvis was arranged. It was noted:

"It may well be that she has had an abscess at the suture line which is draining via the bowel. We have started her on Augmentin which seemed to be a very good idea to me at this stage. We have told her that if an abscess is seen at this time we would arrange for per cutaneous drainage of this. She is very keen to head back home but I have told her that if she is not coping she is quite welcome to contact me and we will arrange for admission.

We will see her in clinic following the CT scan."

On 17 March Mrs B consulted Dr E, who noted that she had been diagnosed with an abscess and was to have a CT scan.

Mrs B consulted Dr E again on 18 March. She was weak and lethargic with a persistent fever. Dr E recorded that she still had a “foul” rectal discharge. He referred her to the Emergency Department at Tauranga Hospital. His referral letter noted:

“Poor [Mrs B] has made a slow recovery. She has a foul watery anal discharge, persistent fever, malaise, and lack of energy. Also urine frequency and diarrhoea. Attached are lab results, but more were done today 18-3-99. T=37.3. Soft abdomen. Chest clear. PR [rectal examination] normal (no discharge seen). I wonder about a stomal infection ... Does she require re-admission? No antibiotics prescribed today.”

There is also another letter on the file from Dr E to the house surgeon on 18 March 1999, stating:

“She has had an offensive anal discharge, diarrhoea initially but now constipated and general malaise. She has had a persistent fever of T=37.5. I commenced Isogel about 1/52 ago for the diarrhoea (now constipation). I commenced her on Augmentin 2 days ago (discharge still present) ... she really needs admission and reassessment.”

#### *Admission 18 March 1999*

Mrs B was assessed in the Emergency Department at 10.15am. At 10.30am she was reviewed by the house surgeon, who noted that she had persistent offensive anal discharge, and was pale and felt lethargic. The house surgeon noted, “Anal discharge started 2.5 weeks ago. Saw [Dr C] 2 days ago. Since then feeling very tired, needs assistance with all cares.” The discharge was described as brown and putrid smelling. The house surgeon noted that Mrs B had not had a proper bowel motion for three days, she had experienced fevers and night sweats, and her abdomen was swollen, soft and tender with a “large sausage shaped mass felt ? fluctuant ? air filled”. On rectal examination there was pus on the glove, and an intra-abdominal collection was considered likely. Swabs of the faeces/rectal discharge were sent for testing. Bloods, a midstream urine, and an X-ray were ordered, and she was admitted under the care of Mr Breeze. It was noted that she was to be nil by mouth and to be given intravenous fluids. The house surgeon was to discuss with the registrar whether antibiotics were necessary. A CT scan was booked for 4pm.

Mrs B was taken for an X-ray at 12.30pm, and returned at 1.30pm. The X-ray report read:

“Staples from the colonic anastomosis centrally within the pelvis. There is mild prominence to small bowel loops within the left lower quadrant, and moderate faecal colonic loading. No definite soft tissue mass to suggest collection identified.”

It was noted that the house surgeon was waiting to discuss Mrs B with the registrar. At 2pm Mrs B was transferred to the ward. At 4pm Mrs B had a CT scan, which showed a moderate sized pre-sacral abscess at the level of the surgical anastomosis. The scan report noted:

“There is a moderate sized retroperitoneal collection within the pre-sacral space at the level of the surgical anastomosis and staples. This measures approximately 7 x 5 cm in diameter, containing soft tissue/fluid density and gas within it.”

Percutaneous drainage under CT guidance was attempted by a radiologist. He noted:

“An 8 French catheter was inserted centrally into the collection via trans-gluteal approach. No complication occurred at time of procedure. Foul smelling fluid was obtained, but this was very thick and did not drain readily. Flushing and aspiration suggested.”

A pigtail catheter was inserted with instructions for four-hourly saline flushes of the drain with 10-20mls of saline, with an attempt to aspirate with a 30ml syringe. It was recommended that a three-way top be used to flush the aspirated pus into a bag.

The progress notes at 6pm record:

“Surgical Reg requests ward call to chart antibiotics ? patient ? intra-abdominal collection since this am. No antibiotics charted by surgical team. Drainage of pre-sacral abscess with CT guidance this pm.

Plan: IV Rocephin

For review by surgical registrar.”

At 9.15pm antibiotics were charted. The following was noted:

“Pigtail drain insitu. [Patient] states that the radiology department could not get any pus out as it was too thick. For 4 hourly [aspirations] and flushes as over page. Flushed with 20ml N/Sal and only 5ml very offensive pus/saline/blood mix was aspirated. [House surgeon] notified of result. [Intravenous antibiotics] charted, Reviewed by [Surgical registrar], as pus still insitu – charted further [intravenous antibiotics]. Mr Breeze notified, remain [nil by mouth]. [Intravenous fluids]. [Intravenous fluids] [indcipherable] [increased] due to frequent diarrhoea. Urine output not able to be separated from diarrhoea. Diarrhoea has ++ pus in it. Afebrile. Nil nausea. [Patient] very lethargic, otherwise feels well.”

On 19 March the night nurse noted that there was nil to scant drainage from the pigtail drain on flushing it. It was noted that nappies were in place, and that Mrs B was incontinent of pus from the anal area. Intravenous antibiotics were given, and it was recorded that there were no verbal complaints.

At 8.30am on 19 March Mr Breeze saw Mrs B during a ward round. He noted that she was still feeling fatigued and tired. He recorded that she was afebrile, and her observations were stable. Mr Breeze also recorded that the pigtail drain contained pus, and her abdomen was soft and non-tender. His instructions were to continue intravenous antibiotics and flushes, a

high protein diet, bloods to be taken on Sunday, and for the house surgeon to be called if her temperature exceeded 38 degrees.

The morning nurse flushed the pigtail drain twice, and recorded that there was very little drainage. Mrs B's observations were stable.

At 10.10pm the nurse recorded that Mrs B was still passing pus in her bowel motions. The pigtail drain was flushed with 20ml of normal saline, and only 3mls were aspirated. It was noted that there was minimal drainage in the bag, and the aspirate remained very offensive.

At 4.30am on 20 March the pigtail drain was again flushed with minimal return. At 11.15am it was noted by a nurse that the drain had been flushed at 8.30am with 15mls of normal saline, and that 7mls of watery, discoloured fluid was aspirated. The notes record: "Drain on f/d [free drainage] since aspiration, draining approx 75mls @ 1115hrs of green/cloudy fluid." At 1.40pm the drain was flushed again with 15mls of saline, and nothing was aspirated, but fluid was recorded as being visible in the tubing.

At 9.20pm it was noted that Mrs B's bowel motions were less frequent, but still contained pus. The nurse recorded: "Pigtail drain site [indecipherable] 4 [hourly] flushes 10ml N/sal & [aspirations] continue nil in [aspirations] through stopcock part or connection entry." It was noted that Mrs B was afebrile, but had slight nausea, and was given Maxolon. It was also recorded that her drainage bag contained approximately 50mls of pus.

The night nurse recorded that the drain was flushed with minimal return.

At 1pm on 21 March it is recorded in the progress notes that Mrs B's observations were within normal range. She was given her last dose of intravenous Rocephin at 4pm, and 4mls of fluid was aspirated when the drain was flushed. The drainage bag was changed, and there was nil-to-minimal drainage. The nurse recorded: "Check tubing on assessment, tends to get kinked over preventing drainage." It was also recorded that Mrs B had two bowel motions, and that pus was still evident, although the amount was decreasing.

At 8.35pm 4mls of fluid was aspirated from the pigtail drain. The bag was not changed. Maxolon was given as Mrs B was nauseous.

The night nurse recorded that Mrs B was tender around the drain site.

Mr Breeze reviewed Mrs B during a ward round on 22 March. He noted that her rectal discharge was the same and she was still feeling nauseous, and that the rectal discharge increased when the tube was flushed. He also recorded that she was afebrile, her observations were stable, and that clinically she was more stable. His management plan was to discuss her case with the radiologist to determine whether a re-scan was required, to continue flushing the drain, stop antibiotics, and take blood for testing.

On 22 March the house surgeon noted that Mrs B was for a limited CT scan the next day to assess her fluid collection.

At 3.30pm the nurse noted that when the drain was flushed at 10.30am, 6mls had been aspirated and there had been approximately 50mls of drainage since the flush, and that after a further flush at 2.45pm 13mls had been aspirated. It was recorded that Mrs B was tender around the drain site, and still had pus draining from her rectum following flushes and during the morning. It was noted that there was some brownish-yellow discharge on her pads, which varied in texture, and was less than previous days.

The afternoon nurse flushed Mrs B's drain, and there was a return of 4mls.

Mr Breeze reviewed Mrs B again on a ward round on 23 March. He noted that she was "feeling full of wind this morning but otherwise ok. Waking 2hrly to pass [rectal] discharge." He noted that she was afebrile, and that her pelvic collection was draining. His plan noted that she was not for a CT scan, and was to be discharged home with district nursing assistance to flush the pigtail catheter drain line daily with 50mls of saline.

Mr Breeze was asked about the circumstances surrounding his decision not to proceed with a CT scan before Mrs B was discharged. He advised:

"The decision whether or not a CT scan is repeated is determined by the patient's clinical condition. In [Mrs B's] case, a repeat scan was not performed as I considered that it was not indicated by her clinical condition. [Mrs B] had full blood counts on 15, 18, and 21 March 1999 and these showed no evidence of infection, with a normal white blood cell count and differential. Additionally, [Mrs B] was afebrile throughout the admission 18-23 March 1999. My assessment was that the drainage was effective, and that it was not necessary to re-scan. Re-scanning would expose [Mrs B] to a further substantial dose of radiation."

Mrs B was discharged on 23 March. The Nursing Discharge Summary noted:

"Keep drain site clean and dry. Carry on with low residue diet, extra snacks, complan and high protein diet as per dietician advice. Drink 1-3 litres of fluids per day. Lactulose 10-20mls daily when needed to open bowels and get rid of some pus. Zantac 150mg twice a day."

And, under the heading 'special instructions':

"See GP if your bowel motions continue to be loose or have pus in them or look/smell offensive, or you get abdominal pain, or you feel feverish or unwell, or you cannot tolerate food or fluids, or your lethargy continues."

Mr Breeze arranged to see Mrs B in his outpatient clinic on 30 March 1999.

#### *Care and treatment following discharge on 23 March*

Mrs B recalled that the drain was "terrible". She said that it got "so bad, so sore, I couldn't lie down, couldn't sleep because it just hurt so much". The district nurses flushed and aspirated the drain during the week, and Ms A flushed and aspirated the drain during the

weekend when the district nurses were not available. A district nurse showed Ms A how flush and aspirate the drain. Ms A advised, "There's a series of taps you had to turn off and on, and you had to get the saline solution and inject it to flush out the abscess, and then try and drain all that water out."

A doctor from the Medical Centre (not Dr E) visited Mrs B at home on 24 March. The doctor recorded that Mrs B had no abdominal pain or temperature, and her antibiotics had been discontinued at hospital. It was recorded that Mrs B would be followed up as required.

On 24 March Mrs B was reviewed by another doctor at the Medical Centre, who recorded:

"Back from [hospital] 23/3/99, still pus rectal discharge plus drain put in. Has bowel abscess. Was on flagyl/Rocalfin [intravenous] for 4 days. [Very] thin. ? need ensure. Told to buy Complian. Daughter seems [to think] mother bright enough but still [very] ill – happy to bring her home but concerned about discharge. For house call – [district nurses] irrigating abscess to get thick pus to move."

Mrs B consulted Dr E on 25 March. He noted that her wound was discharging, and she was eating a little. On examination her temperature was 36.5 degrees, blood pressure 150/60, and her abdomen was soft. Mrs B re-presented later that day "for forms". It was noted that she was slightly better, and had no nausea.

Mrs B was reviewed by Dr E again on 26 March. He noted that she seemed stronger, but her drain was possibly blocked. On examination her blood pressure was 150/60, and her temperature was 36.5 degrees. Her abdomen was soft.

Mrs B consulted a different doctor at the Medical Centre on 28 March, requesting analgesics. Further Augmentin was prescribed. She consulted the same GP on 29 March. The GP noted that the drain had stopped three days ago, and she had pus oozing from "where the drain coming out from bottom". She also had offensive drainage from her anus. It was noted that Mrs B was due to see Mr Breeze the following morning. She was continued on antibiotics, and a skin swab of the drain site was taken. The swab cultured a heavy growth of coagulase negative staphylococci and anaerobic gram negative bacilli. The GP wrote to Mr Breeze, stating:

"Thanks for arranged review [Outpatient Department] of [Mrs B]. Recent hemicolectomy and pre-sacral abscess. Pigtail drain [indecipherable] by [district nurses] and daughter to have ceased draining despite irrigation but offensive [discharge] from around drain and anus. ? abscess persists despite Augmentin.

Plan. Thank you for review. ? removal ? replacement [of] drain ? [indecipherable] ? CT scan to examine abscess."

Mrs B was seen in the Outpatient Department by Dr C on 30 March 1999. Ms A accompanied Mrs B to the appointment. Ms A advised me that by this time, Mrs B could not walk, and was in a wheelchair. Dr C noted that the pigtail catheter to help drain Mrs B's

collection had been painful and pus had been draining around it rather than down it. Mr Breeze advised me that pus draining around the catheter rather than through it meant the catheter was blocked and acting as a plug rather than a drain. A decision was made to remove the catheter to facilitate drainage and to relieve pain. Ms A saw Mr Breeze about to leave the clinic for a meeting and, because of Mrs B's poor condition and problems with the drain, told him he had to do something about her mother because she wasn't qualified to take care of someone so ill. The notes record that Mrs B was not coping at home, and so was admitted to hospital for oral antibiotics and nutritional support for a few days to "build her up a bit and get some social services in place for her return home in a few days time".

*Admission 30 March 1999*

Mrs B was admitted to Tauranga Hospital under the care of Mr Breeze. She was commenced on oral Augmentin.

Mrs B was reviewed by Mr Breeze on 31 March and he noted that she was "much more comfortable [without] drain. [On examination] well. Afebrile [observations] stable". His plan was to discharge her in 24 hours.

Mrs B was reviewed by the house surgeon on 1 April, and noted to be well, afebrile, and her drain site clean. It was recorded that her rectal discharge was minimal, and that her abdomen was soft and non-tender, and not distended. The house surgeon recorded a decrease in drainage from her pelvic collection.

Mrs B was discharged and referred to the district nursing service for daily dressings to the drain site on her buttock until it healed. She was given antibiotics (Augmentin).

Mr Breeze was asked about his management plan for Mrs B's abscess following the removal of the drain. Mr Breeze advised me that he considered that as a result of having the catheter in position for 12 days a drainage track would have become established, which would continue to provide drainage after the catheter was removed.

*Care and treatment following discharge on 1 April*

Mrs B consulted Dr E on 2 April. He noted that she had a fungal infection, and her wound had "burst this morning". He prescribed Canesten cream for her to apply to the infected area.

Mrs B consulted Dr E again on 3 April. He recorded that she had persistent anal discharge, and had to change her pad up to seven times a day. She was in less pain, had no fever, and was eating.

On 13 April Mrs B was reviewed in the Outpatient Department by Dr C. Dr C wrote to Dr E, advising him that Mrs B looked better, although she continued to have discharge from the percutaneous drain, and anally. Dr C noted that on examination Mrs B's abdomen was soft and she had no masses, which was hopefully a sign that the abscess cavity was getting smaller. Dr C also noted that she had consulted with Mr Breeze, who had advised her that



there was nothing more specific they could do for Mrs B, but that she should heal in time. A plan was made to review Mrs B two weeks later.

Mrs B was reviewed in the Outpatient Department by Dr C on 27 April. Dr C noted that Mrs B was making good improvements, and there were whole days when she would get no peri-anal discharge. Dr C recorded that the drain wound had stopped draining, and the wound had healed with no evidence of hernia. Dr C reassured Mrs B, and arranged to review her again in three weeks' time.

Mrs B consulted Dr E on 28 April with a cough. She also said that she was dizzy on getting out of the car and walking. Her blood pressure was 170/80, and her pulse 96 beats per minute. Her temperature was 36.5 degrees. Dr E ordered a blood test, and arranged to review her two days later.

Mrs B's blood count was normal.

Dr E reviewed Mrs B on 30 April. She still had a cough and was fatigued. Dr E noted that her "wound discharge is coming right".

On 12 May Mrs B was discharged from the district nursing service.

During an appointment on 14 May, Dr E noted that Mrs B was weak and lethargic, and still had discharge from her abscess. He completed a referral to Tauranga Hospital.

On 15 May Mrs B was reviewed by another doctor at the Medical Centre, who queried whether she had an abscess in the "drain butt". It was noted that she was for review at Tauranga Hospital on 18 May, and Augmentin was prescribed.

Mrs B was reviewed by Dr C on 18 May in the Outpatient Department. It was noted that her condition was the same as on 27 April, with some peri-anal discharge. It was recorded that Mrs B had become concerned when the old drain site on her right buttock became swollen, and that she had visited her GP, who started her on Augmentin. On examination, Dr C noted that there was a firm nodule on her right buttock, but it did not feel fluctuant. Dr C stuck a needle down the old drain track, but was unable to aspirate pus. Mr Breeze recalled that at this appointment, Mrs B had swelling at the drain site, "but did not have an abscess at this site". A repeat CT scan to review the abscess was arranged, and the plan was to review Mrs B after the scan.

On 21 May Mrs B had a CT scan of her pelvis. The report noted:

"Clinical: Anterior resection 15.02.99 for diverticular disease. Complicated by post operative abscess formation.

Report: ... There is still a moderate sized relatively thick walled cavity lying in the pre-sacral space anterior to the rectum around the level of the surgical staples presumably indicating the site of anastomosis. This measures approximately 6cm x 2cm x 6cm in size and contains fluid and air. It is at the site of the previously drained abscess ...

Comment: There is still a residual abscess cavity containing air and fluid in the pre-sacral space. A further evaluation with a Gastrografin enema may be of value to detect ongoing communication between the area of anastomosis and the abscess.”

On 25 May Mrs B had an outpatient review with Mr Breeze. Ms A accompanied Mrs B to the appointment. Ms A felt that Mr Breeze’s manner was “abrupt and quite intimidating”. Ms A recalled that Mr Breeze told them that he did not want to see Mrs B in the Clinic again.

Mr Breeze wrote to Mrs B’s GP after the consultation, advising him that he had reviewed Mrs B, whose left hemicolectomy 12 weeks ago was followed by the development of a pre-sacral abscess drained percutaneously. He advised that she was much improved, but passing purulent discharge once a week. He noted that recently there was further discharge from the drain site, but that she was “entirely well 95% of the time”. He advised that on examination she appeared healthy with a healthy drain track and rectal examination revealed induration (thickening) pre-sacrally but no acute abscess. He advised that the repeat CT showed a residual abscess cavity 6 x 2 x 2cm (the residual abscess cavity was recorded as 6 x 2 x 6cm on the CT scan report), and that he had reassured Mrs B that this would shrink and disappear with time and no further intervention was necessary. Mr Breeze noted, “At her request we will review her in six weeks time, mainly for reassurance.”

Mr Breeze was asked why he chose not to undertake further investigation of Mrs B’s abscess cavity (ie, a Gastrografin enema) as suggested by the radiologist who reported the CT scan of 21 May. Mr Breeze advised me that when he assessed Mrs B on 25 May, she was passing purulent rectal discharge once a week. He considered that the discharge “indicated a communication was present between the collection and the bowel, at least some of the time, and that it was not necessary to carry out a Gastrographin enema to confirm that”.

Mr Breeze was also asked about his advice to Mrs B that the cavity would shrink and disappear in time, and what other options were available to treat the cavity. Mr Breeze explained:

“The other options were open surgical drainage or repeat percutaneous drainage. As I have stated, open surgical drainage is associated with a 10-20% operative mortality and a 15-30% recurrence rate. I considered that these risks were prohibitive, particularly as [Mrs B’s] potential risk was even greater than this, as she had previously undergone radiotherapy to the operative site for cervical cancer. Percutaneous drainage had been undertaken previously, and had become poorly tolerated because of pain from the drainage tube.

Healing is known to be slow in the presence of irradiated tissues, but I considered perseverance with the present strategy was the appropriate option. I do not recall the specific details of my conversation with [Mrs B] on 25 May 1999, but I feel sure that I would have followed my normal practice of discussing these options with her.”

Ms A advised that after the consultation with Mr Breeze on 25 May, Mrs B “just got sicker and sicker”.

Mrs B consulted a GP at the Medical Centre on 22 June. The notes record:

“Saw [specialist] one month ago, 95% better, seeing him again in 2 weeks. Thinks time will settle. This week as bad as ever. Mr Breeze, says sealed off and can’t affect rest of the body. This weekend shaking shivering aching headache, [temperature] 38 degrees, no pain. Mr Breeze thinks no [antibiotics] needed?? No pain, 6mm by 2mm ... recurrent kidney infections, IMP flu [symptoms], nil sore throat has a cough ... NB Augmentin fixed her lethargy ...”

The doctor prescribed Augmentin. On 23 June Mrs B again consulted the doctor, who queried whether she had an abscess in the ischiorectal area. Blood tests were taken, which were normal.

*Admission 13 July 1999*

On 13 July Mrs B consulted Dr E. She had been vomiting food, liquid and bile for 12 hours, and had abdominal pain. On examination her abdomen was soft, and her bowel sounds were reduced. Dr E queried whether Mrs B had an early bowel obstruction, and referred her to the Emergency Department at Tauranga Hospital. His letter of referral recorded:

“? Early bowel obstruction. This lady had a partial colectomy for [extensive?] diverticulitis earlier this year. She had a stormy post-op recovery with a persistent anal discharge and stomal abscess.

Over the last 12 hours she has complained of abdom [abdominal] pain after food or fluid, vomiting of bile every half hour, constipation, off food. [On examination] afebrile. BP 140/80. P=80. Tender over most of abdo but soft and no distension. [Bowel sounds] reduced. Moderate dehydration.”

She was assessed in the Emergency Department at 3.30pm. The house surgeon reviewed her at 5pm, and noted that she had had a gradual onset of lower abdominal pain four days earlier, which was intermittent, sharp, and severe at times. The pain radiated to the epigastrium. It was noted that for the previous day she had suffered from nausea, and frequent vomiting of large amounts of yellowish fluid. She had had a fever two days previously, and had been given antibiotics by her GP. On examination, the house surgeon noted that her abdomen was soft and tender, with no rebound and no organomegaly. Her bowel sounds were quiet. The plan was for her to have bloods taken, to be given intravenous fluids and analgesia, to remain nil by mouth, and for the surgical registrar to review her.

Mrs B was reviewed by the surgical registrar, who commenced her on intravenous antibiotics. An X-ray of her abdomen was taken, which reported:

“There are short air fluid levels within mid to distal bowel – appearances which would be consistent with obstruction/ileus. The degree of small bowel distension however is not great, indicating that this may well be early. Faecal content is also seen within non-distended large bowel.”

The registrar admitted Mrs B, and queried whether she required a CT scan the following day. Mrs B was admitted under Mr Breeze with constipation, nausea, and lower abdominal pain. Intravenous antibiotics were administered. Mrs B vomited once in the evening, and again at 2.30am. At 5.30am her temperature was 38.4 degrees, but it decreased to 36.8 at 6.30am after extra blankets were removed and the windows opened.

Mrs B was reviewed by Mr Breeze on 14 July. He noted, “Not been feeling well recently. Abscess draining – bowels didn’t work well when discharging. Lower abdominal pain. Vomited x 3 yesterday.” He noted that on observation she was afebrile had a soft abdomen that was not tender, and she was constipated. He planned for her to be given Lactulose and IV antibiotics, and to be discharged on oral Augmentin.

After an X-ray of her abdomen and chest on 14 July, Mrs B was diagnosed with a bowel obstruction.

On 15 July Mrs B was reviewed by the house surgeon, who noted that she was feeling fine, her bowels had opened the night before, and her pain had been relieved after the bowel motion. The plan was to discharge her that day, and for her to take regular lactulose. Mrs B was discharged at 9.30am and given a script for oral antibiotics.

#### *Dissatisfaction with Mr Breeze’s care*

Mrs B was concerned that her condition was not improving. She advised me that during her outpatient appointments she usually saw Dr C, but she felt that she should have been seen by Mr Breeze because she was not getting any better. Mrs B found Mr Breeze dismissive of her concerns, including her concern about her anal discharge. Mrs B recalled that after the pigtail drain was inserted, Mr Breeze did not seem to want to know her. Mrs B advised:

“I felt that ... when I wasn’t getting better, Mr Breeze should have really referred me to somebody else, to have brought somebody else in, because he wasn’t making me better. I wasn’t getting any better, I was worse.”

Dr E recalled that Mrs B voiced to him her dissatisfaction with Mr Breeze’s service and her stormy postoperative progress, and asked him whether it was possible for her to obtain a second opinion from another surgeon. Although not specifically recorded in the notes, Dr E recalled that following Mrs B expressing her concerns to him, he rang a surgical friend and colleague at Tauranga Hospital and expressed his concerns. The surgeon was unable to accept Mrs B as a patient, but advised Dr E that the easiest way to obtain a different surgeon’s assistance would be to admit Mrs B as an acute surgical case and ask for alternative help that way.

I understand that Ms A made an appointment to see a general surgeon, in private for a second opinion. However, the appointment was not kept because on 19 July Mrs B was admitted to Tauranga Hospital under the care of Mr D, general surgeon.

Mrs B consulted Dr E on 16 July. The notes record:

“Just home from [Tauranga Public Hospital] following bowel obstruction due to constipation. Weak, lethargic, in bed. Still has an abscess rectal discharge. To see [the general surgeon] 20/7/99 12.30pm.”

*Admission on 19 July 1999*

On 19 July Mrs B consulted Dr E. He recorded in the notes, “Now has a (R) buttock abscess, as well as anal discharge. Discuss with [the general surgeon] etc.” Dr E referred Mrs B to the Emergency Department at Tauranga Hospital. Dr E’ referral letter noted:

“Thank you for seeing this lady who has had a torrid few months.

She had a L hemicolectomy for diverticular disease in Feb this year. A stormy post-op period followed whereby she developed an anastomotic abscess and per anal discharge which persists to this day. She has lost weight, spiked fevers, been weak and lethargic, and off food. She was in hospital one week ago with a subacute bowel obstruction (? Caused by constipation).

Her daughter remains alarmed at what has happened and there is a concern over the reappearance of the buttock abscess. She was told she was 95% better when quite obviously she isn’t.”

Mrs B was reviewed in the Emergency Department by the house surgeon and Dr C. The Triage assessment noted: “In hospital last week with bowel obstruction, abscess started to form while in hospital.” Dr C noted:

“Well known to me. Underwent anterior resection in February for diverticular disease. Developed an anastomotic collection which drained intermittently [per rectum]. Had an external drain inserted via her R buttock which caused pain and was removed. Continues with intermittent episodes of fever and unwellness followed by a [rectal] discharge. Now [increased] pain and swelling old buttock drain site.”

On observation, it was noted that Mrs B had a palpable mass. Her right buttock mass aspirated 2mls of pus, and other pus was drained from the needle site. It was noted: [Impression]: para-anastomotic collection pointing via R buttock.” A swab was taken from the site, and it was noted that she was for nil by mouth from midnight. Mrs B was admitted to the ward at 10.45pm under the care of Mr D. The swab cultured a moderate growth of *E. coli*, sensitive to Augmentin and other antibiotics.

On 20 July Mrs B was reviewed by Mr D. Mr D recalled that Mrs B was seen in a septic stage with a buttock abscess tracking along the drain site, and a presumptive diagnosis of an

anastomotic leakage or suspected ongoing sepsis in the pelvis. He noted that her temperature and pulse were normal, and arranged for her to have a barium enema and a CT scan.

A provisional CT scan report in the progress notes reads: "Findings consistent with chronic pre-sacral abscess." The CT report recorded:

"Indication: Anterior resection February 1999 for diverticulus disease with anastomotic leak and subsequent abscess formation and now has recurrent fever with rectal pus and clinical buttock abscess.

Findings: There is a pre-sacral abscess collection approximately 6-7cm in diameter

Conclusion: Showed presacral abscess communicating with abscess in buttock via old drain."

On 21 July, at a multi-disciplinary meeting, Mr D discussed how Mrs B's case would best be managed. Mr D recalled: "A decision was made to re-explore her as there was persistent communication between her pre-sacral abscess and bowel lumen, and not dealing with this would not control her problem."

Mrs B was reviewed by Mr D on 21 July. He noted that her observations were stable, and that the plan was to create a defunctioning colostomy<sup>4</sup> and a bigger drainage hole via the anastomosis the following week. Mr D noted that he would try to do the procedure laparoscopically. Mrs B was to be "generally supported" to improve her general condition and nutrition for surgery on 26 July.

At 2.50pm on 21 July Mrs B was seen by the Surgical Case Manager. The Surgical Case Manager recorded in the notes:

"[Mr D] requests [Mrs B] remains in hospital for diagnostic investigations and surgical intervention. Surgery booked for Monday 26 July – afternoon. Patient not aware of OT [operating theatre] time at time of writing this report."

On 23 July Mrs B had a barium enema. The report noted:

"Barium flowed as far as the descending colon. On initial introduction of barium there was a tiny leak of barium in the region of the anastomosis and extending towards the right. On subsequent draining of barium, further barium filled into the abscess cavity via a very small postero-lateral sinus which tracks superiorly almost to the level of S1 and

---

<sup>4</sup> A colostomy is a surgically created opening in the abdominal wall, through which digested food passes. The opening is called a stoma. A temporary colostomy following bowel surgery gives a portion of the bowel a chance to rest and heal. When healing has occurred, the colostomy can be reversed, and normal bowel function restored.

then tracks posteriorly and inferiorly to finally communicate with the pre-sacral abscess cavity. This circuitous route does not lend for free drainage of the collected material back into the bowel with the size of the fistula hole being relatively small.”

An entry in the progress notes by Dr C recorded:

“Leak of barium at region of anastomotic site into pre-sacral space. Initially only limited ba leak, but draining ba – moderate to large leak.”

Mrs B was allowed home on leave that day, but returned the day before her surgery (Sunday), when she was prepared for surgery by being given a fleet at 3.30pm, and half a fleet at 10.30pm. Only half a fleet was given because she was initially still passing watery faeces.

*Operation – 26 July 1999*

Mr D operated on Mrs B on 26 July and, assisted by Dr C, performed a laparoscopic division of the small bowel adhesion, drainage of the pelvic abscess, and formation of a right upper quadrant colostomy, and exploration of the sinus tract in her right buttock. The operation note recorded:

“Indication: Mrs B had left hemicolectomy in mid February and had a good post operative recovery and discharged however developed pussy discharge PR. U/S and CT scans had shown a pre-sacral collection which was drained initially percutaneously but the infection smouldered on with her passing some pus PR and getting recurrent collections in the sinus tract. She has had slow progress but further image showed a fistulation between the right buttock and pre-sacral space. Having discussed the options at combined meeting attended by the radiologists and colleagues, the best option suited for her was a total diversion of faeces from the pelvis with more effective drainage of pre-sacral space surgically. We brought her forward for this procedure using standard fleet bowel preparation.

Procedure: Under GA first patient was placed supine and using prophylaxis for infection, DVT and pressure areas, lower midline incision was opened. Entry into peritoneal cavity revealed there were small bowel (adhesions) completely sealing off pre-sacral abscess by its loops which had to be released, inverted entry into small bowel loop was made which was dissected off adhesions divided and re-anatomised. Copious amount of pus was drained from pre-sacral space, cultures taken for both aerobic and cultures. The anastomosis appeared to be intact with no major defects noted macroscopically but this was difficult as the bowel appeared to be quite significantly angulated and no access was achieved through the abscess cavity. The sinus tract was followed with a catheter and appeared to be in direct communication with pre-sacral space. Having divided the lesions, small bowel enterotomy was reanastomosed in one layer using 3/0 Maxon sutures. Swabs were taken. Saline lavage carried out and pre-sacral space drained after dividing multiple loculations with the finger. This was rather haemorrhagic but good haemostasis was achieved after some time with cold saline lavage. A 22 French chest drain was inserted and brought out through left iliac fossa. Defunctioning site was

chosen right side of transverse colon and standard defunctioning ostomy carried out using 3/0 Maxon suture, distal limb completely closed off with TA40 staples. Having done this wound was closed with massive saline lavage in one layer using 1 Nylon continuous to linea alba, 4/0 Maxon subcuticular applied to skin. Having done this patient was placed in left lateral position and right buttock sinus tract was explored, curetted gently and left open for healing. Patient remained stable throughout. It was decided that rather than prophylaxis, triple antibiotics would be started to treat any infection. Patient to have close observations.”

Mr D advised me:

“In general, copious amounts of pus were drained from the pelvis, there were a lot of adhesions and anastomosis appeared intact with no major defects noted, but this again was difficult to examine because of chronic scar tissue and active infection. We decided to drain the abscess cavity and completely divert her faecal stream through a colostomy chosen on right side of the transverse colon.”

Dr C recalled that the operation was difficult, with multiple adhesions. She advised me that there was a large abscess present, but no obvious defect could be seen in the anastomosis, and there was nothing to indicate any specific concerns about Mrs B’s original surgery.

Mrs B was returned to the ward at 5.30pm. It is recorded in the progress notes that the abscess on her buttock had a small amount of offensive-smelling ooze on the pad. Her temperature at that stage was up to 39 degrees, but dropped to 38.5 degrees by 10.30pm.

At 6am on 27 July her temperature was down to 37.9 degrees. The registrar reviewed Mrs B during a ward round and noted: “Temp up last night – started on triple Abs. Feeling well this am.” It was noted that there was a lot of fluid in her colostomy bag. The plan was to continue antibiotics and intravenous fluids.

On 29 July a wound swab of the pelvic abscess cultured a heavy growth of *E. coli* and *Bacteroides*. The results were discussed with the registrar, and Mrs B was commenced on Flagyl and Rocephin.

Mrs B was discharged on 6 August after a slow postoperative recovery, including a high output from her colostomy.

*Care and treatment following discharge on 6 August*

Mrs B consulted Dr E on 10 August. He noted, “Now at home with colostomy. Now painful [varicose veins] (L) leg [one day]. [On examination]: obvious [varicose veins], no evidence DVT, no calf tenderness, no oedema.”

On 8 September Dr E noted that Mrs B was having problems with a leaking stoma.

Mrs B was reviewed in the Outpatient Department by Mr D on 4 October, as previously arranged. It was noted that she had progressed well with no further problems, and that



examination did not reveal any significant abdominal findings. Mr D noted that a rectal examination was normal, with a widely patent anastomosis, and the sacral sinus area had healed well. He also noted that she had put on weight. He advised Dr E that the next step was to reassess her colon with a double contrast barium enema and plan reversal of her colostomy.

Mrs B consulted Dr E on 8 November. She had experienced further “smelly” anal discharge for the previous three weeks. Dr E performed a rectal examination and noted leaky rectal discharge. He recorded that her abdomen was “OK”, and her temperature was 36.5 degrees. He referred her to Mr D’s Surgical Outpatient Clinic, and prescribed ciprofloxacin. Dr E recorded in his letter of referral to Mr D that Mrs B had pressure sensation over the lower abdomen, was passing urine more frequently, and had no fever, but night sweats. He noted that he had started ciprofloxacin, and that she needed urgent review: “I fear another abscess is developing in the [indecipherable] area or pre-sacral area.”

Mrs B was reviewed in the Outpatient Department by Dr C on 15 November. Dr C recorded that Mrs B had developed rectal discharge again. Mrs B had initially ignored it thinking it was mucous, but it then became quite offensive and more profuse. Dr C noted that Dr E had commended ciprofloxacin, and recorded that Mrs B had a feeling of pressure in her lower abdomen, was off her food, and had no fevers but did have night sweats. Dr C recorded:

“On examination today her abdomen was soft and non-tender but this has always been the case as it has been such a deep abscess. Certainly the buttock wound has healed well.

Today I have discussed her case with [Mr D]. We will arrange for her to have a urine sample to make sure she does not have a urine infection. We will also arrange for her to have a CT-scan, hopefully with some rectal contrast which will give us two pieces of information that is as to how the anastomosis is looking plus also to see whether there is an abscess cavity present. We will see her back in clinic following this.”

Mrs B had a CT scan on 29 November. The report noted:

“Evidence of a contrast leak from the rectum – posteriorly into the previous pre-sacral abscess region/gluteal muscle. If necessary a Gastrografin enema to further determine the size and exact position of the posterior rectal leak could be performed.”

Mrs B was reviewed by Mr D on 6 December 1999. He noted that the CT scan showed the residual pre-sacral abscess cavity “with communication with the bowel lumen”. He recorded: “I think her situation has occurred where the leakage has closed off markedly before the pre-sacral cavity heals. We will need to examine her under an anaesthetic and enlarge this complication given the pre-sacral space to heal faster.” He noted that he would schedule her for surgery two weeks later.

On 22 December Mrs B had a barium enema (ordered by Mr D to examine whether he could close her colostomy). No leak from the anastomosis was identified on the barium enema.

*Closure of colostomy*

On 7 February 2000 Mrs B was admitted under Mr D for closure of her colostomy secondary to the pelvic abscess. A specimen of the colostomy closure site was analysed, and showed that “sections of the colon are abnormal and show thickened muscular wall and dilated submucosa containing a number of ectatic vessels, and this may be due to the colostomy, but this can also be seen in angiodyplasia”. Mrs B was discharged on 14 February.

*Further postoperative reviews*

On 20 March Mrs B was reviewed by a surgical registrar in the Outpatient Department, six weeks after her colostomy was reversed. It was noted that she had recently been lightheaded, and had experienced abdominal pain and some diarrhoea, with a temperature, which appeared to be settling. The surgical registrar recorded:

“On examination her abdomen was soft and I cannot detect any masses or evidence of incisional hernia. Her diarrhoea is possibly settling down.

It is a little hard to work out the cause of these recent symptoms. I wonder if she may have had a coincidental viral infection or maybe even a bit of diverticulitis as she still has some diverticular inside. There is certainly no evidence of hernia at this stage but this is also a possibility.”

The plan was to review her again in three months’ time, or earlier if she had concerns.

Mrs B consulted Dr E on 27 March. He recorded that she had tripped over a ledge on 13 March, and had subsequently suffered from diarrhoea. Her abdomen was soft and mildly tender. He queried whether she had a recurrence of an abscess and should be re-admitted to Tauranga Hospital. He prescribed antibiotics. Blood tests taken on 27 March showed that her platelets were mildly increased, and she had mild neutrophilia. A midstream urine test cultured *E. coli*.

On 28 March Mrs B consulted Dr E, who noted that she was much improved, and her abdomen was less sore. On examination her abdomen was soft and her temperature was 36.5 degrees. He arranged to review her a week later.

Dr E reviewed Mrs B on 7 April. He recorded that she was much improved, with no diarrhoea or discharge. He noted that she had completed her antibiotics five days earlier, and had experienced nocturia three times.

On 11 April Mrs B consulted Dr E. He recorded:

“Recurrence of rigors, [abdominal] pains, diarrhoea, and faecal mucous discharge. Lethargic. [Temperature] = 36.9. Soft abdomen but tender near RIF [right iliac fossa]. [Bowel sounds] normal. A: ? recurrence of abscess.”

Dr E referred Mrs B to Mr D for review in his Surgical Outpatient Clinic on 17 April and prescribed Augmentin and Flagyl. The referral letter stated:

“This poor lady seems to be developing an [abdominal] abscess again. She saw me 27.3.00 with a 2/52 history of diarrhoea and faecal discharge again. She was [anorexic?], losing weight and had a foul-smelling discharge. Temp was 38.

She improved [with] Augmentin [indecipherable] but deteriorated again when she finished the medications 1/52 later. I’ve restarted it. She needs urgent review to exclude re-emergence of abdo/pelvic abscess ... ? another CT scan.”

Dr E specifically requested a review by Mr D himself, because of the difficult time she was having.

Mrs B was reviewed by Mr D on 17 April. Mr D wrote to Dr E, noting that he had reviewed Mrs B for her recent bowel disturbance, temperature, and niggly pain in the left iliac fossa. She was noted to have a urinary tract infection, and stool cultures and microscopy showed increased white and red cells. He noted:

“It sounds like she had some upset to her large bowel probably on the basis of diverticulitis or might have had a smouldering infection involving previous anastomotic site. Her symptoms have settled down with no further fevers.”

Mr D noted that there was mucous coming through her anus at odd times, although examination revealed no abnormal tenderness, and there was no induration, tenderness, or suggestion of pelvic collection on rectal examination. He advised:

“I think whatever has been going on is in the healing phase and doing any investigation at this stage would not change the course of her management as she has been on antibiotics and there is no evidence of any pelvic collection. If she continues to have temperatures or deep seated pelvic pain then either a transvaginal [ultrasound] or CT scan would be helpful to see if there is a collection which could be drained. I have reassured her and discharged her. She is finishing her antibiotics tomorrow and hopefully things will settle down.”

Mrs B consulted Dr E on 25 April, complaining of recurrence of diarrhoea, rigors, and “smelly discharge”. Her temperature was 37 degrees. Dr E prescribed Flagyl and Augmentin.

On review by Dr E on 16 May, Mrs B was noted to have had a relapse, seven days after completing her course of antibiotics. He recorded that she had diarrhoea, purulent discharge, a fever and was sleepy. A blood test taken on 17 May showed mild leucopenia,

and an ESR of 40. A faeces specimen was normal. Dr E referred Mrs B back to Mr D. In his referral letter he stated:

“Poor [Mrs B] is still having problems with fever, purulent stools (a bit foul-smelling at times), off food and [indecipherable]. She improves with antibiotics (usually 10 days Augmentin and Flagyl) only to relapse after 7 days of finishing.

I’ve organised CBC ESR U+E [urea and electrolytes], faeces culture. Copies will be forwarded to you. The family remain concerned about her wellbeing.”

On 22 May Mr D reviewed Mrs B. He noted that her rectal discharge continued, with low-grade fever and mild pain in the left iliac fossa, which was intermittent and settled with antibiotics. Her recent blood tests had been normal and her urine clear and her stool contained no unusual bacteria. He organised a vaginal ultrasound with the option of a limited barium enema, and noted that he would review her thereafter.

Mrs B’s condition improved very gradually. Mr D recalled that she made slow and steady progress, had odd temperatures, and was investigated with a transvaginal ultrasound and CT scans, but no source was found that required further intervention.

*Comments about Mrs B’s postoperative course*

Mr D advised me:

“... [T]he primary problem appeared to be at the anastomosis which was documented on barium studies, and this led onto abscess formation which tracked along the drain site. Mr Breeze had used a double stapling technique, and had air tested this, and from the notes it appeared that the anastomosis was intact. There is a possibility that the primary event could have been a pre-sacral collection which eroded through the anastomosis into the lumen, thus decompressing it partially. This can happen in some cases. The other possibility is ischaemic necrosis of the anastomotic site leading to a leakage which presents with septic complications.

The technique used by Mr Breeze is fairly routine and standardized, and from his notes it does not appear that there were any deficiencies. There was some time lapse between her discharge from hospital after her first operation, to the diagnosis of her problem which needed a second intervention. This could have been detected earlier if necessary steps were taken, thus obviating a crippling problem for months.”

Dr C advised me that she was concerned when Mrs B developed a postoperative complication, but does not recall having any specific concerns about her management. She advised, “I note that when seeing Mrs B in Clinic I often obtained the input of Mr Breeze. I do not recall any problems regarding communication with Mr Breeze and he was always willing to see a patient when asked.”

Mr Breeze advised me in his response to the complaint that he wished to make the following observations about Mrs B’s case:

“ ...

1. Medical treatment, including that of surgical complications is often a step-wise progression. The steps followed are determined by risk benefit analysis.
2. I considered the preferred first line of treatment of her abscess was percutaneous drainage, rather than open surgery. This has a high success rate, is minimally invasive, and avoids disseminating pus into the peritoneal cavity [Mr Breeze provided me with an extract from Kadir, ‘Current Practice of Interventional Radiology’, which states that percutaneous drainage has a success rate of 80-90 percent, and a recurrence rate of 5%. I was not informed of the publication date for this reference].
3. If this was unsuccessful, laparotomy, open drainage of the abscess, and creation of a temporary transverse colostomy, was the second line treatment, as discussed when consent was obtained. This is obviously associated with greater potential morbidity and mortality. [Mr Breeze provided a further reference from Kadir, ‘Current Practice of Interventional Radiology’, which reports a mortality rate of 10-20% and a recurrence rate of 15-30% for surgical drainage.]
4. The mortality/morbidity is potentially even greater in a patient such as [Mrs B] who has previously undergone radiotherapy for cervical cancer. Such patients may suffer radiation damage to the small and large bowel, which jeopardises healing. (This may be the mechanism underlying the development of [Mrs B’s] abscess.) Another important implication is that re-operative surgery is also more hazardous. If this results in inadvertent puncturing of the bowel, as happened, healing may be in jeopardy, potentially resulting in life-threatening abdominal sepsis post-operatively.
5. Through my observations at outpatient follow-up, I formed the impression that [Mrs B] was responding to treatment, and that we should persevere with the first line of treatment. This was the case when I saw her on 25 May 1999. I intended to see her again six weeks later.
6. I was not notified of deterioration subsequently. If I had been, I would have undertaken either further percutaneous drainage, or the second line treatment of open drainage and establishment of colostomy. In the event, she was admitted under my colleague [Mr D], who carried this out.”

Mr Breeze further advised me:

“Open surgery with documented mortality of 10-20% was not indicated in [Mrs B] while she was under my care ... I consider that throughout the time [Mrs B] was under my care, 13 October 1998 to 25 May 1999, that my care was appropriate and was based on a realistic overview of the known risks and benefits of all the potential treatments. If I

had been given the opportunity to complete her treatment, I would expect to have achieved resolution of her problem.”<sup>5</sup>

In light of Mr Breeze’s response that the two management options for drainage of the abscess included percutaneous drainage (the preferred first line of treatment) and laparotomy and open drainage of the abscess, Mr Breeze was asked whether he discussed those two options with Mrs B. Mr Breeze does not recall specific details of his discussion with Mrs B in early 1999. However, he advised that his normal practice is to discuss alternative treatment options, including risks and benefits, and it is likely he would have done so in Mrs B’s case. He noted that Mrs B did not request surgical drainage, and he did not consider that it was clinically indicated.

Mrs B advised me: “The reference to my not requesting surgical drainage I find incredible with my obvious lack of knowledge of medical procedures.”

---

## **Independent advice to Commissioner**

The following expert advice was obtained from Mr Mischel Neill, colorectal and general surgeon:

“[Mrs B] was seen by Mr Breeze in Surgical Outpatients on 13 October 1998. She had had sudden severe abdominal pain in her abdomen, which was brought on by leaning forward, but subsided over three days. This was followed by an attack of diarrhoea, and burning discomfort in the abdomen with some distension. She also had urinary frequency and clots of blood [per rectum]. A barium enema showed moderately severe diverticular disease. A colonoscopy was organised, but this was limited to 25 cm because of severe diverticular disease. Mr Breeze felt on closer questioning that [Mrs B] had noticed pneumaturia, that is passage of air per urethra on a number of occasions and diagnosed a colovesical fistula. Her past history included carcinoma of the cervix, for which she had had a cone biopsy and cobalt radiotherapy in 1972. In 1975 she had a left mastectomy and in 1980 a right mastectomy for carcinoma. In 1996 she had bilateral total hip replacements.

Mr Breeze recommended she have a left hemicolectomy because of a probable colovesical fistula, and advised her that she may have a temporary stoma for three months, the chances of that being around 10%. She was admitted to Tauranga Hospital and on 15 February underwent a left hemicolectomy. There was evidence of recent

---

<sup>5</sup> Mr Breeze’s advice that open surgery was not indicated in Mrs B while she was under his care is inconsistent with his earlier advice to me that surgical drainage was another option available for the treatment of Mrs B’s residual abscess cavity.

severe acute diverticulitis in the sigmoid colon, but there was no colovesical fistula found.

A sigmoid colectomy was carried out, and the descending colon was anastomosed to the upper rectum by means of a double stapling technique. The splenic flexure had been fully mobilised for this to be achieved. The anastomosis was said to be tension free and well perfused. The anastomosis was air tight to the test, and two intact donuts were recorded. Her post-operative progress was steady. There was recorded significant Redi-vac drainage. Unfortunately the figures were not kept entirely and the figures that are recorded showed approximately 700 ml of drainage. She complained on a regular basis of abdominal pain, particularly on the left and on occasion had haematuria. She passed a bowel motion on 20 February five days post-operatively. The Redi-vac drain was removed on the same day. On the sixth day post-op she was given some IV Morphine for the abdominal pain, and on 22 February on the ward round it was recorded that she had passed a soft bowel motion, but there was slight abdominal distension. An MSU showed a growth of E. Coli, for which she was started on Triprim. Her haemoglobin and white cell count were within normal limits. On 23 February she developed diarrhoea, which was thought to have been caused by the Triprim. This continued on 24 February when Triprim was stopped, and an intravenous stat dose of Gentamicin was given.

She was discharged on 24 February where it was recorded that there was no sign of any problems apart from diarrhoea. Over the stay in hospital she had a mildly fluctuating temperature, which fluctuated around 37.5°C, the highest was on 18 February recorded as 38.3°C. Over that time there was no rise in her pulse rate. When discharged from hospital she was afebrile.

She was seen in Surgical Outpatients on 2 March 1999 by [Dr C], Surgical Registrar. She recorded that [Mrs B] was having major problems with diarrhoea and was up 3-4 times per night as a result. She was nauseous, but on examination her abdomen was soft with no tenderness and the wound had healed. The general practitioner [Dr E] recorded that she was passing offensive watery discharge PR. She was feverish, with lethargy and malaise. There was no tenderness in the abdomen, but her temperature was 37.5°C. MSU cultures were normal. Her white count was not raised and tests for clostridium difficile and stool cultures were negative.

She was admitted to Tauranga Hospital on 18 March 1999 where the surgical registrar recorded that her abdomen was tender in the right iliac fossa, and there was a mass deep to the tenderness. A CT was ordered and carried out on 18 March. This revealed a pre-sacral abscess at the level of the anastomosis some 7 x 5 cm in size, and on one plate it could be seen that there was a communication between the rectum and the abscess cavity. The abscess cavity was filled with fluid and gas, which supported the communication with the rectum. An 8 French pigtail catheter was inserted into the abscess cavity and she was commenced on Rocephin, antibiotic. Drainage from the pigtail was not free flowing and required irrigation and aspiration. The following day

she was feeling better, and started to eat more and was discharged home on 23 March 1999 to be seen in Surgical Outpatients on 30 March.

When seen in Outpatients on 30 March by [Dr C] the pigtail drain was removed. There was inflammation around the site of the pigtail insertion into the skin. She was admitted to the ward for observation. She was changed to Augmentin orally and was feeling much better. She was more comfortable and was afebrile. She was discharged on 1 April 1999.

On 13 April she was seen by [Dr C] who recorded that she was discharging pus PR and via the drain site, but she felt that [Mrs B] looked better. On 27 April 1999 she again reviewed [Mrs B] where it was recorded that no pus was draining from the drain site, and that the drainage PR was lessening. Similar findings were found on 18 May at Outpatients and she was recommenced on Augmentin. A CT was again organised where a moderate sized thick walled cavity in the pre-sacral space was again seen measuring 6 x 2 x 6 cm. It continued to contain fluid and air. The radiologist commented that there was still a residual abscess present and recommended further gastrograffin enema to look at the possible continuing tract between the rectum and the abscess cavity. I could not find any record of this having been carried out. On 25 May she was seen in Outpatients by Mr Breeze who recorded that she was entirely well 95% of the time, and on PR there was induration, but no abscess. He also recorded that the CT showed an abscess cavity of 6 x 2 x 2 cm and reassured her that it would shrink down and that no further intervention was needed.

[Mrs B] was admitted back to Tauranga Hospital on 13 July 1999 with a four day history of abdominal pain, constipation, nausea and vomiting. She was tender over her abdomen, although there was no guarding or distension. Her temperature was recorded as 37.3°C. She had a pulse rate of 100 per minute and reduced oxygen saturation level. A plain x-ray was taken and reported by the house surgeon as showing fluid levels and a dilated bowel. Mr Breeze saw her and diagnosed constipation. She was commenced on Augmentin because of her temperature of 38.4°C, and also commenced on Lactulose. This produced a large bowel motion later in the day and she was then discharged home feeling much more comfortable.

Her general practitioner [Dr E] wrote to [Dr D] on 13 July 1999 asking if he would see this lady as she had significant weight loss, spiking fevers. She was weak and lethargic. She had a buttock abscess and an abdominal x-rays showing fluid levels. [Dr D] admitted her on 19 July. A CT was organised, which showed the continuing pre-sacral abscess communicating with an abscess in the buttock via the old drain site. The pre-sacral abscess measured 6 x 7 cm and a barium enema carried out following this showed an anastomotic leak between the rectum and the pre-sacral abscess. [Dr D] discussed this problem with his colleagues and on 26 July 1999 carried out a laparotomy on [Mrs B]. There were extensive adhesions, which were freed, and these adhesions along with the small bowel had sealed off the pre-sacral abscess. Once he exposed this pre-sacral abscess he drained it, and reported that the anastomosis appeared to be intact. There



was a sinus tract communicating with the pre-sacral abscess. The pre-sacral abscess was lavaged and drained via a large bore tube. He then carried out a division of the transverse colon bringing the proximal end out as a colostomy and stapling of the distal end. The right buttock abscess was opened and the sinus curetted. She was commenced on triple antibiotics, namely Gentamicin, Amoxycillin and Metronidazole. She made slow but steady progress over the ensuing days and was discharged home on 6 August 1999.

She was seen in Clinic six weeks later where a barium study was carried out that showed a healed anastomosis. In February 2000 her colostomy was closed, the abscess cavity having resolved.

### *Complaint*

I was asked by the Commissioner whether in my professional opinion Mr Breeze provided services to [Mrs B] with reasonable care and skill in accordance with professional standards. He was interested in the following points.

### *Supporting Information*

- [Mrs B's] letter of complaint, dated 12 December 2003; transcript of interview with [Mrs B] on 23 March 2004; and transcript of interview with [Ms A] on 22 March 2004.
- Notification of investigations to Mr Breeze, dated 4 March 2004; Mr Breeze's response to the complaint, dated 25 March 2004; request for further information from Mr Breeze dated 10 May 2004; and Mr Breeze's response, dated 17 May 2004.
- Request for information from [Mr D], dated 4 May 2004; and [Mr D's] response, dated 26 May 2004.
- Request for information from [an anaesthetist], dated 4 May 2004; and [the anaesthetist's] response, dated 10 May 2004.
- Request for information from [Dr C], dated 4 May 2004; and [Dr C's] response, dated 16 May 2004.
- Request for information from [a house surgeon], dated 4 May 2004; and [the house surgeon's] response, dated 4 May 2004, enclosing [Mrs B's] general practitioner records.
- [Mrs B's] medical records from Tauranga Hospital.

### **Expert Advice Required**

#### **Operation 15 February 1999**

*The appropriateness of Mr Breeze's pre-operative assessment on [Mrs B].*

Mr Breeze after examining [Mrs B] in the Outpatients Clinic gave a provisional diagnosis of diverticular disease with a colovesical fistula. She had a barium enema, which demonstrated diverticular disease and this was followed by a colonoscopy, which confirmed diverticular disease. There were no other investigations carried out, in particular no investigation for colovesical fistula in the form of a CT or ultrasound, or

cystogram. There was also no record of previous urinary tract infections with bowel flora to support this diagnosis. The decision to operate and carry out a left hemicolectomy was based on the presumption of a colovesical fistula. There had been very little in the way of symptoms apart from the one attack prior to her being seen in Outpatients. She did indeed have severe diverticular disease and it was not possible to pass a colonoscope up beyond 25 cm. This finding in itself was justification for the surgery and so a sigmoid colectomy was appropriate in this lady. The operation appeared to be performed with reasonable care and skill in accordance with professional standards and it was quite reasonable to carry this out with the assistance of a first year house surgeon, as his main job would be that of retraction during the procedure and the holding and division of sutures.

*Any other matters*

This lady had had cobalt therapy some 20 years prior to this surgery. In those days the radiotherapy was somewhat blunderbuss treatment and would have exposed the rectum to radiation. Given this fact the risks of an anastomotic breakdown would have been high. I therefore think it would have been prudent to have covered the anastomosis with a stoma, either an ileostomy or a proximal colostomy.

*Post-operative care following the operation 15 February 1999*

[Mrs B's] condition prior to her discharge on 24 February was largely uneventful. She did complain of a sore abdomen over many days post-operatively, but no conclusion was reached by either Mr Breeze or the registrar or house surgeon. A sigmoid colectomy is a painful procedure and produces varying degrees of abdominal pain post-operatively in people. Similarly many patients have a low grade fever after sigmoid resection for diverticular disease, particularly as it was recorded that there were inflammatory changes within the sigmoid colon not found on histology. The Redi-vac drain was recorded as having copious losses, but searching the notes the only volumes recorded amounted to around 700 ml of fluid, which would be in keeping with resection of the sigmoid colon, which was inflamed. Some of this would be serous fluid as well as blood from the raw areas of the abdomen. Her haematuria may have been caused by either inadvertent traction on the catheter, the urinary tract infection of E. Coli, which she was recorded as having, or thirdly by cobalt treatment damage to the bladder some 20 years previously. This frequently leaves a very damaged bladder mucosa, which bleeds easily. [Mrs B's] progress post-operatively prior to discharge did not really reflect signs of an anastomotic leak specifically. Her post-operative progress clearly did not concern the clinicians enough to justify investigation of her abdominal pain or low grade fevers. These investigations may well have been an abdominal x-ray or CT of her abdomen.

[Mrs B's] condition following her discharge was significant. She had developed a major problem with diarrhoea. She was feeling feverish and lethargic and was recorded as having an offensive watery discharge PR. The correct investigations were carried out, being stool cultures and tests for clostridium difficile, but once these came back negative then clearly she needed further investigations, which were carried out once she was readmitted to hospital on 18 March 1999. Between being discharged and being

readmitted on 18 March she was seen on two occasions by the registrar, but not by Mr Breeze. I am unsure as to whether the registrar discussed these findings with Mr Breeze. When she was readmitted to Tauranga Hospital she had a CT carried out the same day, and the diagnosis of a pre-sacral abscess was made and a pigtail catheter inserted to drain the abscess. She was commenced on intravenous antibiotics as well. I believe the time frame was reasonable between her initial discharge from hospital and readmission and treatment commenced. Recognition of a significant anastomotic leak may be delayed as the non-specific symptoms of low grade sepsis including elevated temperature, prolonged ileus, diarrhoea, malaise, and failure to thrive can be attributed to recovery from a major operation, rather than that of a major anastomotic failure. She then received prompt investigation and treatment of the pre-sacral abscess. I believe Mr Breeze's post-operative management of [Mrs B] was appropriate, and that he provided reasonable care and skill.

### **Management of pre-sacral abscess**

*Whether Mr Breeze's management of [Mrs B's] pre-sacral abscess was appropriate.*

There are two ways of dealing with a pre-sacral abscess following an anastomotic leak. The first is the placement of a pigtail catheter into the abscess or two to open up the anastomotic leak to achieve adequate drainage of the abscess into the rectum itself. Both forms of treatment are acceptable and probably the insertion of the catheter would be the more frequent used technique. Once the routine irrigation of a catheter is established it is reasonable to discharge the patient home and have a nurse irrigate the catheter from time to time to prevent any blockage. This also is standard practice. The treatment for the abscess draining really is purely to keep the catheter patent, and this is achieved by irrigating the catheter. It was appropriate to review [Mrs B] in Outpatients to check that this was being achieved. It would appear from the notes and the results that the catheter was probably removed too early and that the abscess itself was not drained completely. There is very little information in the notes as to how much pus and drainage occurred from the abscess cavity. She was seen on 30 March 1999 by the registrar [Dr C]. She recorded that the area round the drainage catheter was very sore and that pus was oozing around it, which suggested that the catheter was probably blocked. She was not coping at home with this and so the pigtail catheter was removed and she was admitted back to hospital.

Arrangements prior to discharge was for Mr Breeze to see her in Outpatients on the 30<sup>th</sup>. There had been co-ordinated and managed care by the district nurse. When she was seen in Outpatients though it does not appear that she did see Mr Breeze, but was treated by the surgical registrar. After the discharge on this occasion she was then seen in Outpatients at regular intervals by the registrar. PR drainage continued for several weeks, but then decreased in volume. A CT carried out in the middle of [May] confirmed that the abscess cavity was still sizeable. It was thick walled measuring 6 x 2 x 6 cm and contained fluid and air. This represented a residual abscess.

I believe at this time a decision should have been made to defunction the colon and reinsert a drain into the abscess cavity. It was unfortunate that the suggestion by the

radiologist of gastrograffin enema was not carried out as this would have highlighted the fact that a communication between the rectum and abscess still persisted and would have made the decision to defunction much easier.

[Mrs B] did not appear to receive any further antibiotics until she was readmitted to hospital on 13 July 1999 when she was given intravenous Augmentin. I do not believe that this was adequate antibiotic cover. She was not monitored after 25 May until she returned to hospital on 13 July 1999. At that stage she was complaining of abdominal pain and constipation. She had a raised temperature, and an abdominal x-ray showed fluid levels in the abdomen, which would be consistent with an ileus or subacute bowel obstruction with progressive abscess inflammation. Initially [Mrs B's] condition was appropriately managed, but once the catheter was removed it was falsely felt that she was improving, and that the abscess cavity would resolve. However, this did not appear to be monitored. Following the scan on 21 May showing a residual abscess cavity with fluid and gas present there did not appear to be any further management of this. There were no further investigations carried out, in particular a gastrograffin enema to establish whether there was persisting communication with the rectum. The advice Mr Breeze gave [Mrs B] that the cavity would shrink and disappear was inappropriate. The cavity clearly needed to be drained and the colon defunctioned. The significance of [Mrs B's] bowel obstruction was more likely to be an ileus consistent with the inflammation from the pre-sacral abscess. This would account for her other symptoms as well, namely the raised temperature, the increased pulse, the abdomen being tender, the feeling of nauseousness and vomiting. It was felt by Mr Breeze that she was constipated and was given Lactulose, which initiated a bowel motion, and she was discharged soon after. A further plain abdominal x-ray would have been appropriate prior to discharge.

### **General Questions**

#### *The overall management and treatment*

The original barium enema carried out on 13 August 1998 showed moderately extensive changes of diverticular disease and in the sigmoid florid diverticulae. There was no mention of strictures or inflammation. This appeared from the notes to be the first attack that this lady had had. Mr Breeze assumed that she had a colovesical fistula and without any investigation, that is a CT, a plain abdominal x-ray, dye placed into the bladder, or cystoscopy. He recommended to her that she have a sigmoid colectomy. The risks of surgery in this lady at her age of 70, and her past history of cobalt radiotherapy to the uterus and cervix, which would have exposed the whole rectum, placed the risks of complications at a very high level. At operation Mr Breeze reported in his operation note that there was evidence of recently acutely inflamed diverticulitis. This was not supported on histology. I believe that most surgeons, given the history of cobalt therapy to the pelvis would have defunctioned this lady for at least three months post-operatively. When she developed a pre-sacral abscess, even with the knowledge that there was communication between the rectum and the abscess a pigtail drain was inserted via CT imaging. This failed to drain the abscess adequately and when the pigtail catheter was removed a repeat CT showed the abscess still present with fluid levels, and

gas within it, this lady should have had a defunctioning colostomy and further drainage of the abscess. Because the abscess was not drained, and continued to communicate with the rectum, the abscess increased in size, and eventually required a further laparotomy with defunctioning colostomy and drainage of the pre-sacral abscess by [Dr D].

After reading the notes it becomes apparent that Mr Breeze did not know what to do with the resolving abscess after the drain had been removed. In this situation it is always helpful to discuss the case with other clinicians, who may have had experience in this area, and to obtain a variety of opinions to base the further treatment on. This was not done.

All patients in Outpatients are under the care and responsibility of the surgeon. Often these patients are seen by the registrar or house surgeon, but the responsibility remains with the surgeon, and the junior staff should be encouraged to discuss any problems at all with the surgeon, so that he can make a decision as to whether he sees the patient or not. He may just give advice, which would be carried out. Discussion with the surgeon by junior staff is a teaching process for the junior staff as well.

**It is my opinion that Mr Breeze did not act with reasonable care and skill in the treatment of [Mrs B], and his treatment was a major departure from the required standard of care.”**

---

## **Response to provisional opinion**

Mr Breeze provided a detailed response to my provisional opinion, and additional independent advice from Professor Frank Frizelle, colorectal surgeon and Professor of Colorectal Surgery. (Professor Frank Frizelle’s report is attached as Appendix One.) Professor Frizelle concluded that “at no point was there a deviation from normal care”, and that “[t]he operative management of [Mrs B’s] diverticular disease was appropriate”.

Mr Breeze submitted:

1. The use of a stoma in patients undergoing surgery for diverticular disease, who have undergone previous pelvic radiation, is selective rather than routine. He noted:
  - (a) My advisor’s comment that the radiotherapy [Mrs B] underwent for her cervical cancer 20 years earlier was “blunderbuss” treatment and would have exposed her rectum to radiation is speculative, and not based on evidence of how, where or when the radiotherapy was given. There was no evidence of radiation damage to [Mrs B’s] rectum on barium enema, colonoscopy, or histology.
  - (b) While low colorectal anastomosis should always be protected by a covering stoma, which should be constructed through normal non-irradiated bowel, in a high

colorectal anastomosis (as used in [Mrs B's] case) a covering stoma is not mandatory. Prior radiotherapy does not mandate the creation of a temporary stoma to protect a high rectal anastomosis. Knightly, M., and Williams, N., "Surgery of the Anus Rectum and Colon" (1993, WB Saunders) note in chapter 62 ("Radiation Injury to Colon and Rectum"): "Ideally anastomoses should be performed between two entirely healthy segments of bowel which lie outside the irradiated field. Sometimes this is not possible, but one side of an anastomosis should be normal and outside the radiation field." Mr Breeze advised that in Mrs B's case he used the descending colon, from outside the radiation field, as one side of the anastomosis and the upper rectum as the other side, in accordance with the above principles.

- (c) [Mrs B's] bowel had been well prepared before surgery with two preoperative doses of oral fleet, and had been adequately cleared of faecal residue. Knightly and Williams note: "When a persistent fibrous stricture complicates diverticular disease, resection is almost inevitable. Primary resection without a covering stoma may be used, provided the proximal bowel can be adequately cleared of residual faecal residue."

Mr Breeze advised that while he considered whether or not to deploy a stoma in [Mrs B's] case, after full evaluation he elected not to create a stoma because [Mrs B] had a technically faultless anastomosis (it was tension free, well perfused, air tight on insufflation, and had two intact do-nuts), had a well prepared bowel prior to surgery, and was "ASA grade II, with no significant co-morbidity". The creation and closure of a stoma is unpleasant, and can cause significant complications.<sup>6</sup> Mr Breeze submitted that the criticism of his decision not to create a stoma is based on hindsight. He argued that his decision not to create a stoma was "logical, entirely reasonable, supported by surgical science" and that his actions were those of a prudent surgeon.

2. The criticism of his management of [Mrs B's] abscess is based on a mis-interpretation of the serial sizes of [Mrs B's] pelvic abscess between 18 March and 21 May 1999. Mr Breeze provided a report by a consultant radiologist who reviewed the films of 18 March and 21 May 1999 retrospectively, and noted:

"I have reviewed the CT images of this woman. The CT scan of 18.03.99 shows a posterior pelvic collection which has an enhancing rim and central low attenuation consistent with an abscess. This has dimensions of 8cm transverse x 6.5cm sagittal x 5cm AP for an approximate volume of 120ml.

The subsequent CT of 21.05.99 shows the collection has decreased significantly in size and at this time dimensions are 6cm transverse x 4cm sagittal x 1.6cm AP for an approximate volume estimated at 15.18ml."

---

<sup>6</sup> Mr Breeze advised that complications from a stoma include bowel obstruction, peritonitis, fistula, infection, haemorrhage, retraction prolapse, hernia, fluid and electrolyte depletion and skin excoriation.

Mr Breeze noted that the CT scans indicate that [Mrs B's] abscess had diminished in size dramatically between the two scans. In particular, there had been an 85-88% reduction in abscess volume between 18 March and 21 May. Mr Breeze noted that the reduction in size of the abscess was confirmed to him during his examination of [Mrs B] at the outpatient department on 25 May 1999. He was reassured that the internal drainage of [Mrs B's] abscess into her rectum was effective. Accordingly, Mr Breeze rejected my advisor's comment that he should have arranged to defunction [Mrs B's] colon and reinsert a drain into her abscess cavity. Mr Breeze advised that the establishment of a colostomy would have been a major intervention, and was not indicated at the time. Mr Breeze stated that my advisor's comments are based on hindsight. In addition, Mr Breeze noted that reinsertion of a drain was not indicated; he was aware that her abscess was draining rectally and [Mrs B] had previously tolerated percutaneous abscess drainage poorly. He noted, "The alternative of trans-abdominal drainage, attended by a documented mortality rate of 10-20% and recurrence rate of 30%, was clearly inappropriate."<sup>7</sup>

Mr Breeze noted my advisor's comment that because the abscess was not drained, and continued to communicate with the rectum, the abscess increased in size. Mr Breeze advised that "... if an abscess is communicating with the rectum, internal drainage is established".

Mr Breeze concluded that his opinion on 25 May 1999 was that abscess drainage was effective, that it had produced a dramatic reduction in abscess size, and that as long as that continued there was no indication for further interventions.

3. The criticism that he did not provide appropriate antibiotic cover for [Mrs B] is based on a misperception that the abscess was not diminishing in size. Mr Breeze noted that, contrary to the advice of my advisor, [Mrs B] did receive further antibiotic treatment prior to her readmission on 13 July 1999 – it is recorded in the hospital notes that her GP started antibiotics two weeks earlier because of a fever. Mr Breeze advised:

"I do not accept that [Mrs B] should have been on antibiotics continuously, as this would have exposed her to a significant risk of antibiotic induced complications. [Mrs B] was appropriately provided with intermittent short courses of antibiotics by myself, my registrar, [Dr C], and by her General Practitioner, [Dr E]."

---

<sup>7</sup> In support of his view, Mr Breeze quoted a passage from Knightly, M. and Williams, N., "Surgery of the Anus Rectum and Colon" (1993, WB Saunders): "Surgical Drainage: As explained, open surgical drainage is used infrequently today: however it occasionally has a place, particularly if laparotomy is indicated for other reasons. Aeder and others (1983) reviewed the complications of surgical drainage of 31 patients; they included septicaemia in 7, fistula in 4, recurrent abscess in 3 and major episodes of bleeding in 2. Laparotomy should be avoided where possible but is indicated in poorly localised sepsis, persisting pain despite percutaneous drainage, and if multifocal collections are present (1983 Aeder Abdominal Abscesses Arch Surg 118 273-9)."

4. He did not fail to monitor [Mrs B] between 25 May and 13 July. He noted:

“After her outpatient visit on 25 May 1999, as is documented, I arranged a further follow-up six weeks later, ie 5 July 1999. I consider that this was a reasonable follow-up interval, because her pelvic abscess had diminished dramatically in size on prior serial CT scanning.”

Mr Breeze was not sure why the appointment took place on 13 July, rather than 5 July.

5. The criticism of his management of [Mrs B] during her admission on 13 July 1999 is based on hindsight, and a misconception that [Mrs B's] abscess had not diminished in size. Mr Breeze advised:

“The salient features of [Mrs B's] admission 13-15 July 1999 are:-

- a 4 day history of gradual onset of intermittent fluctuating lower abdominal pain that was sharp and sometimes severe, with nausea and vomiting.
- continuing drainage of the pelvic abscess rectally.
- a soft non-tender abdomen with quiet bowel sounds.
- mild tenderness on rectal examination, but no masses were present.
- apyrexial on four of six readings, low grade fever on two readings of 37.9, 38.3, resolving with two subsequent normal readings.
- non specific mild abnormality on abdominal x-rays, consistent with, but not diagnostic of obstruction/ileus and significant faecal content.
- E coli urinary track infection detected on MSU.
- administration of oral laxative was followed by a large bowel motion with resolution of symptoms and of the low grade fever.

I note Mr Neill has criticised me for not repeating the plain abdominal x-rays prior to discharge. Has Mr Neill reviewed the films taken on the 13 July 1999, in order [to] form this opinion? If not, I request that he does. He will find a subtle very mild non-specific radiological abnormality. Because of this, and because of rapid and complete resolution of the patient's symptoms, I did not consider repeat x-rays were clinically indicated, and would not have altered management.”

Mr Breeze does not believe that either the clinical or radiological features support Mr Neill's diagnosis of ileus. He noted:



“[Mrs B’s] discharge diagnosis was constipation. I consider this diagnosis was correct, and that this, and her associated urinary tract infection were treated appropriately. With the benefit of hindsight, her transient fever may have heralded the development of a buttock abscess that became manifest 4 days after discharge, but at the time I considered the fever was secondary to her urinary tract infection. The abscess was not apparent during [Mrs B’s] admission under my care.”

---

### **Additional expert advice**

Mr Mischel Neill reviewed Mr Breeze’s response to the provisional opinion, and the colorectal surgeon’s report, and provided the following additional expert advice:

“In reply to your letter of 15 October 2004 with questions taken from the responses by Mr Breeze and Professor Frizelle].

1. That a stoma is non-mandated to protect a high rectal anastomosis.

The risk of leakage from an anastomosis is always a worry and can lead to major complications from abscess to death (quoting Professor Frizelle’s] figures, 20-30% mortality rates, his references 1-4) and are more common in rectal anastomoses. The mortality rate from stoma closure, once again taken from Professor Frizelle’s] response is 1-2% (see Professor Frizelle’s references 1-6).

Radiation from cobalt, in New Zealand in 1972, for cervical cancer would have involved two delivery ports, front and back of the body (nowadays four ports are used to reduce radiation exposure to individual organs). Because only two ports were used a high dose was given each day. This was to give a high dose effect to the area involved, but it also gave a high dose to surrounding tissues. [Mrs B] may well have also received intra-cavity radiation. In discussion with the radiotherapists at [another] Hospital they confirmed that the fields of radiation in 1972 would have covered the pelvis up to the common iliac vessels at the level of L5/S1. This would have involved the whole rectum, and some of the sigmoid colon. The target area would have received 60 gray and the rest of the pelvis at least 40 gray.

In the American literature they state that construction of a protective colostomy is advised if an anastomosis will be done after radiation in the range of 4000-5500 rads (which is 40-55 gray)(1). The radiotherapy effect is largely on the blood vessels of the organ. Mr Breeze does not record whether he divided the inferior mesenteric vessels or not, which may have been the main vessel of supply to the rectum following the radiotherapy to the rectum. If the inferior mesenteric vessels were divided then the leak may have been caused by a combination of the radiotherapy and ischaemia of the rectum. It is not mentioned in the histology whether there was radiation damage to the distal end of the resection. This may well have been because it was not asked for, and

the diagnosis concerned was that of diverticular disease. Also of course the histology was not known at the time of resection.

Mr Breeze quotes from *Surgery of Anus Rectum and Colon* by Michael R B Knightly and Norman S Williams. Their quoted words do not cover [Mrs B's] case.

'Low Colorectal anastomosis should always be protected by covering stoma.' Mr Breeze's conclusion from this is not valid.

I believe that a prudent surgeon would have defunctioned this anastomosis.

2. Is there evidence of significant reduction in size of the abscess cavity between 18 March and 21 May 1999, such that it was appropriate for Mr Breeze to expect the cavity to resolve over time.

Thank you for the CT x-ray plates of 18 March 1999 and [21] May 1999. I have measured the abscess cavities on 18 March as 8cm x 5cm x 7cm and on 21 May 1999 as 6 cm x 2 cm x 6 cm. While there is a decrease in the size of the cavity over this time it is still significant especially when there is two months between the scans. One would have expected the cavity to have been much smaller or even resolved over that two months. The second CT was ordered after [Mrs B] was seen in Outpatients, and it was recorded that 'no pus from the drain site and PR drainage was lessening.' Pus still discharging after two months from an abscess would strongly suggest that it is not draining adequately. I believe a further CT should have been carried out at that point, and a decision made as to whether more adequate drainage should be carried out. I have to agree that these comments are made in hindsight, but it certainly produced a long period of ill health for this lady, which could have been prevented if careful observation of the abscess had been carried out. I disagree with Professor Frizelle's, this abscess was not a small abscess, and the leak was significant.

3. Should Mr Breeze have given weight to the fact that [Mrs B] had previously tolerated percutaneous abscess drainage badly [in] deciding whether to wait for the cavity to resolve.

Fry F L(2), in his study of intra-abdominal abscesses, concluded that a delay in diagnosis, ineffectual drainage and failure of the host defensive mechanism, were the determinances of poor outcome. Pichter and Musher (3) also found that delay in definitive treatment was the main determinant of morbidity and mortality in these patients.

I can find no reference that [Mrs B] tolerated percutaneous drainage poorly. The drain was clearly not draining well, requiring aspiration and irrigation to obtain drainage, there was no free drainage. The wound from the drain was infected and painful. All features, which could have been improved by better placement of the second catheter. The other alternative was placement of a catheter through the anal canal into the leaking anastomosis. Enlargement at least of the anastomotic leak site would have

helped drainage, and it may have been possible to pass a catheter into this anastomotic hole. In the Algorithm for the management of abdominal pelvic sepsis by percutaneous or surgical drainage (4) you will see that they first opt for percutaneous drainage, and if that is unsuccessful, which it was in this lady's case, they move onto surgical drainage. If the sepsis does not resolve from successful drainage they re-scan and if inadequate drainage they then consider other options. If the cavity size is decreased with no new abscesses they suggest antibiotic therapy for a trial, and then if the sepsis continues consider exploration. This really covers [Mrs B's] situation. Mr Breeze had options which he should have considered, rather than just leaving the abscess to self drain. Mr Breeze's references to morbidity and mortality in transabdominal drainage I suspect is in the acute phase (he doesn't say) not in the chronic stage. His references are also old.

4(a) Was the abscess diminishing in size.

The abscess cavity was indeed decreasing in size. This is shown by scans taken two months apart. The scan on 21 May 1999 still shows an abscess with pus and gas in the abscess cavity.

(b) Was there a need for antibiotic cover even if the abscess was diminishing in size?

The treatment for an abscess is adequate drainage. Antibiotics are really to cover the initial drainage period, and for systemic signs and symptoms. However, there are two schools of thought, one being to give continuous antibiotics over this time, and the other to give intermittent antibiotics as necessary. At the time Mr Breeze saw [Mrs B] in Outpatients he did not record systemic symptoms, and he made the statement that there was no abscess so antibiotics in that situation were not required.

(c) Would continuous antibiotic cover have exposed [Mrs B] to a significant risk of antibiotic induced complications?

Yes. This is a possibility, and could be countered by altering the antibiotics used if it was necessary to have been on continuous antibiotic cover.

(d) Would a surgeon practising with reasonable care and skill have ordered continuous antibiotics?

As mentioned there are two schools of thought. However, my report does not recommend continuous antibiotic cover. My comment was that I did not believe Augmentin was adequate cover. She had already had at least two courses of Augmentin in the past, which had not led to resolution of the abscess, so my comment was made because I felt that a change in antibiotics was appropriate at that stage. This would have been even more appropriate had cultures been carried out, which had shown resistance to Augmentin, which the recurring symptoms would suggest.

(e) Do I need to change my advice about the need for antibiotic cover in light of [Mrs B] having been prescribed antibiotics by her general practitioner on 22 June 1999?

I was not aware that the general practitioner had started [Mrs B] on antibiotics on 22 June 1999, but my comments are unchanged.

5. Was it reasonable for Mr Breeze to regard the radiologist's suggestion that gastrografin enema may be of value is something less than a recommendation.

The comment by the radiologist was a suggestion rather than a recommendation, which radiologists tend to make as they do not have the full clinical picture in front of them. I believe that it was unfortunate that a gastrografin was not carried out at the stage, as it would have shown:

- (a) The size of the residual abscess.
- (b) Size of the anastomotic leak and how well the abscess was draining.
- (c) How dependent the drainage was, which may have led to a more definitive drainage procedure, rather than a wait and see attitude.

While the abscess cavity had decreased in size it was still a significant abscess cavity two months after initial drainage, which most surgeons would have expected it to have resolved almost completely in that time if it had been well drained.

(6) (a) Whether Mr Breeze's plan to follow up [Mrs B] six weeks after 25 May 1999 appointment was appropriate, given his decision to wait for the cavity to resolve.

Mr Breeze's plan to follow up [Mrs B] six weeks after being seen in Outpatients on 25 May was appropriate in timing in the public system, but clearly she was not well as the notes progressively record, and a repeat CT of the pelvis to further assess the abscess cavity prior to her return to clinic on 5 July 1999 would have shown whether there was further decrease in abscess size (ie adequate drainage) or an increase in abscess size.

(b) What procedures if any could a surgeon working in the public system reasonably be expected to have in place.

Outpatients' appointments in the public hospital system have always been fraught with problems. There are two problem areas. 1) Patient leaves the doctor and walks out not making a further appointment with the outpatients clerk. 2) Patient does not turn up at the appropriate time.

One system to help the first problem is to have a card with 'no further appointment' or appointment in say six weeks, which the surgeon would circle his preference, then all patients would show this card to the clerk before leaving. However, I must say even this is beaten by the patients at times.

If the patient misses an appointment it is usual for the outpatients clerk to ring and re-book the patient. This may be after consultation with the doctor as to whether a further appointment is really necessary.

In a busy public hospital system it is very difficult for a doctor to keep track of individual patients, and it is my personal belief that patients must take some responsibility. The doctor must rely heavily on those whose responsibility it is to arrange the appointments for the patient.

There appears to be two different opinions with regard to [Mrs B's] appointment. Mr Breeze states that he would see [Mrs B] on 5 July 1999, while [Mrs B's] family states that Mr Breeze did not want to see her again. The letter sent by Mr Breeze from the Outpatients Department on 25 May to the general practitioner may answer that question. Unfortunately I have not seen this letter. If Mr Breeze requested an appointment for 5 July 1999, and the appointment was not made, or was not kept then I would agree with Mr Breeze that it was not his responsibility.

7. (a) X-rays taken on 13 July 1999 showing subtle very mild non-specific radiological abnormalities.

I did not have access to the abdominal x-ray itself, but the radiologist's report read, 'Short fluid levels in the mid and distal small bowel. Appearances consistent with obstruction or ileus. There is faecal content seen in non-distended colon.' (A comment of the faecal content is frequently made on a normal abdominal x-ray.) These comments to me do not sound subtle.

[Mrs B] was admitted on 13 July 1999 with a four day history of abdominal pain, nausea and vomiting, and having not passed a bowel motion for four days. She was tender over her abdomen. Her temperature was 37.3 with a pulse rate of 100 per minute and reduced oxygen saturation level. Her temperature later rose to 38.4 degrees Centigrade. Urinary culture grew E. Coli organism. She was treated with Augmentin and given Lactulose syrup, which stimulated bowel function, and it is recorded that she was feeling more comfortable and was sent home.

The urinary tract infection could have caused the septic features, but I would not have expected abdominal pain to occur with a non-distended colon as referred to in the x-ray report. For severe constipation I would have expected the radiologist to have reported a distended colon loaded with faeces. The comment in the notes was feeling much more comfortable, rather than feeling better.

A repeat x-ray would have in fact been confusing, as she would have had further fluid levels due to the Lactulose ingestion. She was still discharging pus PR four months after diagnosis of pre-sacral abscess, and this really demanded a further CT to assess why the abscess had not settled, and so a CT examination would have been beneficial at that time. The letter written by her general practitioner to [Dr D] the day she was admitted to the hospital does not record symptoms noted by Mr Breeze. The general practitioner records significant weight loss, spiking fevers, weak and lethargic, buttock abscess and abdominal x-rays showing fluid levels. The fact that the GP wrote to another surgeon on the same day that [Mrs B] was admitted shows his frustration from lack of treatment for this patient.

(b) What clinical or radiological features support your diagnosis of ileus?

Fluid levels in the x-ray suggest that the fluid content of the small bowel was not progressing through into the colon. This can be caused either by an obstruction, which would cause colicky abdominal pain, or an ileus, which will cause tenderness, but does not usually cause a colicky abdominal pain. In an ileus the colon may have faeces within it because there is lack of progression of the alimentary tract contents towards the anus.

There was abdominal tenderness to palpation, nausea and vomiting over four days with a mildly raised temperature. The vomiting may have been caused through fluid build up in the stomach like that in the small bowel, and vomiting relieves the distension. Any inflammation within the abdomen can cause an ileus, for example an appendix abscess, pancreatitis, inflammation of the gallbladder or a pelvic abscess.

(c) What evidence is there to support that a pre-sacral abscess can cause an ileus in a patient with normal electrolytes and albumin?

An ileus itself does not usually cause abnormal electrolytes in the first few days, nor would it cause a decrease in albumin levels. Changes in electrolytes are due to an extra-cellular shifting of electrolytes, excretion by the kidneys, and altered replacement by intravenous drip. One would not expect the electrolytes to be abnormal in an ileus unless it was prolonged. Certainly if the vomiting had been profuse then that itself would change the electrolytes. Without infection I would not expect the albumin to have changed at all. Albumin falls rapidly in acute severe infection, but not rapidly in chronic infection, but with the pre-sacral abscess of five months duration (CT 19 July 1999 6 x 7 cm 'a large abscess') I would have expected the albumin to have been lower than 45 g/l. This probably reflects the chronicity of the abscess. I believe the ileus was caused by the increasing pre-sacral abscess size with inflammation in the wall of the rectum and pre-sacral tissues, the constipation or faecal content within the colon was secondary to the ileus.

(d) Was it reasonable for Mr Breeze to diagnose constipation and associated urinary tract infection.

Culture of the urine showed infected urine so the diagnosis of urinary tract infection was correct. A urinary tract infection in this lady with pus discharging from her rectum would have been a very likely diagnosis. Certainly the cultures confirmed it. However, the x-ray report from the radiologist reported faecal contents as seen within a non-distended large bowel. If the constipation was the cause of the abdominal pain and tenderness I would have expected the colon to be more distended and loaded with faeces and that the radiologists would have made this point. Mild loading of faeces as suggested by the radiologist is more in keeping with ileus.

8. Does the pathologist findings support the diagnosis of recent severe acute diverticulitis?

The pathologist's report does not support the diagnosis of recent severe acute diverticulitis. In fact it says the very opposite. He reports a stricture of the lumen of the sigmoid colon, but then says there is no complicating diverticulites (infection) or paracolic abscesses, which one would see in recent severe acute diverticulitis. The pathologist really reports 'a sigmoid colon with an area of thickened wall with a tight stenotic lumen measuring less than 10 mm in diameter. There were multiple diverticulae in that area, but no inflammation.' A stricture in diverticular disease is a complication of diverticular disease. The stricture could have been there for a considerable time. The other point that it is worth considering is whether the stricture may have been caused by the radiation damage at the time of radiotherapy. Unfortunately no comment was made whether the distal end showed radiation damage or not, probably because the question was not asked.

9. Whether I implied that percutaneous drainage was inappropriate?

CT guided drainage was appropriate at the time, but intra-rectal drainage, that is enlarging the anastomotic defect was another way of draining the abscess. Placement of the drain per anum into the abscess cavity via the anastomotic defect and the drain placed on suction and/or irrigation reduces the risk of a fistula from the anastomosis via the abscess to the skin opening of the percutaneous drainage. This in fact did occur in [Mrs B's] case as clearly recorded in [Dr D's] operation note. I think the main point of this comment is that she really required better drainage of the abscess than she had, by a second percutaneous drain as mentioned, per rectum, [or] by surgical drainage.

10. Error in [Dr D's] operation note.

I agree with Professor Frizelle's comments 'saline lavage was carried out and Mass closure was carried out with one layer of continuous nylon'. This was not really of any significance and would not change any comments I have made.

11. Significance of Professor Frizelle's comments

- (a) Post-operative course of the kind experienced by [Mrs B] is not uncommon. If [Professor Frizelle's] is commenting on the pre sacral abscess not being uncommon, then this may be so in his practice but certainly isn't in mine. The leaking anastomosis and abscess formation is an uncommon complication. If his comments are made about diverticular disease in general, I would agree. However, [Mrs B's] postoperative problems were not really due to diverticular disease, but were due to a leaking anastomosis and a non-resolving pre-sacral abscess resulting in poor rectal function.
- (b) 'Elective diverticular disease resection'. I agree with this statement but once again her problems were not from the diverticular disease, as such but secondary to possible radiation damage or possible ischaemia leading to leaking anastomosis and pre-sacral abscess.

- (c) ‘Recurrent diverticulitis and persisting symptoms’, I also agree with this statement, but are irrelevant in this case.

...

### References

1. Principles and Practice of Surgery for the Colon, Rectum, and Anus. Philip H Gordon and Santhat Nivatvongs.
  2. Fry D E, Garrison R N, Heitch R C, et al. Determinants of Death in Patients with Intra-abdominal Abscess. Surgery 8:517-523, 1980.
  3. Pithter W D, Musher D M. Critical Importance of Early Diagnosis of Intra-abdominal Infection. Arch, Surg 117:328-333, 1982.
  4. Complications of Colon and Rectal Surgery. Edited by Terry C Hicks, David E Beck, Frank G Opelka, Alan E Timmcke.”
- 

## **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.*
- ...
- (4) *Every consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer.*
-



## Relevant standards

Clause 8 of the Royal Australasian College of Surgeon's *Code of Ethics* (September 1993):

“During an episode of care, the surgeon should ensure continuity in the management of the patient, in order to provide reassurance, to relieve suffering and, where appropriate, to reassess clinical decisions and therapeutic options ...”

Clause 10 of the Royal Australasian College of Surgeon's *Code of Ethics* (September 1993):

“The surgeon should provide competent care, consistent with accepted practice. If a problem is encountered outside the surgeon's area of expertise, or outside the expected course of an illness, consultations with a properly qualified and competent colleague should be sought forthwith.”

---

## Opinion: Breach – Mr Breeze

In my opinion Mr Breeze breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code) in relation to two specific aspects of his treatment of Mrs B: first, his surgery on Mrs B and, secondly, his management of her postoperative pre-sacral abscess. The reasons for my opinion are set out below.

### The operation

#### *Decision to operate*

Mrs B consulted Mr Breeze on 13 October 1998 on referral from her GP for diverticular disease. Mrs B had a three-month history of weight loss, a change in bowel motion, and an incident of rectal bleeding. She had had an attack of severe abdominal pain in February of that year, which subsided over three days and was followed by diarrhoea, a burning discomfort in the abdomen, and abdominal distension. At the time, she had a soft abdomen with no palpable masses, and a rectal examination was normal. A barium enema, ordered by her GP and performed on 12 August 1998, indicated that she had diverticular disease.

Mr Breeze examined Mrs B. No masses or organomegaly were identified, and rectal examination with sigmoidoscopy to 15cm was normal. Mr Breeze suspected that Mrs B's symptoms were due to an inflamed segment of the sigmoid colon, in contact with the dome of her bladder. He arranged a colonoscopy to further investigate her rectal bleeding, in case it was due to an undetected bowel cancer. The colonoscopy, undertaken on 17 November, was normal.

Mr Breeze reviewed Mrs B on 5 January 1999. After discussion with Mrs B, Mr Breeze formed the view that she was experiencing convincing symptoms of a colovesical fistula, and he recommended an elective resection for diverticular disease. Accordingly, Mr

Breeze's decision to operate and carry out a left hemicolectomy was based on the presumption of a colovesical fistula. (I understand that the presence of a colovesical fistula complicates diverticular disease and strengthens the need for surgery.) Mr Breeze did not carry out any other investigations to confirm his suspicion that Mrs B had a colovesical fistula. The further investigations he could have undertaken included a CT scan, an ultrasound, or a cystogram.

My expert advisor, Mr Neill, commented that surgery was appropriate for Mrs B, and justified by the finding of severe diverticular disease on barium enema and colonoscopy. However, the presumption of a colovesical fistula appeared to be inappropriately based on her symptoms, without further investigation. Mrs B had very few symptoms, apart from one attack in February, and she had no previous history of urinary tract infections with bowel flora to support the diagnosis of a colovesical fistula. Surgery identified that Mrs B did not have a colovesical fistula. Although I am satisfied that Mr Breeze's decision to operate was appropriate in the circumstances because of Mrs B's severe diverticulitis, Mr Breeze should carefully consider my advisor's comments on the appropriateness of his preoperative diagnosis of colovesical fistula.

*The operative procedure*

Mr Breeze operated on Mrs B on 15 February 1999 with the assistance of a first-year house surgeon. It was reasonable for Mr Breeze to proceed in these circumstances.

Mr Breeze ensured that prior to surgery Mrs B's bowel was prepared with two oral fleets. At operation, Mr Breeze found changes of recent severe acute diverticular disease of the sigmoid colon, but no colovesical fistula.<sup>8</sup> The segment of the sigmoid colon and rectum containing diverticular disease was excised, and the bowel reconnected (anastomosed) using a double stapling technique. The join of the bowel was tested intra-operatively, and was demonstrably airtight. A Redivac drain was inserted, and the abdomen closed. Mr Breeze did not cover the anastomosis with a stoma.

Mrs B had suffered from cervical cancer in 1972, and had been treated at the time with a cone biopsy and cobalt radiotherapy. In 1975 Mrs B had a left mastectomy, and in 1980 a right mastectomy, because of breast cancer. Mrs B's risk of complications from surgery was very high because of her history of cobalt radiotherapy treatment. In particular, she had a very high risk of anastomotic breakdown.

The issue is whether Mr Breeze should have covered the anastomosis with a stoma in light of Mrs B's history of radiotherapy to the pelvis. This turns on two matters – whether the radiotherapy Mrs B received for her cancer of the cervix was likely to have affected her

---

<sup>8</sup> There is some disagreement between Mr Breeze and my advisor as to whether the pathology report supports Mr Breeze's finding of recent severe acute diverticulitis. In my opinion the matter is not relevant to my findings in this case.

rectum, increasing the risk of surgical complication, and, if so, whether Mr Breeze should have been aware of that.

Professor Frizelle stated that when cobalt radiation was used for cervical cancer, the whole pelvis dose given was usually 40gy, although the cervix may have received 60gy. He explained that the rectum is closely applied to the back of the vagina and cervix in the distal third of the rectum, which would be at risk of receiving a high dose of radiation. However, Mrs B's anastomosis was not performed in that area, but in the upper rectum (rectosigmoid junction) 14-18cm from the dentate line and well outside the radiation field.

Mr Neill responded that in New Zealand in 1972 radiation from cobalt for cervical cancer was a "somewhat blunderbuss" treatment. Radiation would have involved two delivery ports, one at the front and one at the back of the body.<sup>9</sup> Because only two ports were used, a high dose was given each day – which resulted in a high-dose effect not only to the area involved, but also to the surrounding tissue. Mrs B may well have also received intra-cavity radiation. My advisor noted:

"In discussion with the radiotherapists at [a] Hospital they confirmed that the fields of radiation in 1972 would have covered the pelvis up to the common iliac vessels at the level of L5/S1. This would have involved the whole rectum, and some of the sigmoid colon. The target area would have received 60 gray and the rest of the pelvis at least 40 gray.

In the American literature they state that construction of a protective colostomy is advised if an anastomosis will be done after radiation in the range of 4000-5500 rads (which is 40-55 gray)."

It appears that Mrs B's previous radiotherapy would have exposed the whole rectum to radiation. Accordingly, the risk of surgical complication and anastomotic breakdown was high.

In his initial response to the complaint, Mr Breeze acknowledged that "[m]ortality/morbidity is potentially even greater in a patient such as Mrs B who has previously undergone radiotherapy for cervical cancer. Such patients may suffer radiation damage to the small and large bowel, which jeopardises health." Thus, Mr Breeze was, or should have been, aware of potential damage to the whole of Mrs B's rectum (not just the mid/lower rectum) from her previous radiotherapy treatment. I find Mr Breeze's response to my provisional opinion – that the area of descending colon and upper rectum used to create the anastomosis lay outside the radiation field since (as noted by Professor Frizelle) the main focus for pelvis radiation is the mid or lower third of the rectum, not the upper rectum – unconvincing. If Mr Breeze had any doubts about the true extent and significance of Mrs B's radiotherapy, he should have discussed the matter with a colleague (for example, a radiologist or oncologist).

---

<sup>9</sup> My advisor noted that nowadays four ports are used to reduce radiation exposure to individual organs.

Accordingly, it is my view that Mrs B's radiotherapy likely affected her entire rectum, and that Mr Breeze was, or should have been, aware of that. The final question is whether, with such actual or imputed knowledge, Mr Breeze should have covered the anastomosis with a stoma.

Mr Neill advised me that in light of Mrs B's history of cobalt therapy (radiotherapy) to the pelvis, a prudent surgeon would have covered the anastomosis with a stoma, either an ileostomy or a proximal colostomy, for at least three months postoperatively. My advisor explained that the effect of radiotherapy is largely on the blood vessels of the organ. He stated: "Mr Breeze does not record whether he divided the inferior mesenteric vessels or not, which may have been the main vessel of supply to the rectum following the radiotherapy to the rectum. If the inferior mesenteric vessels were divided then the leak may have been caused by a combination of the radiotherapy and ischaemia of the rectum."

Professor Frizelle countered that while in hindsight it would have been prudent to cover the anastomosis with a stoma, there is no absolute indication for stoma formation following an anterior resection, and it would generally be considered uncommon to cover an elective high anterior resection with a stoma. Defunctioning stomas are used when there is considered to be a substantial risk of leakage and where, if leakage occurred, it is unlikely the patient would survive. For example, an immunosuppressed patient; where the anastomosis is undertaken close to the anal canal; when the anastomosis is undertaken in the presence of sepsis; and when the anastomosis is shown on intraoperative assessments to leak and cannot adequately be repaired at the time. He advised:

"In patients who have had preoperative pelvic radiation (such as external beam radiation for rectal cancer) then undergo resection, it is my normal practice to defunction them when the anastomosis involves the lower third of the rectum (less than 6cm from the dentate line). There are however many surgeons who do not, because of the associated morbidity and mortality. In this situation the main focus for radiation is the mid or lower third of the rectum. In anastomoses for diverticular disease the anastomosis is usually on to the top of the rectum (rectosigmoid: 14-18cm from dentate line), well outside of the radiation field."

Mr Breeze therefore submitted that the use of a stoma in patients who have undergone previous pelvic irradiation is selective rather than routine, and that with a high colorectal anastomosis (such as in Mrs B's case) a covering stoma is not mandatory. Mr Breeze commented that there was no evidence of radiation damage to Mrs B's rectum on barium enema, colonoscopy or histology.<sup>10</sup> In addition, he noted that to create the anastomosis he used descending colon from outside the radiation field on one side, and upper rectum from

---

<sup>10</sup> The colorectal surgeon also noted that no radiation changes in the resected bowel were reported by the pathologist.

the other – which is consistent with the recommendations in the text “Surgery of the Anus Rectum and Colon”.<sup>11</sup>

Mr Breeze submitted that to say he should have covered Mrs B’s anastomosis with a stoma is to judge the case with hindsight. At the time, he elected not to create a stoma in the knowledge that Mrs B had a technically faultless anastomosis, a well prepared bowel, was ASA grade II, and had no significant comorbidity. He was also mindful that the creation and closure of a stoma can cause significant complications.

Professor Frizelle’s advice and Mr Breeze’s submissions are based on the assumption that Mrs B’s upper rectum was not within the radiation field. However, I am persuaded by Mr Neill’s advice that Mrs B’s whole rectum would have been exposed to high doses of radiation during cobalt radiotherapy treatment in 1972. I therefore do not accept Mr Breeze’s submission that his decision not to create a stoma was “logical” and “entirely reasonable”.

In support of his position, Mr Breeze submitted that there was no evidence of radiation damage to the rectum on histology. My advisor also pointed out that it is not mentioned in the histology whether there was radiation damage to the distal end of the resection (which may be so because it was not asked for and was not the diagnosis of concern). The histology was not known at the time of the resection, and is therefore irrelevant to an assessment of whether Mr Breeze acted reasonably at the time by not covering the anastomosis with a stoma.

On the basis of the Professor Frizelle’s advice, it appears that Mr Breeze provided surgical services in accordance with the standard accepted by a responsible body of colorectal surgical opinion. It follows that Mr Breeze exercised reasonable care and skill, and did not breach Right 4(1) of the Code, in the operative procedure he performed on Mrs B. However, the Code of Health and Disability Services Consumers’ Rights also entitles consumers “to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer” (Right 4(4)). Mrs B faced the potential harm of complication from her anastomosis – a risk that was heightened by her previous radiotherapy – and the option of covering the anastomosis with a stoma was an available option to minimise her potential complications.

I accept Mr Neill’s advice that a prudent practitioner with the knowledge of Mrs B’s history<sup>12</sup> would have defunctioned her colon with a stoma covering the anastomosis – either an ileostomy or a proximal colostomy – for at least three months postoperatively, to

---

<sup>11</sup> Knightly, M. and Williams, N., “Surgery of the Anus Rectum and Colon” (1993, WB Saunders) recommend that the anastomosis should ideally be performed between two entirely healthy segments of bowel which lie outside the irradiated field, but where that is not possible, one side of the anastomosis should be normal and outside the radiation field.

<sup>12</sup> I do not accept Mr Breeze’s submission that the criticism of his failure to cover the anastomosis with a stoma is made with hindsight bias.

promote healing and reduce the risk of postoperative complications. By failing to insert a stoma, Mr Breeze operated in a manner that did not minimise the potential harm to Mrs B, and breached Right 4(4) of the Code.

### **Postoperative care and treatment**

Mrs B had a tumultuous and prolonged postoperative recovery from her surgery, complicated by a pre-sacral abscess. The issues for determination are whether Mr Breeze diagnosed Mrs B's pre-sacral abscess in an appropriate and timely manner, and whether he treated the abscess appropriately.

#### *Diagnosis of pre-sacral abscess – prior to discharge on 24 February*

In the period between Mrs B's operation on 15 February and her discharge from hospital on 24 February she experienced a low urinary output, a painful and tender lower left abdomen, haematuria, a slightly distended abdomen, and significant diarrhoea. The progress notes record that Mrs B had significant drainage in her drains, but that is not reflected in the notes, which record drainage of 700 ml – consistent with a resection of an inflamed sigmoid colon. The question is whether any of the symptoms Mrs B experienced during her admission indicated that she was suffering from a postoperative complication that required further investigation prior to her discharge on 24 February.

Mr Neill advised that Mrs B did not present with specific signs of an anastomotic leak prior to her discharge on 24 February. Recognition of a significant anastomotic leak may be delayed, as the non-specific symptoms of low-grade sepsis, including an elevated temperature, prolonged ileus, diarrhoea, malaise, and failure to thrive, can be attributed to the recovery process from a major operation, rather than to a major anastomotic failure.

Mrs B experienced symptoms that were, in hindsight, consistent with an anastomotic breakdown – abdominal pain, low-grade fevers, and diarrhoea. However, at the time it appears that her symptoms were reasonably attributed to the recovery process and other factors.

Mrs B's abdominal pain was first documented by Mr Breeze on 19 February, and it persisted. There were no recorded investigations into Mrs B's abdominal pain, and no suspected cause of the pain was noted. A sigmoid colectomy is a painful procedure, and produces varying degrees of postoperative abdominal pain. Although Mrs B's abdominal pain could have been investigated by an abdominal X-ray or CT scan, it appears that Mr Breeze attributed her pain to the usual postoperative recovery process and a urinary tract infection. Certainly, it did not raise any concern that Mr Breeze considered warranted further investigation. I accept that it was reasonable in the circumstances for Mr Breeze not to further investigate Mrs B's abdominal pain prior to her discharge on 24 February.

Mrs B also experienced low-grade fevers. Many patients have a low-grade fever after sigmoid resection for diverticular disease, particularly if there are inflammatory changes within the sigmoid colon, which Mr Breeze reported that he found during surgery. Mrs B's diarrhoea commenced after she was prescribed antibiotics (Triprim) for her urinary tract

infection on 22 February, and appears to have reasonably been assumed to be secondary to the antibiotic.

There is an argument that, when considered as a whole, the combined symptoms of abdominal pain, low-grade fevers and diarrhoea should have alerted Mr Breeze to the possibility of a significant postoperative complication, such as anastomotic failure. However, on the basis of my expert advice, I am satisfied that the symptoms could reasonably be attributed to the recovery process from a major operation and Mrs B's urinary tract infection, and at the time did not specifically indicate an anastomotic leak. Accordingly, in my opinion the decision to discharge Mrs B on 24 February was reasonable.

*Diagnosis of pre-sacral abscess – following discharge on 24 February*

As noted by Mr Neill, Mrs B's condition following her discharge was significant. The day after her discharge, Mrs B consulted her general practitioner complaining of nausea, diarrhoea, weakness and lethargy. Her GP took blood tests on 25 February, which showed that she had a raised ESR, mild neutrophilic leucocytosis, and moderate thrombocytosis.

Mrs B was reviewed in the Surgical Outpatient Department on 2 March. Her symptoms of nausea, diarrhoea, weakness and lethargy persisted. Tests were ordered and an appointment arranged to see her two weeks later to review the results. The test results were reported as normal.

As arranged, Mrs B was reviewed in the Surgical Outpatient Department again on 16 March. It was noted that her diarrhoea had settled, her tests were clear, but she had developed a putrid brown anal discharge and hot and cold temperatures. Blood tests taken by her GP on 15 March showed that her haemoglobin was slightly low. Mr Breeze was concerned that Mrs B might have developed an abscess, and he prescribed Augmentin and arranged an urgent CT scan. Mrs B was not admitted to hospital, because she was keen to go home. However, her GP referred her to hospital on 18 March because she was weak and lethargic with a persistent fever and "foul" rectal discharge. At hospital, an X-ray and CT scan were performed, which confirmed a pre-sacral abscess collection of 7 x 5 cm in diameter.

Mr Neill considered that the time frame between Mrs B's discharge and the diagnosis of a pre-sacral abscess on her admission to hospital on 18 March was reasonable. When her diarrhoea, fever and lethargy were identified during her outpatient appointment on 2 March, the correct investigations were carried out – stool cultures and tests for *Clostridium difficile*. Once these tests were reported as negative, Mrs B required further investigations, having developed an offensive anal discharge and a mildly raised temperature. When Mrs B had her next outpatient appointment, on 16 March, further testing was arranged by way of an urgent CT scan. Mrs B was admitted to hospital on 18 March, where appropriate further investigations into her condition were performed, including a CT scan.

I accept my expert advice that the appropriate tests into Mrs B's condition were performed, and that her pre-sacral abscess was diagnosed within a reasonable time frame. Although it was over three weeks between Mrs B's discharge from hospital and the diagnosis of her

abscess, and that period was understandably distressing for her, I accept that recognition of a significant anastomotic leak may be delayed since non-specific symptoms can equally be attributed to the recovery from major surgery. Mr Breeze undertook appropriate tests to investigate her condition when concerning symptoms persisted. In this respect, Mr Breeze's treatment of Mrs B was reasonable.

*Management of pre-sacral abscess – insertion of pigtail catheter*

Mr Neill noted that there are two ways to deal with a pre-sacral abscess following an anastomotic leak. The first option is to place a pigtail catheter into the abscess. The second option is to open up the anastomotic leak to achieve adequate drainage of the abscess into the rectum itself. Both forms of treatment are acceptable, although the insertion of a pigtail catheter is more frequently used.

After Mrs B's abscess was identified by CT scan on 18 March, a pigtail catheter was inserted into the abscess following an unsuccessful attempt at percutaneous drainage under CT guidance. The plan was for the drain to be flushed with 10-20mls of saline, four hourly. Mrs B was also commenced on antibiotics. On the basis of my expert advice, I accept that the insertion of the pigtail drain was an appropriate intervention to manage Mrs B's abscess at that time.

Mrs B remained in hospital until 23 March, when she was discharged home. During her admission, it appears that the nursing staff initially had difficulty aspirating her drain, and the drainage was often minimal and offensive. On 23 March Mr Breeze noted that the pelvic collection was draining, and the pigtail catheter was effective. He discharged Mrs B home with district nursing assistance to flush the pigtail catheter drain line daily. Mr Breeze arranged an outpatient appointment for Mrs B on 30 March.

Mr Neill advised that once the routine irrigation of the catheter is established, it is reasonable (and standard practice) to discharge the patient home and have a nurse irrigate the catheter from time to time to prevent any blockage. It is important to keep the catheter patent to allow the abscess to drain, which is achieved by irrigating the catheter. Mr Breeze discharged Mrs B five days after the pigtail catheter was inserted, when he believed that the catheter was effectively draining the collection. On the basis of my expert advice, I accept that it was reasonable for Mr Breeze to discharge Mrs B from hospital on 23 March with the pigtail drain in situ, and with instructions for daily flushing by the district nurses. He appropriately arranged to review Mrs B on 30 March to check the patency of the catheter.

*Management of pre-sacral abscess following removal of the pigtail catheter*

Mrs B attended her prearranged outpatient appointment on 30 March when she was reviewed by Dr C and talked to Mr Breeze. It was noted that the catheter was painful and blocked, and pus was draining around rather than down it. The catheter was removed to facilitate drainage and relieve pain, and Mrs B was admitted to hospital for oral antibiotics and nutritional support. A further drain was not inserted because Mr Breeze considered that as a result of having the catheter in position for 12 days, a drainage track would have become established, and would continue to provide drainage after the catheter was



removed. Mrs B was discharged on 1 April and referred to the district nursing service for daily dressings to her buttock. She was prescribed Augmentin.

Following her discharge on 1 April, Mrs B's condition did not improve. Between 1 April and 18 May Mrs B had six GP appointments and three consultations at the Surgical Outpatient Department with Dr C, registrar.<sup>13</sup> Over this period she suffered from persistent anal discharge and discharge from where the drain had been. On 13 April, during an outpatient appointment, Dr C consulted Mr Breeze, who advised that there was nothing more they could specifically do for Mrs B, but that she would heal in time.

Mrs B remained weak and lethargic, with anal discharge (although the discharge was reducing). She was reviewed in the Surgical Outpatient Department again on 18 May. A CT scan was arranged to review the abscess, because of concerns about swelling and a firm nodule on Mrs B's right buttock. The CT scan taken on 21 May revealed a residual abscess cavity measuring approximately 6 x 2 x 6cm. The CT report suggested further evaluation with a Gastrograffin enema to detect ongoing communication between the area of anastomosis and the abscess. Mr Breeze reviewed the CT films and opined that the abscess had significantly decreased in size. Mr Breeze's subsequent management plan was based on that conclusion. At an appointment on 25 May Mr Breeze reassured Mrs B that the cavity would shrink and disappear with time, and no further intervention was necessary. He chose not to undertake further investigations because he considered that the discharge itself indicated that a communication was present between the collection and the bowel, and further investigations to confirm that were not necessary. He did not instigate further treatment, such as open drainage or repeat percutaneous drainage, because he considered that the risks were prohibitive, and "perseverance with the present strategy was the appropriate option".

Mrs B's cavity did not shrink and disappear. A CT scan on 20 July 1999 identified a pre-sacral abscess collection approximately 6-7cm in diameter, which Mr D drained during surgery on 26 July 1999.

Mr Neill advised that Mr Breeze did not act with reasonable care and skill in his management of Mrs B's abscess from May 1999 when the residual abscess cavity was identified by CT scan. Several aspects of Mr Breeze's management of Mrs B raise concern, including:

- (a) his decision not to drain the abscess;

---

<sup>13</sup> As noted by my advisor, all patients in surgical outpatient departments are under the care and responsibility of their surgeon (in this case, Mr Breeze). Often the patients are seen by the registrar or house surgeon, but the responsibility for the care and treatment of the patient remains with the surgeon. Junior staff are encouraged to discuss problems with the surgeon, who can make a decision whether to see the patient. The notes indicate that Dr C, the registrar who reviewed Mrs B during her outpatient appointments, regularly consulted with Mr Breeze about Mrs B's condition, care and treatment. Mr Breeze did assess Mrs B on 25 May, following the CT scan on 21 May that identified a residual abscess cavity.

- (b) his failure to provide appropriate antibiotic cover;
- (c) his failure to monitor Mrs B from 25 May to 13 July, when she was readmitted to Tauranga Hospital; and
- (d) his assessment of her condition when she was readmitted to hospital on 13 July 1999.

The CT scan on 18 March 1999 identified that Mrs B had an abscess cavity, reported in the scan report as 7 x 5cm in diameter. On 21 May a CT scan identified that Mrs B had a residual abscess cavity, reported in the scan report as 6 x 2 x 6cm, containing fluid and air. Mr Neill advised that at the time the residual abscess was detected by CT scan on 21 May, Mr Breeze should have made a decision to defunction Mrs B's colon and reinsert a drain into the abscess cavity. My advisor stated that the residual abscess cavity clearly needed to be redrained and the colon defunctioned. Further investigation by way of Gastrografin enema, as suggested by the radiologist, would have supported the decision to defunction Mrs B because it would have shown the size of the residual abscess, the size of the anastomotic leak and how well the abscess was draining, and how independent the drainage was. This may have led to a more definitive drainage procedure being adopted by Mr Breeze, rather than a wait-and-see approach. It would also have highlighted the persistence of the "communication" between the rectum and abscess.

Mr Breeze submitted that my advisor's comment that he should have arranged to defunction Mrs B's colon and reinsert a drain into the abscess cavity is based on hindsight. Mr Breeze's management of Mrs B from 25 May was based on his opinion that the abscess cavity had decreased in size. Mr Breeze stated that on reviewing the CT films at the time, it was his opinion that the abscess had decreased significantly in size between 18 March and 21 May 1999. A retrospective review of the CT scan films by a consultant radiologist identified that the CT scan of 18 March showed an abscess 8 x 6.5 x 5cm with an approximate volume of 120mls, whereas the CT scan of 21 May showed that the collection had decreased significantly in size to 6 x 4 x 1.6cm with an approximate volume of 15-18ml. Mr Breeze noted that the CT scans indicated that there had been an 85-88% reduction in abscess volume between 18 March and 21 May, confirming that the internal drainage of Mrs B's abscess into her rectum was effective. Accordingly, Mr Breeze submitted that reinsertion of a drain was not indicated. Mr Breeze further submitted that the establishment of a colostomy would have been a major intervention that was clearly not indicated at the time; Mrs B had previously poorly tolerated percutaneous abscess drainage, and the alternative of trans-abdominal drainage was inappropriate given the risks involved. Mr Breeze advised:

"My opinion on 25 May 1999 was that the abscess drainage was succeeding, that it had produced a dramatic reduction in abscess size, and that as long as this continued, there was no indication for further interventions."

Mr Breeze did not consider further investigation was necessary because the discharge itself indicated a persistent "communication" between the rectum and abscess. His expert, the colorectal surgeon, advised that there was no evidence that a Gastrografin enema would have been of value because there was already considerable evidence that such a connection

existed, and it was unlikely to change Mrs B's management at the time when she appeared well and was progressing adequately.

Professor Frizelle opined that drainage of the abscess cavity identified on 21 May 1999 was not indicated because Mrs B was not reported as unwell in Mr Breeze's letters; the cavity had decreased in size considerably; and intraluminal drainage was occurring (Mrs B was still describing the passage of pus and blood rectally; the fluid injection into the catheter before it became blocked was not all returned; and air was present in the cavity on CT scan). He stated:

“The management Mr Ian Breeze put in place was contemporary and appropriate. A tailored approach is necessary to abscess drainage following anterior resection. The abscess cavity appeared to be draining intraluminally and one could have expected that it would have been walled off from the rest of the abdomen and would have eventually settled down.”

In assessing the reasonableness of Mr Breeze's management it is necessary to consider whether the residual abscess cavity had decreased significantly in size and whether Mrs B was well, so that further active management was not indicated.

Following receipt of Mr Breeze's response to my provisional opinion, Mr Neill reviewed the CT scan films of 18 March and 25 May. He measured the abscess cavity on 18 March as 8 x 5 x 7cm, and the abscess cavity on 21 May as 6 x 2 x 6cm (containing pus and gas). He noted that while there was a decrease in the size of the cavity between 18 March and 21 May, the cavity on 21 May is still significant, especially given the two-month gap between the scans – one would have expected the cavity to have been much smaller or even have resolved over the two months since initial drainage. Mr Neill disagreed with Professor Frizelle's assessment that the abscess was small. He advised that the abscess was not small, and the leak was significant. In addition, Mrs B continued to experience rectal discharge of pus two months after the abscess was first identified, and this strongly suggested that the abscess was not draining adequately.

While there is disagreement about the specific proportions and significance of the residual abscess cavity identified on 21 May, I am satisfied that although the abscess cavity had decreased in size, it was still significant. In my view most surgeons would have expected the abscess cavity to have almost completely resolved two months after initial drainage, had it been draining well. Mr Neill advised that at the time the residual abscess cavity was identified, Mr Breeze should have made a decision to re-drain the abscess cavity and defunction Mrs B's colon. Clearly Mr Breeze had options that he should have considered, rather than leaving the abscess to self drain. In particular, as noted by Mr Neill, a second catheter could have been inserted (better placement would have improved the conditions Mrs B experienced on previous catheter percutaneous drainage); or a catheter could have been placed through the anal canal into the leaking anastomosis. Enlargement at least of the anastomotic leak site would have helped drainage, and it may have been possible to pass a catheter into this anastomotic hole. Mr Neill commented:

“In the Algorithm for the management of abdominal pelvic sepsis by percutaneous or surgical drainage you will see that they first opt for percutaneous drainage, and if that is unsuccessful, which it was in this lady’s case, they move onto surgical drainage. If the sepsis does not resolve from successful drainage they re-scan and if inadequate drainage they then consider other options. If the cavity size is decreased with no new abscesses they suggest antibiotic therapy for a trial, and then if the sepsis continues consider exploration. This really covers [Mrs B’s] situation. My Breeze had options which he should have considered, rather than just leaving the abscess to self drain.”

Despite Mrs B’s residual abscess cavity, swelling at the old drain site, fatigue and persistent (although diminishing) anal discharge, Mr Breeze did not prescribe any antibiotics for her at the consultation on 25 May. Mrs B received no antibiotics from 25 May until her GP prescribed her antibiotics on 22 June, when she presented with a temperature of 38 degrees, and “shaking and shivering”.<sup>14</sup> Mr Neill stated that Mrs B did not receive appropriate antibiotic cover for her condition.

Mr Breeze submitted that my advisor’s criticism for not providing appropriate antibiotic cover for Mrs B is based on a misconception that her abscess was not diminishing in size. He stated that Mrs B was appropriately managed with intermittent short courses of antibiotics. Professor Frizelle advised that the management of an abscess is drainage, and there is no evidence to support the continuing use of antibiotics after the initial time of drain insertion (five days). Mr Neill agreed that treatment for an abscess is adequate drainage. However, he noted that antibiotics are used to cover the initial drainage period (as noted by Professor Frizelle), and for systemic signs and symptoms. There are two schools of thought – one being that continuous antibiotics should be given, and the other that antibiotics should be prescribed intermittently as necessary. At the time Mr Breeze reviewed Mrs B in the outpatient department he did not record systemic symptoms, and concluded that there was no abscess and therefore antibiotics were not required. However, Mrs B’s abscess was still significant on 25 May. As such, my advisor noted that because at least two previous courses of Augmentin had not led to resolution of the abscess, a change in antibiotics at that stage would have been appropriate.

Mr Neill commented that not only did Mr Breeze not instigate prudent active management for Mrs B’s residual abscess cavity – by way of drainage and antibiotic cover – he failed to monitor and manage her effectively from that time. Mr Breeze believed that the residual abscess cavity had “diminished dramatically” in size. Accordingly, he chose not to drain the cavity, and advised Mrs B that it would shrink and disappear. Mr Breeze arranged a follow-up appointment six weeks later (5 July 1999).

---

<sup>14</sup> I note that the GP records for Mrs B’s consultation on 22 June note: “Mr Breeze thinks no [antibiotics] needed??”

No appointment took place on 5 July 1999, although the reason is not clear. This meant that Mrs B received no monitoring from Mr Breeze from the time of her appointment on 25 May until her readmission to hospital via her GP on 13 July.

Professor Frizelle advised that six weeks is a common length of time to follow up a patient in the public sector. There is an expectation that if a problem arises before the scheduled follow-up appointment, the patient will contact his or her GP and be referred for an earlier appointment. Mr Neill agreed that Mr Breeze's plan to follow up Mrs B six weeks after her outpatient appointment on 25 May was appropriate timing in the public system. However, he noted that Mrs B was clearly unwell (as the notes progressively record), and a repeat CT of the pelvis to further assess the abscess cavity prior to her return to the clinic on 5 July would have shown whether there was a further decrease, or an increase, in abscess size. In my view, Mr Breeze should have monitored Mrs B closely to ensure that the cavity was resolving, as he believed it would, because of the implications for her if it did not resolve. At the least, this would have involved arranging a repeat CT scan, as suggested by my advisor, or an earlier appointment. I note that the clinic letter to Mrs B's GP following the appointment on 25 May noted: "At her request<sup>15</sup> we will review her in six weeks time, mainly for reassurance."

Mrs B received no monitoring from Mr Breeze from the time of her appointment on 25 May until her readmission to hospital via her GP on 13 July. She naturally felt very isolated over that time, when her condition deteriorated significantly. She developed abdominal pain and constipation, and had a raised temperature. Had Mr Breeze reviewed and reassessed her over that period and, in particular, reviewed the status of her residual abscess cavity and his clinical decision not to actively treat it, Mrs B may have been spared prolonged suffering.

Mrs B recalls her sense that Mr Breeze was dismissive of her concerns during this period, and expressed her dissatisfaction to her GP, Dr E, who arranged for another surgeon to see her. However, Mrs B deteriorated and was admitted to Tauranga Hospital on 13 July 1999 with abdominal pain, a history of 12 hours' vomiting food, liquid and bile, reduced bowel sounds, constipation and fevers. An abdominal X-ray showed fluid levels in the abdomen, consistent with an ileus or subacute bowel obstruction. Mr Breeze submitted that while, with the benefit of hindsight, Mrs B's transient fever may have heralded the development of a buttock abscess, which became apparent four days after discharge, at the time he considered the fever was secondary to her urinary tract infection. Mr Breeze diagnosed constipation, and prescribed Lactulose. The Lactulose initiated a bowel motion, and Mrs B was discharged soon afterwards. Mr Breeze advised that the abscess was not apparent during her admission, and he believes the diagnosis of constipation and urinary tract infection were correct and that his treatment was appropriate.

Mr Neill advised that Mrs B's bowel obstruction was more likely to be an ileus. While the urinary tract infection could have caused the septic features, extreme abdominal pain would

---

<sup>15</sup> Commissioner's emphasis.

not be expected in a non-distended colon (as evident on the X-ray report). In cases of severe constipation one would expect a radiology report of a distended colon loaded with faeces. Mr Neill stated:

“Fluid levels in the x-ray suggest that the fluid content of the small bowel was not progressing through into the colon. This can be caused either by an obstruction, which would cause colicky pain, or an ileus, which will cause tenderness, but does not usually cause a colicky abdominal pain. In an ileus the colon may have faeces within it because there is lack of progression of the alimentary tract contents towards the anus. There was abdominal tenderness to palpation, nausea and vomiting over four days with a mildly raised temperature. The vomiting may have been caused through fluid build up in the stomach like that in the small bowel, and vomiting relieves the distension. Any inflammation within the abdomen can cause an ileus, for example an appendix abscess, pancreatitis, inflammation of the gallbladder or a pelvic abscess.

... the x-ray report from the radiologist reported faecal contents as seen within a non-distended large bowel. If the constipation was the cause of the abdominal pain and tenderness I would have expected the colon to be more distended and loaded with faeces and that the radiologists would have made this point. Mild loading of faeces as suggested by the radiologist is more in keeping with an ileus.”

My Neill advised that it would have been appropriate for Mr Breeze to arrange a CT examination to reassess Mrs B’s condition prior to her discharge on 15 July.

Mr Breeze submitted that my advisor’s criticism of his management of Mrs B during her admission on 13 July 1999 was based on a misconception that her abscess had not diminished in size, and is a judgement made with hindsight. Mr Breeze submitted that neither the clinical findings nor radiological features support my advisor’s diagnosis of ileus. He also disagreed with my advisor’s comment that a plain abdominal X-ray/CT scan should have been taken prior to Mrs B’s discharge on 15 July. Because a film taken on 13 July showed a subtle, very mild non-specific radiological abnormality and Mrs B’s symptoms resolved rapidly, Mr Breeze did not consider that a repeat X-ray was indicated.

Professor Frizelle noted that Mrs B presented with lower abdominal pain and a fever. He stated that the appropriate tests were undertaken, and two causes identified and treated, following which Mrs B’s condition improved. He noted:

“If the CT scan had been undertaken then, then the presacral re-collection may have been identified then as [it was] a week later. In patients who have surgical complications and subsequent multiple scans and imaging there is a real risk of over exposure to radiation, as such in these patients careful consideration of when to image should be undertaken. There does not appear to be adequate indication for such a test at that time.”

Mr Neill responded that Mrs B was still discharging pus per rectum four months after the initial diagnosis of pre-sacral abscess, and “this really demanded a further CT to assess why the abscess had not settled”.

### *Conclusion*

I have received conflicting advice from my expert advisor and Mr Breeze’s expert advisor about the reasonableness of Mr Breeze’s management of Mrs B’s residual abscess cavity. In the face of this conflicting advice it would be unreasonable to find Mr Breeze in breach of his duty of reasonable care and skill (under the Code). However, I do have misgivings about aspects of Mr Breeze’s care.

Mrs B’s postoperative complications did not result from her diverticular disease, but from a leaking anastomosis and a non-resolving pre-sacral abscess. These are unusual complications. Initially, Mrs B’s condition was appropriately managed, but once the catheter was removed, it appears that Mr Breeze’s management was suboptimal.

Mr Breeze’s management plan was based on his assumption that the abscess had decreased in size, yet the residual abscess cavity was clearly still significant and Mrs B continued to endure a miserable time. In my view, Mr Breeze needed to do more than leave the abscess to self-drain without considering other management options. At the least, Mr Breeze should have ensured appropriate antibiotic cover and re-assessed the abscess. When Mrs B re-presented at hospital on 13 July with persisting symptoms, Mr Breeze should have arranged a CT scan to further assess the abscess. At that stage Mrs B had been discharging pus per rectum for four months after the initial diagnosis of pre-sacral abscess, and was clearly unwell. It appears that Mr Breeze failed to take a holistic overview of Mrs B’s condition, following her admission to Tauranga Hospital on 13 July. Her symptoms, in light of her history of a residual abscess cavity identified on 21 May and her persistent and deteriorating condition, should have indicated to Mr Breeze that Mrs B was suffering the effects of a serious and ongoing postoperative complication. Mr Breeze appears to have viewed her symptoms during the 13 July admission in isolation of her prolonged and tumultuous postoperative history.

Clause 8 of the Royal Australasian College of Surgeon’s *Code of Ethics* (September 1993) states:

“During an episode of care, the surgeon should ensure continuity in the management of the patient, in order to provide reassurance, to relieve suffering and, where appropriate, to reassess clinical decisions and therapeutic options ...”

In my view, Mr Breeze failed to fulfil his obligation as a surgeon to ensure continuity in his management of Mrs B and, where appropriate, to reassess clinical decisions and therapeutic options, for the reasons set out above.

Mr Breeze’s management of Mrs B’s condition in the period May to July 1999 had a significant impact on her health and well-being. She suffered a stormy postoperative course, some of which could have been prevented. As noted by my advisor, because the abscess was

not drained, and continued to communicate with the rectum, the abscess increased in size and eventually required a further laparotomy with a defunctioning colostomy and drainage of the pre-sacral abscess by Mr D. Had Mr Breeze continued to carefully observe Mrs B's abscess and considered further treatment, Mrs B's long period of ill-health may have been prevented.

As noted by Mr Neill, when complications are encountered "it is always helpful to discuss the case with other clinicians, who may have had experience in this area, and to obtain a variety of opinions to base the further treatment on. This was not done." My advisor's comment echoes a comment made by Mrs B during the course of the investigation. She felt that Mr Breeze should either have referred her to someone else, or discussed her case with someone else, because his treatment of her was not successful. She was not getting any better under his care.

In my view, Mr Breeze should have discussed Mrs B's complicated and persistent postoperative condition with his colleagues. I note that when Mr D took over Mrs B's care on 19 July, he discussed her case in a multidisciplinary team meeting, where an action plan was formulated to effectively deal with her condition. I also note that clause 10 of the Royal Australasian College of Surgeons' *Code of Ethics* states:

"The surgeon should provide competent care, consistent with accepted practice. If a problem is encountered outside the surgeon's area of expertise, or outside the expected course of an illness, consultations with a properly qualified and competent colleague should be sought forthwith."

Mr Breeze failed to consult with a colleague, as required by the Royal Australasian College of Surgeons' *Code of Ethics*.

I accept that Professor Frizelle did not criticise Mr Breeze's postoperative management, describing it as "contemporary and appropriate". I also recognise that inevitably some surgical patients will suffer unexpected complications, and that it is all too easy to determine with the benefit of hindsight that different steps should have been taken. However, I am not satisfied that Mr Breeze's management of Mrs B in the period May to July 1999 met the high standards expected of a surgeon. In my opinion, Mr Breeze did not comply with professional and ethical standards, and therefore breached Right 4(2) of the Code.

---



## Recommendations

I recommend that Mr Breeze:

- apologise in writing to Mrs B for his breaches of the Code. This apology is to be sent to the Commissioner's Office and will be forwarded to Mrs B;
  - review his practice in light of this report.
- 

## Follow-up actions

- A copy of my report will be sent to the Medical Council of New Zealand and the Royal Australasian College of Surgeons.
- In light of the significant public interest in my inquiry into Mr Breeze's practice, a copy of my report, with details removed identifying parties other than Mr Breeze, my expert advisor, Professor Frizelle, and the hospital, will be released to the media and placed on the Health and Disability Commissioner website, [www.hdc.org.nz](http://www.hdc.org.nz), for educational purposes.

## Appendix One – Report from Professor Frizelle

“Report on A.

Prepared in response to HDC preliminary report on the care provided by Mr Ian Breeze.

1. My full name is Francis Antony Frizelle. I am a Colorectal Surgeon at the Christchurch Colorectal Unit of Christchurch Hospital. I am also a Professor of Colorectal Surgery at the Christchurch School of Health Sciences, a part of Otago University. I am the only Professor of Colorectal Surgery in New Zealand.
2. I qualified BMedSc in 1983, and MB ChB from Otago University (Dunedin, New Zealand) in 1985. I became a Fellow of the Royal Australasian College of Surgeons in 1992, and I obtained a Masters in Medical Science from Otago in 1995.
3. I have undertaken a colorectal fellowship at the Mayo Clinic, Rochester, Mn, USA, and a laparoscopic fellowship at Ninewells, Dundee, Scotland, UK. I am a member of both the Australasian and the American Colorectal Societies, holding executive office in both societies. I have published over 200 scientific publications largely on colorectal surgical management issues.
4. This report is prepared after reading and reviewing the following documentation
  - (a) Report of the Health and Disability Commissioner Case 03HDC19273
  - (b) The case notes from Tauranga Hospital
5. The main issues identified by the Health and Disability Commissioner are:
  - (a) The operative procedure. Specifically the issue about whether a temporary defunctioning stoma should have been used.
  - (b) Management of pre-sacral abscess following removal of the pigtail catheter; specifically
    - (i) Mr Ian Breeze’s decision to not to drain the abscess
    - (ii) Mr Ian Breeze’s failure to provide appropriate antibiotic cover
    - (iii) Mr Ian Breeze’s failure to monitor [Mrs B] from 25<sup>th</sup> May to 13<sup>th</sup> July 1999
    - (iv) Mr Ian Breeze’s assessment of her condition when she was readmitted to hospital on the 13<sup>th</sup> July
6. The place of defunctioning loop colostomy following cobalt pelvic radiation for cervical cancer.

The issue raised by Dr M Neill in his report is whether a defunctioning loop stoma (colostomy or ileostomy) should have been used at the time of surgery. He states "... It would have been prudent to have covered the anastomosis with a stoma, either an ileostomy or a proximal colostomy."

With the vision of hindsight this is true. It would however generally be considered uncommon to cover an elective high anterior resection with a stoma, though the opposite would be true of an ultra low anterior resection.

The place of defunctioning stomas in anterior resections is a confusing and somewhat vexed issue, as there [is] no absolute indication for stoma formation following an anterior resection. The use of a defunctioning stoma relates to the degree [of] concern the surgeon has for the anastomosis.

Defunctioning stomas are used when there is considered to be substantial risk of leakage, and where it is considered that if leakage occurred the patient would not survive (1-4). A leaking colorectal anastomosis is associated with a mortality of about 20-30% in various large series and when the patient survives it is associated with high morbidity and usually poor function if reconnected (2-6).

The situations where there is evidence in support of the use of a defunctioning loop stoma relate to patient factors, disease factors and technical factors of the surgery (1-7). Examples are:

- (a) An immunosuppressed patient
- (b) When the anastomosis is undertaken close to the anal canal (less than 6cm from dentate line: low and ultralow anterior resection).
- (c) When the anastomosis is undertaken in the presence of sepsis
- (d) When the anastomosis has been shown on intraoperative assessment to leak and this can't be adequately repaired at the time or there is concern about the repair.

Many studies have shown that a stoma doesn't decrease the change of an anastomotic leak, it does however decrease the severity of a problem when a leak occurs (2-5). There is a general trend away from temporary stomas because of the associated morbidity and mortality (5-7). Stomas themselves are associated with a high morbidity, in regard to their formation, function, and closure (1,5,6). There is a mortality of 1-2% associated with the closure of loop stoma (1-6).

In patients who have had preoperative pelvic radiation (such as external beam radiation for rectal cancer) then undergo resection, it is my normal practice to defunction them when the anastomosis involves the lower third of the rectum (less than 6cm from dentate line). There are however many surgeons who do not, because of the associated morbidity and mortality (1,5,7). In this situation the main focus for radiation is the mid or lower third of the rectum. In anastomoses

for diverticular disease the anastomosis is usually on to the top of the rectum (rectosigmoid: 14-18cm from dentate line), well outside of the radiation field (8).

Radiation is used increasingly for treatment of pelvic malignancy. It produces its therapeutic benefit by affecting the synthesis of DNA in cells undergoing mitosis, particularly by the general of Oxygen free radicals from intracellular water, which can also damage RNA and cell membranes. The higher the cell turnover, the more likely there will be some effect caused by irradiation. The gut mucosa has relatively high mitotic rate, although the rectum is significantly slower than the small intestine, accounting for its relative resistance to damage (9).

Acute injury generally heals but may be delayed up to 6 months. It is usually confined to the mucosa with histology showing normal submucosa, but thickened and oedematous lamina propria with patchy fibroblastic proliferation and decreased mitotic rate within the mucosa may occur (10). Chronic injury is characterized by fibrosis of the connective tissue and vascular changes with sub-intimal fibrosis in the arterioles of the submucosa and formation of platelet thrombi, which leads to relative ischaemia (11). The mucosal capillaries attempt to compensate developing telangiectasia with friable vessels that are prone to bleeding. If the ischemia is more significant, ulceration, perforation and fistula or abscess formation may rarely result. The fibrosis lends itself to the other clinical manifestations of poor rectal compliance, especially urgency. The fibrous contraction usually reaches a maximum 12-24 months after radiation treatment and most complications occur within this period (12).

When cobalt radiation was used for cervical cancer the whole pelvis dose given was usually 40Gy, however the cervix may received 60Gy. The rectum is closely applied to the back of the vagina and cervix in the distal third of the rectum, and rectum in this area would be at risk of receiving a high dose of radiation.

However as stated above this is not the area anastomosed as this was the upper rectum (rectosigmoid junction). This is confirmed by the lack of any radiation changes reported by the pathologist in the bowel resected.

7. The management of a presacral abscess following an anterior resection. This is outlined as described by Soaters et al (4).

A tailored approach is necessary to abscess drainage.

- (a) Some patients have only limited leakage with small adjacent abscesses revealed by enemas to opacify the anastomosis. Clinical signs are often mild including slight fever and malaise, modest abdominal discomfort and normal vital signs. In such patients a conservative attitude of wait and see appears to be warranted. Only when clinical signs deteriorate is a more aggressive approach necessary.

- (b) Small lateral anastomotic failure with adjacent unilocular abscess of greater size (approx. 5cm diameter or larger) generally needs drainage either internally via the anastomosis, or externally via CT scan-guided puncture techniques of small surgical incisions. Such leakages may sometimes require a diverting loop ileostomy or colostomy.
- (c) If anastomotic failure amounts to half or more of the circumference of the anastomosis, the likelihood of spontaneous closure is small. Under these circumstances a Hartmann's procedure is required.
- (d) In case of multilocular abscesses and abdominal spread, laparotomy and abdominal debridement is generally necessary, often accompanied by a Hartmann's procedure. In these severely ill patients it is not always easy to establish whether there is a true anastomotic disruption during the operation. A more aggressive approach appears to be warranted. In case of doubt it can be considered ultimately the safest approach to disconnect the anastomosis. In this condition the first concern should be to treat sepsis effectively and to reduce mortality.

Once a leakage and the resulting abscess have been successfully treated and the patient has become metabolically stable, the anastomotic defect may heal quickly or may develop into a faecal fistula. Some of these faecal fistulas may heal spontaneously when the situation is favourable.

- (c) The defect in the anastomosis should be lateral and relatively small and comprise substantially less than 50% of the circumference.
- (d) The edges of the anastomosis should be healthy and vascularly well perfused, whereas neighbouring abscesses should be adequately drained. For this purpose, drainage should be continued for weeks depending on drain production. When well-draining tracts have developed into mature fistulae, withdrawal of the drain may be tried to close the fistula spontaneously.
- (e) This is only possible when distal passage of stool is uninhibited, which may be enhanced when stool passage is diminished by proximal diverting enterostomies. Another method to achieve this is to drain the colon or rectum distal to the leak by inserting a rectal tube. This diminishes the pressure in the area of the defect, which may promote its closure. When circumstances are favourable, spontaneous closure occurs in more than 50% of cases. There is no evidence in the literature that 'starvation of the lower gut' induced by parenteral nutrition may help to close the fistula. Stoma-like fistulae in open wounds do not close spontaneously and need to be closed surgically.
- (f) Any attempt at operative repair should be undertaken when patients have become metabolically stable, have regained an optimal condition and when inflammatory signs have subsided. For this purpose, plasma albumin, haemoglobin, sedimentation rate and C-reactive protein levels may be used as indicators. Re-operation should generally be postponed at least until 6

weeks after the last operation. This period is necessary for maturation of adhesions, the disappearance of wound oedema and consequently the accessibility of the surgical area.

As can be seen from the above description the anastomotic leak in this case falls into the catalogue of a small anastomotic failure with adjacent abscess of (approx 5cm) size, where generally drainage is needed either internally via the anastomosis, or externally via CT scan-guided puncture techniques or small surgical incisions. This was undertaken. The patient at that time did not appear to need a diverting loop ileostomy or colostomy.

8. Management of pre-sacral abscess following removal of the pigtail catheter.

(g) The decision not to drain the abscesses.

Once the drain was removed and the repeat scan showed a residual collection further drainage was not indicated at that time because:

- (i) The patient as reported in Dr I Breeze's letters was not unwell.
- (ii) The cavity had shrunken considerably see letter from [the reporting radiologist] re size of cavity.
- (iii) There appeared to be intraluminal drainage as (a) the patient was still describing passage rectally of pus and blood, and (b) the fluid injection into the catheter before it became blocked was not all returned and (c) the presence of air in the cavity on the CT scan.

The other issue that is raised in the report is whether a contrast study should have been undertaken at this point as raised by [the reporting radiologist] in his comment '... a further evaluation with a gastograffin enema may be of value to detect ongoing communication between the area of anastomosis and the abscess ...'

There is no evidence that this test would be of any value at this time as there was considerable evidence that such a connection existed (for reasons listed above) and was unlikely at that time to change management, when the patient appeared well and progressing adequately.

(h) The failure to provide antibiotic cover

The management of an abscess is drainage. It is generally recommended that some sort of appropriate antibiotics are used at the time of drainage for 5 days (ie the time of drain insertion).

There is no evidence to support the continuing use of antibiotics after this time. [The] Professor of Infectious Diseases ... supports this view. The

problem with continuing antibiotics relates to the lack of any proven therapeutic benefit as well as the possible complications such as:

- (i) The development of selected bacteria (ie MRSA) and
  - (ii) The development of fungal infections (eg candida)
  - (iii) The development of nausea and bowel dysfunction associated with many antibiotics (eg Augmentin)
- (i) The failure to monitor [Mrs B] from 25<sup>th</sup> May to 13<sup>th</sup> July

It would appear arrangements were made to see [Mrs B] in 6 weeks following drain removal. This is a common length of time to follow up patients, in the public sector with the expectation that if a problem arose before then that the patient would contact their GP and be referred for an earlier appointment. It is common practice for care to be shared with the GP in most postoperative situations. [Mrs B] had previously shown that she could access specialist care through her GP.

[His] assessment of her condition when she was readmitted to hospital on the 13<sup>th</sup> July.

[Mrs B] was admitted acutely under the care of Mr Breeze on the 13<sup>th</sup>. Mr Ian Breeze did not see [Mrs B] on the 13<sup>th</sup> but on the 14<sup>th</sup> of July. When seen on the 14<sup>th</sup> it is recorded that the patient was well until the day of admission, when she had vomited, that the patient had a soft abdomen, was not tender in the abdomen and on rectal exam was only mildly tender. There is no recorded finding of a rectal mass. The abdominal X-rays were 13/7 visit number 305343 did not lead to a definite diagnosis however it is pointed out that ‘... There are short air fluid levels within mid to distal small bowel – appearances which would be consistent with obstruction/ileus. The degree of distension however is not great, indicating that this may be early. Faecula content is also seen within non-distended large bowel ...’

The patient was observed in hospital for 48 hours and it is recorded that she was feeling fine after her bowel moved and that her pain was gone. It does appear from the medical and nursing notes that a CT scan was considered for the 14<sup>th</sup>, however in light of the favourable clinical progress and the identification of two causes for her symptoms it appears to have been cancelled.

During this admission she had a fever, which settled. She also was shown to have a urinary tract infection (E Coli Lab number 1746783) sensitive to Augmentin (antibiotic). She was discharged on antibiotics, lactulose (a laxative) with follow up with her GP.

During this admission, over 5 months from her high anterior resection, [Mrs B] presented with lower abdominal pain, and a fever. It would appear that appropriate tests were undertaken and two causes were identified (constipation and a urinary tract infection), both causes were treated, and patient improved.

If the CT scan had been undertaken then, then the presacral re-collection may have been identified then as [it was] a week later. In patients who have had surgical complications and subsequent multiple scans and imaging there is real risk of over exposure to radiation, as such in these patients careful consideration of when to image should be undertaken (13). There does not appear to be adequate indication for such a test at that time.

## 9. Other points

### (a) The operation undertaken

At various places in the records the operation is called a left hemicolectomy, a sigmoid colectomy and an anterior resection. From a review of the operation notes it would appear that the patient had a high anterior resection, as the rectum was mobilized, and the anastomosis was undertaken between the descending colon and upper rectum. This is also confirmed by the fact that the anastomosis appears to be at the level of S1 seen on limited Barium enema 23/7/99 visit number 306663.

### (b) Histology

The pathologist ... who reported the colon resection describes in his text of the pathology report (laboratory number 0388807) the following '... the specimen consists of a segment of large bowel measuring 350mm in length and up to 30mm in diameter with a generous portion of attached mesentery. A 100mm length of the segment, approximately 50mm from one margin shows a markedly thickened wall and tight stenotic lumen measuring less than 10mm in diameter. In this region multiple diverticular are found. The bowel presumed proximal to this region is dilated up to 75mm in circumference ...'

The statement at the end is '... The appearances are of uncomplicated diverticular disease ...'

These two parts of the pathology report is very inconsistent. The complications of diverticular disease are perforation, fistula formation, abscess formation, inflammation, and stricture formation. What is described in detail in the above comments is a stricture. The summary comment is clearly incorrect.



(c) Error in operation note

The operation record of [Dr D] states ‘... Having done this wound was closed with massive saline lavage in one layer using 1 Nylon continuous to linea alba, 4/0 Maxon ...’ I believe that the phrase ‘massive saline lavage’ in this context is an error of typing and should read ‘mass closure’ therefore saying ‘... having done this wound was closed with in one layer (mass closure) using 1 Nylon continuous to linea alba, 4/0 Maxon ...’ ...

(d) Late post operative course

Following surgery by [Dr D], [Mrs B’s] problems have continued. She had her colostomy closed once it was shown that the anastomotic deficit had closed, however she continues to be seen at monthly intervals in March, April and May 2000 with ongoing bowel disturbance.

While it is recognized that at least up to that time her total colon has not been investigated by colonoscopy, it should also be recognized that such a postoperative course is not uncommon.

Elective diverticular disease resection had greater morbidity and mortality than that of elective colorectal carcinoma resection (14). Surgery is often not the end of a patient’s problems with 1-10.4 per cent developing recurrent diverticulitis after resection, of which 0-3.1 per cent require resection (15-19). Persisting symptoms are found in 27-33 per cent (20-21).

In summary

In my opinion and following the extensive review of the published literature on the topic I conclude that at no point was there a deviation from normal care. The operative management of [Mrs B’s] diverticular disease was appropriate. The complications following surgery are regrettable, but unfortunately not uncommon. The surgery and subsequent complications has had a significant impact on [Mrs B’s] health and well being. The management Mr Ian Breeze put in place was contemporary and appropriate. A tailored approach is necessary to abscess drainage following anterior resection. The abscess cavity appeared to be draining intraluminally and one could have expected that it would have been walled off from the rest of the abdomen and would have eventually settled down. At some point if this failed to bring about resolution of symptoms consideration of a defunctioning stoma would have been necessary. The point that despite this being done by [Dr D] the patient is still having symptoms is of concern (and perhaps the patient needs a colonoscopy), however persisting symptoms are common.

*References*

1. Chen F, Stuart M, The morbidity of defunctioning stomata. Aust N Z J Surg. 1996;66(4):218-21.
2. Karanjia ND, Corder AP, Bearn P, Heald RJ Leakage from stapled low anastomosis after total mesorectal excision for carcinoma of the rectum. Br J Surg. 1994;81(8):1224-6.
3. Karanjia ND, Corder AP, Holdsworth PJ, Heald RJ. Risk of peritonitis and fatal septicaemia and the need to defunction the low anastomosis. Br J Surg. 1991 Feb;78(2): 196.
4. Soeters PB, deZoete JP, Dejong CH, Williams NS, Beaten CG. Colorectal surgery and anastomotic leakage. Dig Surg 2002;19:150-155.
5. Machado M, Hallbook, Goldman S, Nystrom PO, Jarhult J, Sjudah1 R. Defunctioning stoma in low anterior resection with colonic pouch for rectal cancer: a comparison between two hospitals with a different policy. Dis Colon Rectum. 2002;45(7):940-5.
6. Mealy K, O'Broin E, Donohue J, Tanner A, Keane FB. Reversible colostomy – what is the outcome? Dis Colon Rectum. 1996;39(11):1227-31.
7. Biondo S. The role of resection and primary anastomosis of the left colon in the presence of peritonitis. Br J Surg 1997; 84, 380-3.
8. Domingeuz J, Frizelle FA, Wolff BW. Recurrent Diverticulitis Following Resection Chapter in Diverticular Disease, Ed J.P Welch, J.Cohen, W. Sardella, P.Vignati. Pub Lea and Febiger, 1998.
9. Kinsella TJ, Bloomer WD. Tolerance of the intestine to radiation therapy. Surg Gynecol Obstet 1980; 151:273-84.
10. Haboubi NY, Schofield PF, Rowland PL. The light and electron microscopic features of early and late phase radiation-induced proctitis. Am J Gastroenterol 1988; 83:1140-4.
11. Haselton PS, Carr N, Schofield PF. Vascular changes in radiation bowel disease. Histopathology 1985; 9:517-34.
12. Sandeman TF. Radiation injury of the anorectal region. Aust N Z J Surg 1980; 50:169-172.

13. Kalra MK, Maher MM, Saini S. Radiation exposure and projected risks with multidetector-row computed tomography scanning: clinical strategies and technologic developments for dose reduction. *J Comput Assist Tomogr.* 2004;28 Suppl 1:S46-9.
14. Bokey EL, Chapius PH, Pheils MT. Elective resection for diverticular disease and carcinoma. Comparison of postoperative morbidity and mortality. *Dis Colon Rectum* 1981; 24: 181-182.
15. Wolff BG, Devine RM. Surgical management of diverticulitis. *Am Surg* 2000; 66: 153-156.
16. Benn PL, Wolff BC, Ilstrup DM. Level of atlastomosis and recurrent diverticulitis. *Am J Surg* 1986; 151: 269-271.
17. Bacon HE, Berkley JL. The surgical management of diverticular disease of the colon with particular reference to rehabilitation. *Arch Surg* 1960; 80: 646-649.
18. Leigh JE, Judd ES, Waugh JM. Diverticulitis of the colon: recurrence after apparently adequate segmental resection. *AmJ Surg* 1962; 103: 51-54.
19. Marsh J, Liem RKT, Byrd BG, Daniel RA. One hundred consecutive operations for diverticular disease of the colon. *South Med J* 1975; 68: 133-137.
20. Munson KD, Hensein MA, Jacob LN, Robinson AM, Liston WA. Diverticulitis. A comprehensive follow up. *Dis Colon Rectum* 1996; 39: 318-322.
21. Parks TG. Natural history of diverticular disease of the colon. A review of 521 cases. *BMJ* 1969; 4: 639-642.”