

# OFFICE OF THE STATE CORONER FINDINGS OF INQUEST

CITATION: Inquest into the death of Annette

**MAXFIELD** 

TITLE OF COURT: Coroners Court

JURISDICTION: Mt Isa

DELIVERED ON: 10 October 2008

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HEARING DATE(s): 6 – 9 October 2008

FINDINGS OF: Mr Michael Barnes, State Coroner

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remote locations

**REPRESENTATION:** 

Counsel Assisting: Ms Jennifer Rosengren

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The Coroners Act 2003 provides in s45 that when an inquest is held, the coroner's written findings must be given to the family of the person who died, each of the persons or organisations granted leave to appear at the inquest and any agencies with responsibility for the areas of administration referred to in any comments or recommendations. These are my findings in relation to the death of Annette Merle Maxfield. They will be distributed in accordance with the requirements of the Act and posted on the web site of the Office of the State Coroner.

#### Introduction

For at least twenty years prior to her death, Annette Maxfield had suffered abdominal pain and intestinal problems that numerous operations and therapies had been unable to resolve. Despite numerous tests and examinations, the cause of these symptoms was never identified.

On 24 November 2004, Mrs Maxfield underwent surgery at the Mount Isa Base Hospital for the radical surgical excision called an abdominoperineal excision of the rectum (APER). She died later that day as a result of severe haemorrhaging that could not be controlled.

#### These findings:

- confirm the identify of the deceased woman and the time, place and medical cause of her death;
- consider whether the APER surgery should have been performed;
- consider whether it should have been performed at the Mount Isa Base Hospital;
- critique the standard of the surgery;
- consider whether adequate attempts were made to control the bleeding;
- consider whether any changes to the policies or procedures of the Mt Isa Hospital are needed to reduce the likelihood of deaths occurring in future; and
- consider whether the conduct of any of the medical practitioners involved in the case should be referred for the consideration of the Medical Board.

Addressing these issues requires that I focus on Mrs Maxfield's medical history. While there is no doubt her ongoing health issues dominated aspects of her life, in other respects she had a full and happy life and it is important that be acknowledged.

# **Social history**

Mrs Maxfield was born Annette Merle West, in Ipswich on 24 April 1942. She met her future husband Brian in January 1972. They married in 1974. At the time of her death Annette and Brian had been together for thirty three years. Mrs Maxfield had seven children, two of them with Brian and five from a previous relationship.

Mr and Mrs Maxfield lived in Mt Isa since 1972. She worked in a variety of jobs and had a wide circle of friends. She kept in regular contact with her extended family.

She was 62 when she died. She is survived by her husband, her seven children and four grandchildren. Her death was a severe blow to the family who still miss her terribly. They have my sincere condolences.

I turn now to the issues foreshadowed in the introduction.

# Should the APER have been performed?

To determine whether the undertaking of such radical surgery was appropriate, it is necessary to consider in some detail Mrs Maxfield's medical history and the impact of her ailments.

#### Medical history

When only 19, Mrs Maxfield had her gallbladder removed. Her 20s seem to have been relatively uneventful from a medical perspective, although by the time she was 21, Mrs Maxfield had borne five children, all delivered vaginally and apparently without complications.

When she was 30, after bearing two more children, Mrs Maxfield developed gynaecological problems that caused her to undergo a tubal ligation in 1972 and a hysterectomy in 1976.

In the mid 1980s, Mrs Maxfield developed bladder dysfunction and underwent a number of surgical and exploratory procedures. She also developed bowel adhesions, secondary to a small bowel obstruction. These issues never completely resolved; nor was their aetiology understood despite her undergoing at least three laparotomies.

It may be significant that one of the specialists who attended on Mrs Maxfield in 1989 considered she suffered from hysterical pseudo-distension, evidenced by the condition resolving when she was sedated or anaesthetised. There was also speculation she may have been motivated by narcotic seeking.

Throughout the 1990s, Mrs Maxfield apparently developed a depressive illness with chronic tiredness. She was prescribed antidepressant medication. She also had surgery to repair problems with her bladder and her rectum which were probably attributable to her multiple births.

In 2001, Mrs Maxfield developed intense perineal pain and faecal incontinence which was never resolved and which led to her undergoing numerous medical and surgical procedures including that which led to her death.

She was reviewed by Dr Ross Gallery, the director of surgery at the Mount Isa Base Hospital who referred her to Dr Mason a gastroenterologist at the Townsville General Hospital for advice. That specialist recommended magnetic resonance cholangiopancreatography (MRCP), a medical imaging technique which uses magnetic resonance imaging to visualise the biliary and pancreatic ducts in a non-invasive manner.

This scan revealed no physical abnormalities inconsistent with her surgical history. It seems Dr Gallery began to wonder whether there was a psychological component to Mrs Maxfield's complaints. In his letter back to her referring GP he refers to her being "very hazy about previous history" and notes "there seems to be some inconsistencies".

At around this time Mrs Maxfield also reported incapacitating faecal incontinence, although her chart records her claiming she had suffered it for many years. This was investigated via a colonoscopy in Mt Isa which found nothing untoward. An anorectal manometry and ultrasound scans were undertaken in Townsville. They suggested the faecal incontinence was due to a defect in the anterior of the external anal sphincter.

In June 2002, Professor Ho, a colorectal surgeon, performed a sphincter repair at the Townsville Hospital but this wound split after three days and for this reason perhaps, the surgery provided little relief.

When giving evidence, Professor Ho said he would have preferred Mrs Maxfield to first have tried anorectal biofeedback therapy before resorting to surgery. This involves the patient undertaking a series of pelvic floor exercises, the results of which are conveyed to the patient via a digital monitor with a view to the patient developing better sphincter control. This therapy is obviously less invasive than surgery and Professor Ho believed it more likely to address Mrs Maxfield's symptoms than surgery, which he considered did not have a high chance of success. He was proved correct in this regard. He could not advise the court why Mrs Maxfield refused to first try the exercise regime, nor why she failed to undertake them post surgery as prescribed.

As none of these interventions resolved the underlying problems, Mrs Maxfield's depression understandably worsened. She was visiting a psychologist and taking antidepressants but was still considered by her psychologist to be at risk of suicide. It is clear that the pain and regular incontinence very significantly degraded her quality of life.

In November 2002, Dr Gallery performed a colostomy whereby the sigmoid colon was dissected near to the rectum and the proximal end of the colon was brought out through an incision in the abdomen. The other end was sewn off causing the balance of the colon to become dormant.

It seemed that Mrs Maxfield recovered well from the colonoscopy and obviously it addressed the faecal incontinence. However, she then developed quite severe upper quadrant pain, increased heartburn and waterbrash – the spontaneous flooding of the mouth with a clear salty fluid.

In order to explore these new symptoms a gastroscopy was performed at the Mount Isa Hospital in December 2002. This involved inserting a flexible tube with a camera and light into the stomach. It provided no explanation for the symptoms.

The colostomy did not resolve the severe pain Mrs Maxfield suffered in her lower abdomen. When examined by Dr Gallery in August 2003 Mrs Maxfield was found to have an unusually tight band of sphinctal muscle in her anus. This led Dr Gallery to conclude that a division of the anterior anal band could prove palliative.

This option was discussed with her in September 2003. She was advised that it was irreversible but as the colostomy had been successful and was by this stage accepted as a permanent arrangement this did not pose a problem.

Accordingly, the procedure was undertaken on 13 October 2003.

In December of that year Mrs Maxfield was also seen by Professor Rane, a gynaecologist, in relation to pelvic pain but nothing conclusive was discovered.

#### The decision to excise the anus and rectum

Mrs Maxfield was next seen by Dr Gallery on 16 January 2004 where she again presented as very depressed and complaining of intense pain and tenderness in her perineum. He therefore considered whether further surgery should take place and sought advice from Professor Ho in relation to this proposal. In the referral letter, Dr Gallery admitted he was at a loss to explain her symptoms and queried whether they had a psychological component.

Dr Gallery concluded the letter by seeking Professor Ho's assessment of whether an abdominal perineal excision should be undertaken and if so whether it should be done in Mt Isa.

Professor Ho gave a conditional affirmative response to the first question and did not answer the second.

Professor Ho saw Mrs Maxfield in Townsville in March 2004 but was not able to properly examine her because of the acute tenderness in her peri-anal area that prevented him from even touching it. Nevertheless, in his written response to Dr Gallery he agreed an abdominal perineal resection was the most appropriate option. He did however suggest a number of tests be undertaken first to exclude possible causes for her pain that might best be treated by other measures. Specifically, he suggested:-

- a further colonoscopy to exclude the possibility of inflammatory bowel disease – namely Crohn's disease or ulcerative colitis;
- an MRI to exclude the possibility of a tumour; and
- a psychiatric review to ensure she fully understood the risk of persisting perineal pain even after the radical surgery that was being considered.

Professor Ho claims he discussed with Mrs Maxfield other options such as the anorectal biofeedback therapy and/or attendance at a pain clinic but she was adamant she only wanted surgery.

Professor Ho's preparedness to recommend this course seems at odds with his evidence about its prospects. During the inquest he said variously that it was not his preferred choice, that it was not likely to address her symptoms; that it was possible it would; that it was probable it would; that the chances of it doing so were not more than 60% and that he would not strongly disagree with it. However in his last advice to Dr Gallery on the issue he wrote, "I agree with you the best option under these circumstances would be the removal of the rectal stump".

His position seems to be that it was likely Mrs Maxfield had some sort of inflammation or infection in her peri-anal area and in view of her extreme pain and her unwillingness to attempt any other remedies, the excision of the anus and rectum was not unreasonable.

On 16 April 2004 Dr Gallery again saw Mrs Maxfield. On that day he also received a letter from the psychologist she had been seeing for some two years, Rebecca Johnston. Ms Johnston confirmed that Mrs Maxfield "understands the further medical procedure will not guarantee any relief from the pain she now experiences" and that "she has been told that the procedure may even make her condition worse". However, in view of Mrs Maxfield telling Ms Johnston that her current condition was intolerable, her psychologist indicated that Mrs Maxfield wanted to proceed with the procedure.

A colonoscopy was undertaken on 16 June 2004. Although it showed some "patchy colitis" it did not explain the extent of Mrs Maxfield's severe pain. Attempts were made to redress this by way of Colifoam enemas without success.

When she next saw Dr Gallery on 3 August 2004, Mrs Maxfield apparently expressed her keenness to have the radical perineal resection – the removal of the rectal stump or APER – undertaken as soon as possible.

In August 2004, Professor Ho confirmed the MRI showed no indication of cancer. While it became apparent during the inquest that Professor Ho might have passed on slightly inaccurate information relayed verbally to him by the radiologist who interpreted the MRI, I consider this was of no significance. On the crucial question of whether the surgery should proceed, he wrote, as I have quoted above, that it was the best option.

Dr Gallery said in evidence that he recognised the excision of the anus and rectum was unusual and he was not overly confident it would succeed in eliminating Mrs Maxfield's pain but he considered it was the only thing he could offer a desperate patient. He claims he considered that Professor Ho would have canvassed involving a pain management specialist if naturopathic pain was likely to be involved. Dr Gallery expressed little confidence in a psychiatrist being able to diagnose or treat psychogenic pain.

Although he later sought to qualify it, in a letter to the Mt Isa coroner Dr Gallery wrote "I was not at all keen to embark on this surgery, but I allowed myself to be persuaded". After hearing all of the evidence, I consider that might be the most accurate statement about how the surgery came to be performed.

Dr Gallery was under a lot of pressure to do something about Mrs Maxfield's complaint; he considered that as a surgeon all he could offer was surgery. And so on 24 November 2004, Mrs Maxfield was admitted for the APER.

#### **Conclusion**

An APER is radical, irreversible surgery usually only undertaken because of extensive malignancy that can not otherwise be addressed. There was no such need in this case; rather the excision was undertaken because of continuing, severe pain the cause of which had not been established. Conversely, as a colostomy had already rendered the remaining colon and rectum obsolete, it could be argued the surgery was not as significant as in the more usual cases.

Professor Ho stipulated three steps that should in his view have been undertaken before the surgery. The two further tests for physical explanations of the pain were pursued with negative results. The third precondition, a psychiatric review was undertaken in a limited fashion that focussed only on whether the patient was giving informed consent.

I have no doubt Mrs Maxfield was made aware the procedure might not eliminate her pain but she nonetheless enthusiastically embraced it in the hope it would relieve the agony and inconvenience she continued to suffer after the colostomy had addressed her faecal incontinence.

However, having regard to the extensive abdominal surgery the patient had undergone and the doubts Dr Gallery and others had expressed about an inconsistent history, changing symptoms and pseudo distensions, exploration of whether there were neuropathic and/or psychogenic components to the pain she suffered may have been appropriate. When no physiological cause for the pain was ever established, it is surprising that no pain management specialist was consulted.

As mentioned above, neither Dr Gallery nor Professor Ho considered it likely the procedure would achieve its purpose.

The two experts consulted by the court, Dr Andrew Bell and Dr Tony Green had slightly different views. Dr Green said he considered the prospect of the operation resolving the pain were not good but it was a decision Dr Gallery was entitled to make.

Dr Bell considered the procedure would eliminate the anal pain because the anus would be removed, but he considered that having regard to Mrs Maxfield's history, further pain was likely to develop in some other organ.

Dr Bell rejected each of Dr Gallery's explanations as to the likely cause of the pain and his reasons for agreeing to perform the operation both severally and collectively. He said in his view the decision to undertake the procedure when the aetiology of the problem had not been established was unwise and an error of judgement. In his view, Mrs Maxfield's pain was a symptom, not a diagnosis and until one was established, he considered Dr Gallery should have continued exploring other options to reduce or manage the pain rather than resorting to radical surgery. For example, he considered the patient should have had a psychological examination.

The alternative to surgery was not, as counsel for Dr Gallery submits, to do nothing. Rather, attempts should have been made to manage the pain while an explanation for its cause continued.

None of the doctors who gave evidence had ever performed the operation to reduce or eliminate pain from an undiagnosed disease or condition and none of them was aware of any other practitioner doing so.

Undoubtedly, Mrs Maxfield pressured and pleaded with Dr Gallery to do the operation, but that is not in my view a sufficient answer. Patients have the right to refuse treatment medical practitioners recommend; they do not have the right to demand treatment that practitioners do not believe is warranted.

Dr Bell suggested that he could not definitely say the operation should not have been done because he was not the treating practitioner. With all due respect, taken to its logical conclusion that would mean no treatment could ever be sanctioned unless the treating practitioner agreed it was in error. I believe we have moved on from the notion that only a doctor and his/her patient can critique health care. In this case the independent specialist expert consulted by the court who has undertaken between 300 and 500 such procedures rejected each of the explanations given by the treating doctor to justify the procedure and said he would not have done the APER on Mrs Maxfield. In those circumstances, I am of the view I can conclude the decision to proceed with the operation was inappropriate and an error of judgement.

# Should the procedure have been attempted at Mt Isa Hospital?

As mentioned earlier, when Dr Gallery wrote to Professor Ho seeking advice as to whether Mrs Maxfield should undergo an anoperineal excision, he also asked whether it should be done in Mt Isa. He explained in evidence that he was intending to indicate to Professor Ho that he would do the procedure if the specialist thought that was appropriate. "I didn't want him to think I was dumping her on him" Dr Gallery explained.

Professor Ho said in evidence the absence in his letter to Dr Gallery of any response to Dr Gallery's query was the result of that issue being resolved in a telephone conversation in which Dr Gallery assured him he was sufficiently experienced and had the necessary support. Professor Ho said it was not his place to question Dr Gallery's assessment of these issues. It is disappointing he did not engage more constructively. Professor Ho was in a position to suggest more appropriate venues and surgeons for the undertaking of the procedure, if it was to go ahead.

Dr Gallery says he does not remember that conversation but concedes it may have occurred. He says he had done this procedure about 30 times in his 30 years as a surgeon and perhaps another 20 closely related operations. He had undertaken the procedure most recently about two years before he performed it on Mrs Maxfield. He considers he had sufficient knowledge and experience to undertake it but says he had concerns about the level of ICU support available in Mt Isa and whether the other staff were sufficiently experienced to adequately manage the anaesthetics and ventilation, and whether sufficient blood products would be on hand.

As will become apparent, his concerns in this regard were well founded. However, as is already obvious, Dr Gallery did not allow these reservations to deter him from proceeding.

The doctor who anesthetised Mrs Maxfield was Dr Louis Peachy. He was a general practitioner with a fellowship of the Australian College of Rural and Remote Medicine. He was a medical educator at the Mount Isa Centre for Rural and Remote Health. That appointment allowed him a 20% clinical load which he undertook by acting as an anaesthetist one day a week at the Mount Isa Base Hospital. Although he had considerable experience in anaesthetising patients in rural hospitals he was not a specialist anaesthetist. He had once been involved in providing anaesthetic cover for an APER in about 1996. He said in evidence that Mrs Maxfield's operation was the most major surgery for which he had been responsible for many years.

To assist him Dr Galley had only a second year junior house officer; that is a doctor with two years post university experience. Dr Peachey had a similarly junior doctor as his assistant.

Mt Isa Hospital had a ward referred to as an intensive care unit; however it would have been more accurately described as a high dependency unit. None of the usual specialists one would expect to find in an ICU were on hand.

Dr James Troup, the deputy director of anaesthesia and peri-operative medicine at the Royal Brisbane and Women's Hospital, provided independent expert evidence in this matter. He said in his report to the court, "I would expect it (the APER) to be performed by an experienced surgeon with an

experienced anaesthetist, in a centre which can cope with major blood loss and possible postoperative intensive care". He confirmed that position when he gave oral evidence and said he was concerned the procedure was undertaken without a specialist anaesthetist being involved. He was of the view that serious blood loss was a real possibility. The operation should, in his view, only have been undertaken at a facility where the staff were sufficiently experienced, the equipment sufficiently sophisticated and resources on hand to cope with that.

Dr Bell said that the literature demonstrates the variables which correlate with success of high risk surgery are the frequency with which the practitioner has done the procedure and the frequency with which it is done in the facility in question. In this case, Dr Gallery's average of doing only one APER per year combined with the low volume of such surgery in Mt Isa indicates a good outcome was less likely than had either of those variables been high. Counsel for Dr Gallery submitted that these studies related to surgery for cancer and had no application to surgery undertaken for other reasons. I did not understand that to be the effect of Dr Bell's evidence and see no reason to presume the logic of the thesis would be so confined.

Professor Ho thought a surgeon would need to do about 20 similar operations per year to maintain sufficient currency in abdominal rectal surgery in order to safely undertake an APER.

Dr Bell also considered it was unreasonable to expect a general practitioner, even one with the extensive experience in anaesthetics of Dr Peachey, to be the doctor responsible for the anaesthesia in such major surgery.

An aspect of the case which was not explained was why the then recently arrived director of anaesthetics, who was a specialist, did not provide the anaesthetic cover rather than the much less qualified Dr Peachey.

#### **Conclusion**

I am of the view that Dr Gallery made an error of judgment in deciding to undertake such significant elective surgery at the Mt Isa Hospital. I consider he, the anaesthetist, Dr Peachey and the support staff had insufficient or insufficiently recent experience in the procedure and in dealing with the complications that could reasonably have been foreseen. It must be stressed that Mrs Maxfield placed considerable pressure on Dr Gallery to do the procedure. She had previously had a bad experience with Professor Ho and did not want the procedure done in Townsville. However, there was no medical reason why it had to be done urgently. Dr Gallery should have insisted that if the procedure were to be done, Mrs Maxfield have it done at a more suitable facility.

There were at the time no policies in place in the hospital which stipulated which procedures could be done there. Dr Coffey, the executive director of medical services since appointed, in a statement to the court, said this had now been rectified by the adoption of a clinical services framework which describes the types of services that may be performed. It is framed with

reference to the seniority and experience of the staff employed at the hospital. Currently, this approach means that no elective open abdominal surgery is undertaken, other than caesarean sections.

# Was the care provided of an appropriate standard?

I am of the view this question can best be addressed in five stages.

- Was the preoperative assessment appropriate?
- Was the intra operative anaesthesia appropriate?
- Was the surgery done appropriately?
- What caused the haemorrhage? and
- Did those involved respond to the haemorrhage adequately?

#### Adequacy of preoperative assessment

Mrs Maxfield attended at the hospital two days before the operation for a preoperative assessment. From the form completed during that process it is obvious that her vital signs were measured, a brief history of her past operations were recorded and her current medications were noted. It recorded she took alcohol everyday and that she was "fit". No blood tests or blood matching was ordered.

On 24 November Mrs Maxfield arrived at the hospital at about 7.00am as arranged. Again her vital signs were noted and it was recorded she "has heavy intake of alcohol – ethnol 55oz daily average everyday".

At about 9.45, Dr Peachey who was to anaesthetise Mrs Maxfield examined her and took a brief history. He was aware she had undergone a number of surgical procedures in the recent past and had not had any adverse reaction to the anaesthetic. She reminded him that when he had done the anaesthetics for her colonoscopy, he had trouble inserting a cannula. He did not read her charts and did not review the results of her preoperative assessment done two days earlier or the admission notes made earlier in the day. He recorded her as being a "regular social" drinker which he explained to the court he interpreted as a couple of drinks every couple of days. Had he known what she had told the admission nurse, Dr Peachey says he would have considered ordering a liver function test.

Dr Peachey did not order any blood tests to establish her haemoglobin levels, or her electrolyte levels. He did not seek to establish a coagulation profile nor send any blood for a group and hold which would have enabled speedy cross matching if that became necessary. According to Dr Troup, these are all things that should have been done as a matter of course when such major surgery was about to be undertaken.

As had occurred on a previous occasion, Dr Peachy had trouble obtaining intravenous access in Mrs Maxfield's arms. After failing in this regard, he inserted a central venous catheter in the right internal jugular vein.

He did not insert an arterial line; another failing that Dr Troup considered severely compromised his ability to monitor vital signs when Mrs Maxfield's blood pressure plummeted.

Dr Peachey accepts these criticisms and could not explain why he did not undertake these tests other than oversight and the lack of any clear policies or professional leadership in the anaesthetics department of the hospital. It seems the department had been relying on locums for some time and a new director had only recently arrived.

Dr Troup was of the view that these omissions deprived Dr Peachey of information he needed to consider when the emergency developed and delayed his response.

#### **Conclusion**

I accept, as does Dr Peachey, that he made a number of serious oversights in the preoperative assessment of Mrs Maxfield and that he failed to monitor aspects of her condition relevant to the response to the emergency which ensued. It is possible that had he undertaken the tests and other steps that a competent general practitioner providing anaesthetic cover would be expected to, his ability to respond to that emergency may have been improved. It seems likely however, this would not have altered the outcome.

It is suggested by his counsel that because Dr Peachey did not undertake the initial pre-operative assessment he should not be held accountable for its inadequacies. With respect, in my view it is his responsibility to ensure that an appropriate assessment has been done or do it himself. Dr Peachey gave evidence he did not even read the report of that assessment. If a lack of time means that matters essential to a safe procedure can not be done, the procedure, when it is not a response to an emergency, should be postponed.

#### Adequacy of intra-operative anaesthesia

The anaesthetics commenced at about 11.50am. Dr Troup considers Dr Peachey administered appropriate anaesthetic agents in reasonable quantities. He also considers that anaesthesia was maintained by means appropriate for the planned operation. He was however critical of the failure to record central venous pressure and end tidal carbon dioxide during the course of the operation.

#### Conclusion

Apart from the issues referred to by Dr Troup, I am of the view the intraoperative anaesthesia was adequately managed by Dr Peachey.

### Was the surgery done appropriately?

The operation commenced at around 12.10pm. Dr Gallery says he planned to excise the anus, rectum and remnant sigmoid colon via a peri-anal incision and only make an incision in the abdomen, if he was unable to complete the operation from below. He says he had used this approach on one or two occasions before.

He says he commenced by making incisions on the anterior and posterior sides of the anus. He developed these along each side of the rectum and maintained vision of the surgical plane by deploying purpose specific retractors.

Dr Gallery says he encountered no difficulty separating the posterior wall of the rectum from the Waldeyer's facia that attaches it via the periosteum lining to the anterior face of the sacrum. He says he had sufficient view of where he was working to do so safely and that he kept close to the bowel which he believed reduced the likelihood of his severing unseen blood vessels.

The anterior face of the rectum was also mobilised without difficulty as he worked his way up the posterior wall of the vagina, past the uterus.

Dr Gallery says that only after he completed the division of the Waldeyer's facia and had progressed adjacent to the promontory of the sacrum did he become concerned he could not safely proceed further because he could not clearly see where he was working. His operation report notes "approx 30 - 40 cm mobilised from below without approaching the closed end of the rectal stump".

He therefore, in his words to the Mt Isa coroner, "capitulated" and temporarily closed the perineal wound and made an abdominal incision. This was about an hour after the operation commenced.

Dr Gallery says that with relative ease he overcame some adhesions in the upper pelvis and was able to free the distal sigmoid colon attached to the rectum and divide all vessels and tissue tethering the rectum. This also took in the vicinity of an hour.

When Dr Galley returned to the perineal wound to remove the now freed bowel, he says he was surprised to find considerable bleeding which, when he removed the specimen, he could see welling up in the hollow of the pre sacrum.

I shall return to the possible causes of this bleeding and a critique of the attempts to stem it after I discuss the appropriateness of the surgery thus far described.

The more usual approach to an APER is to first undertake an abdominal incision through which the sigmoid colon and upper rectum are mobilised, before making a perineal incision to divide the remaining tissue and deliver the specimen.

Dr Gallery's reasons for departing from the usual approach were:

- his desire to avoid another incision if this was possible, sparing the patient the risks of another wound;
- his belief that with careful positioning of the patient and the use of the Lloyd-Davies retractors he could safely remove all of the tissue by dividing it from the connecting tissue from below;
- his desire to avoid the difficulty of dividing the adhesions in the abdomen resulting from previous surgery;
- even though when he fashioned the colonoscopy, Dr Gallery anticipated the possibility of rejoining the colon and so he "didn't pursue the rectum deep into the pelvis" and is not likely to have divided the inferior mesenteric artery, he claims he anticipated that the remnant sigmoid colon may have shrunk down into the pelvis making its removal without an abdominal incision possible;
- his belief that even though a better view can be had from above he does not accept this reduced the likelihood of unintended insult to vascular vessels; and
- it is easier to pack the pelvis if bleeding does occur.

Neither Professor Ho, Dr Green nor Dr Bell has ever attempted an APER with this approach and Dr Bell is adamant that no recognized colo-rectal surgeon of whom he is aware does so.

Dr Green was of the view that so long as the surgeon did not proceed further than he could safely, there was no problem with this approach. He suggested there was nothing to lose by starting with the perineal approach and switching to the abdomen if that became necessary. In his opinion a surgeon could dissect up to 15 centimetres upwards from the anus relying on feel as much as sight and by pulling the rectum downwards increase the upwards range of dissection. However, when asked where this would be on the dissection diagrams tendered in evidence he indicated a point in the mid to lower rectum.

Dr Bell was adamant the procedure should be undertaken by first making an abdominal incision and the freeing of the sigmoid colon and upper rectum as far as this could safely be done from that approach. Only when that had been done should a perineal incision be made. The surgeon should develop the incision up to the pelvic floor adjacent to the coccyx and work his finger around behind the rectum while his assistant moved the mobilised upper rectum to one side to give the surgeon greater access to the other side. Dr Bell said he did not believe a surgeon working from the perineal approach could see more than 5cm from the pelvic floor.

In relation to Dr Gallery's reasons for the perineal approach Dr Bell said:-

- dividing adhesions is a regular task for abdominal surgeons and rarely poses a problem, as indeed turned out to be the case here;
- it was inevitable that tissue would need to be excised from the abdominal cavity and that could not be achieved from below;
- excision of the rectal stump was never likely to be achieved relying only on a perineal approach and considering that it could showed error of judgement;
- it was not appropriate to start from below because the Waldeyer's fascia should be divided from above and 80 to 90% of the rectum could be freed and then leverage applied from above to assist with the freeing of the lower rectum;
- a surgeon could not hope that by dissecting along the bowel he or she would avoid vascular structures as that would necessitate dissecting the meso colon which has numerous blood vessels;
- by striving to excise the whole rectal stump from below the risk of venus assault was greatly increased;
- it was likely that the Waldeyer's facia would deflect the dissection posteriorly resulting in damage to the presacral venous plexus.

Dr Bells' expertise and experience indicates I should prefer his opinion as to what is the appropriate sequencing of the steps in this procedure. I should also accept his opinion that the approach adopted by Dr Gallery was dangerous and unwarranted. Although Dr Green lent some support to Dr Gallery's approach, it was pertinent that neither he nor Professor Ho had ever employed it themselves.

It was submitted by counsel for Dr Gallery that support for his approach could be found in a text written by Dr Golliger published in 1980. With all due respect to Mr Diehm and Dr Golliger, the excerpt tendered contained a fascinating description of the development of colorectal surgery techniques in the 18<sup>th</sup>, 19<sup>th</sup> and early 20<sup>th</sup> centuries. However, I consider the opinions and habits of currently practicing specialists more persuasive than a text written in the 1970s when determining standards appropriate to practice in the 21<sup>st</sup> century.

Nor does the fact that devices have been developed to respond to iatrogenic injury caused when the abdominal approach is used mean that the perineal approach is safer. Rather, it simply confirms this is a high risk procure that must be undertaken by surgeons with current expertise using the best methods.

In answer to the evidence that proceeding from below is unduly risky, Dr Gallery says he only proceeded as far with the perineal approach as he could

safely see to do so. Dr Bell is adamant that Dr Gallery could not have had sufficient vision to adequately view an incision as deep as that he apparently made.

His counsel's submission that Dr Bell, in effect, can't knock it if he hasn't tried it, ignores Dr Bell's evidence that he refrains from engaging in this approach because he knows from experience that his view is unduly restricted to the extent that proceeding is unsafe.

Dr Gallery's oral evidence on this issue and a number of important other matters varied significantly from that contained in his statement and over the time he was in the witness box. Regrettably, I have concluded that his evidence is not reliable in some respects and I consider some of his statements to be self serving.

#### Conclusion

I am of the view that the appropriate sequence of steps in this procedure is as described by Dr Bell and that Mrs Maxfield's circumstances did not justify departure from it.

I consider that Dr Gallery, as a result of an error of judgement, attempted to excise the rectal stump via an initial perineal incision and pressed on further than was safe in a futile effort to complete the procedure in this manner. While I acknowledge that when he was unsuccessful he, to use his word, capitulated and made an abdominal incision, I consider he had by then engaged in unnecessarily dangerous surgery.

#### What caused the haemorrhage?

Dr Gallery's evidence as to whether a surgical error caused the fatal bleeding and if so where and when it occurred vacillated.

- In a letter to the Mt Isa coroner he advised "the exsanguinating haemorrhage was immediately apparent when it occurred".
- In his second statement prepared for the inquest he says he was unsure whether it occurred as result of dissection from the perineal or abdominal sites.
- When he gave evidence he said variously;
  - he didn't accept that he necessarily damaged the veins at all and that the bleeding may just have flowed from the rectum separating from the sacrum;
  - a coagulopothy may have been responsible for the usual small veins that are inevitably cut not clotting.
  - the perforation occurred in the middle of the dissection of the Waldeyer's Facia when he was dividing tissue near S2, S3 and S4 (when he was working from the perineal incision).

Dr Gallery also conceded that after he left the lower incision he was not in a position to see into that wound which was draped. The bleeding was noticed when he returned to the pelvis to complete the excision. He also acknowledged that although he did not notice the bleeding when he was initially working from the perineal incision it may have occurred at that stage.

During the investigation and initially during the inquest it was assumed the bleeding commenced at about the time Dr Gallery returned to the lower incision and noticed it, because at that stage Mrs Maxfield's blood pressure dropped precipitously from 90/60 at 1.50pm to 60/40 at 2.00pm. However, a more careful examination of the blood pressure as charted reveals it had also dropped to dangerously low levels much earlier.

Between 12.25pm and 12.40pm, Mrs Maxfield's blood pressure diminished from 90/55 to 65/40. It returned to 120/70 for 5 or 10 minutes either side of 1.00pm and then bobbled around between 80/55 and 90/60 before crashing at 2.00pm as described earlier.

The interpretation of this data is complicated by the uncertainty surrounding the fluid intake managed by the anaesthetist during this period. The charts are clearly inaccurate in some respects and difficult to understand. There is also the variation in the anaesthetic agent to consider. It seems the Sevoflurane was running at 2% at 12.15; was reduced to 1.5% at 12.45; increased to 2.5% at 1 o'clock and was titrated back to 1.5% at 1.15pm. This drug can influence blood pressure and so it is difficult to know what part, if any, it played in the variations mentioned earlier. I do not accept Dr Peachey's counsel's submission that Dr Bell attributed the blood pressure variations to this drug. He merely alluded to its possible involvement, as have I.

The other issue that needs to be taken into account when trying to determine when the bleeding commenced is the rate of the blood loss. Dr Bell gave evidence that venous bleeding in the presacral area is not rapid; he suggested 300mls in 15 minutes as a ready guide. He also suggested between one and two litres of blood would need to be lost to explain such a severe drop as that noticed in Mrs Maxfield between 1.00 and 2.00pm.

#### **Conclusion**

Because of the complications referred to earlier, I can not be certain about when the haemorrhaging commenced but having regard to:-

- the dangerous level to which Dr Gallery had excised the rectum before he "capitulated" and continued the excision from an abdominal incision:
- the drop in blood pressure during the time that he would have been traversing areas known to be adjacent to the vessels later found to be bleeding; and
- his acknowledgment that this could indeed have been when the perforations occurred;

I am more inclined to conclude that the haemorrhaging commenced when Dr Gallery was working from the perineal incision and went unnoticed until he returned to that site, by which time the accumulation of blood made it abundantly apparent and the urgency of the situation was confirmed by the anaesthetist.

#### Was the response to the haemorrhage adequate?

Dr Gallery says he became aware of the bleeding when he re-entered the perineal wound, at about which time he was also told by the anaesthetist that Mrs Maxfield's blood pressure was parlous.

He says he completed the removal of the rectum and was then able to see blood welling up in the presacral region. In evidence he said that he was not able to determine with certainty the source of this bleeding. This seems inconsistent with his operation report which includes "bleeding locate(d) to multiple flimsy wide bore veins in hollow of sacrum". Dr Gallery explained he assumed the blood was venous because of its colour and the rate it was issuing forth but continued to deny that he could identify the veins from which it was coming even though he acknowledged he applied sutures and forceps to try and stem the bleeding.

He agreed that the location in which the blood was pooling was consistent with it issuing from the presacral venous plexus but also, for a while, suggested other possible sources.

Dr Gallery explained that he applied pressure to the bleeding area with his hands and packs. He says he searched from above and below to locate vessels that could be ligated but was unsuccessful.

Dr Bell considered that the only other method to control the bleeding was the placement of a thumbtack through a bleeding vein. However, this was only feasible if the bleeding vein could be identified and was in the basivertebral system. Dr Gallery's evidence was that he was unable to locate a bleeding vein – rather the bleeding was defuse and issuing from numerous, perhaps ten, indistinguishable points.

As the bleeding continued, Dr Gallery decided the creation of tamponade by fully packing the pelvis and closing both wounds would provide the best prospects of success. This was done shortly after 4.00pm.

As the bleeding continued, replacement of lost volume became imperative. It seems there were unnecessary delays in this occurring that can be attributed to Dr Peachey's inadequate preoperative preparation and his inability to speedily determine what steps to take.

There was a delay of one hour and ten minutes between 2.50pm and 4pm before the first blood was transfused and a blood test was not ordered until 3.20pm - one hour and twenty minutes after the bleeding was first identified. Dr Troup considered that while Dr Peachey may have been otherwise occupied, the blood test should have been ordered closer to 2pm. Dr

Peachey's evidence was that he placed a greater priority on the administration of fluids other than blood. Dr Troup thought it was difficult to know how the prioritization of fluid replacements should have been managed in the absence of a pre-operative haemoglobin level.

There was a further delay of an hour before another unit of blood was transfused at 5pm. Dr Troup's evidence was that once the results of the blood test were known, Mrs Maxfield should have been transfused with at least two units of blood immediately.

The first unit of fresh frozen plasma ("FFP) was not transfused until 5.10pm, by which time Dr Peachey estimated Mrs Maxfield had lost close to eight litres of blood. Dr Troup considered that this blood should have been transfused before Mrs Maxfield lost more than five litres of blood. Dr Peachey was unable to explain the reason why it had taken three hours to transfuse the first unit of FFP. Further Dr Troup thought that while the FFP was transfused at a sufficient rate until 6.10pm, the decision to change the rate to three hourly was puzzling. Mrs Maxfield was only transfused with a total of six units of FFP and Dr Troup thought the number should have been at least double that.

Dr Troup was critical of the fact that no further blood tests were taken after 3.20pm. Dr Troup rejected Dr Peachey's explanation that he knew the results were going to be poor and they would not have changed his management plan, which was to attempt to boost Mrs Maxfield's blood pressure with the administration of fluids. Dr Troup explained that the best prospect of improving Mrs Maxfield's deteriorating condition was to address the ongoing bleeding. The monitoring of Mrs Maxfield's haemoglobin and other levels was an important part of this. Dr Troup thought that blood tests should have been ordered hourly.

Coagulation studies were not ordered until after 5.00pm by which time there had been significant blood loss. Dr Troup could see no reason why the studies could not have been ordered with the blood test at 3.20pm.

Mrs Maxfield required a number of units of O negative blood shortly after the bleeding commenced as there was no cross matched blood available. Dr Peachey did not draw a sample of Mrs Maxfield's blood prior to the administration of the donor blood. Consequently, the obtaining of cross matched blood in the operating theatre was delayed. Further the transfusions of the donor blood necessitated the administration of intravenous calcium or calcium gluconate to compensate for the adverse effect of the donor blood on coagulation factors. This was not done.

These omissions demonstrate the treatment of the haemorrhaging by Dr Peachey was far from satisfactory. However Dr Troup was not convinced that even an anaesthetist experienced with treating massive blood loss would have been able to improve the outcome in the presence of ongoing bleeding.

As Mrs Maxfield's condition continued to deteriorate, Dr Peachey realized the seriousness of the situation and sought the assistance of Dr Ashraf, the

Director of Anaesthetics. It would have been reasonable and appropriate for Dr Ashraf to have assumed responsibility for the attempts to manage the ongoing blood loss from this time. This does not appear to have occurred as Dr Peachey could recall Dr Ashraf being present on an intermittent basis only. This was clearly unacceptable and unfortunate for Dr Peachey that he did not have the support of a more senior colleague.

As the bleeding continued and Mrs Maxfield's blood pressure remained dangerously low, her blood's tendency to clot continued to diminish. As her core temperature declined, coagulopothy set in that made recovery very unlikely.

#### Conclusion

Despite Dr Gallery's inconsistent evidence about whether he located the perforated veins, I conclude that he did everything reasonably possible to respond to the haemorrhaging.

Dr Peachey seems to have made a number of serious errors of judgement. He was disadvantaged from the outset of the haemorrhaging because of his failure to group and hold or cross match blood, his failure to have had the usual blood tests undertaken before the operation and his failure to have in place vital monitoring ports. He then compounded the situation by undue delay intra-operatively in taking the blood tests when the bleeding was detected and transfusing blood products.

The evidence tends to indicate however, that even in more competent hands, Mrs Maxfield's prospects of surviving were slim.

# Post operative and post mortem events

At about 6.30pm Mrs Maxfield was moved to the ICU. She was peripherally cool and the bleeding was continuing. She was given inotropes in an unsuccessful attempt to raise her blood pressure.

Mr Maxfield came to the hospital at about 7.00pm. His wife was still alive but clearly, gravely ill. He spoke to Dr Gallery and is adamant he was told the operation had been a success – an insensitive term to use in the circumstances but nothing turns on exactly what was said. It was made clear to him that his wife's death was imminent. I have some concerns about whether Queensland Health's full disclosure policy was complied with and whether the consideration and compassion one would hope would be extended to a person in his situation occurred. However, the evidence is insufficient for me to make findings in relation to those issues.

He left, highly distressed.

At about 7.30 Mrs Maxfield's heart rate slowed and at 7.50pm she was declared dead.

Later in the evening, Mr Maxfield was brought back to the hospital by the police and he identified her body to an officer.

The matter was reported to the local coroner. Mrs Maxfield's body was flown to Brisbane for an autopsy which was undertaken by an experienced forensic pathologist.

Dr Gallery and Dr Peachey were asked to provide statements which they did in May 2005. Dr Gallery's statement, absent the formal parts was 10 lines long. Dr Peachey's was only twice as long. Both were completely inadequate for an understanding of how the death occurred.

I assumed responsibility for the matter after the local coroner indicated that he would have great difficulty finding sufficient court time to hear an inquest and write findings. As a result unacceptable delay ensued, to the detriment of the family and those involved.

This matter once again demonstrates the difficulty the coronial system has in investigating medical deaths which are clearly beyond the competence of general duties police officers. The appointment of a full time northern coroner should at least ensure that in future such matters are dealt with in a timely fashion.

The inquest was convened in Mt Isa on 6 October and evidence was heard over four days. Ms Jennifer Rosengren was counsel assisting and the Mt Isa Health District and its employees were represented by Mr Geoffrey Diehm of counsel. Both made written submissions after the close of evidence which I found to be of great assistance.

I also wish to acknowledge the assistance provided by Dr James Troup, Dr Tony Green and Dr Andrew Bell. All three provided detailed written reports critiquing the treatment by the clinicians involved in Mrs Maxfield's care. I'm sure none of them enjoyed deconstructing the performance of colleagues in a public forum but I am grateful their commitment to reflective practice and improving patient safety allowed them to overcome any reservations they may have had. I certainly could not have hoped to understand the circumstances of the death without their involvement.

# Findings – time, place and cause of death

I am required to find, as far as is possible, who the deceased was, when and where she died, what caused the death and how she came by her death. I have already dealt with this last issue, the manner of the death. As a result of considering all of the material contained in the exhibits and the evidence given by the witnesses I am able to make the following findings in relation to the other aspects of the death.

Identity – The deceased person was Annette Merle Maxfield

Place of death – She died at the Mount Isa Base Hospital in north western Queensland

**Date of death** – Mrs Maxfield died on 24 November 2004

**Cause of death** - She died from haemorrhage caused by a abdominoperineal

excision of the rectum.

## Concerns, comments and recommendations

Section 46 provides that a coroner may comment on anything connected with a death that relates to public health or safety, the administration of justice or ways to prevent deaths from happening in similar circumstances in the future.

That requires the coroner to consider whether the death under investigation was preventable and/or whether other deaths could be avoided in future if changes are made to relevant policies or procedures.

Coroners, of course, do not have the expertise that would enable them to rely on personal knowledge when approaching this task; they rely on the evidence of medical specialists with qualifications and experience in the relevant field. As has already been mentioned, in this case I was greatly assisted by the reports and oral evidence of Dr James Troup, Dr Tony Green and Dr Andrew Bell. Dr Greg Coffey, the executive director medical services of the Mt Isa Base Hospital, also provided valuable evidence.

The systemic issues which were raised by the circumstances of this case are:

- The scope of surgery that can be undertaken at the hospital;
- The inadequacy of the death review; and
- The lack of professional leadership of the anaesthetics department.

I am satisfied that each of these issues has been dealt with as far as is reasonably possible.

The hospital has adopted the statewide Clinical Capabilities Framework, under which it is designated a level one facility. This means that intraabdominal surgery, other than caesarean sections, is only undertaken in emergencies.

After Mrs Maxfield's death an informal meeting was undertaken among those involved in her care and other senior clinicians. However, no official records were kept, no systemic analysis undertaken and no remedial actions were formulated, implemented or monitored. Dr Coffey advises that since this death a properly functioning mortality and morbidity committee has been established which is administered by a patient safety officer. I am satisfied that if this process is continued the deficiencies referred to earlier will be ameliorated.

A lack of professional leadership in the anaesthetics department continues to impose limitations on what can be achieved in the hospital. Contrary to comments reported in the local press this week, this is not an issue amenable to a simple solution. The chronic shortage of medical graduates will not be redressed for some years and the necessary specialist training will obviously take even longer. I have no basis on which to reject the claims made by Dr Coffey that attempts to recruit senior staff to a number of key positions in the hospital are continuing. There is nothing I could usefully add to that process.

#### Referral to the Medical Board

So far as is relevant to this case, the *Coroners Act 2003* provides in s48(4) that a coroner may give information about a person's conduct to a disciplinary body for the person's profession if the coroner believes the information "*might cause the body to inquire into, or take steps in relation to the conduct*".

The Medical Board of Queensland considers complaints and information about health care practitioners pursuant to Part 3 of the *Health Practitioners* (*Professional Standards*) *Act 1999.* The objects of that Act are set out in s6 and include:-

- (a) to protect the public by ensuring health care is delivered by registrants in a professional, safe and competent way;
- (b) to uphold the standards of practice within the health professions; and
- (c) to maintain public confidence in the health professions.

When considering whether to take action, the Board considers whether the available information appears to provide grounds for disciplinary action against a practitioner registered under the Act as set out in s124 of the Act. Such grounds include "unsatisfactory professional conduct" which, insofar as may be relevant to this matter, is defined as:-

- Professional conduct of a lesser standard than might reasonably be expected of the registrant by the public or registrant's professional peers; and
- Professional conduct that demonstrates incompetence or lack of adequate skill, judgment, or care in the practice of the registrant's profession.

Some health care professionals cavil with disciplinary action being taken for unintended errors of judgement on the basis that everyone makes mistakes and it is unfair to punish those whose mistakes just happen to lead to a serious adverse event. It is suggested such individuals are no more culpable than the many others who make equally poor decisions that, through good luck, don't have adverse outcomes.

I accept that approach when it is applied to spur of the moment decisions made in hectic circumstances, which on reflection and with the benefit of

hindsight are judged to be wrong. But that is not the situation that I am considering in relation to the treatment of Mrs Maxfield.

In her case, I consider the evidence shows that she died as a result of an inappropriate operation being undertaken by an insufficiently experienced surgeon, in an inappropriate fashion, while being assisted by an inadequately experienced anaesthetist who made basic errors from the outset.

It is however important to remember that Dr Gallery did not want to undertake the procedure. Indeed some years before, he expressed reservations about providing any further treatment to Mrs Maxfield. It is apparent that she pursued him and pressured him, and out of compassion for her suffering he agreed to try and assist. He was not motivated by money or any other improper purpose; he did not act with callous disregard. I have no doubt he honestly believed he was capable of safely undertaking the procedure in the manner he did. In my view Dr Gallery did not receive the support he was entitled to expect from his more expert colleague Professor Ho.

Dr Peachey was not a specialist anaesthetist but he had sufficient training and experience to recognise that he made a number of serious errors of judgement that compromised his ability to respond to the emergency when it arose. He gave evidence that he has significantly changed his practice since this death.

When judging Dr Peachey's culpability for these failings, I consider it relevant that he was only working at the hospital on one day per week and that there was a lack of policies and professional leadership in the anaesthetics department that undoubtedly contributed to these errors. He too was badly let down by the director of anaesthetics, Dr Ashraf, who in my view should have assumed responsibility for this patient from the outset or at least when the emergency occurred.

Were the Medical Board's focus punitive or recriminatory these aspects of the practitioners' conduct might militate against it being referred to the Board. However, as outlined earlier, the Board is required to act to maintain professional standards to protect the public and to maintain public confidence in the health care system.

From those perspectives, I am of the view that the Board could conclude that Dr Ross Gallery engaged in *unsatisfactory professional conduct* when:-

- he elected to perform an abdominoperineal excision of the rectum on Mrs Maxfield without having established a cause for her peri-anal pain;
- he attempted to perform the operation himself when he did not have sufficient or sufficiently recent experience, he did not have the assistance of a specialist anaesthetist and when there was no medical emergency requiring him to do so; and

 he attempted to undertake the procedure by way of a perineal incision.

I am also of the view that the Board could conclude that Dr Louis Peachey engaged in *unsatisfactory professional conduct* when:-

- he failed to undertake a satisfactory pre-operative assessment of Mrs Maxfield;
- he failed to ensure that a sample of her blood was available for cross matching before the surgery commenced, he failed to ensure the devices by which a patient's vital signs are routinely monitored intra-operatively were utilized and he failed to order routine blood tests before commencing the surgery; and
- he failed to respond appropriately when the haemorrhage was detected in that he did not order blood tests promptly nor commence transfusing blood products when a reasonably competent practitioner would have done so.

Accordingly, I am obliged to refer the information gathered during this inquest to the Board for its consideration.

This inquest is closed.

Michael Barnes State Coroner Mt Isa 10 October 2008