

**FATAL ACCIDENT INQUIRY INTO DEATH OF MARGARET FEWKES
SHERIFFDOM OF GLASGOW AND STRATHKELVIN AT GLASGOW**

INQUIRY HELD UNDER FATAL ACCIDENTS AND

SUDDEN DEATHS

INQUIRY (SCOTLAND)

ACT 1976

SECTION 1(1)(a)

SECTION 1(1)(b)

DETERMINATION by LINDSAY WOOD, Esquire, Sheriff of the Sheriffdom of Glasgow and Strathkelvin following an Inquiry held at Glasgow on the 13th, 14th, 15th, 16th and 17th days of December Two Thousand and Four, 21st, 22nd, 23rd and 24th days of March, 18th, 20th, 21st and 22nd days of April, 25th day of May and 27th day of June all Two Thousand and Five into the death of MARGARET FEWKES.

GLASGOW, 9th Feb 2006.

The Sheriff, having considered all the evidence adduced, DETERMINES:

In terms of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976, Section 6(1):

(a) That Margaret Fewkes, aged 73 years, who resided at 249 Corkerhill Place, Glasgow, died at the Southern General Hospital, Glasgow at 1755 hours on 24 June 2002.

(b) That the cause of her death was

1(a) Sepsis and multi-organ failure

due to

1(b) Abscess of appendix and ileum.

(c) That a reasonable precaution whereby the death of Mrs Fewkes might have been avoided would have been for a CT scan to be carried out after an ultrasound scan, and then followed by a laparotomy, by no later than Monday, 20 May 2002.

(e) That the creation of a system which accurately noted who had been delegated to carry out certain tasks as instructed by a consultant on a hospital ward round and ensured such tasks were followed through timeously would lead to quicker and appropriate intervention and in this case, a CT scan would have been carried out on 22 May which in turn would probably have led to an operation that day which in turn would have given Mrs Fewkes an improved chance of survival.

NOTE:-

This Fatal Accident Inquiry was instructed into the circumstances of the death of Margaret Fewkes in terms of Section 1(1)(b) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 on the grounds that it appeared to the Lord Advocate that the holding of such an Inquiry would be in the public interest on the grounds that the death had occurred in circumstances such as to give rise to serious public concern.

During the course of the Inquiry, which took place over 15 days, the procurator fiscal depute called the following witnesses:-

1. Mr Alan Dickson

2. Mrs Eleanor Fraser

3. Dr Patricia Boyle

4. Dr Susan Thomas

5. Dr Kerrie McAllister

6. Dr Mo Lee Wong

7. Mr John Anderson

8. Ms Gillian Connell

9. Dr Melissa Randershan

10. Mr Paul Witherspoon

11. Mr George Welch

12. Mr Colin Campbell

13. Dr Steven Kettlewell

14. Ms Daphne Varveris

15. Mr David Wright

16. Mr Graham Sunderland

17. Dr Norman Wallace

18. Ms Marjorie Black

19. Mr Magnus Garrioch

20. Mr David Hamer-Hodges

At the Inquiry:-

Mr Derek Buchanan, Procurator Fiscal Depute, appeared for the Crown.

Mrs Mary Robertson, solicitor appeared on behalf of Mr Paul Witherspoon, Mr George Welch and Mr David Wright.

Mr Douglas Jessiman, solicitor appeared on behalf of Mr John Anderson, Dr Mo Lee Wong and Dr Susan Thomas.

Mr Douglas Ross, advocate appeared on behalf of Greater Glasgow Health Board.

The family of Mrs Fewkes were not represented but the Procurator Fiscal Depute spoke to Mrs Fewkes' son, Mr Alan Dickson at the conclusion of each witness to answer any queries which Mr Dickson may have had or to put further questions if appropriate. Mr Alan Dickson was present on most days and Mrs Fewkes' niece, Eleanor Fraser on a number of occasions.

Following the evidence led by the Crown, the evidence of Mr Lavelle Jones was led by Mrs Robertson.

I would like to express my personal sympathy and condolences to the Fewkes family and particularly to Alan Dickson and Eleanor Fraser who gave evidence at the Inquiry. I hope this Inquiry has assisted them in coming to terms with their loss.

I am sorry that due to court and other commitments, it has taken longer than I would have hoped to issue my judgment. In addition, I found myself needing more time than I anticipated to fully and properly consider all the evidence and supporting productions.

To put matters in a legal context for the benefit of the family, I think it would be helpful to record that in terms of Section 6(1) of the 1976 Act, it is provided that "at the conclusion of the evidence and any submissions thereon, or as soon as possible thereafter, the sheriff shall make a determination setting out the following circumstances of the death so far as they have been established to his satisfaction:-

(a) where and when the death took place;

(b) the cause or causes of such death;

(c) the reasonable precautions, if any, whereby the death might have been avoided;

(d) the defects, if any, in any system of working which contributed to the death; and

(e) any other facts which are relevant to the circumstances of the death."

Mrs Margaret Fewkes was born on 24 April 1929. She enjoyed good health prior to the illness which led to her death.

On 10 April, her general practitioner, Dr Boyle, visited her at home in response to a complaint that she had been suffering from diarrhoea and vomiting for 2 days. This was diagnosed as gastro-enteritis. There was no abnormality, such as a mass, found on examination of her abdomen at that time. Dr Boyle prescribed an antispasmodic.

On 7 May, Mrs Fewkes attended at her GP surgery and was fully examined by a locum doctor, Dr Thomas. Mrs Fewkes told Dr Thomas that she had a pain in the right side of her abdomen and that the area had been throbbing since the previous Friday, 3 May. Dr Thomas noted that Mrs Fewkes had some tenderness in the right iliac fossa and a sensation of fullness there. She arranged for blood and urine tests to be carried out and asked Mrs Fewkes to return in a week's time.

Mrs Fewkes returned to the surgery on 13 May. The blood tests were abnormal. She was examined by Dr Boyle. She noted that Mrs Fewkes was not well and observed a swelling on the right iliac fossa, 2 inches across. She made a differential diagnosis of carcinoma of the caecum (bowel cancer).

Dr Boyle discussed her findings with Mr Graham Sunderland, Consultant Surgeon at the Southern General Hospital, Glasgow, later that day. They agreed that Mrs Fewkes should be admitted to the Southern General on the following day.

Mrs Fewkes was admitted to the Southern General Hospital on 14 May under the care of Mr John Anderson, Consultant Surgeon. She was examined that afternoon by Dr Kerrie McAllister who noted a mass, 3cm by 4cm in the right iliac fossa. A treatment plan was thereafter drawn up which included an ultrasound scan which was scheduled for 20 May and a barium enema which was believed by medical staff treating Mrs Fewkes to have been scheduled for 22 May.

On 21 May, it was noted in the medical records that the barium enema would not take place until 29 May.

On 22 May, Mr David Wright, Consultant Surgeon, examined Mrs Fewkes. He was of the opinion that there had been deterioration in her condition and he felt that she needed an urgent CT (Computerised Tomography) scan. He hoped that it would have occurred preferably that day. That scan did not take place.

On the morning of 23 May, Mrs Fewkes was found to be extremely unwell. George Welch, Consultant Surgeon, considered that her life was in danger due to a combination of factors including low blood pressure, hypoxia, low oxygen delivery and low perfusion of the tissues of her vital organs

as a consequence of probable septic shock caused by cardiac decomposition. He thereafter performed a laparotomy during which he discovered a complex mass in the right lower part of the abdomen. He removed all the unhealthy and damaged tissue, left in a drain and transferred her to the intensive care unit.

The condition of Mrs Fewkes continued to deteriorate with progressive multi-organ failure. On 24 June, the medical staff at the Southern General Hospital with the agreement of her next of kin withdrew medical intervention for Mrs Fewkes. She died shortly thereafter.

Death was certified at 5.55pm on 24 June. The date of birth and normal place of residence of Mrs Fewkes was confirmed by her son, Alan Dickson, as 24 April 1929 and 249 Corkerhill Place, Glasgow respectively.

The cause of her death was certified by Dr Marjorie Black following a post-mortem examination carried out on 28 June as

1(a) Sepsis and multi-organ failure

due to

1(b) abscess of appendix and ileum.

There was no evidence led to suggest that this cause of death was inaccurate or inadequate.

There was some evidence led of the possibility of Crohn's Disease but it was not sufficiently conclusive to persuade me that the abscess was as a result of Crohn's Disease. However, what is clear, is that an appendix abscess formed and led directly to sepsis, multi-organ failure and ultimately Mrs Fewkes' death.

I return now in greater detail to the evidence led and what I drew from it.

With regard to Mrs Fewkes' involvement with her GP practice, evidence was led from Doctors Patricia Boyle and Susan Thomas as to how they dealt with matters and the expert GP evidence from Dr Norman Wallace fully approved the very appropriate action which had been taken and which led to Mrs Fewkes being admitted to hospital on 14 May. I fully accept and endorse that position.

Mrs Fewkes was admitted to the Southern General Hospital on the afternoon of Tuesday, 14 May. This had been arranged between Mrs Fewkes' GP, Dr Boyle following a discussion she had with Mr

Graham Sunderland the previous day. Mrs Fewkes had suffered acute symptoms of vomiting and diarrhoea and a history of altered bowel habit and of declining health for the previous month. She had developed a right iliac fossa mass and an inflammatory process was included in the initial differential diagnosis. A malignant process, possibly of the caecum, was also included in the diagnosis. In effect, it was not possible to say what was wrong with Mrs Fewkes at that stage.

Mrs Fewkes was seen by Dr Kerrie McAllister, a junior house doctor. She noted that on pressing down, Mrs Fewkes' abdomen was soft. She had a right iliac fossa mass which measured 3 by 4 cm. This is a swelling in the right lower side of the abdomen. Dr McAllister concluded from her examination that there were queries as to ovarian, colon carcinoma and inflammatory mass. She prepared a treatment plan involving "intravenous access and fluids, bloods taken for analysis, X-ray, ECG, ultrasound and CT (computerised tomography) abdomen, senior review." She had the benefit of an admission letter from Dr Boyle.

Dr Brian Whittingham, senior house officer, carried out a "senior" review of Mrs Fewkes later that day and approved Dr McAllister's treatment plan.

Mrs Fewkes was admitted to the care of John Anderson, Consultant Surgeon who was responsible for all emergency admissions that day. Mr Anderson first saw Mrs Fewkes the following morning, 15 May, on a ward round. The working diagnosis was cancer of the large bowel (caecum) on the right hand side of the abdomen. Mr Anderson instructed an ultrasound scan to be carried out as an appropriate and relatively quick mode of investigation and which might eliminate certain possibilities and provide some diagnostic information. A barium enema was ordered at the same time although there would be a gap in between.

Given his assessment of the condition of Mrs Fewkes, Mr Anderson did not ask for an ultrasound scan to be given emergency priority but would have done so had he thought it necessary. That would normally be achieved by he or a senior doctor speaking to a senior Radiologist and asking for the investigation to be brought forward as appropriate.

Mr Anderson's view of Mrs Fewkes on 15 May was that she was not acutely unwell although she did have a tender mass on her right hand side. Blood tests and other vital signs indicated either infection, inflammation or malignancy and the plan was to continue observations by medical staff and to repeat blood tests etc on a daily basis pending the radiological investigations.

Although responsible for Mrs Fewkes as the receiving Consultant, Mr Anderson did not see her again until Wednesday, 22 May. He had hospital and teaching commitments over the period and was off-duty over the weekend. Other Consultants saw Mrs Fewkes in Mr Anderson's absence.

Since April 2003, the Southern General Hospital has changed its system whereby each of the four general consultants have one week in four on duty and normally see the patient twice per day at ward rounds. At the time Mrs Fewkes was in hospital, the receiving Consultant saw the patient initially, retained responsibility for the patient throughout but depending on other commitments,

there could be periods of days when he would not see the patient at all. Indeed, during Mrs Fewkes' care from 14 to 23 May, a number of different consultants saw Mrs Fewkes and that led to a criticism of a lack of continuity of care.

From the evidence led at the Inquiry, I am entirely satisfied the new system is better than the older one. It is better for the patient to be seen consistently by the same pair of eyes and handled by the same pair of hands. Indeed, having the same consultant day after day will give less opportunity for there to be misinterpretation of notes taken by junior doctors on ward rounds and who tend to use their own individual shorthand phraseology. The new system helps detect subtle changes but that said, I am not sufficiently persuaded that Mrs Fewkes suffered from a lack of continuity of care. That very point was put to Mr Hamer-Hodges (Crown expert witness) and whilst he had some unease that Mrs Fewkes was seen by different consultants over the period prior to her operation, he conceded it would be speculative to suggest that this contributed to her deterioration. Indeed, there is a counter argument that having fresh eyes constantly looking at a patient can be a positive benefit. Accordingly, but with a little hesitation, I do not make any recommendations in this regard under section 6(1)(d) of the Act.

In giving his evidence, Mr Anderson was asked for his views on whether transferring Mrs Fewkes to a private hospital, Ross Hall, would have helped with her care. He could not remember having had such a discussion with Mrs Fewkes' son and niece about the matter but did not dispute that they had raised it. His experience, however, was that such transfers caused delays and he discouraged transfers, as in this case, where the patient was unwell. His view was that private hospitals are better geared for planned operations as opposed to emergency patients such as Mrs Fewkes.

I can only speculate as to what may have happened to Mrs Fewkes had she been transferred to Ross Hall as there is no evidence to allow me to compare. Accordingly, I can make no recommendations in this regard under the Act.

Going back to the radiological investigations, Radiology Department request cards for an ultrasound scan and a barium enema were completed by Dr McAllister on 15 May but she could not recall whether she took the cards herself to the Radiology Department or whether they were sent through the internal mail system. The request category was top priority, one below emergency.

The cards were processed by the department and an ultrasound scan scheduled for Monday, 20 May.

For whatever reason, the medical staff believed the barium enema was scheduled for Wednesday, 22 May. However, this proved incorrect and it only later emerged that it was scheduled for 29 May.

There was no satisfactory explanation as to why the barium enema would not take place until 29 May or indeed why there was a mix up.

On Thursday, 16 May, the notes for the morning ward round stated "Awaiting ultrasound scan of abdomen and barium enema to investigate right iliac fossa mass. No new issues."

The blood results later that day recorded the patient's white cell count at 14.6 having previously been 11.8 on admission and 12.0 on 15 May. The nursing notes also said that having received Tramadol for pain at 1740 hours, the patient had slept well.

The notes on Friday, 17 May stated the white cell count was elevated at 15.1 and recorded the ultrasound scan as due on Monday with the barium enema scheduled for the following Wednesday. The notes also indicated that the patient felt increased pain over the right iliac fossa. She was given further Tramadol.

On Saturday, 18 May, the morning ward round was conducted by Mr Sunderland. The medical notes stated "spiking temperature, pain worsening, tender in the right iliac fossa." The white cell count had risen to 17.2 and the haemoglobin had fallen to 88. Generally speaking, the notes indicate that Mrs Fewkes was quite unwell. As a result, a triple intravenous therapy of powerful antibiotics was started. This is often used to treat sepsis or infection. Mr Sunderland thought that Mrs Fewkes might have a chest infection.

In his evidence and having looked at the various charts, Mr Sunderland said he would not have described the temperature as "spiking" but nevertheless, he felt the action taken was appropriate. He did not feel an operation was necessary at that time nor did he think it necessary to have an ultrasound scan done then as opposed to Monday when it was scheduled. The working diagnosis at the time was carcinoma of the caecum and in hindsight, he did not think that that was an unreasonable view.

On Sunday, 19 May, the notes record that "temperature settled at 37 degrees overnight. Remains tender in right iliac fossa and loin. Continue intravenous therapy. Ultrasound tomorrow." Thereafter it is recorded that at 4.45 pm, Mrs Fewkes had decreasing saturations and she required to be given oxygen via a face mask.

Mr Sunderland saw Mrs Fewkes again on Monday, 20 May and the following was noted in the medical records: "continues to improve from abdominal point of view... chest X-ray today. Ultrasound scan today, need to check result."

The notes later record that the ultrasound scan result was non conclusive other than excluding an ovarian cyst. Mr Sunderland decided, however, not to change the management plan with the barium enema scheduled for the Wednesday. He was of the view that Mrs Fewkes had responded well to the antibiotic treatment and the TPR charts did not point to her either requiring an urgent operation or needing a CT scan done immediately. He considered Mrs Fewkes as unwell but stable.

On reflecting on the care of Mrs Fewkes, Mr Sunderland thought that the investigations had taken too long as 10 days after admission, the only radiological investigation had been an ultrasound scan on the Monday and which did not take matters particularly far as regards coming to a definitive diagnosis.

Mr Sunderland was of the view that on admission, Mrs Fewkes had presented with what appeared to be a common problem but in fact, he later came to the view that she had an uncommon one and all those looking after her did not consider it urgent that the investigations be accelerated. They came to that view based on clinical presentation and from the TPR charts. For his own part, Mr Sunderland did not think that it had been necessary to expedite matters either on Saturday 18 May or Monday 20 May.

On Tuesday, 21 May, Mrs Fewkes was seen by Dr Paul Witherspoon, senior house officer at that time, on his ward round. He was accompanied by Dr Melissa Randershan. The medical notes recorded that the ultrasound scan report had been noted and there was to be a barium enema the following day. Dr Witherspoon said in evidence that he was not concerned about the patient's condition that day or that a change of the treatment plan was required. He was satisfied by looking at the TPR charts and Mrs Fewkes' presentation that the existing treatment plan should remain in place.

A later entry in the records stated "barium enema not until 29 May 2002". The day's blood results were noted and the white count elevated at 17.7 with the result circled. The nursing records state that Mrs Fewkes was remaining mobile and tolerating only a little diet but managing oral fluids well. The mid-day entry in the nursing note states "left groin remains painful and appears mildly inflamed/dusky." The entry at 2220 reports "Margaret expressing concern over lack of appetite...also complaining right groin hot and inflamed - appears dusky. Drapolene applied to comfort."

On Wednesday, 22 May, Mrs Fewkes was seen by David Wright on his morning ward round. He had seen Mrs Fewkes the week before. He was asked by a nurse to look at Mrs Fewkes' groin as they had concerns over it. It was swollen and indurated. This was in keeping with having an abscess. The ultrasound scan had, of course, not given a positive identification of the problem. The white cell count at 17.7 indicated inflammation or infection. For a healthy person, white cell count ranges between 6 and 11. 17.7 was raised and an indication that an abnormal process was going on, consistent with the mass. The trend of increased white cell count over a period is more important than the figures themselves and in Mrs Fewkes' case, the trend was going in the wrong direction. Mr Wright's overall impression was of deterioration and there was evidence of an abscess. Due to that, Mr Wright felt that an urgent CT scan was necessary. He did not think that an operation was necessarily required at that stage as the scan may have suggested that it was best to drain radiologically.

Mr Wright asked for a scan to be done preferably that day and left it with a ward round doctor to arrange with the Radiology Department.

Dr Randershan accompanied Mr Wright on the ward round. She had no recall of being asked to carry out such an instruction. It emerged in evidence that there may have been another doctor on the round whose name had not been noted and who may have been instructed to have the CT scan done but did not do so.

As it turned out, the CT scan was not instructed that day and therefore not carried out. There was no record in the Radiology Department of such a request.

This was most unsatisfactory and I asked the procurator fiscal to make further enquiries. He recalled Mr George Welch as Clinical Director to try to shed light on the matter by way of his interpretation of the notes and as to who might have been working at the time. Regrettably, Mr Welch, who I did not find particularly helpful in this regard, said that the available records, employment and medical, could not assist and consequently, we are left guessing as to why this instruction was not carried out.

This takes on particular significance on hearing Mr Wright's further evidence that if a CT scan had taken place that day, it may have given information which would have led to immediate operation on 22 May and improved the chances of Mrs Fewkes surviving.

Mr Wright estimated operating on the Wednesday may have given a 50/50 chance of survival as opposed to 23 May when it was 20/80.

At review meetings prior to Mrs Fewkes' death and afterwards, Mr Wright enquired as to why the CT scan had not been carried out but he never received a satisfactory explanation as to what happened or did not happen. I am satisfied it was not practical for Mr Wright to monitor his instruction as he saw many patients that day, gave many and varied instructions and had to rely on the doctors and nurses who were delegated to carry these through.

Mr Wright did not think Dr Randershan would have been asked to arrange the CT scan as she was too junior and if that was the case, I have to come to the conclusion that another, more senior doctor, was asked to arrange the scan and did not do so. There is no evidence that the Radiology Department received such a request and so it seems that the omission was on the part of the untraced doctor.

At the ward round the following day, by which time Mrs Fewkes' had become seriously unwell, it was noted in the records, "chase CT scan".

Mr Wright said that the CT scan would have helped decide whether an operation was necessary or radiological drainage. He could only speculate on what the outcome of the scan would have been. Following Mrs Fewkes' deterioration on the morning of 23 May, (Thursday), her chances of survival were poor. When Mr Wright saw Mrs Fewkes on 26 May, 3 days after the operation, both her condition and the prognosis were very poor and it was thought unlikely that she would survive any

further operation. It was decided to continue with conservative management and that position remained until she died on 24 June.

I am satisfied from Mr Wright's evidence that Mrs Fewkes had a better chance of surviving if she had been operated on on 22 May and that could have been achieved. The CT scan was instructed in the morning by Mr Wright but his instructions were not carried out. That is down to human failure. A system should be in place whereby if the Consultant gives an instruction of such importance, it should be carried through and checks in place to make sure that it is implemented timeously. We cannot be precise as to what the CT scan would have shown. The likely outcome is that it would have led to either a radiological drainage or an immediate operation. If the former, that may have delayed matters and Mrs Fewkes' condition may well have worsened as it did on 23 May. However, if as a result of the CT scan, there was an operation on 22 May, I am entirely satisfied that Mrs Fewkes had a better chance of survival than she had on 22 May. Sadly, Mrs Fewkes was deprived of that option and whilst I cannot be certain of what might have happened on 22 May (and there were signs of at least severe sepsis then), I am satisfied on the balance of probabilities that the CT scan would have led to an operation that day and that she would have had an improved chance of survival. I cannot go beyond that given the evidence I accept from Mr Hamer-Hodges that he could not say what the outcome of an operation would have been on 22 May given the already poor condition of Mrs Fewkes.

On 23 May, Mrs Fewkes deteriorated significantly. At 7.15 am, the nursing records note tachycardi (fast pulse rate) and involvement of medical staff. She had had a coughing fit. She had atrial fibrillation (heart beating very rapidly), fast ventricular rate and low blood pressure. She was unwell and seen by a number of doctors. At the ward round of Mr Anderson/Sunderland that morning, it was noted "chase CT scan data". This was as a result of the CT scan instructed by Mr Wright the previous day not being carried out.

Mr Anderson spoke to Mr Welch and briefed him on the condition of Mrs Fewkes as it was becoming clear that an operation was necessary and which Mr Welch would carry out as Mr Anderson was going on leave. Mr Anderson advised Mr Welch that Mrs Fewkes had an undiagnosed abdominal problem and that she had deteriorated rapidly that morning.

Dr Stephen Kettlewell arranged for Mrs Fewkes to be transferred to the High Dependency Unit and she was seen by Mr Welch around 4.00 pm. He formed the impression that Mrs Fewkes was very ill and that her life was in danger. He was of the view that Mrs Fewkes' heart was not functioning properly, was not delivering oxygen and was not delivering blood to vital organs as it had decompensated as a consequence of septic shock. Mr Welch explained in evidence that septic shock is a consequence of the infection process which results in low blood pressure and low oxygen delivery to the tissues.

Mrs Fewkes was described as "peripherally shut down, sweating, pale" at 4.45 pm and her blood pressure recorded as 75/43.

Mr Welch considered that Mrs Fewkes needed an operation (laparotomy). He considered that Mrs Fewkes' condition was sepsis related to whatever the primary process was in the abdomen. That might have been a tumour, abscess or whatever. Mrs Fewkes needed to be rapidly resuscitated and a laparotomy carried out to eradicate the source of the problem.

A further ultrasound was carried out but did not assist very much. However, Mr Welch was content to operate and see what he found with the naked eye.

The operation began at 8.00pm and Mr Welch found that Mrs Fewkes had a complex mass in the right lower part of the abdomen. It was an appendix abscess and Mr Welch removed all the unhealthy bowel and ascending colon and drained out all the puss, fluid and debris. He left a drain in, closed the abdomen and Mrs Fewkes was then transferred to Intensive Care.

Mr Welch was of the opinion that the appendix abscess had developed over a period of 7 - 10 days but it could have been longer.

He thought it unlikely that Mrs Fewkes would survive after the operation. She had had septic shock and given her pre-operative condition, the normal 30 - 40 per cent mortality rate for septic shock would have been higher, by as much as 50 per cent.

Mr Welch maintained continuing responsibility for Mrs Fewkes while she was in Intensive Care even although, Mr Anderson was her appointed Surgeon. That said, the Intensive Care Unit comes under the care and responsibility of the Consultant Anaesthetists.

Mr Magnus Garrioch, Consultant Anaesthetist, stated in evidence that he was appointed Director of the Intensive Care Unit at the Southern General Hospital in 1997 and he confirmed that Mrs Fewkes had been admitted to the Intensive Care Unit there on 23 May at 11.00 pm. He first had involvement with her on 12 June when she was critically ill but stable. In his opinion, Mrs Fewkes was critically ill due to the delayed treatment of her septic condition. Her chances of survival were less than 50 per cent.

Mr Garrioch explained that septic shock is blood poisoning due to infection or abscess. The septic process damages vital organs and in Mrs Fewkes' case, her lungs were failing, her circulation was failing and her blood was not clotting adequately.

Mr Garrioch emphasised the importance of clinicians recognising sepsis at as early a stage as possible to take appropriate intervention. In his view, this had not happened with Mrs Fewkes.

After 12 June, Mrs Fewkes' treatment continued but subsequent complications meant she deteriorated. She had germs in her bloodstream from the original problems and that led to deterioration in her heart valves. That in turn caused problems for the heart. Mr Garrioch explained

that it is difficult to treat such germs with antibiotics. Due to the heart valve problem, small blood clots went to the brain and Mrs Fewkes suffered a stroke as a result. Her kidneys also deteriorated and by 24 June her brain, kidneys, lungs and circulation were all failing to such an extent that Mr Garrioch decided to discuss with Mrs Fewkes' family discontinuing the treatment as it was not going to succeed.

Mr Garrioch also discussed this with Mr Welch as he had carried out the operation and it was agreed by everyone to discontinue the treatment on 24 June to allow Mrs Fewkes to die with dignity. She died at 1755 hours that day.

Mr Garrioch explained that an abscess or infection can lead to sepsis but it can sometimes be difficult to recognise. There are early markers such as pulse rate, temperature, respiratory rate and white cell count and you need at least 2 of them to be outwith the norm to support a diagnosis of sepsis.

He explained further that you require to look for the source of infection and treatment can come from antibiotics, fluids (intravenous) and surgery if appropriate. Antibiotics are not enough on their own. A CT scan would normally alert a surgeon to an abscess.

In Mrs Fewkes's case, Mr Garrioch believed that a CT scan should have been carried out well before 23 May given the concerns about the lady and the markers of sepsis and some organ failure.

On looking at the charts on 14 May, Mr Garrioch identified the temperature and heart rate as giving a suspicion about sepsis and in addition, the white cell count was borderline. He agreed with the junior doctor's plan but felt that the investigations should have been carried out much quicker than they were. Six days for an ultrasound scan was too long. In that time, the white cell count increased. The patient was unwell on 18 May and required a high dosage of antibiotics and on 19 May, she required oxygen.

In Mr Garrioch's view, this was creating a picture of sepsis, and indeed Mr Sunderland acknowledged that there was sepsis on board on 18 May.

Indeed, the patient's charts were showing signs of sepsis on 18 May. The white cell count was high, the heart rate was high, oxygen saturations were not normal and the patient was uncomfortable and receiving antibiotics.

On 19 May, Mr Garrioch stated that she even had signs of severe sepsis (ie sepsis leading to blood poisoning which leads to organ failure) given her low oxygen concentration count. That would tend to indicate her lungs were failing.

On 20 May, Mrs Fewkes was still receiving oxygen, her blood pressure was low and she had a raised white cell count. She was uncomfortable and these were all indicators of sepsis and of a patient who was deteriorating.

Mr Garrioch went further and said that by Tuesday, 21 May she had septic shock which is a combination of sepsis and low blood pressure which does not respond to fluid treatment. No other evidence, from Mr Hamer-Hodges or any of the consultants supported that proposition, and I likewise. That would have required evidence of collapse and that, I find, did not happen until Thurs, 23 May. By then, with the advent of septic shock, the mortality rate, according to Mr Garrioch, had gone from 10% (sepsis) to 10 - 20% (severe sepsis) to 50% (septic shock). The signs had not been noted and the chances of Mrs Fewkes surviving had lessened as a result.

Mrs Fewkes' death was reviewed at the hospital's monthly mortality meetings and by the Scottish Audit of Surgical Mortality.

As regards the Audit, the case went to a second line review and there were comments about the delays and the specifics of the delays. I was told no specific action was taken as a result of the delays.

Within the hospital internal review, Mr Garrioch had expressed his concerns about the failure to make a diagnosis which consequently led to deterioration, the failure to recognise the urgency of the situation, and the delay in operating.

By contrast, Mr Welch's view was that the consultants and doctors had been misled by Mrs Fewkes' clinical presentation. She had deteriorated rapidly on 23 May and by then, it was too late to save her.

The doctors who saw Mrs Fewkes prior to operation (apart from Mr Wright) were all of the view that her presentation did not need earlier intervention or acceleration of the radiological investigations. I do not go along with that and I elaborate later.

I note there is no suggestion by anyone that the investigations should have started with a CT scan although that is often the case now. A barium enema would not have been particularly helpful diagnostically.

The evidence from Colin Campbell, Consultant Radiologist was to the effect that at the time Mrs Fewkes was admitted to hospital, requests for urgent investigations such as a CT scan would be given priority if the radiologists were persuaded after explanation and discussion with the requesting doctor. The department would normally do its best to meet the appropriate timescale to comply with the patient's needs.

In Mrs Fewkes' case, the request card to the Radiology Department was categorised A1 which is most urgent and just one short of emergency. Such a request is scheduled to get the first available slot and the scheduling of the ultrasound scan on Monday, 20 May was longer than Mr Campbell would have liked.

He thought it possible that the request card did not arrive in the department until the Thursday and there may have been no slots on the Thursday or Friday. There was no normal weekend work then and on that basis, Monday would be the earliest date.

Mr Campbell thought that 5 working days for an ultrasound scan was disappointing.

As regards the barium enema request, 29 May seemed a very long and unusual delay and Mr Campbell could not explain why. Although 22 May was thought to be the scheduled date, there was no record of such an appointment and Mr Campbell could not explain that.

With both requests, there was no mention of high urgency by the doctors.

Mr Campbell agreed that the ultrasound scan results were not particularly clear, hence the need for a barium enema. However, Mr Campbell explained the advantages of a CT scan which would provide more information than either an ultrasound scan or a barium enema with the only downside being the involvement of radiation.

Mr Campbell believed that the request initially for an ultrasound scan was an appropriate one given the patient's condition at that time. Mr Campbell thought that a barium enema would not have helped very much with the diagnosis and that a CT scan was always likely to have been needed.

Daphne Varveris, Consultant Anaesthetist gave evidence that she saw Mrs Fewkes on 23 May at 5.00 pm and was asked to review her for theatre later that evening. She was a priority. She described her as a 73 year old lady who had a 9 day history of a right iliac fossa mass. She was hypotensive, had septic shock and atrial fibrillation. Some days before she had a respiratory problem. Her white cell count was increasing and there was mention of spiking temperatures. She was categorised as ASA 4E which means severely unwell and in a life-threatening and critical condition. Dr Varveris arranged for Mrs Fewkes to be given adrenaline as it is difficult to anaesthetise someone whose blood pressure is so low and she was taken to theatre at 1950 hours when she was anaesthetised. Dr Varveris did not think Mrs Fewkes would not survive the operation and she felt the operation improved the lady as best as could be expected in the circumstances.

She looked after Mrs Fewkes after the operation and saw her the following day, 24 May. She was then under the care of the Intensivists who are the anaesthetists who run the Intensive Care Unit. She felt it was unfortunate that investigations had not proceeded quicker to prevent septic shock

I now refer to the two expert witnesses who gave evidence at the Inquiry. Dr David Hamer-Hodges was led by the Crown and Mr Michael Lavelle-Jones was called by Mrs Robertson. Both are well experienced and eminently qualified in their field as Consultant Surgeons with specialisms and they were able to give evidence which assisted the Inquiry. Of the former, it was said by Mrs Robertson and Messrs Jessiman and Ross in their submissions that he was tainted to quite an extent by hindsight whereas the latter gave expert evidence from a prospective angle. The procurator fiscal deputy did not share the viewpoint of his legal colleagues.

It is of course correct that at a Fatal Accident Inquiry, over emphasis on hindsight would be unfair and that the expert witnesses should look at what doctors were able to see at the time and then consider both the decisions made as a consequence and how these were carried out.

It is clear in this case and agreed by all of the Consultants who looked after Mrs Fewkes prior to the operation that with the benefit of hindsight, Mrs Fewkes was more seriously ill than was apparent to them and if it had been apparent, earlier action could have been taken by way of operation. She may have survived as a result.

I do not believe that Mr Hamer-Hodges was tainted by hindsight when he gave his evidence and indeed, I found his evidence more compelling than that of Mr Lavelle-Jones.

I was of the view that Mr Hamer-Hodges gave it as it was and was both frank and forthright with his opinions. By contrast, I felt that Mr Lavelle-Jones was understated and, indeed, reserved.

Accordingly, I am inclined towards Mr Hamer-Hodges' views that given Mrs Fewkes was "an in-patient for 9 days prior to her final collapse, there should have been the opportunity for an earlier diagnosis and intervention."

Without doubt, the radiological investigations should have happened quicker than they did. It was right to instruct an ultrasound scan and barium enema on admission but for the ultrasound scan to take six days was too long given the condition of Mrs Fewkes. For a barium enema to take over two weeks was far too long although as it turned out, that became academic.

Mrs Fewkes slowly deteriorated while she was in hospital. The TPR charts bear that out according to Mr Hamer-Hodges. In addition, she had a mass which was undiagnosed. She was uncomfortable, quite unwell and needing an increased amount of painkillers. She was not eating.

Progressively, there were signs of sepsis on Saturday 18 May and severe sepsis thereafter. Mr Garrioch gave supporting and convincing evidence to that effect.

On Saturday 18 May, Mrs Fewkes was so unwell that she was put on a course of triple antibiotics. I am satisfied that that was an appropriate response but it should have alerted a review of her treatment plan and in particular, an acceleration of the radiological investigations.

I am entirely satisfied that the Radiological Department would have responded appropriately to a request for a quicker ultrasound scan with a subsequent CT scan and that could have been done at any time between Saturday 18 May and Monday 20 May.

Such a request was not made and there was no change to Mrs Fewkes' treatment plan despite further changes to her condition on Sunday 19 May when she had low saturations, was breathless, and required to have oxygen.

On Monday 20 May, Mrs Fewkes was seen again by Mr Sunderland who believed the antibiotics were working with what was thought to be a chest infection and the medical notes state in effect that the abdomen is fine, continue as we are and await the ultrasound scan result.

When that result was received later that day, it was inconclusive and it was left to await the barium enema on the Wednesday.

It was then discovered on the Tuesday that the barium enema would not take place for another eight days. Despite that, it was decided not to do anything to change the treatment plan even although by then, Mrs Fewkes had been in hospital for a week, had still not been diagnosed, had increasing signs of inflammation in the right groin, was deteriorating clinically and was clearly unwell.

That was similarly the position the previous day when the ultrasound scan result became available and despite the lack of diagnostic information, no change was made to the treatment plan.

I accepted the evidence of Mr Hamer-Hodges that if Mrs Fewkes had been operated on Monday, 20 May, she would probably have survived.

As already covered, Mr Wright saw Mrs Fewkes the following day, Wednesday 22 May, and was concerned about her condition. He instructed an urgent CT scan which was not carried out.

On the following day, 23 May, Mrs Fewkes' condition worsened considerably and that led to an operation that night. Unfortunately, she never recovered and died on 24 June.

I am satisfied on the balance of probabilities that given the signs of sepsis and possibly severe sepsis and other indicators that Mrs Fewkes should have had a CT scan by Monday, 20 May at the latest and in accepting Mr Hamer-Hodges' opinion, that would have shown an inflammatory process on

the right iliac fossa involving the bowel and that in turn would have led to an operation that day which would probably have saved her life. Accordingly, I make an appropriate finding under section 6(1)(c) of the Act and in response to a submission to do so by the Crown. I make no findings at all under section 6(1)(d).

There is a final matter upon which I wish to make comment. Up until Mrs Fewkes had her operation, her son and niece had concerns that not enough was being done for her as she seemed to be deteriorating. Both felt that there was both a lack of, and poor communication from the doctors and nursing staff.

That was refuted by the staff nurse, Gillian Connell and surprisingly, there was nothing in the notes recording concerns expressed by Mrs Fewkes' son and niece. There was a meeting with John Anderson on 21 May at the request of the family and evidence was led during the Inquiry as to what was covered at that meeting. Whilst I take into account the differences between lay perception and medical analysis and indeed, the impact of understandable human emotions, I am satisfied having considered the evidence, particularly that of the family, that the communication was not as informative or responsive as it might have been in such difficult times. I exclude John Anderson from such criticism and, indeed, there would be others who did as much as they could given professional restraints, to talk meaningfully to the family. This was not specifically explored and therefore I cannot go further and nor would I want to.

That said, I do not go as far as making a finding under section 6(1)(e) of the Act as I do not consider that the failing is sufficiently relevant to the circumstances of Mrs Fewkes' death.

SHLW.JH.Fewkes