

DETERMINATION

In terms of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 by Sheriff Robert H Dickson, following an Inquiry held at Cumbernauld between 24th October and 16th November into the death of Mr Andrew Ritchie

Airdrie 16th February 2012

The inquiry into the death of Mr Andrew Ritchie was held at Cumbernauld between 24th October and 16th November 2011. At the same time I was asked to consider evidence in relation to the deaths of Mrs Agnes Nicol and Mr George Johnstone.

The Procurator Fiscal at Airdrie on behalf of the Lord Advocate had on 23rd November 2010 petitioned the Court to hold this joint inquiry in terms of Section 1(1)(b) of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976. It was (correctly) considered to be expedient in the public interest to hold an inquiry into three deaths which had occurred in a three month period in 2006 following in each case a laparoscopic cholecystectomy in a Lanarkshire hospital.

The evidence revealed a number of common features in the circumstances of two or even all three deaths. It also showed in each case factors which were unique to that particular tragedy.

In the circumstances I have therefore decided to issue a separate determination in relation to each death recording the relevant findings and highlighting, where appropriate, any features which overlap in relation to either or both of the other deaths. I consider that the relatives of Mr Ritchie are entitled to know that I have given separate consideration to the death of their loved one and have separately recorded the particular circumstances surrounding it.

The Lord Advocate was represented by Mrs Anne Ferguson, Senior Depute Procurator Fiscal at Airdrie.

The family of Mrs Agnes Nicol listened to the evidence as did the family of Mr George Johnstone and Mr Andrew Ritchie. None had legal representation. Miss Morag Nicol (daughter) spoke on behalf of her mother's relatives, Mrs Alice Johnstone, Mr Johnstone's widow and Mr William Ritchie, a cousin of Andrew Ritchie also asked questions of witnesses and all made submissions at the conclusion of the evidence.

Mrs Laura Donald, solicitor, appeared on behalf of witness numbers 2 and 11, Mr Duncan Mawby, solicitor, represented witnesses numbers 4, 9 and 16 while Lanarkshire NHS Trust were represented by Mr Douglas Ross, Advocate, instructed by the Central Legal Office, Edinburgh.

A joint minute of admissions agreeing the terms of production 35 was lodged.

I heard evidence from:-

- (1) Dr Ahmed Ali, Senior House Officer, Wishaw General Hospital.
- (2) Mr John Cannon, Consultant Surgeon, Wishaw General Hospital.
- (3) Dr Lal Singh, Surgeon, Wishaw General Hospital.
- (4) Mr Hakim Ben Younes, Consultant Surgeon, Wishaw General Hospital.
- (5) Dr Donald McLean, Consultant Anaesthetist, Wishaw General Hospital.
- (6) Dr Alan Morrison, Consultant Anaesthetist, Wishaw General Hospital.
- (7) Dr Alison Simpson, Consultant Anaesthetist, Wishaw General Hospital.
- (8) Mrs Alice Johnstone
- (9) Mr Joseph Cumming, Consultant Surgeon, Monklands District General Hospital, Airdrie.
- (10) Dr Jolene Wotherspoon, Senior Surgical House Officer, Monklands District General Hospital.
- (11) Mr Myklos Kassai, Consultant Surgeon, Monklands District General Hospital.

- (12) Dr Alistair McGee, Consultant Radiologist, Monklands District General Hospital.
- (13) Dr Scott Marshall, Consultant Anaesthetist, Monklands District General Hospital.
- (14) Dr Ruth Rae, Consultant Anaesthetist, Monklands District General Hospital.
- (15) Andrew Burnett, HECT Nurse, Monklands District General Hospital.
- (16) Mrs Alison Lannigan, Consultant Surgeon, Wishaw General Hospital.
- (17) Dr Robert Ainsworth, Consultant Forensic Pathologist, University of Glasgow.
- (18) Dr Marjorie Turner, Consultant Forensic Pathologist, University of Glasgow.
- (19) Dr Julie McAdam, Consultant Forensic Pathologist, University of Glasgow.
- (20) Professor O James Garden, Department of Clinical and Surgical Sciences, Royal Infirmary, Edinburgh.
- (21) Professor John Kinsella, Consultant Anaesthetist, Glasgow Royal Infirmary.
- (22) Dr Jane Burns, Assistant Divisional Medical Director, Monklands, Wishaw and Hairmyres Hospitals, Hairmyres Hospital, East Kilbride.
- (23) Dr Gordon Dewar, Consultant Anaesthetist, Monklands District General Hospital.

The posts referred to in this list record the positions held by the witnesses in 2005/2006.

Since that time Mr John Cannon and Dr Lal Singh have retired. Dr Wotherspoon now holds a position as a surgical registrar in Wales and Dr Kinsella was appointed Professor and head of the academic unit of anaesthesia, pain and critical care at the University of Glasgow in 2007. Dr Jane Burns has since August 2010 held the position of Divisional Medical Director for Lanarkshire NHS Trust. Dr Gordon dewar now holds the post of a Consultant at the new Forth Valley Hospital at Larbert.

The following productions were referred to in the course of the inquiry:-

- (1) GP records (Agnes Nicol).
- (2) Wishaw General Hospital Records (Agnes Nicol).
- (3) Typed operation note re Agnes Nicol (by Mr John Cannon dated 22nd December 2005).
- (4) – (6) Edinburgh Royal Infirmary Records (Agnes Nicol).
- (7) Typed operation note re Agnes Nicol (by Professor O James Garden dated 31 December 2005).
- (8) Post Mortem Report dated 28th March 2006 re Agnes Nicol by Dr Robert Ainsworth.

- (9) Expert Report dated 19th March 2007 re Agnes Nicol by Professor O James Garden.
- (10) Additional Expert Report dated 10th October 2008 re Agnes Nicol by Professor O James Garden.
- (11) GP Records (George Johnstone).
- (12) Monklands District General Hospital Records (George Johnstone).
- (13) Typed operation note re George Johnstone (by Mr Joseph Cumming dated 9th May 2006).
- (14) Post Mortem Report dated 21 June 2006 re George Johnstone by Dr Marjorie Black.
- (15) Expert Report dated 12th January 2007 re George Johnstone by Professor O James Garden.
- (16) Additional Expert Report dated 10th October 2008 re George Johnstone by Professor O James Garden.
- (18) Wishaw General Hospital Records (Andrew Ritchie).
- (19) Typed operation note dated 14th June 2006 re Andrew Ritchie by Ms Alison Lannigan.
- (20) Post Mortem Report dated 2 August 2006 re Andrew Ritchie by Dr Julie McAdam.
- (21) Report by Ms Alison Lannigan re Andrew Ritchie.
- (22) Expert Report dated 29th January 2007 re Andrew Ritchie by Professor O James Garden.

(23) Supplementary Expert Report dated 12th November 2007 re Andrew Ritchie by Professor O James Garden.

(24) Supplementary Expert Report dated 10th October 2008 re Andrew Ritchie by Professor O James Garden.

(25) to (34) – Clinical papers referred to by Professor Garden in his reports.

(35) Report dated 18th January 2011 by Colin J McKay, Consultant Pancreaticobiliary Surgeon.

(36) Report by Professor John Kinsella.

(37) Letter dated 28th December 2005 by Mr John Cannon re Agnes Nicol.

(38) Undated medical report by Mr John Cumming re Mr George Johnstone.

(39) 1-11 X-ray and image reports re Mr George Johnstone.

(40) Photographs (seven) illustrating gall bladder and relative arteries, veins and ducts.

(41) Supplementary report dated 12th November 2007 re George Johnstone by Professor O James Garden.

(1) Andrew Ritchie who resided at Flat 61 Burnside Tower, Motherwell died at 3:00pm on 23 June 2006 within Wishaw General Hospital. He was aged 62 and although he had a number of health problems none were life threatening.

(2) On 24 January 2006 Mr Ritchie was taken to the hospital by ambulance as an emergency having been referred by his General Practitioner, Dr John Lando.

He was complaining of acute abdominal pain in the right upper quadrant (RUQ) and a preliminary diagnosis of cholecystitis was made.

(3) He was admitted to the emergency receiving unit and remained overnight. On examination he was found to be jaundiced and suffering from RUQ pain and that both had persisted for three weeks. The pain had increased in the few days before his admission to hospital. His urine was darker than usual.

(4) An ultrasound was carried out on 25 January which showed that the gallbladder was "grossly abnormal". It was distended, the walls were thickened and inflamed and the inflammation extended into the surrounding tissue.

(5) At the time of his admission Mr Ritchie came under the care of Mrs Alison Lannigan, a Consultant General Surgeon who was the duty surgeon for emergency admissions that day. Mrs Lannigan had been the consultant surgeon for five years. At that time, (the policy has changed since), the general surgeons worked on a rota, each taking a turn to be responsible for emergency admissions. In 2005/06 once a patient had come under the care of a particular general surgeon following an emergency admission, that patient remained under the care of the same surgeon. Accordingly from 24 January 2006 until his death Mr Ritchie was under the care of Mrs Lannigan. Mrs Lannigan saw and examined Mr Ritchie on 24 January and recorded her findings in the medical records.

(6) Mr Ritchie was treated conservatively and responded to the care and antibiotic medication to the extent that the readings for his white cell count (WCC) and liver function test (LFT) returned to the normal range and his

Creative protein level (CRP), (an indication of inflammation as is the raised white cell count), was reduced from 184 to 48. His bilirubin readings reflected his improved health. He was allowed to leave the hospital on 2 February and he returned for an outpatient appointment on 3 March. During his stay in the hospital Mrs Lannigan had rejected the possibility of removing Mr Ritchie's gallbladder at that stage. She did so because he had been fairly septic and required antibiotics. There was no evidence of the presence of stones or problems with the bile duct which might have necessitated a non-elective operation.

(7) On 3 March Mr Ritchie was seen by Dr Dayal, a Senior House Officer attached to the Breast team of which Mrs Lannigan was the Consultant. Although she was a Consultant general surgeon, Mrs Lannigan's specialism was in breast and thyroid surgery and in the course of a year she would only carry out around 25 laparoscopic (keyhole) cholecystectomies. Since Mr Ritchie's death she has decided not to carry out such procedures and her decision has been accepted by NHS Lanarkshire.

(8) Dr Dayal advised Mr Ritchie "that to sort his problems permanently" it would be necessary to take his gallbladder out. He explained to the patient the normal procedure for a laparoscopic cholecystectomy, advised him of the pros and cons and informed him of the chances (5%) of it being converted to an open procedure. Mr Ritchie indicated he was willing to get this done and his name was added to the waiting list for the operation.

(9) Dr Dayal in a letter to Dr Lando reported on his discussion with Mr Ritchie and stated that he had warned Mr Ritchie that there was a one in four hundred chance of bile duct damage.

(10) On 13 June Mr Ritchie returned to Wishaw General Hospital for a pre-admission assessment prior to a laparoscopic cholecystectomy. This was to be carried out by Mrs Lannigan on 14 June. It was the Consultant's intention that Mr Ritchie would be discharged home on 15 June. Mr Ritchie returned to the hospital on 14 June, met Mrs Lannigan, who explained the procedure to him. Mr Ritchie thereafter signed the necessary consent form including an acceptance that it might be necessary to convert the procedure to open surgery.

(11) A laparoscopic procedure allows a surgeon to conduct an operation without major incisions. It involves the creation of a one centimeter hole (a port) below the umbilicus through which the abdomen is inflated with Co₂ gas. Into this port a camera is inserted and three further similar ports are thereafter created. These are to enable the surgeon to manipulate the surgical instruments guided by the view created by the camera images. The pictures are visible on a screen within the theatre. Because of the difficulties which can arise in the course of a laparoscopic cholecystectomy, about 5% of such procedures are converted to open surgery (a laparotomy). This possible development had been explained to Mr Ritchie and he had consented to it.

(12) The gallbladder is a reservoir for bile which feeds into the intestine. The anatomy around it, as well as the liver and duodenum which are close by, is

complex. It is essential the surgeon carrying out the cholecystectomy is able to identify the various veins, arteries and ducts. This can become more difficult due to a patient's abnormal anatomy, the presence of adhesions, a thick walled gallbladder, inflammation or other factors. Such factors are among those which can cause a surgeon to change a laparoscopic procedure to a laparotomy. This is because he or she is unable to gain an adequate clear view of the surrounding anatomy.

(13) During a cholecystectomy a surgeon will require to dissect the cystic duct and cystic artery. It is essential these two vessels are correctly identified and that other vessels are not mistaken for them and wrongly cut. It is also essential that the surgeon starts the surgery as close as possible to the gallbladder as this minimizes the chance of wrongly identifying vessels.

(14) On 14 June Mrs Lannigan carried out the laparoscopic cholecystectomy assisted by Dr Lal Singh and Dr A George. Dr Singh was a very experienced surgeon who had carried out hundreds of similar operations. He had however been the surgeon who had carried out the initial operation on Mrs Alice Nicol on 22 December 2005. Mrs Nicol's subsequent death in March 2006 was one of the three about which this FAI heard evidence.

(15) In June 2006 Dr Singh was aware of the tragedy which had occurred in Mrs Nicol's case. His damaged self confidence which normally might have caused him to query Mrs Lannigan's decision to persist with the laparoscopic

procedure rather than converting it to a laparotomy (open surgery) probably prevented him from acting. Dr Singh has now retired.

(16) The operation was not a simple one. There were extensive and dense adhesions found, the gallbladder was very inflamed and there was pus around it. This resulted in Mrs Lannigan requiring to use both blunt dissection and diathermy in the area of the gallbladder. The operation took two hours which is double the time normally taken by Mrs Lannigan to complete such a procedure.

(17) Initially Mrs Lannigan was unable to see the cystic duct which was concealed behind the gallbladder. This factor combined with the difficulties involved in tackling the dense and extensive adhesions as well as the presence of inflammation should have resulted in Mrs Lannigan converting the procedure to a laparotomy. This would have enabled her to see the structure and operating site more clearly.

(18) Because she thought that she was making progress in dividing the adhesions, although that progress was slow, Mrs Lannigan persisted with the laparoscopic procedure. She ultimately was able to remove the gallbladder but required to leave a small cuff of Hartmann's pouch adhering to the common bile duct.

(19) Prior to the conclusion of the operation a drain was left in position and a complete lavage of the abdomen was carried out.

(20) In the course of the surgery or as a direct result of it, Mr Ritchie suffered two duodenal perforations. The probable cause of these was the lengthy and prolonged use of diathermy in tackling the gross adhesions.

(21) Although Mrs Lannigan did not see evidence of a duodenal perforation she was concerned lest one had occurred. Her concern arose because of the complexity and difficulty of the operation. She therefore carried out a procedure which she had seen used during her training but had never performed personally. This involved the introduction of air and fluid into the abdominal cavity in the belief that, if there was a perforation, this would be shown by the presence of air bubbles. None was observed.

(22) It is extremely doubtful whether this procedure would provide any definitive proof of the presence or absence of a perforation.

(23) At the conclusion of the operation Mrs Lannigan dictated a full note which was passed to her secretary for transcription. It never was included in the medical notes. Accordingly nobody other than Mrs Lannigan and Dr Singh were aware of the complexities of the operation nor Mrs Lannigan's immediate concern that there could have been a perforation arising from the operation. The report dictated by Mrs Lannigan contained no reference to the additional procedure of inserting air into the abdomen to investigate whether a perforation was present.

(24) It was not Mrs Lannigan's practice at the time to make a hand written record of an operation so it could be seen immediately by anybody involved

subsequently with the patient's care. She has since 2006 changed the procedure, (which was the time one which a number of surgeons followed). Mrs Lannigan now ensures that a handwritten note is included in the hospital records.

(25) As a result of the complexity in surgery, including the time during which Mr Ritchie had required to be anaesthetized, Mrs Lannigan knew that he could not be discharged home the following day. She expected him to remain in hospital for a few days. There is however no written record stating this.

(26) Mr Ritchie was seen in the ward following the operation by Dr George. Mrs Lannigan may have been present but there was no record of this. At that time it was noted that the drain inserted during the operation was empty. A subsequent reading recorded by Nurse Smillie at 8.45 p.m. showed that there was approximately 200 mls present.

(27) During the night of 14/15 June bloods were taken by a junior doctor and Mr Ritchie was seen by a Hospital Emergency Care Team (HECT) nurse. As a direct result of the imposition of a limit on the number of hours which could be worked by junior medical staff, NHS Lanarkshire, (along with other health boards), created a HECT team of nurses with considerable experience who underwent specialist training. This enabled them to give advice to the ward staff or to deal with an emergency. At the time Mr Ritchie's haemoglobin figure was 13.9 which was within an acceptable range.

(28) On 15 June the patient was seen by Mrs Lannigan and Dr Singh. It was noted that a further 400 mls of bile had been discharged through the drain and that Mr Ritchie had vomited. By 4.00 p.m. he is recorded as "well" although he had vomited on two further occasions and the drainage bag had required to be emptied twice. At 4.10 p.m. Dr Singh (possibly with Mrs Lannigan) saw Mr Ritchie and it was recorded that drainage discharge was 600 mls.

(29) A plan was considered by Mrs Lannigan that if the level of drainage discharge continued there would be a need to investigate this. Mrs Lannigan made no note or written record of this and accordingly nobody (with the exception of Mrs Lannigan and possibly Dr Singh) knew of this. By the evening of 15 June Mr Ritchie had continued to vomit more than 24 hours after surgery and had, (depending on when various untimed nursing figures referred to), had expelled more than 1100 mls of bile from a drain inserted during the operation.

(30) There was an ongoing concern that Mr Ritchie's fluid level needed to be addressed. This was done on 15 June but the problem persisted. There was no post-operative management plan nor was there any indication that Mrs Lannigan, the surgeon who had conducted the operation, had concerns that a perforation might have occurred. There was nothing in the notes to record the problems which had been encountered during the two hour operation.

(31) The concern in relation to Mr Ritchie's fluid level continued on 16 June when it became apparent that there was an imbalance between the fluid intake and the limited discharge of urine. There was evidence that fluid was

accumulating in the lungs. Mr Ritchie was seen in the morning ward round by Mrs Lannigan and Dr Singh.

(32) On the afternoon of Friday 16 June Mrs Lannigan again reviewed Mr Ritchie's lack of progress. She noted the previous findings of continued bile discharge and decided that the drain should remain in place. She recorded her view the bile was probably coming from the gallbladder bed or the small part that she had required to leave in situ. She added that it might be possibly shown to be due to a duodenal perforation. Biochemistry results recorded a grossly raised CPR level persisting from 15th June.

(33) By the afternoon of 16 June Mrs Lannigan had what she described as "tunnel vision". This caused her to conclude that the source of the discharge was from the area of the small cuff of Hartmann's pouch which she had required to leave in place. She wrongly excluded as one of the more probable causes, a duodenal perforation. By failing to order a CT scan or returning the patient to the operating theatre she did not take steps to investigate what was, in view of the excessive amount of discharged bile and the known complexities of the initial operation, the most likely cause of Mr Ritchie's lack of post-operative progress.

(34) During the night of 16/17 June there was a dramatic drop in Mr Ritchie's urine output and he was seen by the HECT nurse at 6.30 a.m. That nurse wished Mr Ritchie seen by a Senior House Officer. She arranged for this to be done. There is no record of an SHO seeing Mr Ritchie around this time. In the course of his Saturday morning ward round Mr John Cannon, an experienced

Consultant general surgeon, noted that Mr Ritchie was stable. The drain was continuing to allow the discharge of bile.

(35) On 18 June Mr Cannon conducted another ward round. The volume collected from the drain is noted as 650 mls. A blockage was found and a further 100 mls was then released.

(36) On Monday 19 June Mrs Lannigan saw Mr Ritchie. A further 800 mls of bile had leaked from the drain. Mrs Lannigan remained of the view that the cause of the continued presence of bile was the remnants she had required to leave in the initial operation. Again she failed to obtain a CT scan or return the patient to surgery to find the source of the discharge.

(37) On 19 June the seriousness of Mr Ritchie's condition does not appear to have been appreciated. Arrangements were put in hand to have Mr Ritchie seen by the Smoking Cessation Service the following day. Although his CRP had risen to 284 (a further indication of infection) no investigation of the cause was undertaken.

(38) During the night of 19/20 June Mr Ritchie required to be reviewed twice because of pain at the drain site. He was again seen by Mrs Lannigan who obtained an x-ray and discussed the findings with an Upper Gastric Intestinal Surgeon. On the evening of 20 June she arranged for Mr Ritchie's return to theatre where assisted by Drs Singh and McDonald she carried out a laparotomy. She found two perforations to the duodenum and attempted with "limited success" to affect closure of both.

(39) Mr Ritchie was transferred to the Intensive Care Unit where despite expert nursing and the administration of antibiotics his condition continued to deteriorate. On 23 June 2006 at 3.00 p.m. he died.

(40) On 27 June 2006 Dr Julie McAdam, a Consultant Forensic Pathologist at the University of Glasgow carried out a postmortem at the City Mortuary, Glasgow. She found that the cause of death was –

(1) an intra abdominal hemorrhage due to

(1b) dehiscence of duodenal surgical site due to

(1c) laparoscopic cholecystectomy due to

(1d) chronic cholecystitis.

DETERMINATION

In terms of the sub-sections of Section 6(1) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 I am required to make a determination setting out the following circumstances of the death so far as they have been established to my satisfaction:-

(a) Where and when the death and any accident resulting in the death took place;

(b) The cause or causes of such death and any accident resulting in the death;

(c) The reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;

- (d) The defects, if any, in any system of working which contributed to the death or any accident resulting in the death; and
- (e) Any other facts which are relevant to the circumstances of the death.

I accordingly determine:-

(a) Andrew Ritchie, date of birth 28.5.44 who resided at Flat 61 Burnside Tower, Motherwell died within Wishaw General Hospital, Wishaw at 1500 hours on 23 June 2006;

(b) The cause of death was –

- (A) intra abdominal hemorrhage due to
- (B) dehiscence of duodenal surgical site due to
- (C) laparoscopic cholecystectomy due to
- (D) chronic cholecystitis

and that the duodenal perforation was caused during or as a result of surgery during a laparoscopic cholecystectomy carried out on 14 June 2006 within Wishaw General Hospital.

(c) The reasonable precautions whereby the death might have been avoided included:-

- (A) The conversion on 14th June 2006 of the laparoscopic cholecystectomy to a laparotomy.
- (B) The appreciation, not only at the time of the operation but thereafter, by Mrs Lannigan that the extent to which she required to use diathermy

as well as the time involved to tackle the dense and extensive adhesions was likely (and in fact did) cause damage to the duodenum whereby Mr Ritchie suffered two duodenal perforations.

(C) The realisation by Mrs Lannigan that the continuing discharge of quantities of bile more than 24 hours after the operation justified further investigation by scan and if necessary a return to the operating theatre.

(D) The realisation by Mrs Lannigan that a probable cause of Mr Ritchie's failure to improve and of the increasing clinical signs of infection was due to damage caused during the operation of 14th June.

(d) There was a defect in the system of working which contributed to Mr Ritchie's death. This was the absence within the notes of any record of the operation carried out on 14th June although one had been dictated by Mrs Lannigan (and had been typed). The system of working within Wishaw General Hospital failed to ensure that this record was contained within the medical notes available for all medical other staff.

(e) The other facts which were related to the circumstances of the death are:-

(A) The lack of medical notes by those responsible for Mr Ritchie post operative surgical care.

(B) The rota system which existed in 2006, (but which had been subsequently changed), whereby a patient admitted as an emergency becomes the responsibility of the Consultant on duty on the day of admission. This was notwithstanding the fact that there could be other

Consultants within the hospital staff who had a greater expertise or experience in the relevant field of surgery.

NOTE

The record before the Inquiry showed that Mr Ritchie had enjoyed reasonably good health and had as his General Practitioner Dr John Landau. Since the start of 2006 Mr Ritchie had been suffering from abdominal pain in the right upper quadrant and was jaundiced. On 24th January 2006 Dr Landau arranged for his admission to Wishaw General Hospital as an emergency and Mr Ritchie was taken there by ambulance. This decision was probably precipitated by an increase in the pain which Mr Ritchie was suffering.

Mr Ritchie was admitted to the Emergency Receiving Unit and on the following day (25th January) an ultrasound was carried out that revealed that his gallbladder was "grossly abnormal". It was distended, the walls were thickened and inflamed and there was evidence of the inflammation extending into the surrounding tissue.

The Consultant responsible for Mr Ritchie's care was Mrs Alison Lannigan. At that time it was the policy within Wishaw General Hospital, (a policy which no longer persists), that each of the general surgeons worked to a rota and remained responsible for any patients admitted on the day when he or she was

the receiving surgeon. Accordingly although Mrs Lannigan's specialism related to breast and thyroid surgery she remained responsible for Mr Ritchie's care in her capacity as a consultant general surgeon. Mrs Lannigan had in 2006 been a consultant surgeon for five years. During that period she had carried out approximately 25 laparoscopic cholecystectomies each year.

Mrs Lannigan saw and examined Mr Ritchie on 24th January and recorded her findings within the medical records. She correctly diagnosed that the source of Mr Ritchie's problems was his gallbladder and she arranged and supervised his conservative treatment while he was in hospital.

Mr Ritchie's health improved as a result of that treatment and he was discharged home on 2nd February 2006.

It would have been possible to arrange for Mr Ritchie to have his gallbladder removed during this hospital visit. Mrs Lannigan rejected the possibility because Mr Ritchie had a raised creative protein level (CRP) which was an indication of inflammation and sepsis. In addition the ultrasound had shown no signs of the presence of stones or problems within the bile duct. Had they been present this might have necessitated an operation during the January-February hospital admission.

Professor John Garden of Edinburgh University gave expert evidence in relation to this death and the other two in respect of which the Inquiry heard evidence. He was critical of a policy which appeared to exist in Wishaw General Hospital whereby cholecystectomies did not take place during the patient's first visit to the hospital but were the subject of elective surgery on a later date.

In this case that policy has no relevance. I am entirely satisfied that Mrs Lannigan properly considered the options and was justified in her decision. I understood Professor Garden to accept this when he agreed that the fact that Mr Ritchie had been suffering symptoms for three weeks and had had to be treated with antibiotics as well as the results which had been obtained from the ultrasound which indicated no need for an emergency operation, all supported Mrs Lannigan's decision not to proceed with surgery at that time.

I am satisfied it is a course of action which a number of competent and experienced surgeons would have followed and I believe no criticism can be made of Mrs Lannigan in this respect.

Following his discharge from hospital on 2nd February arrangements were put in hand for Mr Ritchie to be seen at an out-patient appointment and this took place on 3rd March. Mr Ritchie was seen by Mr Dayal, a senior house officer, who worked in Mrs Lannigan's unit.

Dr Dayal advised Mr Ritchie that in order to resolve his problems he required to have his gallbladder removed and Dr Dayal explained to Mr Ritchie the full procedures involved. Mr Ritchie indicated that he was willing to undergo the operation and his name was added to the list of those awaiting an elective cholecystectomy.

On 13th June 2006 Mr Ritchie underwent a pre-admission assessment prior to a laparoscopic cholecystectomy which he knew would be carried out by Mrs Lannigan the following day.

On 14th June Mrs Lannigan saw Mr Ritchie and explained to him the procedure involved and obtained his consent including his agreement to change the procedure from a laparoscopic one to a laparotomy should this prove necessary.

Around 5% of laparoscopic cholecystectomies are converted to laparotomies due to difficulties which arise in the course of the operation.

Mrs Lannigan was assisted by Dr Singh, an experienced surgeon who had carried out a considerable number of laparoscopic cholecystectomies in the course of his medical career. He had considerably more experience in this operation than Mrs Lannigan and under normal circumstances, (and subject to medical protocol),

would have been in a position to assist and comment on the procedure while it was being carried out.

Unfortunately Dr Singh had been involved in the death of Mrs Agnes Nicol following an operation in December 2005. This death was one of the three investigated in the course of this Inquiry. It was evident from the evidence which he gave and the manner in which he gave that evidence, that Dr Singh, (who is now retired), was very deeply affected by the circumstances of Mrs Nicol's death. It may be that his lack of self confidence in June 2006 prevented him from commenting on the length of the operation carried out by Mrs Lannigan or on the difficulties which she encountered. It is clear however that he did not at any point indicate to her that, based on his experience, it would be appropriate to convert the procedure to a laparotomy.

Mrs Lannigan found that there were extensive and dense adhesions within the area of the gallbladder, the gallbladder itself was very inflamed and there was pus around it. She initially had difficulty in locating the cystic duct which was concealed behind the gallbladder.

Mrs Lannigan decided to persist with the laparoscopic procedure and the operation itself lasted for two hours which was twice the time, which a normal operation carried out by Mrs Lannigan would have taken.

Mrs Lannigan worked slowly and conscientiously to tackle the dense adhesions which were present. She required to use blunt dissection and diathermy in the area of the gallbladder and ultimately she was able to remove the gall bladder although she required to leave in situ a small cuff of Hartmann's Pouch which was adhering to the common bile duct.

Mrs Lannigan was concerned lest there had been a duodenal perforation in the course of the operation. Although this is a comparatively rare complication, it can arise as a result of the major use of diathermy which weakens the vessels.

Because of her concern Mrs Lannigan carried out a procedure which she had seen (although never carried out herself) during her training. This involved the introduction of air and fluid into the abdominal cavity because she believed that by doing this it would reveal by means of air bubbles if a perforation existed.

Professor John Garden, who clearly was a very experienced and highly respected expert in this field, indicated that he had never heard of this procedure and he had considerable doubts as to whether it would reveal any existing problem.

No indication of such a problem was revealed by the test and to a very limited extent this probably supports the view that the perforations to the duodenum

which would be found by Mrs Lannigan in a later operation did not occur during the operation of 14th June but arose from the weakening of the vessels by the diathermy. It is recognised that the duodenum, weakened in this manner, can subsequently develop perforations. I believe that that is what occurred in this case.

There is further support for this view (that the perforations did not occur during the operation) by the fact that after Mrs Lannigan inserted a drain prior to concluding the operation there was no discharge of bile during the immediate post-operative recovery period. When Mr Ritchie was seen in the ward by Dr George, the third doctor who had been present during the operation, there was no discharge. Had the perforation to the duodenum occurred during the operation it is likely that there would have been evidence of discharge by this time.

Mrs Lannigan dictated a full operation note (production 19) and this was typed by her secretary. This record however never found its way into the medical records and accordingly every doctor who subsequently saw Mr Ritchie, (and the HECT nurse who visited him), had no indication of the complications or difficulties which had arisen in the course of the operation. Had Mrs Lannigan's note been in the medical records it should have alerted others (including Mr Cannon, an experienced Consultant general surgeon, who saw Mr Ritchie in the

course of the weekend following the operation), of the fact that the operation had not been a routine one. Doctors and nurses would have been aware that there was a possibility that something had gone wrong in the course of the operation and that it required investigation.

Mrs Lannigan's note however makes no mention of the additional procedure which she had carried out to investigate whether there could have been a leak from the duodenum. Accordingly even if the note had been in the medical records, this valuable piece of information would not have been available.

The Inquiry was provided with no explanation as to why Mrs Lannigan's dictated note was not within the records. Its presence only came to light when Mrs Lannigan recovered it from her own files.

At that time Mrs Lannigan did not create a contemporaneous hand-written note as she relied on the dictated note which she made, being included in the subsequent records. She has now changed her procedure whereby she ensures that there is a hand-written note put within the records at the time of the operation. She still however subsequently dictates another note for her secretary to transcribe.

I was surprised to learn from Professor Garden and from other doctors that the practice of not writing a contemporaneous note within the records was not unusual in 2006. At that time a number of Consultants relied on dictated notes being subsequently added to the records. Accepting, as I do, that this was the practice at the time, this placed a particular duty on the records department of a hospital to ensure that all such typewritten notes were added to the records and were not mislaid. In this case Mrs Lannigan's record of the operation was apparently mislaid and as a result, as I have indicated, those responsible for Mr Ritchie's care from 14th June onwards had no indication of the complexities which had been confronted in the course of the operation. Furthermore they had no indication of Mrs Lannigan's apparent concern that there could have been a duodenal perforation.

In the absence of evidence to indicate that the practice is not acceptable I cannot comment adversely on a system whereby full reliance has to be made on the findings contained in a subsequent typewritten note. It respectfully seems to me that at the very least there must be a delay in supplying information to those responsible for the post-operative care of the patients if there is not a contemporaneous note available within the records. Such a hand written note would show how the operation had progressed. At the very best there must be at least a delay of 24 hours during which the dictated note is transcribed by a

secretary and sent to the records office for inclusion within the medical records. Such a delay cannot be in a patient's best interests.

It is however totally clear that the practice which existed in 2006 was regarded as acceptable within the medical profession and Mrs Lannigan cannot be criticised for following it. She is to be commended for her decision now to alter her practice and to create a hand-written note at the time of the operation. It may be that other Consultants and those conducting operations would do well to follow her example.

It had been the intention originally to allow Mr Ritchie to go home on 15th June but because of the length of the operation and the complications which had arisen during it, Mrs Lannigan envisaged him remaining in the hospital for two or three days.

In the course of the evening of 14th June the presence of bile from the drain was noted. The following day Mr Ritchie was seen by Mrs Lannigan and by Dr Singh and a further 400mls of bile was found to have been discharged through the drain. At this point Mrs Lannigan considered that the bile, which was being discharged, had probably arisen from the area around the Hartmann's Pouch which she had required to leave in situ. Sadly (as described by her due to "tunnel-vision") subsequent findings were equally attributed to that factor.

It is very easy to see things in retrospect and Mrs Lannigan is to be commended for her frankness in the witness box when she accepted that she had failed to interpret the growing evidence over the subsequent days that Mr Ritchie's condition indicated a rising infection which required proper investigation.

On 14th June around 4:10pm Dr Singh (possibly accompanied by Mrs Lannigan although the notes do not record this) saw the patient and a further 600mls was found to have been discharged.

At this point Mrs Lannigan in her evidence stated that she was concerned about the level of discharge and formed a plan to investigate it. There is no note of this plan nor of her thoughts on the matter, and the absence of that plan and her views, prevented subsequent medical personnel from having the benefit of the views of the surgeon who had carried out the operation and the Consultant primarily responsible for Mr Ritchie's care.

By the evening of 15th June Mr Ritchie was continuing to vomit and there was further discharge of bile through the drain. Problems with Mr Ritchie's fluid level had required to be addressed during the day and the imbalance between fluid intake and expulsion remained a problem despite attempts to address it.

On Friday 16th June Mr Ritchie was again seen by Mrs Lannigan and Dr Singh. Mrs Lannigan visited him again on the afternoon of 16th June when she recorded that the bile was probably coming from the gallbladder bed or small part of the Hartmann's Pouch which she had been unable to remove. She however added that there might be a possibility of the presence of a duodenal perforation. She did not investigate that line of thought.

Mrs Lannigan's "tunnel vision" persisted and she remained of the view that the most likely probability was that the discharge was caused by the presence of the cuff which she had been unable to remove. In her evidence Mrs Lannigan accepted that she had not properly considered the more realistic probability that the discharge of bile was caused by a duodenal perforation or some other cause arising directly from the surgery. In retrospect she accepted that this should have been considered and that she should have obtained a CT scan and probably returned the patient to surgery at that point. She however did not do so and as there was no note relating to the operation itself, and further more there was no record of Mrs Lannigan's views on the patient's lack of progress, the doctors concerned with Mr Ritchie's care over the weekend were handicapped.

The biochemistry figures which were being received every day from 15th June onwards indicated a persistently high CPR level. This was an indication of infection and this factor combined with the persistent and growing problems with

Mr Ritchie's fluid balance, were further indications that there was a need for investigation.

On Saturday 17th June Mr John Cannon an experienced Consultant general surgeon saw Mr Ritchie and considered that his condition was "stable". The drain continued to allow the discharge of bile. Mr Cannon, because he did not have the benefit of Mrs Lannigan's surgical notes or any post-operative plan, was unaware of the problems which had arisen in the course of the operation and was therefore merely monitoring the patient's condition.

On 18th June Mr Cannon was the duty Surgical Consultant and he conducted a ward round in the course of which he saw Mr Ritchie. The volume of bile collected from the drain amounted to 650mls and a blockage had been cleared thereby releasing a further 100mls.

On 19th June Mrs Lannigan returned to see Mr Ritchie. Further bile had leaked from the drain but Mrs Lannigan persisted in her view that the cause of the continued presence of bile was the remnants left from the operation. Once again no CT scan was sought nor was the patient returned to surgery to find the source of the discharge.

An indication of how the true severity of Mr Ritchie's condition had escaped the notice of those involved can be found from the decision made on 19th June, to put in hand arrangements to have Mr Ritchie see the smoking cessation service on the following day. With the benefit of hindsight it is difficult to understand why it was not appreciated that Mr Ritchie's condition required immediate investigation and in their evidence Professor Garden and Professor John Kinsella of the University of Glasgow, who also gave expert evidence, appeared equally puzzled.

Mr Ritchie's condition continued to deteriorate during the night of 19/20th June. He required to be reviewed on two occasions because of pain in the area of the drain site and an X-ray was ordered and reviewed by Mrs Lannigan. She discussed the matter with an upper gastric intestinal surgeon. By the evening of 20th June Mr Ritchie's condition was such that Mrs Lannigan arranged for his return to theatre.

In the course of the subsequent laparotomy carried out by her, assisted by Drs Singh and McDonald, she found two perforations to the duodenum which she attempted to close. This she did with "limited success".

Mr Ritchie was transferred then to the ICU Unit where despite the administration of antibiotics and careful and thorough nursing his condition continued to deteriorate and he died there at 3:00pm on 23rd June.

A post-mortem was conducted by Dr Julie McAdam who recorded the cause of death as found by me in terms of paragraph (b) of my determination. Dr McAdam indicated that she was not in a position to state whether the breakdown in the surgical site occurred at the exact time of the operation or whether it occurred subsequently as a result of weakening of the bowel area. As I have indicated I considered the evidence supports the view that it occurred subsequently as a result of weakening due to the prolonged use of diathermy.

The Inquiry investigated the deaths of three patients within a period of three months following laparoscopic cholecystectomies carried out in hospitals within Lanarkshire NHS. The evidence established that cholecystectomies are one of the most common operations carried out and there was natural concern when on three separate occasions patients died following such an operation.

I have found that there were individual circumstances in relation to each of the deaths and errors made in surgery and in particular the post-operative care of the patients which caused those deaths. They involved different Consultant

surgeons and there is no evidence that there was a lack of training or experience in the surgeons involved.

Although the evidence established that the circumstances of each death was different and the complication which arose in the course of the surgery which led to the patient's death was different in each case there are certain factors which are common to at least two, if not all, of the deaths which require to be commented on.

In his assessment of the records and reports in relation to the three deaths Professor Garden highlighted three matters. They were:-

- (1) The management of the initial presentation;
- (2) The management of the post-operative period; and
- (3) The mistaken and apparent unswerving belief of the surgeons that any failure of the patient to respond post-operatively as expected could not be due to any complication attributable to the operation itself.

In relation to the management and the initial presentation, Professor Garden accepted that there were variations throughout various hospitals in Scotland as to whether a cholecystectomy should be carried out on the first admission. He however was critical of what appeared to be the absolute policy within Lanarkshire NHS in 2005/2006 that laparoscopic cholecystectomies should be

regarded as elective procedure and should not be carried out during the time of the patient's first admission.

Professor Garden pointed out that there were advantages in carrying out the operation at the time of the patient's first admission as it avoided the danger of the patient suffering further pain or complications and equally avoided the need to re-admit the patient to hospital.

I believe that this criticism may have some validity in connection with the cases of Mrs Nicol and Mr Johnstone. Mr Johnstone was anxious that the operation be carried out as soon as possible and it is not recorded why his wish was not acceded to. There does not appear to be anything in the records produced to the Inquiry which would explain on clinical grounds the decision to delay the operation.

In relation to Mrs Nicol it is clear that she did suffer further pain and problems as a result of the delay in the operation and in fact her operation required to be subsequently postponed because of other problems. Professor Garden considered that both operations should in fact have been carried out at the time of the patients' first admission.

There was however at that time a body of opinion which supported the delay in carrying out such operations and the only possible justified criticism which I feel might be made in relation to Lanarkshire NHS was the apparent lack of consideration of clinical issues and the patient's wishes in deciding whether the operation should be carried out at the time of first admission or later.

In relation to Mr Ritchie I am entirely satisfied that the consultant surgeon Mrs Lannigan reached the correct conclusion and there were very valid reasons for not proceeding to an operation at the time of his first admission to hospital. Whatever may have been the policy within Lanarkshire NHS at that time, Mrs Lannigan had sound clinical grounds for concluding that it was not appropriate to proceed with an operation in early February 2006 and I can find no evidence to criticise her management of Mr Ritchie's case during his first stay in the hospital in January/February 2006.

I heard evidence from Dr Jane Burns, a Consultant Anaesthetist who is the current Divisional Medical Director for NHS Lanarkshire. She has held this post since August 2010 and before that was Assistant Medical Director for Wishaw, Monklands and Hairmyres hospitals. She indicated to me (and this was supported by other witnesses) that while there had been no change in the practice of delaying surgery to allow patients to have elective operations after an acute episode, there was an increase in the number of patients who were

operated on during their first admission. She accepted that the matter required to be one of clinical judgement rather than Health Board policy.

In relation to the management of the post-operation period there were clear faults in the care of each of the patients. There was a lack of proper post-operative planning and the recording of those plans. There was clear evidence that when the patients were not responding as was expected this failed to result in the necessary enquiry and investigation as to the cause of this. While it is not possible definitively to say that if each patient had been returned to surgery earlier, and if the necessary scans had been carried out timeously, that lives would have been saved, there is substance in the contention made by Professor Garden and Professor Kinsella that had the post-operative care been to the standard which they expected, and had there been a proper management plan which staff could have worked to, that there remains a realistic possibility in each case that the death would not have occurred.

In each of the cases the Consultant responsible for the patient's care failed to consider the growing body of evidence that there was something fundamentally wrong with the patient and that the most likely cause of this was something which had arisen in the course of the operation. In Mrs Lannigan's case (the death of Mr Ritchie) she accepted that she had had "tunnel vision" which

prevented her giving proper consideration to the most likely cause of his deteriorating health, namely a duodenal perforation.

In relation to Agnes Nicol's death, while undoubtedly Mr Cannon saved Mrs Nicol's life by stemming the major bleed which occurred during Dr Singh's initial operation, he ignored the growing body of evidence in the biochemistry reports and Mrs Nicol's failure to regain consciousness as clear indicators that there was something fundamentally wrong which required immediate investigation. This is difficult to explain.

Mr Cumming's persistent failure to investigate the cause of Mr Johnstone's lack of post-operative progress is equally difficult to understand. Even when the CT scan result finally became available, as a result of the decision of the ICU doctors to investigate the possibility of a stroke, Mr Cumming still failed to take the patient back to surgery.

In relation to the post-operative care of all three patients there was a lack of adequate notes (or in some cases no notes at all) by the senior medical staff. There was a lack of proper management plans recorded in such notes that did exist. I have been left with the regrettable impression that in both Wishaw General Hospital and Monklands District General Hospital in 2005/2006 that there

was clear evidence of a failure by certain Consultants to ensure that there was proper and appropriate documentation at all times.

In her evidence Dr Burns accepted that the cases showed that the documentation was not to an acceptable standard. Mr Cannon, Mr Cumming and Mrs Lannigan all accepted that that was indeed the position.

The lack of adequate documentation, the failure to record a plan of action and the absence of notes by senior doctors prevents those who are responsible for the patient's care at any later stage from knowing the views, impressions and intentions of the senior medical staff. It also denies medical staff of the opportunity to be aware of any abnormal complexities or issues that have arisen in the care of the patient to date. I was therefore pleased to note that Dr Burns stated:-

"I have made it clear to the staff that proper documentation is a condition of employment by NHS Lanarkshire".

It is to be hoped that all members of the clinical staff fully appreciate this.

Dr Burns also advised me that it was now standard procedure for the Consultant, who is present during the ward round, to have his or her presence noted. She also pointed out that there is now in place an early warning system for

highlighting deteriorations in a patient and that this is achieved by colour coding within the records.

Dr Burns was unable to explain why in Mrs Nicol's case Mr Cannon's note had not found its way into the medical records and that the same position had arisen in a different hospital in relation to Mrs Lannigan's note of the operation which she had carried out in relation to Mr Ritchie. She was equally unable to explain why there were no surgeon's notes from either Mr Cumming or from Mr Quandeel in relation to the death of George Johnstone and she further indicated that she had not been aware until the seventh day of the Inquiry that the biochemistry results in relation to Mr Johnstone were not available. She did not appear to be aware either that there were no sign of the X-ray reports for Mr Johnstone nor that the notes in relation to Mr Johnstone's admission in 2005 had never been made available to the Court despite a number of requests from the Fiscal.

I accept of course that Dr Burns was not principally responsible for the administration within NHS Lanarkshire in 2005/2006 but the evidence before the Inquiry and the lack of a complete set of records and documents in relation to any of the three patients is indicative of a system which requires to be overhauled.

It is essential that every doctor and nurse responsible for the care of a patient has access to all the records and all the documents and that full notes are available at all times.

In relation to the care of Mrs Nicol, Mr Johnstone and Mr Ritchie this was not so and I can only hope that NHS Lanarkshire will ensure in future that, firstly there is full documentation recorded by both the doctors and nurses involved in each stage of the treatment of patients, and secondly that the records department ensures that all the hospital records are kept and made available to all those who require access to them.

I am grateful to the solicitors and counsel for the careful and thorough way in which they dealt with these cases. I believe that Mr Ross, Mrs Donald and Mr Marby would wish to associated themselves with my expression of gratitude to Mrs Anne Ferguson for her very thorough and comprehensive knowledge of the records and for the manner of her presentation of the evidence. Without her experience and hard work, this inquiry could have been a meaningless jumble of disjointed elements.

DETERMINATION

In terms of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 by Sheriff Robert H Dickson, following an Inquiry held at Cumbernauld between 24th October and 16th November into the death of Mrs Agnes Nicol

AIRDRIE 16th February 2012

The inquiry into the death of Mrs Agnes Nicol was held at Cumbernauld between 24th October and 16th November 2011. At the same time I was asked to consider evidence in relation to the deaths of Mr George Johnstone and Mr Andrew Ritchie.

The Procurator Fiscal at Airdrie on behalf of the Lord Advocate had on 23rd November 2010 petitioned the Court to hold this joint inquiry in terms of Section 1(1)(b) of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976. It was (correctly) considered to be expedient in the public interest to hold an inquiry into three deaths which had occurred in a three month period in 2006 following in each case a laparoscopic cholecystectomy in a Lanarkshire hospital.

The evidence revealed a number of common features in the circumstances of two or even all three deaths. It also showed in each case factors which were unique to that particular tragedy.

In the circumstances I have therefore decided to issue a separate determination in relation to each death recording the relevant findings and highlighting, where appropriate, any features which overlap in relation to either or both of the other deaths. I consider that the relatives of Mrs Nicol are entitled to know that I have given separate consideration to the death of their loved one and have separately recorded the particular circumstances surrounding it.

The Lord Advocate was represented by Mrs Anne Ferguson, Senior Depute Procurator Fiscal at Airdrie.

The family of Mrs Agnes Nicol listened to the evidence as did the family of Mr George Johnstone and Mr Andrew Ritchie. None had legal representation. Miss Morag Nicol (daughter) spoke on behalf of her mother's relatives, Mrs Alice Johnstone, Mr Johnstone's widow and Mr William Ritchie, a cousin of Andrew Ritchie also asked questions of witnesses and all made submissions at the conclusion of the evidence.

Mrs Laura Donald, solicitor, appeared on behalf of witness numbers 2 and 11, Mr Duncan Mawby, solicitor, represented witnesses numbers 4, 9 and 16 while Lanarkshire NHS Trust were represented by Mr Douglas Ross, Advocate, instructed by the Central Legal Office, Edinburgh.

A joint minute of admissions agreeing the terms of production 35 was lodged.

I heard evidence from:-

- (24) Dr Ahmed Ali, Senior House Officer, Wishaw General Hospital.
- (25) Mr John Cannon, Consultant Surgeon, Wishaw General Hospital.
- (26) Dr Lal Singh, Surgeon, Wishaw General Hospital.
- (27) Mr Hakim Ben Younes, Consultant Surgeon, Wishaw General Hospital.
- (28) Dr Donald McLean, Consultant Anaesthetist, Wishaw General Hospital.
- (29) Dr Alan Morrison, Consultant Anaesthetist, Wishaw General Hospital.
- (30) Dr Alison Simpson, Consultant Anaesthetist, Wishaw General Hospital.
- (31) Mrs Alice Johnstone
- (32) Mr Joseph Cumming, Consultant Surgeon, Monklands District General Hospital, Airdrie.

- (33) Dr Jolene Wotherspoon, Senior Surgical House Officer, Monklands District General Hospital.
- (34) Mr Myklos Kassai, Consultant Surgeon, Monklands District General Hospital.
- (35) Dr Alistair McGee, Consultant Radiologist, Monklands District General Hospital.
- (36) Dr Scott Marshall, Consultant Anaesthetist, Monklands District General Hospital.
- (37) Dr Ruth Rae, Consultant Anaesthetist, Monklands District General Hospital.
- (38) Andrew Burnett, HECT Nurse, Monklands District General Hospital.
- (39) Mrs Alison Lannigan, Consultant Surgeon, Wishaw General Hospital.
- (40) Dr Robert Ainsworth, Consultant Forensic Pathologist, University of Glasgow.
- (41) Dr Marjorie Turner, Consultant Forensic Pathologist, University of Glasgow.
- (42) Dr Julie McAdam, Consultant Forensic Pathologist, University of Glasgow.
- (43) Professor O James Garden, Department of Clinical and Surgical Sciences, Royal Infirmary, Edinburgh.
- (44) Professor John Kinsella, Consultant Anaesthetist, Glasgow Royal Infirmary.

(45) Dr Jane Burns, Assistant Divisional Medical Director, Monklands, Wishaw and Hairmyres Hospitals, Hairmyres Hospital, East Kilbride.

(46) Dr Gordon Dewar, Consultant Anaesthetist, Monklands District General Hospital.

The posts referred to in this list record the positions held by the witnesses in 2005/2006.

Since that time Mr John Cannon and Dr Lal Singh have retired. Dr Wotherspoon now holds a position as a surgical registrar in Wales and Dr Kinsella was appointed Professor and head of the academic unit of anaesthesia, pain and/critical care at the University of Glasgow in 2007. Dr Jane Burns has since August 2010 held the position of Divisional Medical Director for Lanarkshire NHS Trust. Dr Gordon Dewar now holds the post of Consultant at the new Forth Valley Board Hospital at Larbert.

The following productions were referred to in the course of the inquiry:-

(5) GP records (Agnes Nicol).

(6) Wishaw General Hospital Records (Agnes Nicol).

(7) Typed operation note re Agnes Nicol (by Mr John Cannon dated 22nd December 2005).

- (8) – (6) Edinburgh Royal Infirmary Records (Agnes Nicol).
- (7) Typed operation note re Agnes Nicol (by Professor O James Garden dated 31 December 2005).
- (8) Post Mortem Report dated 28th March 2006 re Agnes Nicol by Dr Robert Ainsworth.
- (9) Expert Report dated 19th March 2007 re Agnes Nicol by Professor O James Garden.
- (10) Additional Expert Report dated 10th October 2008 re Agnes Nicol by Professor O James Garden.
- (11) GP Records (George Johnstone).
- (12) Monklands District General Hospital Records (George Johnstone).
- (13) Typed operation note re George Johnstone (by Mr Joseph Cumming dated 9th May 2006).
- (14) Post Mortem Report dated 21 June 2006 re George Johnstone by Dr Marjorie Black (now Dr Marjorie Turner).
- (15) Expert Report dated 12th January 2007 re George Johnstone by Professor O James Garden.
- (16) Additional Expert Report dated 10th October 2008 re George Johnstone by Professor O James Garden.
- (25) Wishaw General Hospital Records (Andrew Ritchie).
- (26) Typed operation note dated 14th June 2006 re Andrew Ritchie by Ms Alison Lannigan.

(27) Post Mortem Report dated 2 August 2006 re Andrew Ritchie by Dr Julie McAdam.

(28) Report by Ms Alison Lannigan re Andrew Ritchie.

(29) Expert Report dated 29th January 2007 re Andrew Ritchie by Professor O James Garden.

(30) Supplementary Expert Report dated 12th November 2007 re Andrew Ritchie by Professor O James Garden.

(31) Supplementary Expert Report dated 10th October 2008 re Andrew Ritchie by Professor O James Garden.

(25) to (34) – Clinical papers referred to by Professor Garden in his reports.

(42) Report dated 18th January 2011 by Mr Colin J McKay, Consultant Pancreaticobiliary Surgeon.

(43) Report by Professor John Kinsella.

(44) Letter dated 28th December 2005 by Mr John Cannon re Agnes Nicol.

(45) Undated medical report by Mr John Cumming re Mr George Johnstone.

(46) 1-11 X-ray and image reports re Mr George Johnstone.

(47) Photographs (seven) illustrating gall bladder and relative arteries, veins and ducts.

(48) Supplementary report dated 12th November 2007 re George Johnstone by Professor O James Garden.

- (1) Mrs Agnes Nicol lived at 6 Hallcraig Place, Carluke at the time of her death on 10th March 2006 within Edinburgh Royal Infirmary. She was aged 50 and had enjoyed reasonably good health.
- (2) On 13th May 2005 she was admitted to Wishaw General Hospital as an emergency having developed severe abdominal pains, nausea and vomiting. She had in fact attended the hospital the day before but had been sent home. The pain, nausea and vomiting had persisted for some days before her admission to hospital. As the pain was in the right upper quadrant (RUQ) gallstone pancreatitis was the provisional diagnosis. Mrs Nicol remained within the hospital until 18th May during which time she was given intravenous fluids, painkillers and antibiotics. An ultrasound was undertaken on 16th May. The report recorded the findings as "the gallbladder contains multiple calculi, at least one of which appears lodged within the gallbladder neck. There is no evidence of thickening of the gallbladder wall or dilation of the intra-hepatic biliary tree. Normal appearance of liver, pancreas, both kidneys and spleen. No free fluid was seen within the upper abdomen".
- (3) On her admission to hospital Mrs Nicol was seen by Mr John Cannon, a consultant general surgeon who was the duty surgeon for emergency admissions that day. At that time (the policy has changed since then) the general surgeons in Wishaw worked on a rota, each taking a turn to be

responsible for emergency admissions. At that time once a patient had come under the care of a particular consultant general surgeon following an emergency admission that patient remained under the care of that surgeon. Accordingly from 13th May 2005 Mrs Nicol was under the care of Mr Cannon and remained his patient until she was moved to Edinburgh Royal Infirmary on 30th December 2005.

- (4) Mrs Nicol's Creative Protein Level (CPL) which if normal should not have exceeded 6mg/l rose to 55mg/l on 14th May and reached 83mg/l on 16th May before falling back to 24mg/l on 18th May. By 18th May she was feeling better and the decision was made to discharge her home that day and to arrange for an elective laparoscopic cholecystectomy at a later date. Mr Cannon put a hand-written note on Mrs Nicol's record "put on soon" which was intended to indicate that he thought that the operation should not be delayed unduly.
- (5) The findings recorded during Mrs Nicol's May 2005 admission included references to her having a thyroid problem and an elevated TSH level. When she returned to Wishaw General Hospital in September for a pre-operation assessment her TSH was raised to such a level that the proposed laparoscopic procedure was postponed. By October her General Practitioner Dr Workman was able to report that the TSH level had dropped to an acceptable figure. Mr Cannon in reply to Dr Workman indicated that it was hoped to undertake the operation in January 2006.

- (6) Due, it is presumed, to a space in the admissions schedule in December, Mrs Nicol was re-admitted to Wishaw General Hospital firstly for a pre-assessment review on 20th December and then a laparoscopic cholecystectomy with the option of proceeding to open surgery on 22nd December. On 22nd December her liver function test and full blood count figures were normal.
- (7) Mr Cannon had not undertaken training in laparoscopic surgery and did not undertake such procedures himself. His specialist interest in 2005 was breast surgery and on the morning of 22nd December he was undertaking a mastectomy in Glasgow Royal Infirmary. He returned to Wishaw around 1:00pm.
- (8) Dr Lal Singh, a staff grade surgeon, who had worked for a number of years with Mr Cannon and was very experienced in undertaking laparoscopic cholecystectomies was assigned Mrs Nicol's operation. He spoke to her, explained the procedures and countersigned her consent form. A junior doctor had initially explained matters to Mrs Nicol and obtained her signed consent but Dr Singh (rightly) thought it appropriate that he, as the surgeon, spoke to the patient himself.
- (9) A laparoscopic procedure allows a surgeon to conduct an operation without major incisions. It involves the creation of a one centimetre hole (a port) below the umbilicus through which the abdomen is inflated with Co2 gas. Into this port a camera is inserted and three further similar

ports are thereafter created. These are to enable the surgeon to manipulate the surgical instruments guided by the view created by the camera images which are visible on a screen.

(10) On 22nd December Dr Singh was assisted by Dr Ahmed Ali. Originally it had been intended that Dr Ali would conduct part of the operation. However when Dr Singh saw the extent of the adhesions around the intended operation site (as shown on the camera images) he decided to conduct the whole operation himself. Doctor Ali operated the camera throughout.

(11) Because of difficulties which can arise in the course of a laparoscopic cholecystectomy, about 5% of such procedures are converted to open surgery (a laparotomy). This possible development had been explained to Mrs Nicol and she had consented to it.

(12) The gallbladder is a reservoir for bile which feeds into the intestine. The anatomy around it as well as the liver and duodenum which are close by, is complex. It is essential that a surgeon carrying out a cholecystectomy is able to identify the various veins, arteries and ducts. This can become more difficult due to a patient's abnormal anatomy, the presence of adhesions, a thick-walled gallbladder, inflammation or other factors. Such factors are among those which can cause a surgeon to change a laparoscopic procedure to a laparotomy because he is unable to gain an adequate clear view of the surrounding anatomy.

- (13) During a cholecystectomy, a surgeon will require to dissect the cystic duct and cystic artery. It is essential that these two vessels are correctly identified and that other vessels are not mistaken for them and wrongly cut. It is also essential that the surgeon starts the surgery as close as possible to the gallbladder as this minimises the chance of wrongly identifying vessels.
- (14) Dr Singh began the procedure and noted that in Mrs Nicol's case the gallbladder was thick-walled and that there was chronic inflammation. He had already observed that there were extensive adhesions. All these are factors which might have caused him to change the operation to a laparotomy to ensure that he had the maximum field of vision to identify the anatomy. He however believed that he had a sufficiently clear view of the ducts and other anatomy to continue with the laparoscopic procedure. He cut and secured what he believed to be the cystic artery and cystic duct. He had however made an anatomical error and misidentification. He had instead severed the common bile duct and right hepatic artery. He also damaged the portal vein.
- (15) A major bleed occurred which Dr Singh was initially unable to stem. He correctly called for help and converted the procedure immediately to a laparotomy. In response to his request for assistance Mr Cannon, who had just returned to the hospital, came to the theatre and after scrubbing up took over with Dr Singh and Dr Ali now assisting.

- (16) During the haemorrhage Mrs Nicol lost at least five litres of blood and remedial steps by means of transfusions were undertaken to replace this. She remained within the operating theatre for three hours during which Mr Cannon stemmed the blood flow and prepared Mrs Nicol for transfer to the Intensive Care Unit.
- (17) The extent of the blood and fluid present around the operation site combined with the continuation of the haemorrhage made it impossible for Mr Cannon to identify with any certainty the various veins, arteries and ducts. He was unsure of the source of the bleeding. He incorrectly identified the portal vein as the inferior vena cava and stitched it. He thereby cut off about 80% of the blood supply and oxygen to the liver.
- (18) In an effort to control the bleeding Mr Cannon tried to conduct a Pringle Manoeuvre. This should involve the pinching between the surgeon's finger and thumb (or by use of a clamp) the hepatic pedicle which should cause the bleeding to diminish and cease. Mr Cannon's attempt at the Pringle Manoeuvre had no effect on the bleeding. In his subsequent operation note Mr Cannon made no mention of the Pringle Manoeuvre or its lack of success.
- (19) At the conclusion of the operation Dr Singh wrote an operation note which is contained within the records and at the same time Mr Cannon dictated a note which was passed to his secretary for typing. This note never found its way into the records and was therefore never seen by any

subsequent clinician. At the conclusion of the operation neither Mr Cannon nor Dr Singh appreciated the errors which they had made and their notes are written on the basis that the correct structures have been cut and sutured.

(20) In order to soak up the blood and fluid within the cavity Mr Cannon placed four caesarean packs within the operation area intending that they should be removed in a subsequent operation within 48 hours. The packs were placed adjacent to Mrs Nicol's liver and Mr Cannon believed that they were pressing on the liver. It is accepted practice to place packs as Mr Cannon did when there is excessive bleeding but such packs require to be removed within a maximum of 72 hours.

(21) Caesarean packs are the largest possible and it is extremely rare to require to use as many as four following a cholecystectomy.

(22) Mrs Nicol was transferred to the intensive care unit (ICU) following the operation and was accompanied there by Mr Cannon and Dr Singh as well as the anaesthetist who had assisted in the operation.

(23) At 4:00pm on 22nd December Mrs Nicol entered ICU. She was under the joint consultant care of Dr Donald McLean, a consultant anaesthetist with specialist involvement in ICU patients and Mr Cannon. While there was no plan written or proposed by Mr Cannon, the ICU care plan recorded the need to maintain sedation and ventilation, to take repeated blood samples for analysis, the requirement for a chest X-ray and the need for

the surgeons to discuss and arrange for the removal of the packs. During the night Mrs Nicol's temperature increased to 37.7.

(24) On 23rd December Mr Cannon visited Mrs Nicol although there is no note written by him. By that time the results from a blood sample taken at 6:50am were available. They showed a bilirubin figure of 36 (normal maximum 23) and an alanine transaminase (ALT) of 6040. The normal maximum figure is 41. Subsequent ALT figures arising from blood tests carried out at 1:35pm and 7:30pm were 6100 and 7620. These figures clearly indicated a very major problem with liver function. Mr Cannon was made aware of the first figure and it is highlighted (by being circled) in a note written by an ICU consultant Dr Alison Simpson on the morning of 23rd December. Dr Simpson's note records that at 1:15pm she considered that there was a need for a further surgical review and that she had contacted Mr Cannon's surgical team. There are no notes recording what Mr Cannon or any member of the surgical team found thereafter. Dr Simpson was subsequently informed by a nurse that whoever had attended for the surgical review was satisfied with Mrs Nicol's condition.

(25) During 23rd December Mr Cannon spoke to Mr Ben Younes, a consultant surgeon who was to be on duty for Saturday 24th (and Sunday 25th) December. Mr Ben Younes had a specialist interest in upper gastric intestinal surgery and in laparoscopic gallbladder removal. There is no

recorded note in relation to this conversation and while Mr Cannon believes he explained to Mr Ben Younes his concern in relation to Mrs Nicol and asked him to have "a good look round", Mr Ben Younes has no recollection of any concerns being expressed. Both are agreed that Mr Cannon wished Mr Ben Younes to take Mrs Nicol into surgery on 24th December and to remove the packs. This would be an open operation.

(26) On the morning of 24th December Mrs Nicol was returned to the operating theatre where Mr Ben Younes removed the packs and carried out some further exploratory work as he found "copious dark coloured blood and some bile". He inserted two drains. He attempted a cholangiogram (a procedure to inject dye to visualise the bile duct and trace any bile leak) but was not able to insert the needle. He failed to observe that the wrong duct and artery had been severed and he failed to see that Mr Cannon had stitched the portal vein. He did endeavour unsuccessfully to remove Mr Cannon's stitches but he failed to appreciate that it was the portal vein which had been affected and that it therefore was depriving the liver of its major blood supply.

(27) Dr Singh, who like Mr Cannon was off duty on 24th December, was so concerned about Mrs Nicol that he returned to the hospital on the morning of 24th December. He intended to watch Mr Ben Younes's operation but instead scrubbed up and joined the operating team thereby assisting Mr Ben Younes and Dr Ali. Later that day Mr Cannon spoke to

Mr Ali to enquire how the procedure had gone. He recollected that Dr Ali had indicated that the operation had gone well and that the bleeding had been stopped.

(28) Mrs Nicol was returned to ICU where further blood tests were taken at 3:28pm and 8:39pm. They showed her ALT figure while grossly inflated had dropped to 4040 and 3240 respectively. Mrs Nicol, who had never regained consciousness since the initial operation remained unconscious. During the night of 24th-25th December initial concerns were expressed by the ICU staff at the need to reduce her sedation.

(29) On 25th December Mr Ben Younes visited Mrs Nicol in the course of his ward round. He noted her progress and wrongly concluded that the fall in her ALT indicated that her liver was recovering. He believed, as apparently did Mr Cannon, that her very high ALT figures were attributable to pressure from the caesarean packs, the effect of the major haemorrhage and the necessary manipulation of the liver during the initial operation. There is no note of either Mr Cannon or Mr Ben Younes's thought processes in relation to this. No surgical plan is contained within the records. Dr Alan Morrison, a consultant in ICU, also saw Mrs Nicol on 25th December and recorded a detailed plan listing problems and proposed treatment from an ICU viewpoint. He and his junior colleagues continued to maintain regular notes on Mrs Nicol's

condition throughout the 25th December and Dr Morrison returned to see her in the evening.

(30) On 26th December Mrs Nicol remained unconscious and in the view of Dr Simpson over-sedated. She instructed the cessation of sedation and noted that the patient had definite signs of renal failure. She recorded that the ALT figure had improved (1868) but also recorded that the bilirubin figure had reached 76. There is no note or record of any input from the surgical staff.

(31) At 2:00am on 27th December the PICO (the output fluid monitor) was removed on Dr Simpson's instructions. It was intended to try and maintain a neutral input/output fluid flow. Later on that day Mr Cannon visited the patient. A note written by a Senior House Officer (surgical) records "patient's condition stable" and notes that fluid had been draining from the area of Mr Ben Younes's operation site. There is no record of the nature of this fluid. Its significance, if any, would depend on its nature.

(32) A plan has been noted by the SHO. It states "(1) Leave drain in, (2) Continue antibiotics, (3) Continue current ----". The writing is illegible so it is impossible to know what was being continued. There is no mention of investigating the cause of the initial bleed (although Dr Simpson in her full note of 23rd December raised the issue with the words "? from what" followed by the reference to a surgical review taking place that day).

(33) On 27th December Mr Cannon had returned from his Christmas break.

Although he was aware that Mrs Nicol had undergone a catastrophic bleed on 22nd December, the cause of which he did not yet know, and her liver function figures had reached more than 18500% of the maximum figure and was still more than 3200% of the acceptable limit, no investigation of either matter was suggested or undertaken. The absence of any recorded constructive plan or concern in relation to these matters hindered the care and treatment of Mrs Nicol.

(34) There was (and had been since at the latest 24th December) a need to carry out a proper and full investigation into why and where the initial bleed had occurred. As neither Mr Cannon nor Dr Singh knew the cause or source of the bleed Mr Cannon should have queried whether it could have been caused by a surgical mistake. He should have by means of a scan or returning Mrs Nicol to surgery have ascertained why the liver function tests were so vastly in excess of normal. He could, and should, have put in hand the obtaining of a CT scan and this should have occurred on 23rd or at the very latest 24th December. Either before or immediately after the operation on 24th December Mr Ben Younes should have arranged a CT scan.

(35) In 2005 (and at present) Professor James Garden headed a unit in Edinburgh Royal Infirmary which had renowned specialist knowledge and expertise in treating cases involving major liver problems. The ALT

figures from 9:13pm on 22nd December (368) increasing to 6040 by 6:50am on 23rd December (of which Mr Cannon would have been aware during his initial visit to Mrs Nicol that day) should have alerted him to the need to investigate the cause. He should have recorded that concern and, if for any reason, he considered that a further wait was justified, he should have made a detailed note of why and what steps should be undertaken if the situation deteriorated (as it did).

(36) The ALT figure rose to 7620 by 7:30pm on 23rd December. It had already risen to 6100 by 1:35pm a figure which was available for Mr Cannon to consider when he visited Mrs Nicol in the afternoon of 23rd December. Mr Ben Younes prior to the operation on 24th December should have been aware of that figure and investigated the cause.

(37) Mr Cannon believed that a CT scan on 23rd December would not have resulted in a sufficiently clear picture because of the presence of the four caesarean packs which were to be removed by Mr Ben Younes on 24th December. He did not consult any radiological colleagues as to the validity of his belief which was probably incorrect.

(38) Professor Garden and his Unit regularly received referrals and requests for advice from other hospitals throughout Scotland. Had Mrs Nicol's case been drawn to the Unit's attention by 24th December, arrangements would have been put in hand for either members of the Edinburgh team to attend Wishaw or for Mrs Nicol's transfer to Edinburgh. No such

referral or request for advice was either suggested or mooted even by 27th December.

(39) By the morning of 28th December Mrs Nicol, despite the removal of sedation, remained unconscious. Her condition was deteriorating. Dr McLean discussed the situation with Mr Ben Younes and in a note indicated that the patient "may require surgical intervention". He wondered whether Mrs Nicol might have suffered an intracerebral event and decided to get a CT scan of her head to ascertain whether there was any evidence of a stroke. At the same point Mr Cannon became aware of this and it was agreed that the CT scan should be extended to cover the area of the operation as well.

(40) Mr Cannon was with Dr McLean when the CT scan was viewed. There was no focal intracranial abnormality nor evidence of intracranial haemorrhage. There was therefore nothing in relation to Mrs Nicol's brain to give cause for concern or to explain her inability to be roused.

(41) The CT scan of the abdomen however revealed that the right side of the liver had died and "there is very poor specification within the portal vein consistent with thrombosis/occlusion". Mr Cannon decided to seek advice from Professor Garden's unit and after telephoning sent the disc containing the CT scan by taxi to Edinburgh together with a letter. This was done around 5:00pm on 28th December.

(42) The letter is in the following terms:

"These are the CT films from today of the lady about whom we spoke this afternoon. She had laparoscopic cholecystectomy on 22.12.05 and torrential bleeding was encountered. The abdomen was then opened and heavy venous bleeding seen in the region of the porta hepatis – this was largely controlled by the sutures and the wound was then packed. Packs were removed on 24.12.05.

Since 24.12.05 WBC have been rising and sepsis was suspected but CT scan shows little evidence of a collection but evidence of a large segment of the right lobe of the liver which does not enhance. Also, on 23.12.05 ALT was 6000+; on 24.12.05 7000+ though this is now down to about 700-800. We feel these findings are in keeping with partial hepatic infarction though no arterial phase CT has been done.

We look forward to hearing your further views on this lady."

(43) On 29th December there continued to be increasing evidence of a sepsis.

This had become more and more evident in the daily results from biochemistry. Around 5:00pm Edinburgh Royal Infirmary contacted Dr Morrison and arrangements were put in hand to transfer Mrs Nicol to Edinburgh. This involved ensuring that she was stabilised and the Glasgow shock team took over to undertake the move.

(44) On 30th December at around 4:00pm Mrs Nicol reached Edinburgh Royal Infirmary and came under the care of Professor Garden's unit. The following day Professor Garden saw and reviewed Mrs Nicol. He recorded

“there was liver failure and necrosis of the right hemi-liver as a result of complicated cholecystectomy. Pressure injury to the right hepatic artery, right portal vein and common bile duct”. He noted (after recording various readings) that her case involved “extremely difficult management decisions”. At that point (as his note confirms) he was unclear as to whether there was obstruction of residual biliary tree which may impact improvement in residual liver function.

(45) Professor Garden’s note, (which is a good example of how a Consultant can record his findings, impressions and thoughts for others to consider when they are involved in the management of a patient), states that he intended to review the CT scan to decide whether surgical intervention that day was necessary.

(46) Professor Garden did review the CT scan which confirmed the complete avascular necrosis of the right hemi-liver, occlusion of the portal vein with thrombosis extending back to the meeting of the supramesenteric and splenic veins. He decided to carry out a laparotomy intending to repair the bile duct after removing the wasted part of the right liver.

(47) In the course of the operation Professor Garden found that the right hemi-liver was necrotic and this was excised. The small bowel was oedematous. The common bile duct had been divided and excised with two clips on the lower bile duct, the right hepatic artery had been

doubled clip, the portal vein was occluded, the left portal vein was ligated and the left hepatic duct was clipped and ligated.

(48) Professor Garden had observed and recorded the various surgical and anatomical errors which had occurred on 22nd December. Because of the major haemorrhage which was present when he reached the theatre Mr Cannon cannot be expected to have noticed Dr Singh's misidentifications nor when it was impossible to accurately identify features can he necessarily be criticised for failing to realise that he had also misidentified a structure and had ligated the portal vein. Mr Ben Younes when he conducted the laparotomy on 24th December was not faced with the difficult conditions which prevailed on 22nd December but he failed to notice that the wrong structures had been cut and that the portal vein was ligated. Mr Cannon, because he was unable to identify the structures during the operation of 22nd December, should thereafter by means of a scan have checked that he had not misidentified and ligated the wrong part (as he had).

(49) Mrs Nicol was returned from surgery on 31st December and remained within Edinburgh Royal Infirmary. In spite of thorough and competent medical and nursing care during the whole time she was there, she died within Ward 118 of the Intensive Therapy Unit at 12:57pm on 10th March 2006.

(50) A post-mortem was carried out by Dr Robert Ainsworth, a consultant pathologist in the City Mortuary Glasgow. Dr Ainsworth concluded that the cause of Mrs Nicol's death was multi-organ failure due to recurrent septicaemia due to hepatic infarction due to complications of endoscopic cholecystectomy.

DETERMINATION

In terms of the sub-sections of Section 6(1) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 I am required to make a determination setting out the following circumstances of the death so far as they have been established to my satisfaction:-

- (a) Where and when the death and any accident resulting in the death took place;
- (b) The cause or causes of such death and any accident resulting in the death;
- (c) The reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;
- (d) The defects, if any, in any system of working which contributed to the death or any accident resulting in the death; and
- (e) Any other facts which are relevant to the circumstances of the death.

Accordingly I determined:-

1(a) Agnes Nicol (date of birth 21st June 1955) who resided at 6 Hallcraig Place, Carluke died within Ward 118 Intensive Therapy Unit, Edinburgh Royal Infirmary at 12:57pm on 10th March 2006.

(b) The cause of death was multiple organ failure due to recurrent septicaemia due to hepatic infarction due to complications of endoscopic cholecystectomy carried out on 22nd December within Wishaw General Hospital. The complications were caused by a misidentification of the anatomy by a Staff Grade Surgeon who wrongly cut the common bile duct and right hepatic artery and the subsequent suturing of the portal vein by a Consultant Surgeon.

(c) The reasonable precautions whereby the death might have been avoided include:-

(A) The conversion on 22nd December of the laparoscopic cholecystectomy to a laparotomy at an earlier stage.

(B) The taking of a CT scan of the abdomen on 23rd or at the latest 24th December.

(C) The contacting of Professor Garden's unit at Edinburgh Royal Infirmary by the evening of 23rd December for advice on the grossly raised ALT figures.

(D) Mr Ben Younes observing during the operation on 24th December that the portal vein had been ligated and correcting this earlier surgical error.

(E) The failure of Mr Cannon from 22nd December onwards and Mr Ben Younes in relation to the post-operative care following the operation carried out by him on 24th December to record any post-operative management plan including any concerns and possible investigations which might be undertaken.

(F) The proper and appropriate documenting by Mr Cannon or any member of the surgical team (with the exception of two very brief and largely uninformative notes on 25th and 27th December) recording any visits to ICU to assess Mrs Nicol and the recording of any findings or further assessments from a surgical point of view.

(d) There were no defects in any system of working which did contribute to Mrs Nicol's death.

(e) The other facts which are relevant to the circumstances of the death are:-

(A) The failure to ensure the filing of all reports within the hospital records.

(B) The rota system which existed in 2005 (but which has been subsequently changed) whereby a patient admitted as an emergency becomes the responsibility of the consultant on duty on the day of admission. This was not withstanding the fact that there could be other consultants within the hospital staff who had a greater expertise or experience in the relevant field of surgery.

(C) The policy which existed in 2005 that a patient displaying major gall bladder problems on initial admission to the hospital would almost invariably be treated conservatively and expected to return at a later date for an elective operation.

(D) The failure of the surgeons to consider the possibility that there had been a misidentification of the structures and that that was the cause or was significantly contributory to Mrs Nicol's failure to recover.

NOTE

The evidence before the inquiry established that Mrs Nicol had enjoyed reasonably good health prior to her admission to Wishaw General Hospital as an emergency on 13th May 2005. At that stage she came under the care of Mr John Cannon, a consultant general surgeon, who was the duty surgeon for emergency admissions that day.

Mrs Nicol remained in the hospital until 18th May during which time she was given intravenous fluids, painkillers and antibiotics. An ultrasound taken on 16th May confirmed the diagnosis of gallstone pancreatitis. That ultrasound showed the presence of at least one stone lodged within the gallbladder neck and it also confirmed that there was no apparent thickening of the gallbladder wall. The film revealed a normal appearance of Mrs Nicol's liver and kidneys.

At that time it was the almost invariable practice within Wishaw General Hospital for cases such as Mrs Nicol's to be treated conservatively and the patient then put on a waiting list for an elective cholecystectomy. It was not the practice then, to proceed to an operation during the initial stay in the hospital.

In Mrs Nicol's case Mr Cannon was sufficiently concerned about the need to proceed to the operation that he added a hand-written note to her records "put on soon" intending to indicate that he considered that the operation should not be delayed unduly.

The policy which existed in Wishaw General Hospital at that time was one which was followed by a number of surgeons and hospitals. It therefore could not be stated that it was a practice "which no professional man of ordinary skill would have taken if he had acted with ordinary care" (Hunter –v- Hanley 1955 SC200 at 206).

It is therefore impossible for me to find, as I was requested, that the failure to operate on Mrs Nicol in May 2005 was a reasonable precaution whereby her death might have been avoided.

It cannot be said that it was a "reasonable" precaution when at that time there were a number of hospitals and competent surgeons who adopted a similar practice to that which existed in Wishaw General Hospital.

It is however worth noting that Mr Cannon considered that as there was a need for a cholecystectomy within the near future, and that Mrs Nicol's case was not one which should be treated as routine by the appointments department. Furthermore the ultrasound indicated that the problems of a thick walled gallbladder with adhesions was not apparent in May and might have made an operation on Mrs Nicol at that stage easier.

I have therefore included a reference to this under sub-section 6(1)(e) of the Act as I think it is a relevant fact.

I was assured in the course of the evidence particularly by Dr Jane Burns, the current Divisional Medical Director of NHS Lanarkshire, that there has been an increase in the number of cases which proceed to a cholecystectomy following first admission. I would expect surgeons and staff to be reminded of the need to review each case individually in deciding whether it was appropriate to postpone such an operation to a later date. Considerations, including the likelihood of the patient suffering further discomfort while awaiting the elective operation should be given due weight.

In 2005 because Mr Cannon had been the surgeon on duty at the time that Mrs Nicol was admitted, he remained her consultant. Mr Cannon himself did not carry out laparoscopic cholecystectomies as he had not undergone training in this aspect of surgery but he was supported in his team by Dr Lal Singh who had considerable experience of such operations. I am satisfied that Mr Cannon was entitled to rely on Dr Lal Singh's experience and expertise in this surgical field to carry out the necessary procedure competently.

It is however somewhat strange that at that time a patient could be assigned to a particular consultant and remain that consultant's patient notwithstanding the fact that that consultant had no expertise or training in the particular type of operation which the patient required to undergo. This practice has now been changed within NHS Lanarkshire.

I cannot state that it would have been a reasonable precaution to have Mrs Nicol's care transferred to another consultant surgeon with experience and expertise in laparoscopic cholecystectomies because I am satisfied that Dr Lal Singh had that necessary expertise and experience.

Professor James Garden prepared very helpful and thorough reports and gave evidence commenting on the care and treatment received by Mrs Nicol while she

was within Wishaw General Hospital. He queried the process by which Mrs Nicol's consent to the operation on 22nd December had been recorded. Having heard Dr Lal Singh's evidence that he personally spoke to her and explained the procedure although it had already been covered by another doctor I am entirely satisfied that there are no grounds for criticism in this respect. Mr Cannon indicated that, as he was the named Consultant, he might have explained to Mrs Nicol that he personally was not going to carry out the operation. I think that this is a counsel of perfection and that Mr Cannon was entitled to leave it to Dr Lal Singh to explain that he was carrying out the operation and the procedure involved.

The operation was to have been partially conducted by Dr Ali, presumably to enable him to gain experience under the supervision of Dr Lal Singh. When however the camera showed images which revealed that there were extensive adhesions around the intended operation site, Dr Lal Singh decided that he would conduct the whole operation himself.

It may be that at that point he should have, because of the prospective difficulties in accurately visualising the anatomy and successfully removing the gallbladder have changed the operation from a laparoscopic to a laparotomy. Dr Lal Singh chose not to do so and proceeded with the operation.

If Dr Lal Singh might have reconsidered his position after the initial sight of the adhesions I believe that he should certainly have reviewed his decision to continue once it became apparent that in addition to the adhesions he was faced with a thick walled gallbladder and inflammation. Although Dr Lal Singh believed that he could, by using the camera correctly, identify the cystic duct and cystic artery which required to be dissected it is now apparent that he was unable to do so. He should therefore, have before proceeding further, changed the procedure to one of a laparotomy thereby allowing him to work directly with the anatomy he could personally see as opposed to what was revealed to him by a camera.

As a result of his failure to correctly identify the arteries, veins and ducts he instead of dissecting the cystic duct and artery severed the common bile duct and right hepatic artery in the course of which he damaged the portal vein.

Had Dr Lal Singh adopted the reasonable course of action of converting the operation before he began cutting structures then Mrs Nicol's death might have been avoided. He would have had a better field of vision and would have had a better chance of identifying the anatomy.

In the course of the operation there was what was described as a "catastrophic" haemorrhage. Dr Lal Singh correctly sought help and fortunately Mr Cannon had

by this time returned to the hospital and was able to come to theatre 6 immediately. Dr Lal Singh had in the meantime converted the operation to a laparotomy and once Mr Cannon had scrubbed up he took over responsibility for the operation.

Because of the presence of significant volumes of blood (Mrs Nicol lost in excess of five litres during this procedure) Mr Cannon had no chance to visualise the anatomy nor to ascertain the errors which Dr Lal Singh had made. His principal task was to try and save Mrs Nicol's life by stemming the flow of blood and this he succeeded in doing. In the course of this procedure he mistakenly identified the portal vein as the inferior vena cava and stitched it. He thereby cut off about 80% of the blood supply and oxygen to Mrs Nicol's liver.

I do not consider that Mr Cannon can be criticised for this error. Faced as he was with a very serious situation and an operation site which made it impossible to visualise any parts of the anatomy with certainty he did what he considered to be necessary to arrest the bleeding and to allow this very ill patient to be transferred to the ICU unit. He however failed thereafter, by means of a scan, to verify what parts of the anatomy had been affected and what he had ligated.

Dr Lal Singh wrote an operation note in Mrs Nicol's records. Mr Cannon dictated a note which he intended should be transcribed by his secretary the following

day and added to the notes. This operation note failed to reach Mrs Nicol's records and was therefore never seen by Mr Ben Younes when he conducted the subsequent operation on 24th December nor was it seen by any member of the ICU staff or any other surgeon prior to Mrs Nicol's transfer to Edinburgh Royal Infirmary on 30th December.

It is impossible to state what, if any, effect the existence of this note within the medical records might have had but it does illustrate a failure in the records system. As a result the surgeon who conducted an important and fundamentally essential part of the operation had not had his record of what occurred and what he found made available to other staff responsible for Mrs Nicol's subsequent care.

One of the reasons why I am not prepared to find that the failure in the system to have all the notes available to subsequent clinicians may have contributed to the factors which led to Mrs Nicol's death relates to the total failure (described by Mr Cannon himself as "woeful") of any management plan by Mr Cannon within the records.

At the conclusion of the operation on 22nd December Mr Cannon did not know what had caused the bleed. He made no provision for investigating this and as Mrs Nicol's condition deteriorated and her ALT figure reached astronomical levels

he proposed nothing and recorded nothing as to her future surgical care (apart from arranging in a brief meeting with Mr Ben Younes that he would remove the caesarean packs). Although Mr Cannon asserted that he had indicated to Mr Ben Younes his concerns in relation to this patient I preferred the evidence of Mr Ben Younes that no such concerns were brought to his attention nor was he invited in the course of the operation to investigate matters further.

I accept that Mr Cannon visited Mrs Nicol at least twice in the course of 23rd December. There is however no note to record this and no record as to what his views on her future treatment might be. In his evidence he indicated that he was considering whether a CT scan should be taken (an idea he wrongly rejected without consulting a radiologist in the mistaken belief that a CT scan would not show a sufficiently clear image because of the presence of the packs). He also indicated that he was considering contacting Professor Garden's unit in Edinburgh because of the spectacular rise in the ALT figure. Again there is no record of this nor did he mention it to Mr Ben Younes as the surgeon on call during the next two days and who was to be responsible for the operation to remove the packs.

Accordingly no doctor had any idea that Mr Cannon was considering either of these courses of action nor his reasons for delaying putting them into effect.

Mr Cannon by his failure to record any management plan or his continuing thoughts once he had seen the patient on 23rd December effectively deprived every other clinician involved in her care over the Christmas period of the benefit of the views of an experienced consultant surgeon responsible for her care.

It is impossible to state that had he done so Mrs Nicol's death would have been avoided but it is clear from the evidence which I heard and in particular the opinion given by Professor Garden that it might have done so.

At 4:00pm on 22nd December Mrs Nicol was transferred to ICU. She was nursed and cared for competently by the staff there. An ICU care plan was prepared, updated and recorded throughout her time in ICU.

Mrs Nicol remained there until her transfer to Edinburgh Royal Infirmary on 30th December

Both the nurses and doctors in ICU concerned with Mrs Nicol's care made regular notes concerning her condition and their concerns. These notes are in marked contrast to the lack of proper and full notes from any member of the surgical team.

In particular there is a very full note by Dr Alison Simpson dated 23rd December which highlights the lack of knowledge as to the cause or location of Mrs Nicol's major bleed. She also records the need for "a further surgical review" and she contacted Mr Cannon's surgical team to ensure that they were aware of her concerns.

No criticism can be directed against any member of the ICU team including in particular the three consultants involved with her care namely Dr Alison Simpson, Dr Donald McLean and Dr Alan Morrison.

Accepting as I do that Mr Ben Younes was given minimal information prior to conducting the operation on 24th December and knowing that he did not have access to Mr Cannon's operation record which was not contained within Mrs Nicol's file there still remained upon him a responsibility to check the site of the original operation when he was removing the packs.

Mr Ben Younes failed to see the anatomical errors made by Dr Singh and the further mistake made by Mr Cannon when he wrongly had placed stitches into the portal vein. At this point Mr Ben Younes was not faced with the problems which had confronted Mr Cannon at the time of the original operation and he should have had a clear field of vision to confirm or otherwise that everything

which should have been done in the course of the first operation had been done correctly.

On 24th December (which was a Saturday) Mr Ben Younes was the on-call surgeon and as such he had responsibility for the surgical care of Mrs Nicol. While he had no note or guidance from Mr Cannon as to why a CT scan might be appropriate or that Mr Cannon had considered obtaining one, it is difficult to know why, in the light of the very high ALT figures and Mrs Nicol's apparent lack of progress that Mr Ben Younes did not himself arrange for one to be undertaken. It may be, that having failed to notice that Dr Singh had cut the common bile duct and the right hepatic artery and that Mr Cannon had put stitches into the portal vein, that he did not see an immediate purpose in a CT scan as he had looked at the site in the course of the operation. Mr Ben Younes appears to have assumed that his surgical colleagues had two days before, correctly identified the anatomy and remedied the cause of the haemorrhage.

Mr Ben Younes's perception was, sadly, reflected not only in this case insofar as Dr Singh and Mr Cannon were concerned, but also by other members of the medical profession in the other two cases which I required to consider. In every case there appeared to be an inability to consider the possibility that there had been a surgical mistake and every other possible reason for the lack of

improvement in the patient's condition was wrongly attributed to these other cases.

This "tunnel vision" as it was described in relation to the care of Andrew Ritchie was undoubtedly a factor in Mrs Nicol's case and was equally a factor in the other two cases which were heard alongside that of Mrs Nicol.

Anybody can make a mistake and in the case of surgeons such mistakes often sadly have fatal consequences. There needs however to be an understanding by those involved in surgery that amongst the possibilities which require to be considered when assessing why a patient is not improving or where there are significant biochemistry results which support the view that the patient is unwell, that the possibility of a surgical error is considered and investigated.

In this case it was not until the CT scan was obtained on 28th December, (and it should be remembered that it was at the instigation of the ICU staff that this was done), that there was the first realisation that something had gone wrong in the course of the surgery and that it had had a devastating effect on Mrs Nicol's liver.

Had a CT scan taken place on 23rd or 24th December the true position would have come to light. Even if Mr Ben Younes failed to notice what was apparent to

Professor Garden a week later, a scan before Christmas would have enabled remedial work to be undertaken at a far earlier stage and given Mrs Nicol a better chance of survival.

Once the CT scan had revealed the true extent of the liver problems Mr Cannon contacted Edinburgh Royal Infirmary and passed to them a disc showing the CT scan. Mrs Donald on behalf of Mr Cannon queried why it had taken Edinburgh Royal Infirmary two days to have Mrs Nicol transferred to them and suggested that that factor might have contributed unnecessarily in the delay in treating her. I do not feel that this is a fair criticism. It was not until 5:00pm on 28th December that Mr Cannon was able to send the disc to Edinburgh by taxi. Within 24 hours the unit in Edinburgh were indicating that they were able and willing to take Mrs Nicol as a patient and steps were then put in hand to arrange for her transfer using the Glasgow crash team whose expertise in transferring very ill patients from one hospital to another gave Mrs Nicol the best chance of surviving the journey.

Once Mrs Nicol had reached Edinburgh Royal Infirmary she came under the care of Professor Garden. After reviewing her case and making a careful note as to the matters which he was considering and were of concern to him, he then checked the scan before proceeded to an operation on the afternoon of the 31st December. Although that operation was carried out skilfully and competently

and Mrs Nicol was carefully nursed and looked after within Ward 118 at Edinburgh Royal Infirmary she sadly died in March 2006 from the overall effects of the operation conducted in Wishaw General Hospital on 22nd December 2005.

As I have indicated surgeons can make errors and undoubtedly Dr Singh made an error in his misidentification of the anatomy at the start of the operation. He would have given himself a better chance of correctly identifying the anatomy and concluding the operation successfully had he, as he accepted in the course of his evidence, moved to a laparotomy as soon as he noticed the problems he was facing.

Mr Cannon succeeded in saving Mrs Nicol's life by stemming the flow of blood and ensuring that she was sufficiently stable to be transferred to ICU. He however stitched the portal vein and thereby deprived the liver of blood and oxygen. While, in my view, he cannot be faulted for this error which was made at a time when his field of vision was obscured by blood and fluid he must bear a heavy responsibility for the subsequent failure to carry out any investigation as to why and where Mrs Nicol had bled from and for failing to check that he had indeed stitched the correct vein. He should also have verified at the same time that Dr Singh had, as he claimed in his operation note, isolated the cystic duct and artery.

Had Mr Cannon seriously considered the possibility that Mrs Nicol's high ALT figures and her other biochemistry results could be attributable to a surgical mistake and investigated this then she would undoubtedly have had a better chance of surviving. The longer that the portal vein remained ligated the greater the time during which the liver was damaged.

A fundamental factor in failing to alert anybody to the potential problems which Mrs Nicol was facing arises from the total lack of notes by Mr Cannon. His failure to make proper (or any) notes recording his visits to see Mrs Nicol and providing a management plan including whether a CT scan might be appropriate and whether an attempt should be made to contact Professor Garden's unit, hindered proper consideration as to what was best for Mrs Nicol.

It was clear from Mr Cannon's evidence that he relied on the fact that Mr Ben Younes, as a specialist in that field, would be conducting the operation on 24th December. I am however not satisfied that he made any effort to bring his concerns to Mr Ben Younes's attention. Mr Cannon's apparent level of concern as to the welfare of his patient may fall to be contrasted with that of Dr Singh who, not only attended the hospital on 24th December, but ensured that he was present in the operating theatre to assist. It is strange that Mr Cannon did not seek to contact Mr Ben Younes who was on duty on both 24th and 25th December

to ascertain how the operation had proceeded. Instead he relied on a phone call to the most junior member of the surgical team.

This was a lady who had been gravely ill two days before and whom Mr Cannon's skill had kept alive. He however appears to have made little effort to ascertain whether the source of the bleeding had been traced and what, if any, other information Mr Ben Younes could give him.

It was suggested by Mr Cannon in the course of the inquiry that the festive season "is not the best time to be involved in surgery". I consider that this is a slur on the efforts of those who were on duty at the time. It was clear from the evidence of Dr McLean in particular that throughout the festive period a Consultant was on call and another member of staff was present in the hospital at all times. This related both to ICU staff and surgical staff and accordingly the hint that the care provided in a Lanarkshire hospital during the festive period was less robust than it was at other times, was certainly not illustrated to me.

Mrs Nicol's death was not attributable to lack of staff during the festive period. It was caused by an error by Dr Singh, a further error by Mr Cannon, the total lack of any surgical management plan or medical notes in relation to the surgical side of Mrs Nicol's care, the failure by Mr Ben Younes to notice the errors caused by Mr Cannon and Dr Singh and the repeated failure to investigate the cause of

Mrs Nicol's lack of recovery, increasing septicaemia and in particular her ALT figures. The failure to investigate either the cause of the bleeding or what else had gone wrong in the course of the operation before 28th December when a CT scan was finally obtained weakened Mrs Nicol's chances of recovery. Once she passed into the care of Professor Garden it was clearly too late to rectify the situation despite his Unit's best efforts.

Both Dr Singh and Mr Cannon expressed their deep regrets at what had occurred and both indicated that Mrs Nicol's death was a matter which they thought about frequently. On behalf of the Court and all those involved in the inquiry I would wish to express my condolences to Mrs Nicol's family for their tragic loss.

The Inquiry investigated the deaths of three patients within a period of three months following laparoscopic cholecystectomies carried out in hospitals within Lanarkshire NHS. The evidence established that cholecystectomies are one of the most common operations carried out and there was natural concern when on three separate occasions patients died following such an operation.

I have found that there were individual circumstances in relation to each of the deaths and errors made in surgery and in particular the post-operative care of the patients which caused those deaths. They involved different consultant

surgeons and there is no evidence that there was a lack of training or experience in the surgeons involved.

Although the evidence established that the circumstances of each death was different, and the complication which arose in the course of the surgery which led to the patient's death was different in each case, there are certain factors which are common to at least two if not all of the deaths which require to be commented on.

In his assessment of the records and reports in relation to the three deaths Professor Garden highlighted three matters. They were:-

- (4) The management of the initial presentation;
- (5) The management of the post-operative period; and
- (6) The mistaken and apparent unswerving belief of the surgeons that any failure of the patient to respond post-operatively as expected, could not be due to any complication attributable to the operation itself.

In relation to the management and the initial presentation Professor Garden accepted that there were variations throughout various hospitals in Scotland as to whether a cholecystectomy should be carried out on the first admission. He however was critical of what appeared to be the absolute policy within Lanarkshire NHS in 2005/2006 that laparoscopic cholecystectomies should be

regarded as elective procedure and should not be carried out during the time of the patient's first admission.

Professor Garden pointed out that there were advantages in carrying out the operation at the time of the patient's first admission as it avoided the danger of the patient suffering further pain or complications and equally avoided the need to re-admit the patient to hospital.

I believe that this criticism may have some validity in connection with the cases of Mrs Nicol and Mr Johnstone. Mr Johnstone was anxious that the operation be carried out as soon as possible and it is not recorded why his wish was not acceded to. There does not appear to be anything in the records which would justify delaying the operation. In relation to Mrs Nicol it is clear that she did suffer further pain and problems as a result of the delay in the operation and in fact her operation required to be subsequently postponed because of other problems. Professor Garden considered that both operations should in fact have been carried out at the time of the patients' first admission.

There was however at that time a body of opinion which supported the delay in carrying out such operations, and the only possible justified criticism which I feel might be made in relation to Lanarkshire NHS, was the apparent lack of

consideration of clinical issues and the patient's wishes in deciding whether the operation should be carried out at the time of first admission or later.

In relation to Mr Ritchie I am entirely satisfied that the consultant surgeon Mrs Lannigan reached the correct conclusion and there were very valid reasons for not proceeding to an operation at the time of his first admission to hospital. Whatever may have been the policy within Lanarkshire NHS at that time Mrs Lannigan had sound clinical grounds for concluding that it was not appropriate to proceed with an operation in early February 2006 and I can find no evidence to criticise her management of Mr Ritchie's case during his first stay in the hospital in January/February 2006.

I heard evidence from Dr Jane Burns, a Consultant Anaesthetist, who is the current Divisional Medical Director for NHS Lanarkshire. She has held this post since August 2010 and before that was Assistant Medical Director for Wishaw, Monklands and Hairmyres hospitals. She indicated to me (and this was supported by other witnesses) that while there had been no change in the practice of delaying surgery to allow patients to have elective operations after an acute episode, there was an increase in the number of patients who were operated on during their first admission. Dr Burns accepted that the matter required to be one of clinical judgement rather than Health Board policy.

In relation to the management of the post-operation period there were clear faults in the care of each of the patients. There was a lack of proper post-operative planning and the recording of those plans. There was clear evidence that when the patients were not responding as was expected this failed to result in the necessary enquiry and investigation as to the cause of this. While it is not possible to say definitively that if each patient had been returned to surgery earlier, and if the necessary scans had been carried out timeously, that lives would have been saved, there is substance in the contention made by Professor Garden and Professor Kinsella that, had the post-operative care been to the standard which they expected and had there been a proper management plan which staff could have worked to, that there remains a realistic possibility in each case that the death would not have occurred.

In each of the cases the Consultant responsible for the patient's care failed to consider the growing body of evidence that there was something fundamentally wrong with the patient and that the most likely cause of this was something which had arisen in the course of the operation. In Mrs Lannigan's case (the death of Mr Ritchie) she accepted that she had had "tunnel vision" which prevented her giving proper consideration to the most likely cause of his deteriorating health namely a duodenal perforation.

In relation to Agnes Nicol's death, while undoubtedly Mr Cannon saved Mrs Nicol's life by stemming the major bleed which occurred during Dr Singh's initial operation, he ignored the growing body of evidence in the biochemistry reports and Mrs Nicol's failure to regain consciousness as clear indicators that there was something fundamentally wrong which required immediate investigation. This is difficult to explain.

Mr Cumming's persistent failure to investigate the cause of Mr Johnstone's lack of post-operative progress is equally difficult to understand. Even when the CT scan result finally became available as a result of the decision of the ICU doctors to investigate the possibility of a stroke, Mr Cumming still failed to take the patient to surgery.

In relation to the post-operative care of all three patients there was a lack of adequate notes (or in some cases no notes at all) by the senior medical staff. There was a lack of proper management plans recorded in such notes that did exist. I have been left with the regrettable impression that in both Wishaw General Hospital and Monklands District General Hospital in 2005/2006 that there was clear evidence of a failure by certain Consultants to ensure that there was proper documentation at all times.

In her evidence Dr Burns accepted that the cases showed that the documentation was not to an acceptable standard. Mr Cannon, Mr Cumming and Mrs Lannigan all accepted that was indeed the position.

The lack of adequate documentation and recording of a plan and of findings by senior doctors prevents those who are responsible for the patient's care at any other stage from knowing the views, impressions and intentions of the senior medical staff. I was therefore pleased to note that Dr Burns stated:-

"I have made it clear to the staff that proper documentation is a condition of employment by NHS Lanarkshire".

It is to be hoped that all members of the clinical staff fully appreciate this.

Dr Burns also advised me that it was now standard procedure for the Consultant who is present during the ward round to have his or her presence noted. She also pointed out that there is now in place an early warning system for highlighting deteriorations in a patient, and that this is achieved by colour coding.

Dr Burns was unable to explain why in Mrs Nicol's case Mr Cannon's note had not found its way into the medical records and that the same position had arisen in a

different hospital in relation to Mrs Lannigan's note of the operation which she had carried out in relation to Mr Ritchie. She was equally unable to explain why there were no surgeon's notes from either Mr Cumming or from Mr Quandeel in relation to the death of George Johnstone and she further indicated that she had not been aware until the seventh day of the Inquiry that the biochemistry results in relation to Mr Johnstone were not available. She did not appear to be aware either that there were no sign of the X-ray reports for Mr Johnstone nor that the notes in relation to Mr Johnstone's admission in 2005 had never been made available to the Court despite a number of requests from the Fiscal.

I accept of course that Dr Burns was not the Medical Director for NHS Lanarkshire in 2005/2006 but the evidence before the Inquiry and the lack of a complete set of records and documents in relation to any of the three patients is indicative of a system which requires to be overhauled.

It is essential that every doctor and nurse responsible for the care of a patient has access to all the records and all the documents and that full notes are available at all times.

In relation to the care of Mrs Nicol, Mr Johnstone and Mr Ritchie this was not so. I can only hope that NHS Lanarkshire will ensure in future that, firstly there is full documentation recorded by both the doctors and nurses involved in each stage

of the treatment of patients, and secondly that the records department ensures that all the hospital records are kept and made available to all those who require access to them.

I am grateful to the solicitors and counsel for the careful and thorough way in which they dealt with these cases. I believe that Mr Ross, Mrs Donald and Mr Mawby would wish to associated themselves with my expression of gratitude to Mrs Anne Ferguson for her very thorough and comprehensive knowledge of the records and for the manner of her presentation of the evidence. Without her experience and hard work, this inquiry could have been a meaningless jumble of disjointed elements.

2012 FAI 15

DETERMINATION

In terms of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 by Sheriff Robert H Dickson, following an Inquiry held at Cumbernauld between 24th October and 16th November 2011 into the death of Mr George Johnstone

Airdrie 17th February 2012

The inquiry into the death of Mr George Johnstone was held at Cumbernauld between 24th October and 16th November 2011. At the same time I was asked to consider evidence in relation to the deaths of Mrs Agnes Nicol and Mr Andrew Ritchie.

The Procurator Fiscal at Airdrie on behalf of the Lord Advocate had on 23rd November 2010 petitioned the Court to hold this joint inquiry in terms of Section 1(1)(b) of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976. It was (correctly) considered to be expedient in the public interest to hold an inquiry into three deaths which had occurred in a three month period in 2006 following in each case a laparoscopic cholecystectomy in a Lanarkshire hospital.

The evidence revealed a number of common features in the circumstances of two or even all three deaths. It also showed in each case factors which were unique to that particular tragedy.

In the circumstances I have therefore decided to issue a separate determination in relation to each death recording the relevant findings and highlighting, where appropriate, any features which overlap in relation to either or both of the other deaths. I consider that the relatives of Mr Johnstone are entitled to know that I have given separate consideration to the death of their loved one and have separately recorded the particular circumstances surrounding it.

The Lord Advocate was represented by Mrs Anne Ferguson, Senior Depute Procurator Fiscal at Airdrie.

The family of Mrs Agnes Nicol listened to the evidence as did the family of Mr George Johnstone and Mr Andrew Ritchie. None had legal representation. Miss Morag Nicol (daughter) spoke on behalf of her mother's relatives, Mrs Alice Johnstone, Mr Johnstone's widow and Mr William Ritchie, a cousin of Andrew Ritchie also asked questions of witnesses and all made submissions at the conclusion of the evidence.

Mrs Laura Donald, solicitor, appeared on behalf of witness numbers 2 and 11, Mr Duncan Mawby, solicitor, represented witnesses numbers 4, 9 and 16 while Lanarkshire NHS Trust were represented by Mr Douglas Ross, Advocate, instructed by the Central Legal Office, Edinburgh.

A joint minute of admissions agreeing the terms of production 35 was lodged.

I heard evidence from:-

- (47) Dr Ahmed Ali, Senior House Officer, Wishaw General Hospital.
- (48) Mr John Cannon, Consultant Surgeon, Wishaw General Hospital.
- (49) Dr Lal Singh, Surgeon, Wishaw General Hospital.
- (50) Mr Hakim Ben Younes, Consultant Surgeon, Wishaw General Hospital.
- (51) Dr Donald McLean, Consultant Anaesthetist, Wishaw General Hospital.
- (52) Dr Alan Morrison, Consultant Anaesthetist, Wishaw General Hospital.
- (53) Dr Alison Simpson, Consultant Anaesthetist, Wishaw General Hospital.
- (54) Mrs Alice Johnstone
- (55) Mr Joseph Cumming, Consultant Surgeon, Monklands District General Hospital, Airdrie.

- (56) Dr Jolene Wotherspoon, Senior Surgical House Officer, Monklands District General Hospital.
- (57) Mr Myklos Kassai, Consultant Surgeon, Monklands District General Hospital.
- (58) Dr Alistair McGee, Consultant Radiologist, Monklands District General Hospital.
- (59) Dr Scott Marshall, Consultant Anaesthetist, Monklands District General Hospital.
- (60) Dr Ruth Rae, Consultant Anaesthetist, Monklands District General Hospital.
- (61) Andrew Burnett, HECT Nurse, Monklands District General Hospital.
- (62) Mrs Alison Lannigan, Consultant Surgeon, Wishaw General Hospital.
- (63) Dr Robert Ainsworth, Consultant Forensic Pathologist, University of Glasgow.
- (64) Dr Marjorie Turner, Consultant Forensic Pathologist, University of Glasgow.
- (65) Dr Julie McAdam, Consultant Forensic Pathologist, University of Glasgow.
- (66) Professor O James Garden, Department of Clinical and Surgical Sciences, Royal Infirmary, Edinburgh.
- (67) Professor John Kinsella, Consultant Anaesthetist, Glasgow Royal Infirmary.

(68) Dr Jane Burns, Assistant Divisional Medical Director for Monklands, Wishaw and Hairmyres Hospitals, Hairmyres Hospital, East Kilbride.

(69) Dr Gordon Dewar, Consultant Anaesthetist, Monklands District General Hospital.

The posts referred to in this list record the positions held by the witnesses in 2005/2006.

Since that time Mr John Cannon and Dr Lal Singh have retired. Dr Wotherspoon now holds a position as a surgical registrar in Wales and Dr Kinsella was appointed Professor and head of the academic unit of anaesthesia, pain and critical care at the University of Glasgow in 2007. Dr Jane Burns has since August 2010 held the position of Divisional Medical Director for Lanarkshire NHS Trust. Dr Gordon Dewar is now a Consultant at the new Forth Health Board Hospital at Larbert.

The following productions were referred to in the course of the inquiry:-

(9) GP records (Agnes Nicol).

(10) Wishaw General Hospital Records (Agnes Nicol).

(11) Typed operation note re Agnes Nicol (by Mr John Cannon dated 22nd December 2005).

- (12) – (6) Edinburgh Royal Infirmary Records (Agnes Nicol).
- (7) Typed operation note re Agnes Nicol (by Professor O James Garden dated 31 December 2007).
- (8) Post Mortem Report dated 28th March 2006 re Agnes Nicol by Dr Robert Ainsworth.
- (9) Expert Report dated 19th March 2007 re Agnes Nicol by Professor O James Garden.
- (10) Additional Expert Report dated 10th October 2008 re Agnes Nicol by Professor O James Garden.
- (11) GP Records (George Johnstone).
- (12) Monklands District General Hospital Records (George Johnstone).
- (13) Typed operation note re George Johnstone (by Mr Joseph Cumming dated 9th May 2006).
- (14) Post Mortem Report dated 21 June 2006 re George Johnstone by Dr Marjorie Black (now Dr Marjorie Turner).
- (15) Expert Report dated 12th January 2007 re George Johnstone by Professor O James Garden.
- (16) Additional Expert Report dated 10th October 2008 re George Johnstone by Professor O James Garden.
- (32) Wishaw General Hospital Records (Andrew Ritchie).
- (33) Typed operation note dated 14th June 2006 re Andrew Ritchie by Ms Alison Lannigan.

(34) Post Mortem Report dated 2 August 2006 re Andrew Ritchie by Dr Julie McAdam.

(35) Report by Ms Alison Lannigan re Andrew Ritchie.

(36) Expert Report dated 29th January 2007 re Andrew Ritchie by Professor O James Garden.

(37) Supplementary Expert Report dated 12th November 2007 re Andrew Ritchie by Professor O James Garden.

(38) Supplementary Expert Report dated 10th October 2008 re Andrew Ritchie by Professor O James Garden.

(25) to (34) – Clinical papers referred to by Professor Garden in his reports.

(49) Report dated 18th January 2011 by Mr Colin J McKay, Consultant Pancreaticobiliary Surgeon.

(50) Report by Professor John Kinsella.

(51) Letter dated 28th December 2005 by Mr John Cannon re Agnes Nicol.

(52) Undated medical report by Mr John Cumming re Mr George Johnstone.

(53) 1-11 X-ray and image reports re Mr George Johnstone.

(54) Photographs (seven) illustrating gall bladder and relative arteries, veins and ducts.

(55) Supplementary report dated 12th November 2007 re George Johnstone by Professor O James Garden.

- 1) Mr George Johnstone lived at 147a Greengairs Road, Airdrie at the time of his death on 11th May 2006 within Monklands District General Hospital (MDGH). He was aged 54.
- 2) In 2004 Mr Johnstone attended the San Antonio Heart Associates in Texas in relation to hypertension. He was prescribed medication and in particular beta-blockers which he continued to take.
- 3) On 22nd December 2005 Mr Johnstone was taken as an emergency to MDGH complaining of abdominal pain. This resolved itself and he went home. The following day he developed a temperature and was enduring increased pain. He returned to the hospital and was admitted.
- 4) He remained as a patient in the hospital until 30th December. The Inquiry did not have access to the hospital notes and records relating to this period (other than by reference to Mr Johnstone's GP records) with the exception of a series of scan reports which were produced by NHS Lanarkshire on the eighth day of the Inquiry (Production 39).
- 5) In a discharge letter sent by the hospital to Mr Johnstone's General Practitioner it is recorded that Mr Johnstone

"was admitted on the 23rd December 2005 with right upper quadrant pain, pyrexia and deranged liver function tests. He was treated for cholangitis with intravenous antibiotics and eventually his clinical

condition improved. An ultrasound confirmed a mildly distended thick-walled tender gallbladder but without any evidence of stones or duct dilatation. Emergency surgery was mooted initially but it was decided that this would not be in his best interests. This was based on the fact that his clinical condition and liver function tests improved, particularly as no stones had been identified. Mr Johnstone himself expressed disappointment with this perceived change of plan particularly as he was due to travel to Mexico on work a fortnight later. Instead he was allowed home and (it is believed) was still planning to travel abroad but he is due to be reviewed in the clinic on his return in about six weeks time when cholecystectomy will no doubt be discussed".

6) Mr Johnstone returned to the hospital on 1st March 2006 when an ultrasound confirmed an inflamed gallbladder without any evidence of stones or duct dilatation. Cholecystectomy was discussed but because Mr Johnstone was about to travel to Mexico again this was postponed until after his return. Thereafter arrangements were made to admit him to the hospital for a laparoscopic cholecystectomy (with the option to convert to laparotomy).

- 7) A laparoscopic procedure allows a surgeon to conduct an operation without major incisions. It involves the creation of a one centimetre hole (a port) below the umbilicus through which the abdomen is inflated with CO₂ gas. Into this port a camera is inserted and three further similar ports are thereafter created. These are to enable the surgeon to manipulate the surgical instruments which have been inserted through the ports and to be guided by the view created by the camera images which are visible on a screen.
- 8) Because of difficulties which can arise in the course of a laparoscopic cholecystectomy, about 5% of such procedures are converted to open surgery (a laparotomy). This possible development had been explained to Mr Johnstone and he had consented to it.
- 9) The gallbladder is a reservoir for bile which feeds into the intestine. The anatomy around it, as well as the liver and duodenum which are close by, is complex. It is essential that the surgeon carrying out a cholecystectomy is able correctly to identify the various veins, arteries and ducts. This can become more difficult due to a patient's abnormal anatomy, the presence of adhesions, a thick walled gallbladder, inflammation or other factors. Such factors are among those which can cause a surgeon to change a laparoscopic procedure to a laparotomy because of an inability to gain an adequate clear view of the surrounding anatomy.

10) During a cholecystectomy a surgeon will require to dissect the cystic duct and cystic artery. It is essential these two vessels are correctly identified and that other vessels are not mistaken for them and wrongly cut. It is also essential that the surgeon starts the surgery as close as possible to the gallbladder as this minimises the chance of wrongly identifying vessels or inadvertently damaging them.

11) On 9th May 2006 Mr Johnstone attended the hospital along with his wife. In the afternoon after he had completed the appropriate consent form Mr Johnstone was taken to the operating theatre where Mr Joseph Cumming, a consultant general surgeon, performed a laparoscopic cholecystectomy. He was assisted during the operation by Dr Quandeel, a surgical senior house officer. At the conclusion of the operation Mr Cumming dictated a note recording what he believed had occurred during the procedure. This note, which was subsequently typed by his secretary, was never included in the medical notes relating to Mr Johnstone. Mr Cumming was able to recover a copy from his own files and it forms production 13. This document was not seen by any of the medical or nursing staff concerned with Mr Johnstone's care.

12) Dr Quandeel wrote a contemporaneous note immediately following the operation. This note has never been traced and was never seen by anybody responsible subsequently for Mr Johnstone's care.

- 13) During the operation Mr Cumming found that the area around the cystic duct and the common bile duct was extremely inflamed. He believed that he had correctly identified the cystic duct and cystic artery which he ligated with metal clips and divided. He dissected the gallbladder from its bed but required to scarify and leave an extremely fibrosed intrahepatic portion. During this Mr Cumming cut or caused to be damaged the main bile duct but he did not realise that this had occurred. The injury to the bile duct resulted in a leakage of fluid and bile into the abdominal cavity.
- 14) Mr Johnstone was returned to the ward having been kept in the recovery room until it was believed he could safely be transferred. He was visited in the evening by his wife and family who found that he was receiving oxygen, was groggy and in pain.
- 15) During the night of 9th/10th May Mr Johnstone continued to be in pain and was given 10mgs of morphine at 4:25am. This was repeated at 8:25am and again at 1:40pm. It is rare for a patient to require as much morphine after a cholecystectomy.
- 16) Mr Cumming visited Mr Johnstone at around 9:00am and again at 12 noon. On the first occasion Mr Johnstone was asleep. The medical notes in relation to these visits were made by Dr Quandeel and do not record Mr Cumming's presence. On neither occasion did Mr Cumming examine his patient and in particular he did not examine his abdomen.

Mr Cumming was unaware of a biochemistry finding from a serum specimen taken at 09:49am that Mr Johnstone was demonstrating signs of renal failure and liver dysfunction.

17) During the 12 noon ward round Mr Johnstone was seen to be walking around the ward but there remained concern as to his inability to pass urine spontaneously. This concern increased during the afternoon and the decision was made to have a catheter fitted. It was apparent that Mr Johnstone was dehydrated and four hourly intravenous fluids were arranged.

18) It had been Mr Cumming's original intention that Mr Johnstone would be discharged home during the late afternoon or evening of 10th May but, because of the presence of the catheter, Mr Cumming decided that his patient should remain for a further night in the hospital.

19) There is no indication in the notes that either Mr Cumming or any senior member of the medical staff were made aware of a deterioration in Mr Johnstone's condition in the course of the afternoon. A nursing note (untimed) for the afternoon/evening of the 10th May records Mr Johnstone's condition as "fair only". It also records that the "abdomen remains distended +++" and by 5:50pm his temperature which was raised at 2:00pm had risen further. His blood pressure had dropped but his heart rate had increased.

- 20) Around 6:00pm Mr Cumming returned to the ward and saw Mr Johnstone. Mr Cumming believes that he saw Mr Johnstone out of bed but this is inconsistent with the recorded readings and nursing notes and it is inconsistent with the evidence given by Mrs Johnstone that when she visited her husband around 7:00pm she found that her husband was in pain and was initially dozy. Although he spoke to her, he eventually fell asleep before the end of visiting time.
- 21) In the course of his visit to Ward 6 before he left for the evening Mr Cumming spoke to Mr Johnstone and explained that he wished the catheter to remain in position and that Mr Johnstone would require to stay in the hospital overnight. He did not examine Mr Johnstone.
- 22) At 10:30pm a junior house officer visited Mr Johnstone, noted that he was pyrexial (raised temperature) but that otherwise he was "well" and took blood cultures for analysis. It is difficult to equate the description of "well" in relation to a patient with a raised temperature who required a catheter. There is no note to suggest that the doctor examined Mr Johnstone.
- 23) As a direct result of the imposition of a limit on the number of hours which can be worked by junior medical staff, NHS Lanarkshire (along with other health boards) created a Hospital Emergency Care Team (HECT). Members of that team were nurses with considerable

experience who had undergone specialist training which enabled them to give advice to ward staff or to deal with an emergency.

24) On the evening of 10th-11th May Mr Andrew Burnett, a staff nurse with 18 years' experience, was a member of the HECT within the surgical unit. At around 11:30pm he was asked to visit Mr Johnstone and carried out a very thorough examination. He recorded his findings which were that the patient was hypertensive with low blood pressure and low urine output. Mr Johnstone's breathing rate was 29 which was well in excess of the normal 12-14 rate and this he believed could have been caused by pain or because the body was under duress. Both lungs were found to have crackles which indicated the presence of fluid or infection. The heart-rate was inflated at 104 (normal 60-80) and there was fresh blood leaking from the wound. The abdomen was distended and there was an absence of bowel sounds which the nurse believed could indicate an infection.

25) Mr Burnett carried out a full series of blood tests and arranged for extra oxygen for the patient. He instructed that the Senior House Officer on duty should be advised of his findings.

26) Mr Burnett compared the figures obtained in an earlier analysis at 10:05am with those recorded at 11:56pm. He recorded them side by side in the notes.

27)Mr Johnstone's haemoglobin had dropped from 16.3 to 14.8 which supported the view that there was internal bleeding. The platelet figure (which recorded the clotting agent within the blood) had dropped from 268 to 170 which again supported the view that there was bleeding. The white cell count had dramatically fallen from 7.7 to 2.2. This, Mr Burnett considered, was clear evidence of an infection and the drop in the neutrophil (6.7 down to 1.7) and the lymph (0.6 down to 0.4) readings both indicated an attempt by the body to fight infection.

28)Mr Burnett's request that the surgical Senior House Officer should see Mr Johnstone resulted in Dr Jolene Wotherspoon attending almost immediately. In her very full note Dr Wotherspoon records the findings made by Mr Burnett. She examined Mr Johnstone and noted that there were no bowel sounds present and that there was a recorded leakage of altered blood from a port site as well as a drop in blood levels. She considered the most important findings were the significant fall in the white cell count and the fact that the platelet level had dropped.

29)Dr Wotherspoon indicated that she was looking for an underlying infection and considered that the potassium urea and creatine levels which were all elevated indicated an acute renal impairment. She recorded that the problems were Systemic Inflammatory Response

Syndrome (SIRS) and ARF – acute renal failure. She indicated that she should be paged if there were any problems and that the bloods should be checked again at 4:00am.

30)Dr Wotherspoon returned to review the patient at 2:30am. She did this without being called because she wanted to see if there had been any change in Mr Johnstone's condition. She noted that he was hypoxic (had a low oxygen level) although he was at that point receiving oxygen. She arranged for him to sit up and this caused the oxygen level to improve. At that point his blood pressure was low, his heart rate was increased but his urinary output was now satisfactory.

31)At 3:40am Mr Burnett returned to make a further assessment. Like Dr Wotherspoon at 2:30am he had chosen to visit the patient of his own volition and had not been sent for. The figures which resulted from the bloods which he took at that time indicated that the patient had an overwhelming sepsis and a major infection. He noted a reduced airway on the right-hand side lung and crackling on the left side and considered that there was an indication of a collection of fluid or infection. Although the blood pressure had improved Mr Johnstone's temperature had continued to rise indicating in Mr Burnett's view that the patient was now having to fight a significant infection.

32)Mr Burnett contacted Dr Wotherspoon to indicate his views and Dr Wotherspoon attended immediately. Amongst the information which

he supplied to Dr Wotherspoon was the fact that the respiratory rate had risen further to 32 per minute and that the white cell count had fallen to 1.4.

33)Dr Wotherspoon in the medical records recorded “? source of sepsis - ? abscess intra-abdominal”.

34)Dr Wotherspoon contacted the on-duty consultant surgeon Mr Kassai and advised him of the position. She reported to him all the findings which had been made. She advised Mr Kassai that she considered that the patient was deteriorating, that she had found creps in both lungs, that the urea figure indicated a deterioration and further evidence of renal failure and that the bilirubin had now doubled. She queried whether there could be an abscess within the inter-abdominal wall but she did not know the source of this sepsis.

35)Following her conversation with Dr Kassai (who was at home) she was advised to contact Dr McGie, the consultant on-call radiologist with a view to the latter arranging an ultrasound scan. When however she spoke to Dr McGie, who was also at home, he indicated that he did not feel that a scan was necessary until the morning and that he felt that an ultrasound scan would be of very little value. Dr Wotherspoon then telephoned Mr Kassai to advise him of this.

36)Around this time Mr Johnstone indicated to a nurse that he wished his wife contacted and this was undertaken. Mrs Johnstone was advised

that her husband had asked that she be informed that "he had had a bad night". Mrs Johnstone contacted her son and together they went to the hospital. Dr Wotherspoon who was with Mr Johnstone and had remained with him when he was transferred to the High Dependency Unit at 5:50am was not aware that Mrs Johnstone was in the hospital. She therefore did not know that a relative was present and had not been given any up to date information.

37) From the time that Mrs Johnstone arrived in the hospital until she was able to see Mr Johnstone later that morning when he was being transferred to the Intensive Care Unit it probably would not have been possible for her to see her husband. This was because he was being carefully assessed and looked after by Dr Wotherspoon and other members of the medical and nursing staff.

38) Around 7:00am Mrs Johnstone was able to see her husband who told her that he thought he had been "a goner". Dr Wotherspoon spoke with Mrs Johnstone and explained that her husband was very ill and that arrangements were being made to transfer him to the intensive care unit.

39) Dr Ruth Rae, a consultant anaesthetist, who was the on-call consultant for the ICU unit saw Mr Johnstone and arranged for his transfer to the intensive care unit. A plan was prepared which included the need for a CT scan. The ICU records prepared by or at the instance of Dr Rae

notes that Mr Johnstone was shocked, that his heart rate had now reached 120 per minute, his blood pressure had fallen further and that he was suffering “? septic shock”. There is a reference to the need for a surgical opinion. Dr Scott Marshall, who took over the ICU care at 9.am spoke to Mrs Johnstone repeating Dr Wotherspoon’s assessment that her husband was very ill.

40)At 8:20am an ultrasound scan was undertaken. This indicated that there was some free fluid within the pelvis and this was aspirated and appeared to be “venous blood”. As the views were “limited” consideration was then given as to whether it would be possible to obtain a CT scan. Such a procedure would involve moving Mr Johnstone to the radiology department where the equipment was. Unlike an ultrasound scan the equipment for a CT scan is not mobile and cannot be taken to the patient’s bedside.

41)Mr Cumming returned to the hospital and was made aware of Mr Johnstone’s deteriorating condition. He did not however consider that it was appropriate to return Mr Johnstone to the operating theatre to ascertain whether a cause of Mr Johnstone’s problems could have arisen from the operation. At that stage Mr Cumming had no definite view as to why Mr Johnstone was not improving although he accepted that Mr Johnstone was septic and he attributed this as being most likely due to a chest infection.

42)By 9:00am Mr Johnstone was unconscious and he remained so until his death at 7:55pm that evening.

43)To transfer a patient from ICU for a CT scan requires that the patient is stabilised. This was undertaken in the case of Mr Johnstone and at 11:30am a CT scan was undertaken by Dr Dewar. This indicated that there was free fluid around the liver and more extensive free fluid within the pelvis. There was "a 4x6 centimetre soft tissue density lesion immediately inferior to the gallbladder fossa and this is likely to represent a haematoma". The clips which it was believed by Mr Cumming had been placed on the divided ducts appeared to be in the correct area. It is impossible by using only an ultrasound or CT scan to be certain that a clip is attached to the correct part of the anatomy. This is because of the close proximity of various arteries, ducts and veins. A scan can however confirm that the clip appears to be secure and is in the correct area.

44)While there are extensive notes written by both the medical and nursing staff at ICU there does not appear to be any note recording a senior surgical input thereafter to Mr Johnstone's case. Although fluid had been drained at the time of the ultrasound scan at 8:20 and there was now evidence of a further collection of fluid showing on the CT scan at 11:30am no steps appear to have been taken on the surgical

side to ascertain why this was happening nor to investigate the possible cause.

45)Mr Johnstone remained in the ICU and the doctors and nurses there continued to care for him. His condition however gradually deteriorated in the course of the afternoon and around 7:40pm there was a rapid deterioration. Four attempts were made to resuscitate Mr Johnstone but sadly this was unsuccessful. He was pronounced dead at 7:55pm.

46)A post-mortem was conducted by Dr Marjorie Turner, a consultant forensic pathologist at the University of Glasgow. The cause of death was multiple organ failure due to a biliary leak following a laparoscopic cholecystectomy carried out on 9th May by Mr Joseph Cumming. A secondary cause of death was recorded as ischemic heart disease.

47)Mr Johnstone was over-weight and his medical records indicate that he had been repeatedly warned in relation to this. He had attended at the San Antonio Heart Clinic. There is no evidence that he was ever aware that he had sustained a heart attack nor is there any evidence as to when this occurred. Dr Turner however found that he had an enlarged heart and severe coronary arterial atheroma and that there was evidence of a previous infarction "which could have contributed to his death".

DETERMINATION

In terms of the sub-sections of Section 6(1) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 I am required to make a determination setting out the following circumstances of the death so far as they have been established to my satisfaction:-

- (a) Where and when the death and any accident resulting in the death took place;
- (b) The cause or causes of such death and any accident resulting in the death;
- (c) The reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;
- (d) The defects, if any, in any system of working which contributed to the death or any accident resulting in the death; and
- (e) Any other facts which are relevant to the circumstances of the death.

Accordingly I determine that:-

- (a) That George Johnstone (date of birth 31st July 1951) who resided at 147a Greengairs Road, Airdrie died within the intensive care unit, Monklands District General Hospital, Airdrie at 7:55pm on 11th May 2006.

(b) The cause of death was multiple organ failure due to a biliary leak following laparoscopic cholecystectomy carried out on 9th May 2006 within Monkland District General Hospital by a Consultant general surgeon and that a secondary cause was ischemic heart disease.

(c) The reasonable precaution whereby the death might have been avoided include:-

(A) The carrying out of a cholecystectomy during Mr Johnstone's stay in Monkland District General Hospital in December 2005.

(B) The conversion on 9th May 2006 of the laparoscopic cholecystectomy to a laparotomy.

(C) The realisation by Mr Joseph Cumming that the cause of the sepsis present on 10th and 11th May was due to a complication arising from the operation on 9th May and his repeated failure to return Mr Johnstone to the operating table to explore any possible causes.

(D) The attendance of Mr Myklos Kassai at the hospital following Dr Jolene Wotherspoon's telephone calls around 4:30am on 11th May.

(E) The obtaining of a CT scan of the abdominal area on 10th May.

(d) There was a defect in the system of working which contributed to Mr Johnstone's death. This was a fundamental lack of documentation and a serious

absence of essential information within the medical records. This contributed to the delay and the ultimate failure to intervene surgically.

(e) The other facts which are relevant to the circumstances of Mr Johnstone's death are:-

(A) The policy which existed in 2005 under which a patient displaying major gall bladder problems on initial admission would almost invariably be treated conservatively and thereafter discharged. The patient would be asked to return at a later date for an elective operation. Mr Johnstone's expressed wish that the operation be carried out during his initial stay in the hospital in December 2005 appears to have been given no weight.

(B) The failure to have the December 2005 records available at the time of Mr Johnstone's admission on 9th May (or thereafter). This may have deprived Mr Cumming of reports and records in relation to the condition and state of Mr Johnstone's gall bladder and of possible complications before he proceeded to a laparoscopic procedure.

(C) The absence of a time and date on the biochemistry reports showing when the result is made available to the ward.

NOTE

The evidence before the Inquiry established that Mr Johnstone had enjoyed reasonably good health and had been subject to regular health checks in

connection with his employment. He was noted to be substantially overweight and had been counselled in relation to this on a number of occasions by various doctors. In 2004 he had attended the San Antonio Heart Associates in Texas in relation to hypertension and had been prescribed medication for this.

At the post-mortem carried out by Dr Marjorie Turner there was evidence that Mr Johnstone had an enlarged heart and severe coronary artery atheroma. There was evidence of an earlier infarction which in Dr Turner's view could have contributed to his death. Mr Johnstone was clearly not aware of this earlier incident and there was no evidence as to when it had occurred. While Dr Turner was not prepared to exclude this from the possible cause of death it was not the primary cause. That arose directly from the circumstances of Mr Johnstone's operation on 9th May 2006.

On 22nd December 2005 Mr Johnstone was taken to Monklands District General Hospital as an emergency because he had abdominal pain which had not responded to drugs or other treatment. His condition however improved and he was allowed to go home but returned the following day having developed a temperature and suffering increased pain. He remained within the hospital until 30th December. The records in relation to that hospital attendance were never produced to the Inquiry nor was there any evidence that they were available at

the time of Mr Johnstone's operation on 9th May or during the subsequent period until his death on 11th May.

It also requires to be recorded that Mr Joseph Cumming the surgeon who conducted the operation on 9th May dictated a note in relation to the operation which although it was typed by his secretary, was never added to the medical notes. A hand-written note by Dr Quandeel which was written immediately after the operation likewise was not available for the Inquiry. There was no evidence to suggest that it was ever contained in the medical records, nor that any doctor or nurse who was involved in the subsequent treatment of Mr Johnstone saw it.

The significance of these matters cannot be overlooked. Firstly it is apparent from a copy letter contained within Mr Johnstone's General Practitioner records that consideration was given during the December 2005 hospital stay to proceeding to a cholecystectomy but that this was not done notwithstanding the fact that Mr Johnstone was disappointed at the decision. Without the records it is impossible to tell what caused the doctors to decide not to proceed with an operation then. At the time the patient was stabilised and was within the hospital willing and apparently anxious to have the necessary operation carried out as soon as possible. In the absence of these notes or of anybody who could speak to the details of Mr Johnstone's time within Monklands District General Hospital in December 2005 it is impossible to speculate as to whether an error

was made in not proceeding with a cholecystectomy at that time. The existence of a policy within the hospitals in Lanarkshire that such operations should be delayed until a patient returned on a chosen date for an elective procedure, did not appear to give weight to the views of the patient.

Secondly had Mr Cumming's or Mr Quandeel's operation notes been within the records it would have highlighted that this was not a simple operation without complications. On the contrary, it was a difficult one in which an experienced surgeon had had to leave a portion of the gallbladder in place. It could have alerted somebody, even if Mr Cumming persisted in ignoring the most obvious cause of the infection (that it arose from the operation site), to raise the issue of returning Mr Johnstone to surgery.

On the eighth day of the Inquiry NHS Lanarkshire who, I was advised, had been repeatedly asked to deliver all the records in their possession in relation to Mr Johnstone, produced copy radiology reports both in relation to Mr Johnstone's attendance in December 2005 as well as those undertaken during May 2006. These reports form production 39. Number 39/3 records that on 23rd December 2005 at 14:46 hours an ultrasound of the upper abdomen revealed "a mildly distended thick-walled tender gallbladder". Had Mr Cumming been aware of this report prior to proceeding to a laparoscopic cholecystectomy in May 2006 it would have indicated to him that there had been evidence that the gallbladder

was thick-walled, a factor which required to be taken into consideration before deciding to proceed with a laparoscopic operation as opposed to a laparotomy.

A further possible contra-indication to carrying out a laparoscopic procedure was contained in the ultrasound of 1st March which found an inflamed gallbladder.

There is no way of knowing what Mr Quandeel recorded in his note but Mr Cumming's note (a copy of which he managed to obtain from his own records) was based on the assumption that the operation had been carried out correctly and that there was no cause for concern. As I have indicated however, had the note been within the records, it would have told anybody reading it that it had been a difficult operation giving rise to potential complications.

In the absence of the December 2005 hospital records it is impossible to state whether there may not have been further clues which would have deterred Mr Cumming from proceeding with a laparoscopic cholecystectomy. This is particularly so when one considers the various problems which he found when he commenced the procedure including that the area around the cystic duct and the common bile duct were extremely inflamed and that there was indeed a thick-walled gallbladder with "severe adhesions".

When Mr Johnstone attended Monklands District General Hospital on 22nd December 2005 and again on 23rd December 2005 he was clearly in pain and discomfort due to a gallbladder problem. This appears to have been correctly diagnosed and he was kept in hospital until 30th December during which time he received conservative treatment. Although he was clearly anxious that an operation should take place this was not done and in the absence of the records it is impossible to tell on what basis that decision was made.

During the inquiry in relation to the three deaths I was advised that there was in 2005/06 a policy within the Lanarkshire hospitals not to operate on patients with gallbladder problems on their initial admission as an emergency but instead to stabilise the patient, discharge him or her and thereafter make arrangements for an elective cholecystectomy which would probably be dealt with laparoscopically.

I was informed that since 2005/06 this policy has been modified so that while the majority of cases are dealt with in this way there is now a greater likelihood that a patient will be operated on before being discharged from hospital on the initial admission.

The evidence at the Inquiry established that the policy adopted in the Lanarkshire hospitals in 2005/06 was one which a number of consultants in various hospitals followed.

In Mr Johnstone's case however it is clearly recorded that he wished his gallbladder removed during his stay in hospital in December 2005. He was stabilised and there was no suggestion that he was unfit for the operation at that time. There was no indication that the area around the cystic duct and common bile duct were extremely inflamed as they were by May 2006.

I have therefore concluded that it would be appropriate to record under the subsection which deals with reasonable precautions whereby the death might have been avoided that had Mr Johnstone's operation taken place in December 2005 his death might have been avoided.

I was assured in the course of the evidence, particularly by Dr Jane Burns the current Divisional Medical Director of NHS Lanarkshire that there had been an increase in the number of cases which proceeded to a cholecystectomy following first admission. I would expect surgeons and staff to be reminded of the need to review each case individually in deciding whether it was appropriate to postpone such an operation to a later date. Considerations, including the likelihood of the patient suffering further discomfort or further complications while awaiting the elective operation should be given due weight as should the patient's own wishes in this matter.

When Mr Johnstone returned to the hospital on 1st March it appears that the hospital were willing to proceed to an elective operation but unfortunately he personally was unable to fit this into his calendar because he was due to go abroad on business. He did however return to the hospital as arranged on 9th May for the operation.

The operation was carried out by Mr Joseph Cumming a very experienced general surgeon who had conducted similar operations on many occasions. He estimated that the total of these could probably be measured in four figures. Mr Johnstone gave his consent to the operation and it was explained to him that Mr Cumming might require to change the procedure to a laparotomy if it was found that there were undue difficulties in continuing with the "keyhole surgery".

Mr Cumming did find a number of difficulties in the course of the operation. There were adhesions which required to be broken down by "a mixture of blunt and coagulation diathermy dissection", "the area around the cystic duct and the common bile duct was extremely inflamed", "the intra-hepatic portion of the gallbladder was left in situ because of severe adhesions". I accept that it was a matter for Mr Cumming's judgement based on the information available to him at the time to decide whether this case was appropriate for a laparoscopic procedure. Whether a chance to consider the notes from the 2005 hospital stay before he made his decision would have made a difference is a matter of

speculation. It did however deprive him of certain relevant information in connection with factors which he would have wanted to weigh up.

Faced with the problems which became apparent once he had started the procedure Mr Cumming should have converted to a laparotomy. In the course of his evidence he indicated that he wished he had done so but that he felt at the time it was appropriate to persist with a laparoscopic cholecystectomy although it was "technically difficult".

The post-mortem revealed that in the course of the operation he either cut or damaged the main bile duct but this was not appreciated at the time. The injury to the bile duct resulted in a leakage of fluid and bile into the abdominal cavity.

Mr Cumming was challenged about his statement in production 38 (a note which he wrote after Mr Johnstone's death) in which he stated that the patient's "recovery was initially on schedule". He explained that this phrase merely meant that the patient had spent the appropriate time in the recovery room and had then been transferred to the ward without any excessive delay or problems at that stage. He was also criticised in relation to his reference to "a" cystic duct when there is only one. Mr Cumming accepted that this was not grammatically accurate but he was clear about the basic anatomy around the gallbladder.

As I have indicated because of the absence of either Mr Cumming's note or that by Mr Quandeel within the records for anybody subsequently to look at, there were no warning signs that the operation had been "technically difficult" as described by Mr Cumming nor that a portion of the gallbladder had required to remain in situ.

The criticism in relation to the absence of the records was tackled by Dr Burns. She suggested that the records could have been mislaid by the Procurator Fiscal's Department when they were sent, but I do not accept there is anything to support this. On the contrary it is clear from the evidence of Dr Turner that even when she saw the notes at the time of the post-mortem there were portions which should have been present which were not available. The absence of the complete set of 2005 records cannot be blamed on anybody other than the Records Department at the hospital. The production on the eighth day of the inquiry of certain reports which had been repeatedly requested earlier is something which requires to be investigated within the Monklands District General Hospital.

During the night of 9th/10th May Mr Johnstone was in such pain that he required to be given morphine at 4:25am and again at 8:25am. Although Mr Cumming stated that he visited Mr Johnstone at 9:00am the note written by a junior doctor indicates that the patient was asleep and Mr Cumming does not appear to have

carried out any investigation or enquiry as to his patient's condition and how he had progressed overnight. Had he done so he might have wondered why Mr Johnstone required two doses of morphine and he might have at least alerted the staff in the ward that should Mr Johnstone require any further morphine he should be informed of this. It is extremely rare for a patient to require three doses of morphine after a cholecystectomy. In Mr Johnstone's case he did because a further dose of morphine required to be administered at 1:40pm. All this points to Mr Johnstone's recovery being abnormal.

Page 61 of the medical records is a report from the biochemistry department following a sample taken on 10th May 2006. It was received in the department at 9:49am but unfortunately there is no record as to when the report was sent out. This appears to be the situation in relation to a number of reports from the biochemistry department. Dr Burns, as Clinical Director, may wish to give serious consideration to altering the system of reporting so that not only is the time that the sample is received by the department noted, there is also a record as to when the results are made available to those seeking it.

Mr Cumming stated that he was unaware of this biochemistry finding and that nobody drew it to his attention. He accepted that it would be available on a screen even if the paper copy had not yet reached the ward and he agreed that it indicated signs of renal failure and liver dysfunction. It is surprising that

nobody drew this to Mr Cumming's attention and that he did not make any enquiries when he returned at 12 noon (by which time the patient was awake and mobile) to ascertain whether there were any findings which he should consider.

Had he done so it would have been apparent to him that Mr Johnstone was not making a good recovery and that there was a cause for concern which required to be investigated.

Mr Cumming did not examine Mr Johnstone's abdomen nor did he write any notes about his attendance at 12 o'clock. There is nothing in the records to indicate that he in fact was present although I accept his evidence that he was. It however would be far better practice for either the consultant to write the note in relation to the ward round or to ensure that his or her presence was duly recorded if only by initials. This would ensure that anybody subsequently seeing the patient would know that what was contained in the note related to a time that the consultant was present and was supportive of the terms of the note. I understand from Dr Burns that this was or was about to become the practice.

Throughout the day Mr Johnstone required ongoing analgesia, his heart rate was rising and his body temperature was raised. Again it does not appear the Mr

Cumming was aware of this either because no enquiries were made or because the information was not passed to him.

Mr Johnstone's condition was not that of a patient who had undergone an uncomplicated cholecystectomy. The reasons for this should have been investigated in the course of the 10th of May and Mr Johnstone should either have been returned to surgery to investigate whether there was any complication which had arisen from the operation or alternatively (and as a first step) a CT scan should have been arranged which would have revealed the problem which ultimately led to Mr Johnstone's death.

There is a reference in the nursing notes that Mr Johnstone's condition was "fair only" and that "his abdomen remained distended +++" but the entry is untimed and therefore it is impossible to know whether it preceded Mr Cumming's return to the ward prior to his leaving at around 6:00pm. What however is clear that at 5:50pm Mr Johnstone's temperature had risen and this was further evidence that he was unwell and that something was wrong.

Mr Cumming in his evidence stated that he had visited the ward around 6 o'clock prior to leaving for the night. He claimed that he had seen Mr Johnstone walking around but this evidence is inconsistent with what Mrs Johnstone found when she visited her husband at 7:00pm. I have concluded that Mr Cumming is

mistaken in his recollection that Mr Johnstone appeared to be well enough to wish to go home. Again Mr Cumming did not examine Mr Johnstone and he does not appear to have been aware that the patient had a raised temperature. He also does not appear to have taken into consideration the fact that Mr Johnstone had required three separate doses of morphine including one which had been administered since he last saw the patient.

Mrs Johnstone visited her husband that evening and found that he was in pain and initially dozy. Although he spoke to her he ultimately went to sleep before the end of the visiting hour.

Mr Cumming suggested that this was evidence that Mr Johnstone was not in pain as he would not have fallen asleep. I do not accept this. Mr Johnstone had received analgesia and I believe that his wife's assessment of him is correct.

At 10:30pm there is an entry in the records which indicates that Mr Johnstone was seen by a junior house officer. This records that Mr Johnstone was pyrexial but "otherwise well". I do not feel that this entry can be accurate as any doctor examining Mr Johnstone at this point and considering the evidence which was then available could never have described him as "otherwise well".

By 11:30pm the HECT nurse had visited Mr Johnstone and had correctly raised alarm bells. In particular he drew attention to the rise in Mr Johnstone's breathing rate, the presence of crackles in the lungs, the raised heart-rate and the dramatic drop in the white cell count. Mr Burnett correctly concluded that Mr Johnstone should be seen by a doctor and arrangements were made to contact Dr Jolene Wotherspoon, the Senior House Officer (surgical) on duty.

Dr Wotherspoon attended immediately and recorded very full findings. Her notes (and those of Mr Burnett) are in sharp contrast to the absence of notes or the minimal information provided by others.

Dr Wotherspoon was clearly concerned by Mr Johnstone's condition and returned herself to see him again at 2:30am. She noted that his oxygen levels were dropping but they increased when she arranged for him to be propped up but sadly subsequent readings showed that this was merely a temporary improvement.

Around 3:40am Mr Burnett returned and again made a full recording of his findings. He arranged for Dr Wotherspoon to be contacted and spoke to her. She came to the ward immediately and her note is timed at 4:30am. The apparent gap between the entries of 3:40am and 4:30am might imply that there was a delay in Dr Wotherspoon attending. This was not so. Dr Wotherspoon

indicated (and I accept) that she could not state clearly the basis on which the entry was timed at 4:30am. This may be the time when she actually made the entry at the end of her examining the patient and carrying out other enquiries. What however was clear to me was that at this stage Mr Johnstone was very fortunate to be looked after by an experienced and exceptionally competent HECT nurse and by a very conscientious and thorough Senior House Officer. Both were justifiably very concerned by Mr Johnstone's deteriorating condition.

Dr Wotherspoon contacted the on-duty consultant surgeon Mr Kassai at his home. She told him the full position and in particular she told him of the significant fall in the white cell count and that the platelet level had dropped. By this time the white cell count had fallen to 1.4.

Dr Wotherspoon also indicated to Mr Kassai that she was concerned as to the source of the sepsis and she wondered whether there was an abscess intra-abdominally.

Mr Kassai asked Dr Wotherspoon to contact the on-duty radiologist who was Dr McGie. She did so (again Dr McGie was at home) and indicated that Mr Kassai wished an ultrasound carried out to investigate what problems there were.

Dr McGie indicated that he did not consider that an ultrasound would provide any clear picture and that the matter should be left until the morning. In that an ultrasound will provide very limited information Dr McGie was correct but it is somewhat surprising that when a surgical colleague invited a radiologist to investigate a possible problem that a decision was made not to carry out the procedure or alternatively speak directly with Mr Kassai to explain the reasons for not doing so.

Dr Wotherspoon contacted Mr Kassai again to advise him of Dr McGie's decision and nothing further was done.

In my view (supported by Professor Garden who gave expert evidence in this case) Mr Kassai should have attended the hospital in response to Dr Wotherspoon's telephone call. There was clear evidence that the patient was seriously ill, that there were indications of septicaemia and that this could well be intra-abdominal.

It is recognised in the medical literature that a leak of bile can occur in the course of a cholecystectomy and that although this is rare it is something which must be borne in mind by a surgeon. When, as in this case, a Senior House Officer specifically indicates that in her opinion there is an infection which could have an intra-abdominal cause and when there is clear biochemistry findings to

support that doctor's view that there is an infection which the body is trying to fight there is, in my view, a responsibility on a Consultant on-call surgeon to visit the hospital, examine the patient and assess what further steps require to be taken including taking the patient to theatre.

In my view this was an opportunity which was missed and had Mr Kassai visited the hospital after Dr Wotherspoon's telephone calls he might well have concluded that her assessment was correct and that there was a need to return Mr Johnstone to the operating theatre.

Dr Wotherspoon continued to care for Mr Johnstone and arranged for his transfer to the High Dependency Unit so that his condition could be more closely monitored. Unfortunately Mr Johnstone continued to deteriorate but before it did so he was able to ask a nurse to contact his wife and Mrs Johnstone came to the hospital with her son around 5.45am.

They were asked to wait and due to a breakdown in communication were not told of how matters were progressing. This was unfortunate as naturally Mrs Johnstone was exceptionally concerned that her husband had wanted her contacted at such an unusual time.

In the work which goes on in a hospital it is possible for such human errors to occur and I am entirely satisfied that the fact that Mrs Johnstone was not kept informed in relation to her husband does not reflect any lack of care. During the time he was in the High Dependency Unit he was carefully and thoroughly looked after by the nurses and Dr Wotherspoon. It is unlikely that even if it had been known that Mrs Johnstone was waiting within the hospital that it would have been possible for her to see her husband until his condition had been stabilised as best possible by Dr Wotherspoon and arrangements had been made to contact Dr Rae the duty consultant for the Intensive Care Unit to facilitate his transfer to that department.

At 7:00am Mrs Johnstone did speak to her husband who indicated that he thought earlier that he had been "a goner".

Mr Johnstone was clearly very ill at the time and this was explained to Mrs Johnstone by Dr Wotherspoon. It was also explained to her by Dr Scott Marshall a consultant in the ICU unit who took over responsibility for Mr Johnstone after 9:00am.

After Mr Johnstone's transfer to ICU he was cared for and monitored by the staff there including Dr Rae and Dr Marshall. An ultrasound scan was carried out around 8:20am by Dr McGie and as Dr McGie had anticipated the picture was of

little value. This is because it is very difficult to get a good picture on a small screen where there is limited light and the patient's breathing is compromised.

Mr Cumming indicated that he believed that he was present when the ultrasound was carried out but this is inconsistent with the statement which he prepared (production 38) where he stated that Dr McGie had "just completed the ultrasound investigation".

Whether he was present when the ultrasound took place or not is of little importance as he had an opportunity to review it and to learn that there was a collection of fluid in the pelvis and that this had been aspirated.

Arrangements were then made for Mr Johnstone to be taken to the radiology department for a CT scan and this took place at 11:30am. A CT scan can not be conducted at the patient's bedside and involves moving the patient to the radiology department where the fixed equipment is situated.

Mr Cumming asserted that he discussed matters with Dr Marshall and that "our feeling, on balance, was that we were still dealing with an extremely septic patient and that a laparotomy would not benefit him at this time" (production 38, page2). Dr Marshall denied that he had been involved in making any decisions in this matter. He indicated that Mr Cumming had expressed his opinion and

decision that there would not be a laparotomy in this case. It was not a decision which they had jointly reached. In Dr Marshall's view the responsibility for any decision as to whether the patient should be returned to surgery was a matter for the surgical consultant.

The same situation applied to Mr Kassai in his evidence. He confirmed that he had met Mr Cumming in the course of the morning and he knew by then Mr Cumming had seen his patient. He learned that the patient had deteriorated and was now in ICU and was extremely unwell. He, Mr Kassai, recollected that Mr Cumming talked about the question of whether the patient should go back into surgery but that he Mr Cumming felt that the patient was too unstable for this. Mr Kassai did not consider that his opinion was being sought; he was merely being told what the decision was. At no time did Mr Kassai see Mr Johnstone and he was unaware of the result from the CT scan.

The CT scan took place at 11:30am and Mr Cumming was made aware of the result. He appears to have concentrated on whether there appeared to be clips in the correct part of the anatomy and failed totally to appreciate the significance of the further findings of fluid and the patient's other symptoms as well as the biochemistry and blood culture results. He also appears to have totally ignored Dr Wotherspoon's note timed at 4:30am when she specifically queried the source of the sepsis and wrote "? Abscess intra-abdominal ? second perf".

For reasons which I am unable to understand and for which it appeared to me there was very little justification, Mr Cumming excluded any other cause of the sepsis than a possible chest infection. By that time (and I accept that it is much easier to look at these matters in retrospect) there was an abundance of evidence which suggested that a realistic possibility for the cause of the infection was to be found within the operation site.

When he came to give evidence Professor Garden indicated that had he been responsible for the patient if nothing had happened before 11:30am (and he clearly indicated that steps should have been taken much earlier) he personally would have pushed Mr Johnstone's bed towards the operating theatre to ensure that there was no further delay before an immediate laparotomy took place.

Mr Cumming chose not to take this opportunity and contended that Mr Johnstone was not stable enough to undergo an operation. While I accept that Mr Johnstone's condition was deteriorating, I agree with Professor Garden's view, which was supported by evidence given by Professor John Kinsella, that whatever Mr Johnstone's condition might have appeared to be it was always worth giving him the chance of what could be achieved by a laparotomy rather than to take no positive action at all.

Mr Johnstone continued to receive supportive therapy but his condition deteriorated and he died within the Intensive Care Unit at Monklands District General Hospital at 7:55pm on 11th May 2006.

I, and all those who attended the inquiry, were particularly sad that Mrs Johnstone who had stayed beside her husband throughout the day was away from the hospital when Mr Johnstone's condition deteriorated dramatically and resuscitation attempts failed. She was therefore not able to be with him when he passed away. There is sadly no way in which the time of a person's death can be predicted with total accuracy and I do not feel that any blame can attach to the hospital or any member of the staff for them not being able to forewarn Mrs Johnstone of how imminent her husband's death was.

This death, like the other two which were investigated at the same time, could and should have been avoided. As with the other cases there appeared to be an inability of the consultant surgeon to appreciate that a likely reason for the patient's failure to recover as expected was something which had occurred during the surgical procedure. In each case the surgical staff appeared to have taken the view that some other cause must be present and have eliminated from their consideration the known factor that in the course of a cholecystectomy (particularly a laparoscopic one) errors can occur but that the situation can be rectified by prompt intervention. In this case Mr Cumming repeatedly failed to

appreciate the growing volume of evidence that Mr Johnstone's condition was deteriorating. He was requiring an unusual amount of analgesia, was showing signs of fever and his biochemistry, breathing, heart rate and temperature all pointed to the need for a full investigation into what was the cause of his worsening condition.

The longer that Mr Cumming delayed in investigating why Mr Johnstone's recovery was not proceeding as normal the lower became the chances of rectifying the situation. Had a CT scan been taken on 10th May the probable cause of Mr Johnstone's problems should have become evident.

Even at 4:30am on 11th May when Dr Wotherspoon has clearly recorded her concern at the possible source of the sepsis and has specifically mentioned the question of the abdomen as a possible site, nothing was done. Given the information which Dr Wotherspoon passed to Mr Kassai I considered that Mr Kassai should have come to the hospital and examined Mr Johnstone himself and that there is a likelihood that he would thereafter have taken him into surgery and given Mr Johnstone a chance to survive.

Mr Kassai indicated he did not recollect Dr Wotherspoon's telephone call although he accepted it must have been made. It is perhaps unfortunate that doctors at home do not keep any records of calls they receive and what

information is passed to them. In this case Mr Johnstone died within 16 hours of that phone-call and again it seems strange that nobody sought an contemporaneous note from Mr Kassai as to his involvement.

By the morning Mr Johnstone's condition had deteriorated further. As a result of Dr Wotherspoon's care he had been moved firstly to the High Dependency Unit and thereafter after Dr Rae became involved he was taken to ICU.

It is the responsibility of the ICU staff to care for the patient but it remains the responsibility of the surgical staff to make any decisions about a possible return to the theatre. Accordingly full responsibility rests with Mr Cumming as to the decision that Mr Johnstone should not be returned to surgery for a laparotomy. He sought to indicate that this decision had been taken with the agreement of Mr Kassai and Dr Marshall. I prefer their evidence that they were merely told that that was Mr Cumming's decision and that they were not consulted in the sense of being asked for their opinion.

Inevitably Mr Johnstone's condition worsened as the bile continued to enter into his system due to the failure to deal with the leak.

Mr Cumming advised me that he now no longer carried out laparoscopic cholecystectomies and that this was his decision. It is important to realise that

prior to this tragedy he had carried out a large number of such operations and there is no suggestion that he was a poor or careless surgeon. In this case however a patient died under his care and the ultimate responsibility for that requires to rest with him. It was he who carried out the operation, it was he who apparently damaged the anatomy so that bile leaked into the system, it was he who made the decision not to investigate one of the most likely causes of it (an operation side-effect) and it was he who, even when the patient is continuing to deteriorate, failed to give that patient the slim chance of survival by returning him to theatre.

All those involved in the inquiry expressed their deepest sympathy to Mrs Johnstone and her family in their sad loss. I associate myself with that and hope that as a result of hearing the evidence at the inquiry they now know more about the circumstances which led to Mr Johnstone's death.

The Inquiry investigated the deaths of three patients within a period of three months following laparoscopic cholecystectomies carried out in hospitals within Lanarkshire NHS. The evidence established that cholecystectomies are one of the most common operations carried out and there was natural concern when on three separate occasions patients died following such an operation.

I have found that there were individual circumstances in relation to each of the deaths and errors made in surgery and in particular the post-operative care of the patients which caused those deaths. They involved different consultant surgeons and there is no evidence that there was a lack of training or experience in the surgeons involved.

Although the evidence established that the circumstances of each death was different and the complication which arose in the course of the surgery which led to the patient's death was different in each case there are certain factors which are common to at least two if not all of the deaths which require to be commented on.

In his assessment of the records and reports in relation to the three deaths Professor Garden highlighted three matters. They were:-

- (7) The management of the initial presentation;
- (8) The management of the post-operative period; and
- (9) The mistaken and apparent unswerving belief of the surgeons that any failure of the patient to respond post-operatively as expected could not be due to any complication attributable to the operation itself.

In relation to the management and the initial presentation Professor Garden accepted that there were variations throughout various hospitals in Scotland as

to whether a cholecystectomy should be carried out on the first admission. He however was critical of what appeared to be the absolute policy within Lanarkshire NHS in 2005/2006 that laparoscopic cholecystectomies should be regarded as elective procedure and should not be carried out during the time of the patient's first admission.

Professor Garden pointed out that there were advantages in carrying out the operation at the time of the patient's first admission as it avoided the danger of the patient suffering further pain or complications and equally avoided the need to re-admit the patient to hospital.

I believe that this criticism may have some validity in connection with the cases of Mrs Nicol and Mr Johnstone. Mr Johnstone was anxious that the operation be carried out as soon as possible and it is not recorded why his wish was not acceded to. There does not appear to be anything in the records produced to the Inquiry which would explain on clinical grounds the decision to delay the operation.

In relation to Mrs Nicol it is clear that she did suffer further pain and problems as a result of the delay in the operation and in fact her operation required to be subsequently postponed because of other problems. Professor Garden

considered that both operations should in fact have been carried out at the time of the patients' first admission.

There was however, at that time, a body of opinion which supported the delay in carrying out such operations and the only possible justified criticism which I feel might be made in relation to Lanarkshire NHS was the apparent lack of consideration of clinical issues and the patient's wishes in deciding whether the operation should be carried out at the time of first admission or later.

In relation to Mr Ritchie I am entirely satisfied that the consultant surgeon Mrs Lannigan reached the correct conclusion and there were very valid reasons for not proceeding to an operation at the time of his first admission to hospital. Whatever may have been the policy within Lanarkshire NHS at that time, Mrs Lannigan had sound clinical grounds for concluding that it was not appropriate to proceed with an operation in early February 2006 and I can find no evidence to criticise her management of Mr Ritchie's case during his first stay in the hospital in January/February 2006.

I heard evidence from Dr Jane Burns, a consultant anaesthetist, who is the current Divisional Medical Director for NHS Lanarkshire. She has held this post since August 2010 and before that was Assistant Medical Director for Wishaw, Monklands and Hairmyres hospitals. She indicated to me (and this was

supported by other witnesses) that while there had been no change in the practice of delaying surgery to allow patients to have elective operations after an acute episode there was an increase in the number of patients who were operated on during their first admission and that she accepted that the matter required to be one of clinical judgement rather than Health Board policy.

In relation to the management of the post-operation period there were clear faults in the care of each of the patients. There was a lack of proper post-operative planning and the recording of those plans. There was clear evidence that when the patients were not responding as was expected this failed to result in the necessary enquiry and investigation as to the cause of this. While it is not possible definitively to say that if each patient had been returned to surgery earlier and if the necessary scans had been carried out timeously, that lives would have been saved, there is substance in the contention made by Professor Garden and Professor Kinsella that had the post-operative care been to the standard which they expected, and had there been a proper management plan which staff could have worked to, that there remains a realistic possibility in each case that the death would not have occurred.

In each of the cases the consultant responsible for the patient's care failed to consider the growing body of evidence that there was something fundamentally wrong with the patient and that the most likely cause of this was something

which had arisen in the course of the operation. In Mrs Lannigan's case (the death of Mr Ritchie) she accepted that she had had "tunnel vision" which prevented her giving proper consideration to the most likely cause of his deteriorating health namely a duodenal perforation.

In relation to Agnes Nicol's death, while undoubtedly Mr Cannon saved Mrs Nicol's life by stemming the major bleed which occurred during Dr Singh's initial operation, he ignored the growing body of evidence in the biochemistry reports and Mrs Nicol's failure to regain consciousness as clear indicators that there was something fundamentally wrong which required immediate investigation. This is difficult to explain.

Mr Cumming's persistent failure to investigate the cause of Mr Johnstone's lack of post-operative progress is equally difficult to understand. Even when the CT scan result finally became available, as a result of the decision of the ICU doctors to investigate the possibility of a stroke, Mr Cumming still failed to take the patient to surgery.

In relation to the post-operative care of all three patients there was a lack of adequate notes (or in some cases no notes at all) by the senior medical staff. There was a lack of proper management plans recorded in such notes that did exist. I have been left with the regrettable impression that in both Wishaw

General Hospital and Monklands District General Hospital in 2005/2006 that there was clear evidence of a failure by certain consultants to ensure that there was proper and appropriate documentation at all times.

In her evidence Dr Burns accepted that the cases showed that the documentation was not to an acceptable standard and Mr Cannon, Mr Cumming and Mrs Lannigan all accepted that that was indeed the position.

The lack of adequate documentation, the failure to record a plan of action and the absence of notes by senior doctors prevents those who are responsible for the patient's care at any other stage from knowing the views, impressions and intentions of the senior medical staff. It also denied them information relating to any abnormal complication which had arisen in the care to date. I was therefore pleased to note that Dr Burns stated:-

"I have made it clear to the staff that proper documentation is a condition of employment by NHS Lanarkshire".

It is to be hoped that all members of the clinical staff fully appreciate this.

Dr Burns also advised me that it was now standard procedure for the Consultant who is present during the ward round to have his or her presence noted. She also pointed out that there is now in place an early warning system for

highlighting deteriorations in a patient and that this is achieved by colour coding within the records.

Dr Burns was unable to explain why in Mrs Nicol's case Mr Cannon's note had not found its way into the medical records and that the same position had arisen in a different hospital in relation to Mrs Lannigan's note of the operation which she had carried out in relation to Mr Ritchie. She was equally unable to explain why there were no surgeon's notes from either Mr Cumming or from Mr Quandeel in relation to the death of George Johnstone and she further indicated that she had not been aware until the seventh day of the Inquiry that the biochemistry results in relation to Mr Johnstone were not available. She did not appear to be aware either that there were no sign of the X-ray reports for Mr Johnstone nor that the notes in relation to Mr Johnstone's admission in 2005 had never been made available to the Court despite a number of requests from the Fiscal.

I accept of course that Dr Burns was not the Medical Director for NHS Lanarkshire in 2005/2006 but the evidence before the Inquiry and the lack of a complete set of records and documents in relation to any of the three patients is indicative of a system which requires to be overhauled.

It is essential that every doctor and nurse responsible for the care of a patient has access to all the records and all the documents and that full notes are available at all times.

In relation to the care of Mrs Nicol, Mr Johnstone and Mr Ritchie this was not so and I can only hope that NHS Lanarkshire will ensure in future that firstly there is full documentation recorded by both the doctors and nurses involved in each stage of the treatment of patients, and secondly that the records department ensures that all the hospital records are kept and made available to all those who require access to them.

I am grateful to the solicitors and counsel for the careful and thorough way in which they dealt with these cases. I believe that Mr Ross, Mrs Donald and Mr Marby would wish to associated themselves with my expression of gratitude to Mrs Anne Ferguson for her very thorough and comprehensive knowledge of the records and for the manner of her presentation of the evidence. Without her experience and hard work, this inquiry could have been a meaningless jumble of disjointed elements.

