OUTER HOUSE, COURT OF SESSION

[2019] CSOH 31

A711/15

OPINION OF LORD PENTLAND

In the cause

GEORGE ANDREWS

Pursuer

against

GREATER GLASGOW HEALTH BOARD

Defender

Pursuer: Young QC, Nicholson; Drummond Miller LLP
Defender: Stephenson QC, P Reid; NHS Scotland Central Legal Office

22 March 2019

Introduction

[1] In this action, which came before me for proof, the pursuer is the surviving partner of the late Ms Jean Graham ("the deceased"), who died on 8 January 2013 in Glasgow Royal Infirmary. She was 77 years of age. The cause of the deceased's death was recorded on her death certificate as being: I (a) Ischaemic Bowel and (b) Superior Mesenteric Artery Thrombus and II Atrial Fibrillation and Ischaemic Heart Disease.

[2] The pursuer and the deceased had lived together as partners for around 20 years at the time of the deceased's death. The pursuer seeks damages, as the deceased's executor-nominate and as an individual, by way of reparation for the deceased's death,

which he avers was caused by negligence on the part of Dr Mohamed Wazim Kaleel Izzath ("Dr Izzath"), a junior doctor then in the employment of the defenders, the Greater Glasgow Health Board.

[3] The pursuer alleges that Dr Izzath was negligent because he failed to advise the deceased that she required to be admitted to the Acute Assessment Unit ("the AAU") of Glasgow Royal Infirmary when she was under his care there on 6 January 2013. The pursuer claims that Dr Izzath ought to have recognised that the deceased might be suffering from a serious medical condition, namely upper gastrointestinal bleeding. There is a further allegation of negligence on the ground that Dr Izzath failed to carry out a rectal examination of the deceased. As I shall explain more fully in due course, the case really turns on the question as to whether Dr Izzath was at fault because he neglected to advise the deceased that she should be admitted when he assessed her on 6 January 2013. I should mention in passing that the pursuer did not insist on a third allegation of negligence advanced in the pleadings; this was to the effect that Dr Izzath was negligent because he did not speak to the deceased's next of kin before discharging her from hospital.

[4] The pursuer maintains that if the deceased had been admitted to hospital on 6 January 2013 she would probably not have died.

[5] The defenders contend that Dr Izzath was not negligent, although they concede with the benefit of hindsight that the deceased should have been admitted to hospital on 6 January 2013. The defenders also say that even if the deceased had been admitted to hospital at that time, she would nonetheless still have died.

Evidence led at the proof

[6] In addition to his own testimony, the pursuer led evidence from:

a. Dr John Goldie, an on-call general medical practitioner, who was called out to the deceased's home by NHS 24 in the early afternoon of 6 January 2013. Dr Goldie referred the deceased to the AAU at Glasgow Royal Infirmary.

b. Dr Izzath, who examined and assessed the deceased in the AAU later that day.

c. Dr Stephen Cleland, a consultant endocrinologist and general physician, who was on duty in the AAU that day. Dr Izzath discussed the deceased's case with Dr Cleland.

d. Mr Neil Nichol, a consultant in accident and emergency medicine at Ninewells Hospital, Dundee and at Perth Royal Infirmary. Mr Nichol gave expert evidence in support of the pursuer's allegations of negligence.

e. Dr Barry Vallance, a retired consultant physician and cardiologist. He gave expert evidence supporting the proposition that it was negligent for the deceased not to have been admitted to hospital on 6 January 2013. Dr Vallance also gave opinion evidence concerning the cause of the deceased's development of atrial fibrillation on 7 January 2013. Finally, he covered the issue of the deceased's life expectancy on the hypothesis that she survived the blockage of her superior mesenteric artery.

f. Mr James Holmes, a retired consultant general and colo-rectal surgeon. He gave expert evidence on negligence and on causation.

g. Mr Roderick Chalmers, a consultant vascular surgeon at Edinburgh Royal Infirmary. He gave expert evidence on causation.

[7] For their part, the defenders led evidence from:

a. Dr Paul Leonard, a consultant in emergency medicine at the Royal Hospital for Sick Children in Edinburgh and at St John's Hospital in Livingston. Dr Leonard

supported the defenders' case that Dr Izzath had not been negligent in his assessment and treatment of the deceased.

b. Mr Michael Wyatt, a consultant general and vascular surgeon. He was called primarily to give evidence on causation, but he expressed some views on negligence.

[8] The evidence of Mr Gavin Bryce, a consultant general surgeon, who performed a laparotomy on the deceased in the morning of 8 January 2013, was provided by way of an agreed precognition.

Some medical terminology

[9] At the outset it will assist if I briefly explain some of the medical terminology that is relevant for the purposes of this case.

[10] **Acute mesenteric ischaemia** ("AMI") refers to the clinical condition in which the blood supply to the small intestine is acutely interrupted. The most common cause of AMI is occlusion (ie blockage) of the superior mesenteric artery by a blood clot (embolus). The usual source of the embolus is the heart, where the clot forms as a result of abnormal cardiac rhythm or due to scarring on the inner wall of the heart at the site of previous muscle damage after myocardial infarction.

[11] **Atrial fibrillation** is a heart condition causing an irregular and frequently an abnormally fast heartbeat. The irregular rhythm has the result that blood is not pumped in an orderly manner; this can cause clots to form.

[12] **Beta blockers** are a type of medication that causes the heart to beat more slowly and with less force than normal.

[13] **Haemoglobin** is a protein found in the red blood cells; it carries oxygen. It gives blood its red colour.

[14] **Ischaemia** refers to an insufficient supply of blood to a part of the body, for example to the heart muscle, causing angina.

[15] **Melaena** refers to the passage of black tarry stools, resulting from upper gastrointestinal bleeding. The stools have a highly offensive odour due to the presence of blood which has been digested by intestinal enzymes and bacteria. The degradation of the blood accounts for the dark colour of the stools.

[16] The **mesentery** is a pleated membrane in which the intestine is loosely slung from the back of the abdomen. It has the mesenteric blood vessels and lymph nodes between its two layers.

[17] **Myocardial infarction** is suffocation of a segment of the heart muscle by blockage of an artery.

[18] **Necrosis** means death of some portion of an organ, for example from damage to its blood supply.

[19] The **small intestine** (small bowel) begins as the duodenum at the outlet of the stomach. It continues as the jejunum and then as the ileum.

[20] The **superior mesenteric artery** ("SMA") is a branch of the aorta supplying blood to the intestine.

The facts of the case

[21] The sequence of events giving rise to the present proceedings may be summarised as follows.

Saturday 5 January 2013

[22] The pursuer explained in his evidence that at about 17.30 on 5 January 2013 the deceased felt unwell whilst having her evening meal; she was unable to eat it. She complained of pain in her groin and in her stomach. She vomited and had diarrhoea over the course of the next 2 hours. The pursuer telephoned for an ambulance at about 19.30. In the call (a transcript of which was produced) the pursuer reported that the deceased had been violently sick and had had four bouts of diarrhoea. She also had pain in her chest. On being asked, the pursuer told the call handler that the deceased had not vomited blood or coffee ground material in the last 24 hours and that she had not passed black or bloody stools.

[23] I should explain that what is referred to as coffee ground vomit is highly indicative of upper gastrointestinal bleeding. It is caused by the acidity of the stomach changing the blood into small black granules.

[24] The ambulance took the deceased to the Accident and Emergency Department of Glasgow Royal Infirmary where she arrived at 20.29. On being triaged, it was noted that the deceased was complaining of lower chest and upper epigastric pain, and that she had vomited twice since 17.00. The clinical notes timed at 22.39 state that the deceased had central abdominal pain; this was dull in nature. There was associated vomiting, and it was noted that the deceased had had 3 episodes of diarrhoea with a small spot of blood present during one episode. The deceased's past medical history, which included cardiac arrest, myocardial infarction, and angina was recorded by those treating her. An electrocardiogram showed normal sinus rhythm. Nothing significant was discovered on X-rays of the deceased's chest and abdomen; in particular, there was no evidence of any bowel problem. Blood tests were largely unremarkable, although the white cell count was

mildly elevated, as was serum bilirubin. The elevated bilirubin was ascribed to possible Gilbert's syndrome, a hereditary condition which can cause mildly heightened levels of bilirubin; it does not usually have serious consequences.

[25] At 23.45 it was noted that the deceased was walking around in the department and was feeling better, although she was still having some pain. A working diagnosis of viral gastroenteritis was made, and the deceased was discharged home, having been issued with drugs for nausea and vomiting, dyspepsia, and pain control. At the time there was an outbreak of viral gastroenteritis in the West of Scotland.

[26] It was agreed by joint minute that the diagnosis and subsequent decision to discharge the deceased on 5 January 2013 were not negligent.

Sunday 6 January 2013

[27] The pursuer gave evidence that during the night the deceased was unable to keep anything down, including the pills she had been given at the hospital. By about 06.00 on 6 January 2013 she was no longer able to control her bowels; she was soiling the bed because she could not get to the toilet. She was vomiting in bed. The pursuer's recollection was that the vomit and diarrhoea got darker in colour. By about 13.00 both the vomit and the diarrhoea were black. The deceased was clearly getting worse, and the pursuer was struggling to cope with the situation. At 13.00 he telephoned NHS 24. A recording and transcript of the call were produced.

[28] During the call, which lasted about 23 minutes, the pursuer described the deceased as being in terrible and constant pain; it was coming from her stomach. He said that she had been having black vomit and diarrhoea. She was wriggling about and "trying to crawl into a wee ball" due to the pain. The call handler spoke to the deceased, who said that the

pain was all round her stomach. She said that she needed to get the issue sorted out as she could not suffer it any longer. The deceased told the call handler that she had had about 4 episodes of diarrhoea that day; it was not a lot on each occasion. When she went to the toilet the diarrhoea was black and thick; her vomit was also black. She said that she had never seen anything like it. She described the diarrhoea as having a horrible smell; she said that it was just coming away from her. The call handler asked the deceased if the diarrhoea was sticky like tar. The deceased replied that it was not like that; she said that it was watery. She said that she would prefer for a doctor to be sent because she did not want to go to hospital if she could avoid it.

Dr Goldie's visit on Sunday 6 January 2013

[29] In response to the call to NHS 24, Dr John Goldie, an on-call general medical practitioner, attended at the home of the deceased and the pursuer in the east end of Glasgow at about 13.45 on 6 January 2013. In his evidence Dr Goldie said that he recalled the visit. The deceased was lying in bed; she looked pale and very white. Dr Goldie recalled that she was respectful towards him. He formed the impression that the pursuer was not coping with the situation and that he seemed very worried about his partner. In his clinical notes, Dr Goldie recorded that the deceased had ongoing diarrhoea and vomiting. He wrote that her stools were "black" and that her vomitus was "black". He thought that the deceased might have upper gastrointestinal bleeding; this could be due to an actively bleeding ulcer or to the side-effects of taking long-term aspirin. Dr Goldie noted that the deceased had been given some aspirin the previous night. In view of his concerns, Dr Goldie decided that the deceased should go the AAU at Glasgow Royal Infirmary by ambulance; this meant that she would bypass the Accident and Emergency department and

be promptly assessed by physicians. On the NHS 24 form, which he sent with the deceased, Dr Goldie wrote: "D (standing for diagnosis) Melaena ? 2°(meaning secondary to) Aspirin". By his use of the term "melaena" Dr Goldie meant black watery diarrhoea caused by intestinal bleeding. Dr Goldie did not perform a rectal examination because he assumed that such an investigation would be done at the hospital. He did not make a diagnosis of gastroenteritis since he thought that the onset of black stools and black vomit pointed to a more serious condition.

[30] Dr Goldie came across to me as a caring and experienced general medical practitioner. He testified in a careful and convincing manner. I considered him to be a credible and reliable witness. The contrary was not suggested.

The ambulance records

[31] The ambulance records show that Dr Goldie called for an ambulance at 14.01. It arrived 11 minutes later. Amongst other readings, the ambulance crew noted that the deceased's capillary refill (a measure of blood flow to the skin) was prolonged at more than 2 seconds. I did not understand any of the experts ultimately to consider this finding to be significant. The deceased was noted to be fully conscious and not confused; she was said to be having multiple episodes of uncontrolled black diarrhoea.

The events in the AAU on Sunday 6 January 2013

[32] The deceased arrived at the AAU at 14.43 on 6 January 2013. The triage note records that she had been discharged from the hospital at 01.00 that morning, that she was not coping at home, that she had loose stools and was unable to eat. A standard abbreviated mental test was done, in which she scored 3 out of 4. This is a simple test which involves the

patient being asked four basic questions, such as what year it is. Whilst it would be wrong to attach too much weight to the findings of this test, it might suggest that the deceased was suffering from a degree of mental confusion.

[33] The evidence as to what occurred whilst the deceased was in the AAU came from the pursuer and from the notes made by Dr Izzath in the medical records; Dr Izzath had no recollection of seeing or examining the deceased. There was also some evidence from Dr Stephen Cleland, the consultant physician to whom Dr Izzath spoke in the evening of 6 January about the deceased's condition.

The pursuer's evidence as to what happened in the AAU on 6 January 2013

[34] The pursuer said that he was kept waiting in the reception area for about 4 hours before he was allowed to see the deceased. At around 18.00 or 19.00 he was permitted to see her. A nurse escorted him to a different area in the AAU. He found the deceased on a trolley in a cubicle. According to the pursuer, a nurse said that the deceased had not been fully assessed because they were prioritising patients; if no emergencies came in, the deceased was second in line to be assessed. The pursuer stayed with the deceased for around an hour. A doctor (whom the pursuer assumed to be Dr Izzath) arrived and examined the deceased; he asked her how she was feeling, looked at her charts, and asked a few questions. The pursuer's impression was that there was no real assessment of her condition. The deceased was able to respond to the questions. About 30 minutes to an hour later the same doctor returned; he said that the deceased was being discharged because she had had no episodes of diarrhoea or vomiting for around 3 hours. According to the pursuer, the deceased's reaction to this was that she was scared, although she said nothing to the doctor. He presented the pursuer with anti-diarrhoea and anti-vomiting tablets. The

pursuer said that he explained to the doctor that the deceased had been unable to keep down any medication, including the tablets she had been given the previous evening. The doctor told the pursuer not to worry; he said that the deceased would be all right in 2 or 3 days. The pursuer said that he tried to explain that he and the deceased were not coping and that all their bed sheets were still damp, having had to be washed. He was exhausted, not having slept for about 24 hours. The pursuer said that he "begged the man to give her a bed", but the doctor turned away. The pursuer said that he then spoke to a different person; he tried to explain to him that he was terrified by the prospect of the deceased being sent home. This person told the pursuer that "there was not a bed available in the whole of Glasgow". He too walked away.

[35] The pursuer said that it was "utter nonsense" to suggest that the deceased wanted to go home. She was not fit to do so. She was worried about being discharged and she was scared. He did not hear her say to the person he now understood to have been Dr Izzath that she wanted to be discharged. The pursuer's evidence was that the deceased did not say to him on 6 or 7 January that she wanted to come home from hospital.

[36] At about 21.00 the pursuer managed to get the deceased out of bed and into a wheelchair. He pushed her to the taxi rank. When they got home, he half carried her upstairs to bed.

[37] In cross-examination, the pursuer accepted that in a complaint he made to Glasgow Royal Infirmary by email on 8 March 2013 he described the deceased's diarrhoea and vomit on the afternoon of 6 January as being "black or dark grey in colour". He said that this was a fair description of what he saw. The pursuer acknowledged that he was not in a position to say what had been done to assess the deceased during the 4 hour period when he had

been waiting in reception. Whilst he was with her in the AAU, she had not had any diarrhoea or vomiting.

[38] The pursuer was a measured and, to my mind, an impressive witness. He testified moderately, but with conviction. His recollection of events was convincing and detailed. It was not put to the pursuer in cross-examination that any of his evidence was untrue or inaccurate in any material sense. In his closing submissions, counsel for the defenders made no criticism of the pursuer's credibility or reliability.

Dr Izzath's evidence

[39] Dr Izzath explained that in January 2013 he was working as a junior doctor. He had just started clinical radiology training in Glasgow Royal Infirmary, having completed his two foundation years after graduating from medical school. On 6 January 2013 he had agreed to work an extra shift in the AAU, a department where he had spent part of his post-qualifying training in his second foundation year. He would have spent at least 4 months in an acute medical unit by January 2103. He had no memory of seeing the deceased or of discussing her case with Dr Cleland.

[40] Dr Izzath could not say whether he saw Dr Goldie's referral form or the ambulance notes, although he accepted that these were supposed to be put with the patient's medical records. Mr Nichol explained that he would expect the ambulance sheet to have been available; as a matter of normal practice the ambulance staff would hand it over. Mr Nichol also said that if a document was contained in a patient's medical records, this usually meant that the document had been there from the outset. I accept Mr Nichol's evidence on these points.

[41] In his evidence Dr Izzath was taken through the clinical notes he made on the deceased. The notes extend to about two pages; they are not particularly detailed. They are timed at 19.05. Dr Izzath was not able to say whether this would have been the time when he first saw the deceased and began his examination of her or whether it would have been the time when he wrote up the notes after completing his assessment of her.

[42] The medical records show that the deceased was monitored in the AAU in compliance with the National Early Warning Score ("NEWS") system. Readings of her respiratory rate, blood oxygen saturation level, temperature, pulse, blood pressure, and consciousness level were recorded at 14.50, 16.02, and 17.30. The aggregated NEWS scores at these times were respectively: 2, 4, and 1. Dr Izzath explained that the reduction in the deceased's NEWS score to 1 showed that her condition was improving over the course of the afternoon while she was being observed and assessed in the AAU.

[43] At 17.17 on 6 January an electrocardiogram was carried out. Dr Izzath said that the presence of his initials on the print-out indicated that he had seen it. The electrocardiogram showed that the deceased's heart was in normal sinus rhythm. It was not in atrial fibrillation.

[44] In his clinical notes, Dr Izzath recorded the history of the deceased's complaint as being one day of diarrhoea with 12-14 episodes and vomiting 24-28 times. He noted that the vomiting was getting better. Dr Izzath wrote that the diarrhoea looked dark and he added the word "black" in inverted commas. He said that he could not now be sure why he had placed inverted commas around the word "black". It was possible that the reference to the diarrhoea looking dark was based on an observation, but he could not be sure.

[45] Dr Izzath recorded that the deceased had recently had "flu" and that she had not had contact with anyone suffering from diarrhoea and vomiting. She had experienced some

abdominal pain, but this had now settled down. She felt light-headed and tired and had been unable to keep anything down since the day before, but was now starting to drink with no issue. He also noted that she had "spiked" a temperature of 38˚C on the ward.

[46] In his clinical notes, Dr Izzath recorded that the deceased had a past medical history of cardiac arrest 18 years ago, hypertension and chronic obstructive pulmonary disease. He noted that she had no known drug allergies and was taking a number of medications. In terms of social history, the deceased was an ex-smoker, drank no alcohol, lived with her husband and was usually independent.

[47] Dr Izzath set out in the next section of his clinical notes the results of his systematic enquiries. He recorded that the deceased denied any loss of consciousness, blackouts, fits, faints, funny turns or headaches; he added that she had not had any palpitations, chest pain, shortness of breath, cough or wheeze. The deceased also denied any pain, frequency or hesitancy on passing urine and she had no musculoskeletal symptoms.

[48] Dr Izzath went on to make an entry in the notes that the deceased looked well. He recorded her pulse, blood pressure, respiratory rate, oxygen saturation on air, and her temperature. All were within normal limits. Dr Izzath also noted that the deceased's chest was clear, that her heart sounds were normal, that her jugular venous pulse was normal, that she had no oedema (this would have been assessed at her ankles) and that her abdomen was soft and not tender. Bowel sounds were present.

[49] Dr Izzath noted that the chest and abdominal X-rays taken the previous night disclosed no abnormality and that an electrocardiogram showed sinus rhythm. The deceased said that she had no chest pain. Dr Izzath recorded that the white cell count was 12, the urea 8.4 and the C-reactive protein (a marker of inflammation) was elevated at 25.

[50] In the section of the notes for recording biochemical and haematology results, Dr Izzath entered the readings obtained on 5 and 6 January. He marked certain readings which he considered to be of possible significance or where there had been a possibly significant change over the 2 days. He did not mark the haemoglobin results. Dr Izzath transposed to the clinical notes the readings for the white cell counts, the urea and the CRP. He did not transpose the haemoglobin results.

[51] Dr Izzath recorded that his clinical impression was one of likely gastroenteritis. In terms of a plan, he noted that the "patient would like to go home" and that she could cope at home. The clinical notes conclude by stating that Dr Izzath discussed the case with Dr Cleland. The notes say that as the patient is able to look after herself and able to drink, she should go home. She was advised that if she got worse, she should come back in. She was prescribed antiemetics for nausea and vomiting.

[52] In his evidence Dr Izzath said that he was quite meticulous in preparing his clinical notes. By his reference to "it's getting better" he meant that the frequency of the deceased's vomiting was reducing. He thought that a patient who was suffering from dehydration would not look well. He accepted that he had not made any note of having carried out a rectal examination. He had no recollection of the pursuer saying that he and the deceased could not cope at home. He explained that the whole of his discussions with the deceased would be part of his continuous process of assessing her mental state. He thought that he would have had a discussion with her before he wrote that she was able to cope at home. He accepted that a report of melaena would be an important sign of gastrointestinal bleeding.

[53] Dr Izzath said that melaena had a highly characteristic noxious odour. Its smell was extremely pungent. In retrospect, Dr Izzath accepted that he should probably have

suspected melaena, but he was unsure what information had been available to him at the material time, so he was unable to be sure. Although he had no specific recollection of his discussion with Dr Cleland, Dr Izzath said that he would have given him the full story and the results of the laboratory tests. That was his usual practice. In regard to the question of discharge from hospital, Dr Izzath said that he would always wish to respect the patient's wishes. That was why he had documented them in the notes.

[54] Dr Izzath said that he was cautious about admitting patients and would tend to admit a lot of people. He said that he would have a discussion with the registrar or consultant in order to take account of wider considerations. Whereas a decision to discharge a patient was the responsibility of the consultant or registrar, Dr Izzath would sometimes provide a recommendation. Dr Izzath said that he had the authority to admit a patient; he did not have to obtain permission from a more senior doctor before doing so. Asked whether he had offered the deceased admission to hospital, Dr Izzath's position was that he could not be certain.

[55] Dr Izzath confirmed in cross-examination that as at January 2013 he had understood what melaena was. He knew that it had a particular appearance, namely that it was tarry and really black. It had a consistency like a purée and was not watery. He recollected having seen melaena prior to 6 January 2013 as he had done almost a year of training in general surgery. He also recalled the first time he had seen it when he had been a third-year medical student. If a patient passed melaena on a ward, the smell was detectable. It tended to linger on the patient. Dr Izzath thought it likely that the nurses working in the AAU would also have had experience of melaena. If a nurse removed a bedpan containing possible melaena she would test for it and send a sample to the laboratory. She would then inform the medical staff about this. Dr Izzath said that if a nurse had shown him a bedpan

containing melaena, he would have recorded this in the notes. In re-examination on that point, Dr Izzath accepted that the absence of any note suggested that he had not been shown a bedpan containing the deceased's stool. Dr Leonard agreed that if a stool sample was inspected, this should be recorded in the patient's notes.

[56] Looking at the totality of the recordings and assessments in the medical notes, Dr Izzath considered that over the time of her stay in the AAU the deceased's condition had improved. The assessment of a patient in the unit was an ongoing process. He would have reviewed the electronic reports from the laboratory as they were received. He thought that the haemoglobin readings did not point to any significant issue. On 5 January the level was 14.8 (otherwise 148g/L). On 6 January it was 14.2 (otherwise 142g/L). Dr Izzath said that he must have thought that the deceased's haemoglobin levels were within the normal range. If there had been a significant loss of blood through gastrointestinal bleeding, he would expect the haemoglobin level to drop. He was aware that sometimes patients would report a stool as being black when it was not truly that colour. If he had been shown a stool sample with melaena he would have recorded this in the notes. If there had been traces of melaena on the deceased's legs he would have expected to see this. If she had passed melaena whilst in the AAU he would have expected to be able to smell that she had done so.

[57] Dr Izzath said that he would not have written in the notes that the deceased would like to go home unless she had expressed that view to him. He would have had a discussion with her about whether she wanted to go home. He would not have recorded that the deceased could cope at home unless she had said that to him.

[58] Dr Izzath explained that his normal practice was to provide his consultant with full details of the presenting complaint.

[59] Dr Izzath was, I thought, a rather tentative and unconvincing witness. I acknowledge that he was in the difficult position of having to base his evidence entirely on the medical records. I had the impression that, at some points in his evidence, Dr Izzath was struggling to recollect what he had said previously about the issues arising from his treatment of the deceased.

Dr Cleland's evidence

[60] Dr Cleland has been a consultant physician for 16 years. In January 2013 he was working in the AAU. He was on duty in the afternoon and evening of 6 January 2013. He had no recollection of the deceased, of his discussion about her with Dr Izzath, or of Dr Izzath himself.

[61] Dr Cleland accepted that a patient with suspected melaena should be investigated to establish whether she had the condition. This was because melaena was produced by upper gastrointestinal bleeding, which was a serious medical condition. If the assessment excluded melaena, inspection of the stool or a rectal examination would not be necessary in Dr Cleland's view.

[62] Dr Cleland said that there was an expectation that a junior doctor considering discharge of a patient from the AAU in January 2013 would discuss the position with a registrar or consultant. His evidence was that he would have made sure that Dr Izzath went over all the findings and results with him in their telephone call. The discussion would have been a detailed one. Dr Cleland said that he would expect the junior doctor to provide him with a summary of the patient's history, the findings on examination, the results of the observations in the AAU, the NEWS scores, and the results of the blood tests. If Dr Cleland was uncertain about anything he was told, he would instruct the junior doctor to arrange for

the registrar to see the patient or Dr Cleland would go to examine the patient himself. Dr Cleland explained that he must have been reassured that it was appropriate to discharge the deceased. He said that it was his responsibility as the consultant to approve her discharge.

[63] Under reference to the deceased's medical records, Dr Cleland summarised his reasons for the discharge decision as follows. The deceased was clinically stable. The examination of her abdomen was unremarkable. Her condition had improved during her stay in the AAU. She was keen to be discharged. Her observations were non-concerning. The deceased's blood pressure was normal. The electrocardiogram showed normal sinus rhythm. Her haemoglobin level was normal and had not dropped significantly between 5 and 6 January. The urea was slightly elevated; this was consistent with diarrhoea and vomiting.

[64] Dr Cleland said that he believed that the crucial factor would have been that the deceased had attended hospital the previous day and had had a similar set of blood test results. It was important that there was no significant difference between her haemoglobin readings on the two occasions. The same applied in regard to her urea levels. These findings were not, in Dr Cleland's view, consistent with profuse and severe gastrointestinal bleeding.

[65] Dr Cleland added that he did not see how it would have been possible for a general practitioner to make a definite diagnosis of melaena. The impression formed by Dr Izzath on the basis of the examination and findings in the AAU was more important than the view of the referring general practitioner.

[66] Dr Cleland said that had it not been for the blood test results, he would have preferred for the deceased to have been admitted.

[67] Perhaps understandably in the circumstances, Dr Cleland gave his evidence in a somewhat guarded manner. His testimony was based on reconstructing what he thought must have happened from examination of the medical records. I have to say that I did not find him to be a particularly convincing witness, although I accept that he was doing his best to assist the court.

Events following the deceased's discharge on 6 January 2013

[68] Having returned home in the late evening of 6 January 2013, the deceased's condition deteriorated. The pursuer explained that she was unable to keep down fluids or the medication she had been given. She had an episode of vomiting at about 22.30 and passed diarrhoea at about 23.00. She slept fitfully, for 2 or 3 hours at a time. She would wake up with pains in her stomach. The pursuer said that the deceased was in a great deal of pain, mainly in her stomach. She pleaded with him to help her. She completely lost control of her bowels. He saw that she had watery faeces running down her legs whilst she was in bed.

[69] At around 21.00 on Monday 7 January 2013 the pursuer telephoned for an ambulance. The deceased had gone to the toilet. She shouted to the pursuer that she had lost control of her legs. The pursuer described her as having become wedged between the toilet bowl and the bathroom wall. The paramedics found her in that position.

[70] On arrival at the Accident and Emergency Department of Glasgow Royal Infirmary at 21.37 the deceased was noted to be pale, clammy and sweaty. She appeared to be confused. The junior doctor who assessed her at 23.00 noted that the deceased reported having had diarrhoea, which was initially black, but had since turned to bright red; it contained no frank blood. He or she recorded that the deceased had gone to the bathroom

and had been unable to get off the toilet for about 1.5 hours that evening due to weakness. She had been vomiting the whole time as well. The vomit was black. On examination, she was found to have diarrhoea on her legs; this was noted to be brown, not red. An electrocardiogram was carried out at some point between the deceased's admission and 23.00. This showed that the deceased's heart was in fast atrial fibrillation; it was noted that she had not taken her Atenolol, a beta blocker used to prevent heart attack. The impression was of viral gastroenteritis and atrial fibrillation secondary to sepsis.

[71] When reviewed by a physician at 02.15 on 8 January, a repeat abdominal X-ray showed dilated loops of small bowel centrally. The deceased's CRP was very high at 287. Again, the impression was of sepsis. The plan was for fluid resuscitation and for surgical review.

[72] The deceased was reviewed on several occasions during the early hours of the morning of 8 January. There was a medical review at 04.35 and a discussion with a surgeon at around the same time. At 05.30 a surgical registrar carried out a further review. He or she noted that the deceased was feeling generally unwell, weak and disorientated. Whilst the impression was of possible ascending cholangitis (inflammation of the bile duct) and viral hepatitis with or without gastroenteritis, a need to consider ischaemic gut was noted. A computed tomography angiogram (CTA) was to be arranged. The scan was carried out at 06.35.

[73] At 08.30 an entry was made in the medical records that the CTA had shown superior mesenteric artery thrombus just distal to the origin of the right hepatic artery. Appearances were consistent with an ischaemic bowel. A laparotomy was to be carried out as soon as practicable. The deceased was with the anaesthetist prior to surgery at about 09.45.

[74] Mr Bryce performed a midline laparotomy at about 10.00. Before the procedure took place, Mr James Park, a clinical research fellow, certified that the deceased was incapable, within the meaning of the Adults with Incapacity (Scotland) Act 2000, of consenting to surgery due to delirium secondary to sepsis.

[75] In his agreed precognition Mr Bryce said that he was able to recall the case because of the extent of dead bowel. He said that this was not a case where the bowel was not quite right. There was significant necrosis through almost all of the small bowel. At most 15cm of the jejunum was spared. A large portion of the right colon was also ischaemic. Mr Bryce said that he found the bowel to be black and green, with a thin flaccid wall. It was cool to the touch and had a necrotic smell. This meant that there had been no blood supply to the bowel, resulting in infarction. Mr Bryce said that this usually occurs if there has been no blood supply for approximately 8 to 16 hours. That would mean that the occlusion occurred between around 18.00 on 7 January and 02.00 on 8 January. Resection was not possible because the deceased had no viable small bowel. The deceased's condition was not survivable in terms of maintaining nutrition. She was very unstable in theatre. Her chances of a successful outcome were low.

[76] The deceased was returned to the recovery ward and kept ventilated until the pursuer could attend from home where he had gone to try to rest. He was able to see her before she died at around 11.30 on 8 January 2013.

Negligence

Failure to advise that admission was required

[77] I shall address first the allegation that Dr Izzath was at fault because he neglected to advise the deceased that she required to be admitted to hospital on 6 January 2013.

[78] The parties' principal experts on the liability issues, Mr Nichol and Dr Leonard, helpfully met before the proof with a view to attempting to narrow the issues between them. They agreed *inter alia* that in light of (a) the deceased's history, (b) her presentation in the AAU, (c) the recorded observations following her arrival there, and (d) Dr Izzath's findings on examination, she should have been offered admission to hospital. The experts also agreed that if Dr Izzath did not offer admission to hospital, his failure to do so would have been a departure from normal practice that no ordinarily competent clinician would have taken. In his evidence Mr Nichol said that a better way of expressing the point would be to say that Dr Izzath should have advised the deceased that she should be admitted to hospital.

[79] Mr Nichol was in no doubt that the deceased should have been admitted to hospital on 6 January 2013. He drew together the reasons why she should have been admitted as follows:

- she was an elderly patient;
- she had attended hospital for a second time on successive days;
- a general practitioner had referred her to hospital with suspected melaena and not because of gastroenteritis;
- at the time she presented on 6 January 2013, her condition appeared to be worsening;
- there was a history of black vomit and black stools;
- these were strong indications of upper gastrointestinal bleeding;
- she was not coping at home;
- she was feverish, suggesting the development of possible sepsis;
- she was on long-term aspirin;
- she had been vomiting up oral medication;

- she had a significant previous medical history;

Particularly when these points are viewed collectively, they amount to a powerful case for admission to hospital in my opinion.

[80] There was substantial support for Mr Nichol's opinion in the evidence of the other medical experts. Dr Vallance agreed that Dr Izzath's management of the deceased had been negligent. He had failed to recognise the possible significance of the reported black diarrhoea and black vomit in the presence of abdominal pain in a patient presenting to hospital for a second time in 2 days. Dr Izzath had also failed to recognise the importance of the fact that the deceased had been referred to hospital by a general practitioner who suspected melaena. Dr Vallance considered that no ordinarily competent doctor would have discharged the deceased in the circumstances. His view was that Dr Izzath's diagnosis of gastroenteritis was negligent.

[81] Dr Vallance explained that gastroenteritis produces green or yellow stools and not black vomit and black diarrhoea. In cases of gastroenteritis it is common to find that the colour of the stool changes to green; this is due to the presence of bile pigment in the stool. Where there is diarrhoea, food passes too rapidly through the intestine with the result that the intestinal bacteria and chemicals are unable to break down the bile pigment to its normal brown colour. Dr Vallance was clear that black stool usually means that there is blood in the stool; it is not indicative of gastroenteritis. The deceased should, in Dr Vallance's opinion, have been immediately admitted to hospital because her symptoms were highly suggestive of gastrointestinal bleeding and of serious intra-abdominal pathology.

[82] Mr Nichol agreed that black stools and black vomit were not characteristic of gastroenteritis. I understood Dr Cleland in his evidence ultimately to accept that green

vomit was more likely with gastroenteritis. Dr Leonard thought that black vomit would be an unusual symptom in a case of gastroenteritis.

[83] Dr Vallance went on to say that a surgical opinion should have been immediately sought following admission. This was because the deceased's symptoms were indicative of serious intra-abdominal pathology; she should have been managed in a surgical ward.

[84] Mr Holmes was in no doubt that the deceased should have been admitted to hospital on 6 January 2013. He considered that it should have been clear to Dr Izzath that this was not a case of simple gastroenteritis. The deceased had become progressively worse since the previous day and was reportedly passing black diarrhoea suggestive of melaena. She had vomited repeatedly. Her symptoms were very suggestive of gastrointestinal bleeding. She must have been dehydrated. It should have been clear that her symptoms were potentially life-threatening.

[85] Whilst Dr Leonard considered that it was reasonable for Dr Izzath to have reached a diagnosis of gastroenteritis, he seemed to me to attach too much weight to the fact that Dr Izzath was a trainee doctor; this can be seen from paragraphs 3.2, 3.6, and 3.9 of his report dated 16 August 2018. As I shall explain more fully in due course, the appropriate standard of care is that of a doctor of ordinary skill and care carrying out the duties for which Dr Izzath was responsible on 6 January. The standard of care does not fall to be reduced simply because it was a junior doctor who was performing the relevant medical tasks at the material time.

[86] Moreover, Dr Leonard acknowledged that the deceased's history of multiple episodes of black vomit and black diarrhoea (together with the fact that she was on long-term aspirin) were suggestive of upper gastrointestinal bleeding, for example from

gastric erosions or a duodenal ulcer. His view on this was in line with the opinions expressed by Mr Nichol, Dr Vallance and Mr Holmes.

[87] Dr Leonard's view appeared also to have been influenced by a statement from Dr Izzath, which had been supplied to him for the purpose of preparing his report. In this statement, Dr Izzath apparently said that he had established that the deceased was not passing melaena. The statement was not produced in evidence. In any event, the evidence does not show that Dr Izzath excluded melaena. As I shall explain more fully in the next section of this Opinion, I am satisfied that he did not carry out a rectal examination or inspect a stool sample. There is no reference in his clinical notes to his having considered melaena.

[88] Mr Wyatt's evidence on whether it was negligent not to have admitted the deceased was of little assistance. His consideration of the issue focussed on whether it was negligent of Dr Izzath not to have diagnosed AMI. That is not the pursuer's case. It is, however, notable that in his report of 28 June 2018, Mr Wyatt acknowledged that it would have been appropriate to have admitted the deceased for further investigations.

[89] The defenders founded on the evidence of Dr Cleland that the deceased's stable haemoglobin levels were not consistent with severe and profuse bleeding. He considered that 10 episodes of diarrhoea would point to there being a severe bleed. It should be recalled, however, that the reference in the clinical notes to 12 to 14 episodes of diarrhoea was to the position over the previous 24 hours. The deceased told the NHS 24 call handler that she had had 4 episodes on diarrhoea on 6 January and that she had not passed a lot on each occasion. Dr Cleland accepted that the haemoglobin levels might not drop immediately even in the case of a large bleed; that a dehydrated patient might not show a

reduction in level even though there was a bleed; and that the amount of blood in a patient with an ischaemic bowel was less than where there was a pulsating artery or an ulcer.

[90] In my opinion, Dr Izzath should have suspected that the deceased had an intra-abdominal abnormality, even if she did not have classic melaena or its usual symptoms. There is support for this in the evidence of Dr Vallance, who agreed that the haemoglobin level might not drop immediately, even in a patient with a gastrointestinal bleed. Dr Leonard accepted that there could be a delay in haemoglobin levels reducing in the event of a sudden loss of blood. A dehydrated patient might not show a reduction in level because the blood would be more concentrated due to water loss from the intravascular space. The result would be that the haemoglobin level could remain relatively stable for a time, thus masking the presence of a gastrointestinal bleed.

[91] Mr Nichol explained that where the small intestine became ischaemic, the lining would slough off the bowel wall into the lumen. This would then pass down the digestive tract and produce bloody diarrhoea. The pursuer also relied on the evidence of Mr Chalmers in this connection. He explained that when the small intestine became ischaemic, the thin inner layer, known as the mucosa, would be affected first. Damaged cells would leak fluid into the bowel causing diarrhoea. The deeper layers would be affected and would become necrotic as the lack of blood supply took hold at a later stage. It was possible in the early stages for there to be watery diarrhoea.

[92] Looking at the expert testimony as a whole, I am satisfied that the weight of the evidence strongly supports the view that the deceased should have been admitted to hospital on 6 January 2013. I am left in no doubt that Dr Izzath should have suspected that the deceased had a serious intra-abdominal abnormality. I consider that in failing to do so,

Dr Izzath fell below the standard of care reasonably to be expected of an ordinarily competent doctor in the circumstances.

[93] The issue which then arises is whether Dr Izzath advised the deceased that she should be admitted. If he did, it would ultimately be for the deceased to decide whether to follow his advice, assuming that she had the mental capacity to make a decision for herself and assuming also that she was given sufficient information to enable her to make a properly informed decision. If Dr Izzath failed to advise the deceased that she should be admitted, then on the basis of the expert evidence he was negligent.

[94] The pursuer gave cogent evidence that the deceased did not want to be discharged from the AAU. I found his evidence on the point convincing. There is no reference in the medical notes to the deceased having been advised that she should be admitted. Dr Izzath said in his evidence that he was unable to be certain whether he had given her this advice. In the circumstances, I consider that the best and most reliable evidence on the issue came from the pursuer.

[95] The pursuer was in no doubt that the deceased was frightened about the prospect of returning home because she and the pursuer had not been able to cope there. There is support for this in the evidence given by Dr Goldie, the on-call general practitioner. He formed the impression that the pursuer was not coping and that he was very worried about the deceased.

[96] The pursuer's evidence was that Dr Izzath said that the deceased was being discharged because she had had no episodes of diarrhoea or vomiting for around 3 hours. The pursuer said that when Dr Izzath gave him further medication for the deceased, the pursuer explained that the deceased had not been able to keep down the tablets she had been given the previous evening. He pleaded with Dr Izzath to admit the deceased.

[97] In considering whether to accept the pursuer's evidence it is important to note that in his email of complaint sent on 8 March 2013 the pursuer said that he pointed out that the deceased was not able to keep down liquids and that "they should not have sent this exhausted very sick lady home".

[98] There is also a note recording a meeting attended by the pursuer and representatives of the hospital on 5 July 2013 following his complaint. The note records the pursuer as saying that the deceased had been "thrown out of the emergency department twice, despite him begging for her to remain in hospital". The note goes on to say that the pursuer told staff that the deceased could not keep her medication down due to sickness. The pursuer said at the meeting that it was untrue that the deceased had expressed a wish to go home.

[99] It is, therefore, clear that the pursuer's position as to the deceased not wanting to be discharged has been consistent from an early stage. This weighs heavily in favour of the credibility and reliability of the pursuer's evidence on this point.

[100] As I have explained, there is no indication in the clinical notes that Dr Izzath advised the deceased that she should be admitted to hospital. Mr Nichol gave evidence, which I accept, that it would have been good practice to make a note that an offer of admission had been made and declined (although it would not be negligent not to have done so). More importantly, I am sure that if Dr Izzath had offered to admit the deceased or advised her that she should be admitted she would have agreed to be admitted. Dr Goldie remembered that the deceased was respectful towards him. There is no reason to think that she would not have followed medical advice that she should be admitted, had it been given. Moreover, the evidence indicates that the pursuer was present when Dr Izzath told the deceased that she was to be discharged. I accept the pursuer's evidence that his strongly held and

expressed view was that the deceased should be admitted. There can be no doubt that he would have urged the deceased to accept medical advice that she should be admitted.

[101] I acknowledge that Dr Izzath recorded in the notes that the deceased would like to go home and that she could cope at home. Having regard to the pursuer's clear and convincing evidence on these points to contrary effect, I am unable to accept that these entries in the notes were an accurate reflection of the deceased's wishes and of her ability to cope at home. As I have explained, there is a substantial body of evidence showing that the pursuer and the deceased were not coping at home.

[102] I conclude that the right inference to draw from the totality of the evidence is that Dr Izzath did not advise the deceased that she should have been admitted to hospital. In my opinion, he was negligent in having failed to give the deceased that advice. I am satisfied that had he done so, the deceased would have accepted his advice. She would, therefore, have been admitted at about 19.05 on 6 January 2013.

[103] Since I have found that (a) Dr Izzath failed to advise the deceased that she should be admitted; (b) that his failure to give her that advice was negligent; and (c) that the deceased would have accepted the advice had it been given, I need not make any separate finding as to the deceased's mental state. I would merely reiterate that I am in no doubt that if Dr Izzath had advised the deceased that she required to be admitted to hospital, she would have accepted his advice.

[104] The evidence was that Dr Izzath had authority to admit a patient to the AAU and that he frequently did so. For the reasons I have already set out, I consider that Dr Izzath was negligent in failing to advise the deceased that she should be admitted to hospital. The fact that Dr Izzath discussed the deceased's case with Dr Cleland cannot, in my opinion, serve to absolve Dr Izzath of liability for having failed to advise the deceased that she

should be admitted. Dr Izzath's note tends to indicate that he told Dr Cleland that the deceased could cope at home. Dr Cleland's approval of the decision to discharge the deceased must have been conditional on that being the position. In fact it was not the position. There is strong evidence that the deceased and the pursuer were not coping at home. It follows that Dr Cleland's approval of the proposed discharge was based on inaccurate information. For that inaccuracy Dr Izzath must, in my view, be held liable.

[105] Furthermore, it is important to appreciate that Dr Izzath owed the deceased a stand-alone duty of reasonable care. It was argued for the defenders that Dr Izzath discharged his duty of care by seeking advice from Dr Cleland. Reliance was placed on a brief passage in *Jones on Medical Negligence* (5th ed paragraph 3.115): "Inexperienced doctors will discharge their duties of care by seeking the assistance of their superiors to check their work, even though they may themselves have made a mistake." In my opinion, it would be going too far to say that there is any clear principle to this effect. Much will depend on the particular facts and circumstances of the case. In general, the principle is that a junior and inexperienced doctor must achieve the same standard of care as a more experienced colleague would be expected to bring to the task in hand. Counsel for the defender referred to a line of authority showing that a solicitor is generally entitled to rely on the advice of counsel (*Locke* v *Camberwell Health Authority* [2002] Lloyd's Rep PN 23 at 29 (per Taylor LJ). He submitted that this approach was readily applicable to the relationship between a junior doctor and a senior colleague. I am unconvinced by the argument. It seems to me that the nature of the relationship between counsel and his or her instructing solicitor is one that arises in a very different professional context to that of junior and more senior hospital doctors. The differences are numerous, but amongst them is the obvious fact that the instructing solicitor pays counsel for his or her specialist expertise or advice. Whereas the

solicitor has a contractual relationship with the client, counsel does not. They owe duties to the client that are not coextensive. Although they are members of the same profession, counsel and his or her instructing solicitor have distinct roles to perform. In my opinion, the analogy is not a helpful one in the context of the relationship between a junior hospital doctor and a more experienced colleague.

[106] It is well-known that a learner driver must show the same standard of care as any other driver (*Nettleship* v *Weston* [1971] 2 QB 691, CA). The same principle applies in the case of a junior doctor. In *Wilsher* v *Essex Area Health Authority* [1987] QB 730 the Court of Appeal considered the position of junior doctors. Mustill LJ (as he then was) rejected the notion of a duty tailored to the actor, rather than to the act he or she has to perform. He did not agree that the medical profession could be treated as a special case. His lordship said this:

> "… it would be a false step to subordinate the legitimate expectation of the patient that he will receive from each person concerned with his care a degree of skill appropriate to the task which he undertakes, to an understandable wish to minimise the psychological and financial pressures on hard-pressed young doctors … in a case such as the present the standard is not just that of the averagely competent and well-informed junior houseman (or whatever the position of the doctor), but of such a person who fills a post in a unit offering a highly specialised service."

Glidewell LJ stated that the law required the trainee or learner to be judged by the same standard as his more experienced colleagues. If it did not, inexperience would frequently be urged as a defence to an action for professional negligence.

[107] The issue arose again recently in the Court of Appeal in *FB* v *Rana* [2017] PIQR P17. The trial judge had held that in taking a case history a junior doctor owed a lesser duty than would be owed by a more experienced colleague. The Court of Appeal did not support this view. Thirlwall LJ said this at paragraph 30:

> "I have had the advantage of reading the judgment of Jackson LJ in this case. He there sets this appeal in the context of the law of negligence generally and of professional negligence in particular. I agree with his analysis and add only that in every case of alleged clinical negligence the court is concerned with the acts and/or omissions of a doctor or other medical professional in the context of a particular task or tasks whether it be the delivery of a baby, the examination of a patient, the performing of surgery, the taking of a history and so on. There is often a correlation between the complexity of the task and the seniority of the doctor but many tasks are carried out by doctors of different seniority; surgery is often performed by a consultant surgeon. When it is performed by a registrar the standard of competence required is the same as that required of the consultant. As Jackson LJ observes, where a doctor in a particular post does not exercise the degree of skill required for the task in hand, the health trust is liable."

At paragraph 59 Jackson LJ said this:

> "In *Wilsher* v *Essex AHA* (supra) the Court of Appeal for the first time gave detailed consideration to the standard of care required of a junior doctor. (This issue did not arise in the subsequent appeal to the House of Lords). The majority of the court held that a hospital doctor should be judged by the standard of skill and care appropriate to the post which he or she was fulfilling, for example the post of junior houseman in a specialised unit. That involves leaving out of account the particular experience of the doctor or their length of service. This analysis works in the context of a hospital, where there is a clear hierarchy with consultants at the top, then registrars and below them various levels of junior doctors. Whether doctors are performing their normal role or 'acting up', they are judged by reference to the post which they are fulfilling at the material time. The health authority or health trust is liable if the doctor whom it puts into a particular position does not possess (and therefore does not exercise) the requisite degree of skill for the task in hand."

[108] Applying these principles to the facts of the present case, I find that Dr Izzath did not carry out a sufficient assessment of the deceased to exclude the possibility that she was suffering from a serious intra-abdominal abnormality. The reports of black diarrhoea and black vomiting, together with her symptoms of abdominal pain and the other features highlighted by Mr Nichol should have caused Dr Izzath to advise the deceased that she should be admitted to hospital. I am satisfied that any reasonably competent hospital doctor would have done so in the exercise of reasonable care. The fact that Dr Izzath discussed the deceased's case with Dr Cleland does not have the effect of exonerating him from his failure to exercise reasonable care.

[109] Counsel for the pursuer objected to the line of evidence concerning whose responsibility it was to consider whether the deceased should be admitted to or discharged from the AAU. The basis of the objection was lack of notice in the pleadings. Having regard to my decision on the merits of that issue, the objection falls away and I need not rule on it.

Failure to carry out a rectal examination

[110] Having decided that there was negligence on the part of Dr Izzath in failing to advise the deceased that she required to be admitted to hospital, the question as to whether Dr Izzath should have carried out a rectal examination becomes of little importance. I can, therefore, deal with the pursuer's second ground of fault more briefly. The question raised is whether Dr Izzath should have performed a rectal examination to evaluate the reported melaena.

[111] In the note of their joint meeting, Mr Nichol and Dr Leonard recorded their agreement that if there was a clear history of gastroenteritis (ie on questioning the patient, or other witness, it was possible to be certain that any stool passed was not melaena) then rectal examination would not be normal practice. If there was any clinical suspicion of an upper gastrointestinal bleed, normal practice would be either to inspect the stool visually or to perform a rectal examination. If the patient was unable to provide a stool sample, then a rectal examination would normally be performed in an attempt to obtain a sample of stool for inspection.

[112] I consider that Dr Izzath could not have been certain that any stool passed by the deceased was not melaena. There were reasonable grounds for suspecting that the deceased had passed melaena before she was admitted to the AAU on 6 January 2013. There was the recorded reference to melaena in the diagnosis made by Dr Goldie in the afternoon of

6 January. There were the descriptions in the ambulance notes of the deceased having passed black diarrhoea. The deceased had told the NHS 24 call handler that she had passed black diarrhoea; it is reasonable to infer that she would have said the same to Dr Izzath. In the clinical notes he recorded that the diarrhoea looks dark and he added the word "black". Dr Leonard accepted in cross-examination that if the deceased gave a history of diarrhoea that was in line with what she said in the NHS 24 call, this would raise a clinical suspicion of melaena.

[113] There is nothing in the notes to suggest that Dr Izzath inspected a stool sample or that he carried out a rectal examination. His evidence was that if a nurse had shown him a bedpan containing what he thought was melaena, he would have made a record of this in the clinical notes.

[114] It may be the case that the deceased did not have classic melaena, but in my opinion she undoubtedly had reported serious symptoms that warranted appropriate and thorough investigation for possible upper gastrointestinal bleeding. That being so, I have no difficulty in accepting the agreed opinion of Mr Nichol and Dr Leonard that Dr Izzath should have carried out a rectal examination. He was negligent in not doing so. Mr Nichol and Dr Leonard were at one in their evidence that a stable haemoglobin level was not an adequate substitute for a rectal examination or a stool test.

Conclusion on liability

[115] I conclude that Dr Izzath was negligent in (a) failing to advise the deceased that she required to be admitted to hospital and (b) failing to carry out a rectal examination.

Causation

The issues

[116] Having concluded that Dr Izzath was negligent, I turn to consider the issues which arise in respect of causation. The main evidence on this branch of the case was given by two distinguished consultant vascular surgeons: Mr Roderick Chalmers of Edinburgh Royal Infirmary and Mr Michael Wyatt of the Freeman Hospital, Newcastle upon Tyne. They differed in their views as to: (a) when the deceased's AMI first occurred – ie when did her superior mesenteric artery become occluded and (b) what the expected rate of progression of the condition would be in the deceased's case. The answers to these questions are important because they inform decisions as what would have been likely to happen if the deceased had been admitted to hospital on 6 January 2013. In particular: would her AMI have been identified; if so, when; and, if identified, would successful surgery have been carried out. Dr Vallance and Mr Holmes also gave some evidence bearing on causation.

Acute mesenteric ischaemia

[117] To set the scene for consideration of the causation issues, it will assist if I provide a short outline explaining the nature of the condition from which the deceased died, namely acute mesenteric ischaemia ("AMI").

[118] AMI is an uncommon medical condition. It accounts for less than 1 in 1000 hospital admissions. It arises when the blood supply to the small intestine is acutely interrupted. The most usual cause, as was agreed to have happened in the deceased's case, is occlusion of the main artery supplying the small intestine and proximal large intestine (the superior mesenteric artery). Patients often have a number of medical comorbidities. It is recognised that patients with a history of atrial fibrillation, recent myocardial infarction, congestive

heart failure or peripheral arterial emboli are at risk from a superior mesenteric artery embolism.

[119] The usual source of the embolism is the heart where the clot forms as a result of abnormal cardiac rhythm or due to scarring on the inner wall of the heart at the site of previous muscle damage after myocardial infarction. In the present case it was not in dispute that the embolism originated in the deceased's heart.

[120] The symptoms experienced by patients with AMI are somewhat variable, but it is usual for there to be the sudden onset of acute central abdominal pain. Mr Wyatt drew attention to the account in the 8th edition of *Rutherford's Vascular Surgery* (a leading textbook) where it is stated that a careful history may reveal post-prandial abdominal pain and food intolerance. There may often also be vomiting, diarrhoea and distension of the abdomen. The physical signs are difficult to detect in the early stages of AMI, particularly in elderly patients. The diagnosis is often missed.

[121] It is important to appreciate that in the present case the pursuer does not criticise Dr Izzath for not having suspected AMI on 6 January 2013. The pursuer's case is that if the deceased had been admitted to Glasgow Royal Infirmary in the evening of 6 January 2013, her AMI would have been diagnosed and successfully treated by surgery.

[122] By the time that the condition evinces clinical signs (cardiovascular collapse) and there are biochemical indicators (acidosis and elevated CRP), there will be established infarction of some or all of the small intestine. Mr Chalmers said that depending on the amount of small intestine affected, this would be somewhere between 12 and 48 hours after the onset of symptoms. A high index of suspicion was therefore required of clinicians in order to make a diagnosis in time to allow intervention before infarction supervenes.

[123] The diagnosis is confirmed by a CT angiogram using intravascular contrast medium to enable visualisation of the arterial tree in a three dimensional format. The classic radiological sign of an embolus in the superior mesenteric artery is an acute cut off of contrast medium a few centimetres from the vessel's origin giving rise to an obvious filling defect compatible with a blood clot.

[124] Successful management of AMI comprises early diagnosis followed by emergency revascularisation of the superior mesenteric artery and resection of any infarcted intestine. Revascularisation would usually take the form of an embolectomy. This involves a surgical procedure in which the abdomen is opened, and the mesenteric artery is explored and controlled near to its origin. A balloon catheter is passed proximally and distally with a view to removing all embolus. The artery is then closed and circulation to the small intestine is restored. It is often found that small loops of bowel have been irreversibly damaged. These will not improve; they will inevitably progress to infarction. In such circumstances, the affected segments of bowel are resected. The ends are stapled off and the abdomen is then closed with a view to a so-called "second-look laparotomy" the next day. At that stage the viability of the remaining small intestine is reassessed. If all is considered to be satisfactory, the continuity of the bowel is restored by joining the two ends back together again.

[125] Throughout the critical phase of their illness, patients are managed and carefully monitored in an intensive care environment. If there are signs of ongoing bowel infarction, a further laparotomy with additional resection may be necessary.

[126] If the diagnosis of AMI is delayed, extensive bowel infarction will develop. Whilst it is theoretically possible for patients to survive with short remaining lengths of small bowel, this would mean that long-term nutrition would have to be by intravenous means. That is

often not a survivable outcome, leaving the surgeon with no legitimate option other than to close the abdomen and palliate the patient. As I have explained, that was the regrettable outcome in the deceased's case.

Mr Chalmers' evidence

[127] Mr Chalmers explained that he is the senior consultant vascular surgeon in a large teaching hospital department at Edinburgh Royal Infirmary. In addition, he is the lead clinician of the Scottish National Service for Thoraco-abdominal Aneurysm Surgery. Mr Chalmers has a particular interest in complex aortic surgery and mesenteric ischaemia. As a result, he has substantial experience of treating patients with both chronic and acute mesenteric ischaemia.

[128] Mr Chalmers considered that the description of the deceased's symptoms pointed to the occlusion having occurred at about 17.30 on Saturday 5 January 2013 when she was unable to eat her evening meal, complained of feeling nauseous, and experienced pain in her groin. As I have explained, AMI is known to give rise to symptoms in the immediate aftermath of the patient having eaten a meal. The deceased then experienced diarrhoea and vomiting. The pursuers' description, in the course of the NHS 24 call, of the deceased curling up in pain ("trying to crawl into a wee ball") was typical of a patient with AMI. On this point Mr Wyatt agreed; he explained that the development of AMI was usually associated with excruciating abdominal pain of an intensity that was out of keeping with the clinical findings.

[129] Mr Chalmers thought that the subsequent symptoms were consistent with the deceased's small bowel having started to become infarcted. The overall picture was one of constant abdominal pain over the period between 5 and 6 January. That fitted with

ischaemia, as did the nausea, vomiting, and diarrhoea. Mr Chalmers' view was that the development of black vomit on 6 January indicated that infarction had taken place. This caused the vomit and diarrhoea to change colour due to the mucosal lining of the bowel sloughing off.

[130] With regard to the progress of AMI, Mr Chalmers said that he had substantial personal experience, over a period of about 30 years, of successfully treating patients whose symptoms had lasted for more than 24 hours. He drew attention to some studies (admittedly of limited scope) which were in line with this experience.

[131] In particular, Mr Chalmers referred to two studies which indicated that patients with embolic AMI will often have resections carried out and will survive in circumstances where their symptoms have exceeded a period of 24 hours before surgery. In an article published in 2002 entitled *Contemporary management of acute mesenteric ischaemia: Factors associated with survival,* Park and others found that in a group of 58 patients 68 per cent of those presenting after 24 hours survived for 30 days and 50 per cent for 1 year. In a small South Korean study published in 2013 (*Treatment Outcome in Patients with Acute Superior Mesenteric Artery Embolism*), a group of 30 patients had the same embolic condition as the deceased (none had chronic as opposed to acute mesenteric ischaemia). Of the 10 whose symptoms exceeded a period of 24 hours, 8 survived bowel resection. Whilst Mr Chalmers acknowledged that these studies were of limited value on their own, their results tended to be consistent with his clinical experience of operating on patients with AMI over a period of some 30 years. He said that the majority of the patients on whom he had operated successfully would have had symptoms for more than 24 hours. In Mr Chalmers' view, progress varied greatly amongst patients; there were no hard and fast rules. Damage to the small bowel was not a linear process based on the duration of the ischaemia. Many patients were likely to obtain some

small volumes of blood supply through other arterial routes despite the occlusion of the superior mesenteric artery. One such route, amongst others, was the right hepatic artery; this was above the level of the embolus in the deceased's case. There was a network of arterial branches that supplied blood to the small bowel. Mr Chalmers was confident in saying that, based on his extensive experience, many patients survived AMI through resection of infarcted bowel and successful revascularisation where their symptoms exceeded a duration of 24 hours.

[132] Mr Chalmers considered that it would be unusual for a patient to have two concomitant abdominal pathologies, such as gastroenteritis and AMI, at the same time.

[133] On the issue of the likely clinical course had the deceased been admitted on the evening of 6 January 2013, Mr Chalmers thought that she would have been transferred to a ward within 2 hours. In the meantime, the deceased's condition would have been closely monitored by the nursing staff. A senior doctor would have been likely to have reviewed the deceased within 2 hours of her arriving on the ward. Mr Chalmers would expect a physician at senior trainee or consultant level to have AMI within his or her differential diagnosis in the case of an elderly returning patient with a history of cardiac disease and symptoms such as those of which the deceased had complained. In these circumstances (and given the background of reported black diarrhoea and black vomit), it was reasonable to expect that a CT angiogram would have been arranged that evening. The radiologist would see the images as they were produced. That would have led quickly to a laparotomy being done. Mr Chalmers considered that revascularisation and resection of infarcted bowel would have been completed at some time between midnight and 01.00 on 7 January. These estimates of timings were based on Mr Chalmers' experience of working in a similar unit to the one at Glasgow Royal Infirmary. He observed that in a major teaching hospital, such as

Glasgow Royal Infirmary, there is the capacity to carry out emergency procedures of the type that the deceased required at any time of day or night and at weekends.

[134] If the deceased had a successful embolectomy and all or most of her small bowel was successfully revascularised, Mr Chalmers considered that the deceased's prospects of survival would have been between 60 and 80 per cent. If the operation took place in the late evening of 6 January, he estimated that about 20 to 30 per cent of the small bowel would have been infarcted and would have required resection. If the operation was carried out in the morning of 7 January, about 50 per cent or perhaps slightly more of the small bowel would have been infarcted and would have needed resection. Mr Chalmers accepted that if surgery took place after about 06.00 on 7 January the deceased would not have survived. By then, particularly in view of her age and comorbidities, the deceased would not have been able to survive surgery or to receive adequate nutrition following surgery. It is important to appreciate that this particular piece of evidence was given in the context of Mr Chalmers' overall view that the acute embolic event had occurred on the evening of 5 January, some 36 hours previously.

Mr Wyatt's evidence

[135] For his part, Mr Wyatt was of the opinion that the acute event occurred at some point between the deceased's discharge from the AAU on the evening of 6 January and her admission to hospital on the evening of 7 January. He considered that the diagnoses of gastroenteritis were correctly (or at least reasonably) made on 5 and 6 January. Mr Wyatt's view was that the atrial fibrillation developed because the deceased was unable to take her beta blocking medication due to the effects of dehydration and persistent vomiting and diarrhoea. The medication was washed out of her system. It would, in Mr Wyatt's opinion,

be unusual for a patient with AMI to present with profuse vomiting and diarrhoea. The fact that the deceased was seriously unwell with a high temperature when she was admitted on the evening of 7 January, together with the fact that she was found to be in atrial fibrillation and had evidence of sepsis were all factors that pointed towards the acute embolism having occurred relatively recently. The atrial fibrillation caused the acute embolic event in the superior mesenteric artery. Atrial fibrillation carried a high risk of systemic embolization. The small bowel would then start to die immediately. He would expect infarction to have progressed to the stage where the bowel could not be saved within 12 hours; he based this estimate on his experience. Sepsis would set in within 12 hours causing rapid deterioration in the patient's condition. Mr Wyatt drew attention to guidelines for the management of AMI published in 2016 by a study group of the European Society for Trauma and Emergency Surgery ("ESTES"). The guidelines highlighted that although the gut can survive 75 per cent reduction in blood flow for up to 12 hours without significant injury, irreversible bowel damage occurs within 6 hours of complete vascular occlusion. The guidelines acknowledged that mortality rates had declined over the past 50 years, but they remained unacceptably high at 50 to 69 per cent.

[136] Mr Wyatt disagreed with the view expressed by Dr Vallance that the thrombus would not develop until 48 hours after the onset of atrial fibrillation. Mr Wyatt explained that his opinion on the point was based on his extensive experience of treating acute patients over a period of more than 25 years; they often had atrial fibrillation and had already developed an embolus as a result of that. Mr Wyatt also disagreed with Dr Vallance on the question of whether the deceased could still have been deriving some benefit from her beta blocking medication even though she had not been able to take it due to the vomiting and diarrhoea; the half-life of the beta blocking medication required that it be taken every day.

[137] Mr Wyatt accepted that there was a possibility that the deceased's life could have been saved if she had been admitted on 6 January. He thought that if she had been given beta blocking medication intravenously, she might still have developed atrial fibrillation; the cause of atrial fibrillation was multi-factorial. In Mr Wyatt's view, if she had been admitted on 6 January, the probability was that she would not have been fully investigated until the next morning.

[138] Mr Wyatt considered that by the time the deceased came back to Glasgow Royal Infirmary in the late evening of 7 January, her small bowel would have been ischaemic and beyond the possibility of being resected. That would have been the position even if she had immediately undergone surgery.

Dr Vallance's evidence

[139] Dr Vallance was of the opinion that the deceased had ischaemia of the small bowel due to occlusion of her superior mesenteric artery from the outset. She did not have gastroenteritis. The source of the embolus was from within the left ventricle with thrombus overlying the segment of infarcted left ventricle; ie mural thrombus in the area of myocardial infarction which had occurred in 1990. Dr Vallance explained that as that part of the muscle wall had not been contracting, thrombus could build up at the site. This could be present for many years without declaring itself until at some point a section of the thrombus broke off and embolised. He considered that the development of atrial fibrillation in the deceased's case was due to the overall toxicity consequent to the ischaemic bowel and not to gastroenteritis. It was Dr Vallance's opinion that the deceased's heart rate, as recorded on the electrocardiogram on 7 January 2013, of 109 beats per minute suggested that she still had significant active betablockade even though she had been unable to keep down all of her

medication. This heart rate was less rapid than would usually be expected at the onset of atrial fibrillation in an elderly patient; in such a case one would normally expect the heart rate to be around 150 to 160 beats per minute. In these circumstances, Dr Vallance considered that it was not the lack of betablockade which precipitated the onset of the deceased's atrial fibrillation, but toxicity from her infarcted bowel.

[140] Dr Vallance went on to say that it was widely accepted that thrombus does not develop for up to 48 hours after the onset of new atrial fibrillation. He referred to guidance issued by the Scottish Intercollegiate Guidelines Network and the National Institute of Clinical Excellence. The guidelines acknowledged that patients with new onset atrial fibrillation could be safely converted back to normal cardiac rhythm if the onset was less than 48 hours. After 48 hours they should not be converted due to a significant risk of embolization as thrombus may have developed.

Mr Holmes' evidence

[141] Mr Holmes expressed the view that if the deceased had been operated on at around midnight on 6 January, it was likely that some of her small bowel would have been irreversibly ischaemic. He thought that between 25 and 50 per cent of the small bowel would have had to be resected. If less than 50 per cent of the bowel had to be removed, on the balance of probabilities the deceased would have survived. Mr Holmes went on to provide what he described as rough approximations of the deceased's prospects of survival in circumstances where various proportions of her small bowel had been resected.

[142] In my opinion, Mr Holmes' evidence has to be approached with considerable caution. I noted that he had not practised in the NHS for more than 16 years. He had not been in clinical practice since 2009. He had had no experience of carrying out emergency

surgery since 2002. He had only ever seen between 6 and 12 cases of AMI during a career which began in 1960. In only one of these cases had the patient survived; Mr Holmes could not recall whether he or she had required resection. Mr Holmes had never been involved in research relating to AMI or published on the subject. He had not worked in an emergency unit since CT scanning became widespread. Mr Holmes' CV appeared to contain some (no doubt inadvertent) inaccuracies.

[143] In view of Mr Holmes' limited experience in relation to the modern understanding and treatment of AMI, I do not consider that I can safely place any reliance on his evidence on the causation issues.

Conclusion on when the acute embolic event occurred

[144] Faced with the conflicting views of eminent medical specialists on the issue of when the deceased's acute embolic arterial occlusion first occurred, the court's task is challenging. At the end of the day I have come to the conclusion that Mr Wyatt's opinion is the more convincing one. There are several reasons why, in my judgment, his views on the issue are to be preferred to those of Mr Chalmers and Dr Vallance.

[145] In the first place, there are a number of factors that point towards the occlusion having occurred between the evening of 6 January 2013 and the next evening. First, there is the evidence that whilst the deceased was unquestionably seriously unwell when she was admitted to Glasgow Royal Infirmary on 7 January, this was not found to be the position when she was assessed there on 5 and 6 January. It was only on 7 January that she was in atrial fibrillation for the first time; and that there were signs that sepsis had set in. On 5 and 6 January the doctors who assessed the deceased did not consider her to be seriously unwell (although, for the reasons I have explained, she should have been admitted to hospital on 6

January) : on both those occasions her heart was in normal sinus rhythm; there were no signs of sepsis; and two medical assessments indicated that her condition was improving – at 23.45 on 5 January and at 19.05 on 6 January. It is difficult to reconcile the deceased's apparently improving condition on 5 and 6 January with the hypothesis that her bowel was already becoming infarcted. As I have explained, AMI is not a condition that corrects itself. While Mr Chalmers said that the progress of the condition was not linear, he did not to my mind have a convincing explanation for why the deceased's AMI apparently improved over the course of the first 2 days.

[146] A further factor in favour of Mr Wyatt's hypothesis is that the deceased's biochemical tests were essentially normal on 6 January; that too points towards her not being seriously ill at that stage. Mr Chalmers offered no explanation for how the arterial occlusion could have taken place some 23 hours earlier without adversely affecting the deceased's biochemistry.

[147] Second, Mr Chalmers accepted that at 19.05 on 6 January there was nothing in the medical notes to suggest that the deceased was seriously unwell. Yet by that stage, according to his theory, the superior mesenteric artery had been occluded for more than 24 hours. Mr Chalmers also accepted that after a further 11 hours had elapsed the deceased's condition was such that her life could not be saved. In my opinion, Mr Chalmers was unable to offer a convincing explanation for why the deceased's AMI should have progressed in this surprising manner: slowly and with apparent improvement over the first 24 hours, followed by relatively rapid deterioration in the course of the next 11 hours. Mr Chalmers suggested (rather tentatively I thought) that an alternative blood supply might have developed. This was not, however, covered in his report. Moreover, he accepted that there was no direct evidence supporting this theory; there was, for example, nothing in the

CT scan carried out in the early hours of 8 January to show that an alternative blood supply had developed.

[148] Third, Mr Wyatt said that the cardinal feature of AMI was the sudden onset of excruciating pain. I did not understand Mr Chalmers to disagree. Yet there was no evidence of such pain having occurred when the deceased attended hospital on 5 January, by which stage the deceased's AMI had already started to develop, according to Mr Chalmers' theory. At that stage the abdominal pain was recorded as being dull in nature. The descriptions of pain in the NHS 24 transcript do not assist the pursuer's theory because that was long after the onset of the AMI according to Mr Chalmers. In this connection it is of interest to note that in the pursuer's precognition on the *quantum* aspects of his claim, he describes the deceased suffering severe pain on the night of 6 January or the early hours of 7 January. That is consistent with the acute embolic event having happened around that time.

[149] Mr Wyatt strongly disagreed with Dr Vallance's view that the thrombus would not develop until more than 48 hours after the onset of atrial fibrillation. Mr Wyatt said that his view was based on his extensive experience of seeing patients in an acute setting over a period in excess of 25 years whereas Dr Vallance would be dealing with elective patients. In view of his substantial experience of seeing what happens with acute patients, I prefer Mr Wyatt's views on this issue. I should add that I did not find Dr Vallance's views on why he thought the occlusion occurred on 5 January to be convincing. They were not based on any references to medical or scientific studies. I have the same reservations about his theory on the continuing effects of the beta blocking medication; again, these were unsupported by any scientific evidence.

[150] Looking at the totality of the evidence, I have come to the view that the correct conclusion to draw is that Mr Wyatt was correct in his opinion that the acute embolic event occurred between the time of the deceased's discharge from the AAU on the evening of 6 January and the time of her admission to Glasgow Royal Infirmary on the evening of 7 January. For the reasons I shall set out later, I consider that it occurred on 7 January.

What would have happened had the deceased been admitted on 6 January 2013?

[151] The next question to be addressed is what, according to the evidence, would probably have happened if the deceased had been admitted to the AAU on 6 January 2013. In particular, would the deceased's AMI have been identified and successfully treated?

[152] Dr Cleland explained what would have happened to the deceased had she been admitted to the AAU at around 19.30 on 6 January 2013 because of a suspected upper gastrointestinal bleed. He explained that patients with upper gastrointestinal bleeding commonly presented to the AAU. Sometimes they stayed in the AAU overnight. The deceased might have had to wait for about 2 hours until a bed was available in a medical ward. After admission to the ward, a physician would have reviewed the deceased. If Dr Cleland or another consultant was still on duty when the deceased was admitted, she would have been seen by one of them. By 20.00 Dr Cleland would have completed his shift but whether or not he saw the deceased that night, the management plan would have been the same. The deceased would have been fasted; venous access would have been established; she would have been resuscitated with fluid and bloods as considered appropriate; her blood would have been cross-matched in case a transplant was needed; arrangements would have been set up for her to have a possible gastroscopy in the morning; her blood tests would have been repeated; and she would have continued to be kept under

observation. If the deceased was found to be in a stable condition the next morning, if her blood tests were unchanged, and if the observations of her condition were normal, a gastroscopy would not have been performed. If the deceased's condition deteriorated to the extent of showing signs of sepsis, the management plan would have changed.

[153] Mr Bryce, the surgeon who performed the laparotomy on the deceased on the morning of 8 January 2013, agreed that melaena can suggest an upper gastrointestinal bleed. He said that the first line of investigation is to request an upper gastrointestinal endoscopy. A CTA scan was not the first line of investigation.

[154] Mr Nichol said that if the deceased had been admitted because of suspected serious intra-abdominal pathology, she would have been treated with intravenous fluids and by observations; these would possibly have led to a gastroscopy being performed. His views on the likely progress of the deceased's treatment in hospital were broadly in line with those of Dr Cleland and of Mr Bryce.

[155] Mr Wyatt considered that if the deceased had been admitted to a ward on 6 January 2013, her lack of abdominal symptoms, the fact that she was feeling well, and her continuing vomiting and diarrhoea would have meant that she would not have had a CTA scan carried out and would not have progressed to surgery.

[156] What is, of course, clear is that the deceased did actually progress to surgery (regrettably unsuccessful) following her admission to Glasgow Royal Infirmary on the occasion of her third attendance there in the evening of 7 January. Given that I consider Mr Wyatt to be well-founded in his view that the acute embolic event occurred at some point between the evenings of 6 and 7 January, the important question which arises is this: would the deceased's AMI have been identified and successfully treated if she had been in Glasgow Royal Infirmary 24 hours earlier than the time of her final admission – ie from the

evening of 6 January instead of from the evening of 7 January. The relevant hypothesis involves the assumption that rather than being at home during that 24-hour period (as she in fact was), the deceased would have been in a ward at Glasgow Royal Infirmary, having accepted Dr Izzath's advice that she should be admitted. It was during this 24-hour period that the deceased's AMI developed. Would she have been saved if she had been in hospital when that happened?

[157] The evidence given and the opinions expressed by Dr Cleland, by Dr Bryce and by Mr Nichol did not address that issue. Their focus was on a different question: what would have been the sequence of clinical and other events if the deceased had been admitted on 6 January with a generalised condition of suspected intra-abdominal abnormality. As I have explained, the real question is a different one: it is what would probably have happened if the deceased had suffered an acute embolic event at a time when she was an in-patient being closely monitored on a medical ward in a major teaching hospital (ie Glasgow Royal Infirmary).

[158] As Mr Wyatt explained, when the superior mesenteric artery becomes occluded, infarction of the small bowel sets in rapidly. It is reasonable to infer that this is what happened on 7 January given that the evidence shows that the deceased became extremely unwell in the course of that day; she collapsed, was in severe pain, and had to be taken to hospital by ambulance. By the time she was admitted that evening, she was undoubtedly extremely ill; by then her superior mesenteric artery had become occluded. If the deceased had been in hospital earlier that day, it is highly probable that the medical and nursing staff, who would have been monitoring her suspected abdominal abnormality, would have picked up the fact that she was deteriorating to a severe extent. Her heart would have gone into atrial fibrillation. She would have developed acute abdominal pain. She would have

had acute diarrhoea. Her CRP would have risen steeply. Mr Wyatt conceded that it was possible that if the deceased had been admitted on the evening of 6 January her small bowel could have been saved. I consider that the evidence, viewed as a whole, supports the conclusion that such an outcome was not just possible, but was probable.

[159] In support of this conclusion, I accept the evidence given by Mr Chalmers, under reference to the published literature, that a physician at senior trainee or consultant level would have had AMI within his or her differential diagnosis, especially since the deceased was an elderly patient with a history of cardiac disease. Mr Wyatt helpfully drew attention to the ESTES guidelines. These recommend *inter alia* that AMI should be suspected in patients with acute abdominal pain, in whom there is no clear diagnosis and disproportionate symptoms, particularly in the elderly with a history of cardiovascular problems. The guidelines make clear that in cases of suspected AMI, CTA scans should be performed immediately. They state that AMI secondary to arterial embolism should be suspected in patients with atrial fibrillation who have a sudden onset of abdominal pain. The guidelines reflect good practice. Those I have cited would have applied in the deceased's case. Having regard to the evidence of Mr Chalmers and Mr Wyatt, it is reasonable to infer that (a) the guidelines would have been followed if the deceased had been a patient in a medical ward in Glasgow Royal Infirmary between the evenings of 6 and 7 January; (b) the deterioration in the deceased's condition in the course of 7 January due to the onset of AMI would have been quickly identified by the medical and nursing staff; (c) a CTA scan would have been arranged; and (d) this would have led promptly to surgery. Taking Mr Wyatt's estimate of 12 hours before the condition became irreversible, there would have been more than sufficient time to operate on and revascularise the deceased's small bowel. Her life would then have been saved. I accept Mr Chalmers' evidence that

favourable outcomes are, in practice, achieved in patients with early diagnosis and minimal delay to operative intervention. The deceased would (but for Dr Izzath's negligence) have been in the best possible place for such conditions to be satisfied, namely in a medical ward in a major teaching hospital being monitored for intra-abdominal abnormality.

[160] The defenders submitted that there was insufficient evidence to allow the court to find that the deceased's AMI would, even on the balance of probabilities, have been identified and successfully treated had she been admitted on the evening of 6 January. I reject that submission. There was clear evidence supporting these conclusions in the testimony of Mr Chalmers; his evidence was based on his experience working in a similar unit and on the medical literature. Support can also be found in the evidence of what actually happened on 8 January. It took from 02.15 when the deceased was reviewed by a physician until 06.35 for a CTA scan to be carried out; the laparotomy was performed at 10.00. From these timings it is reasonable to infer that it would have taken no more than 8 hours from when the deterioration in the deceased's condition would have been noted until surgery if she had been admitted on the evening of 6 January. That is well within Mr Wyatt's 12-hour time scale for successful revascularisation.

[161] Further support for this view can be found in the agreed evidence of Mr Bryce. He said that if a CT scan was reported as being suggestive of ischaemic bowel, urgent surgery would commence within 2 hours with a maximum of a further 30 minutes for the vascular surgeons to be called in.

[162] It was submitted on behalf of the defenders that there was no evidence to show exactly when the deterioration in the deceased's condition occurred. This meant, or so the argument ran, that there was no starting point for working out what would have been likely to have happened; so the pursuer could not establish a causative link. In my view, this line

of argument is unrealistically narrow and theoretical. Pressed to its limit, it would mean that the pursuer had to meet an impossibly high standard of proof by identifying the precise moment when the occlusion occurred. I do not accept that the law on causation imposes such an onerous burden on a pursuer. There was evidence from Mr Wyatt, which I accept, that the acute event occurred between the evenings of 6 and 7 January. As I have said, the evidence shows, in my view, that it occurred on 7 January. The important point is that on that date the deceased would, absent the negligence of Dr Izzath, have been in hospital. It is highly likely, as the evidence amply shows, that in those circumstances her AMI would have been identified and successfully treated by expert medical staff. That is a matter of common sense, as it seems to me. I remind myself of the famous observations of Lord Reid in *McGhee* v *National Coal Board* 1973 SC (HL) 37, 53 that the legal concept of causation is not based on logic or philosophy; it is based on the practical way in which the ordinary man's mind works in the everyday affairs of life. The fallacy of the defenders' submission is that it reflects the first of these approaches rather than the latter.

[163] The defenders also sought to argue that the approach I have taken to the evidence was not foreshadowed in the pursuer's case and that it was not, therefore, open to the court to adopt this approach. That argument is, in my opinion, without merit. In statement VIII of the pursuer's condescendence there are detailed and specific averments about what would have happened to the deceased if she had been admitted to Glasgow Royal Infirmary on 6 January 2013. The pursuers' pleadings include averments that the deceased's condition would have deteriorated that evening and that the deterioration would have been evident from abnormal physiology, increasing abdominal pain, deteriorating biochemistry in terms of CRP, and a developing metabolic acidosis from the necrosis in her small bowel. The averments say that the deterioration would have been picked up promptly, that there would

have been an urgent surgical review, and an emergency CT scan. There is a pleaded *esto* case that if a CT scan could not have been taken on 6 January, it would have been taken early on 7 January. The pursuer avers that successful surgery would have taken place on 7 January. Having regard to the pursuer's pleadings, there is no doubt that they give notice of the approach to causation which I have held to have been established by the evidence.

[164] I would add that the issues I have just summarised were also addressed (without objection) in the evidence by many of the witnesses, not least by Mr Wyatt. In his closing submissions, counsel for the pursuer specifically advanced the approach to causation that I have upheld.

[165] For these reasons, I reject the argument that the pursuer is not entitled to succeed on causation on the basis of the approach that I have found to be made out.

[166] The analysis I have adopted thus far is an application of the conventional 'but for' test, the continuing importance and centrality of which were recently reaffirmed in the Inner House in *AW* v *Greater Glasgow Health Board* [2017] CSIH 58, paragraphs [329] to [330].

[167] As I have explained, the defenders argued that because it is impossible to pinpoint exactly when the deceased's AMI first occurred, the pursuer's case on causation had to fail. For the reasons I have already set out, I reject that approach; it seems to me to be unrealistically technical and excessively theoretical. But even if the defenders are right in attaching critical importance to the pursuer's inability to identify precisely when the occlusion first occurred, I consider that it would still be the case that Dr Izzath's negligence had a causative impact on (or made a material contribution towards) the deceased's death by substantially delaying her admission to hospital.

[168] As the Court of Appeal explained in *Bailey v Ministry of Defence* [2009] 1 WLR 1052, in a case where medical science cannot establish the probability that 'but for' an act of

negligence the injury would not have happened but can establish that the contribution of the negligent cause was more than negligible, the 'but for' test is modified, and the claimant will succeed (Waller LJ at para 46). The Judicial Committee of the Privy Council adopted a similar analysis in *Williams v The Bermuda Hospitals Board* [2016] AC 888 where the Board concluded that it was right to infer on the balance of probabilities that the hospital board's negligence materially contributed to a single and indivisible septic process, and therefore materially contributed to the injury to the respondent's heart and lungs. In *Williams* a negligent delay in ordering an immediate CT scan resulted in the respondent being exposed to a materially longer period of ischaemia than would have been the case had there been no negligence. In the present case, Dr Izzath's negligent failure to advise the deceased that she required to be admitted resulted in the deceased's admission to hospital being set back by around 24 hours. If the defenders are correct in saying that there is a conceptual problem for the pursuer in proving 'but for' causation because the starting point of the deceased's AMI cannot be scientifically identified (an argument with which I do not agree), then the position may be equiparated to that which arose in *Williams*. In effect, there would then be two concurrent causes of a single indivisible outcome (ie the deceased's death): (i) the clinical negligence and (ii) the non-negligent cause. Especially where it is not feasible for medical science to disentangle the ischaemia due to the negligent delay from the ischaemia that would have arisen in any event, the 'but for' rule falls to be modified. On the basis of the case law I have cited, the question on that hypothesis would resolve into whether Dr Izzath's negligence caused a material delay in diagnosis and treatment – 'material' in the sense that it made a real (or meaningful or significant) contribution towards the death. In the context of such a serious condition as AMI it is reasonable to conclude that a period of delay in the region of 24 hours made a material contribution to the deceased's death. It

follows that even taking the defenders' approach to causation at its highest, the pursuer would still succeed because on the balance of probabilities the negligence made a material contribution to the outcome.

[169] In summary, I conclude that whichever of these approaches to causation is adopted, the pursuer has proved the necessary causal link between Dr Izzath's negligence and the deceased's death.

Damages

[170] The pursuer advances claims for damages in his capacity as executor-nominate of the deceased under her will (the first conclusion of the summons) and as an individual (the second conclusion).

Transmissible solatium

[171] Under section 2(1) of the Damages (Scotland) Act 2011 ("the 2011 Act"), there is transmitted to the pursuer, as executor-nominate of the deceased, her right to damages for solatium caused by Dr Izzath's negligence.

[172] Damages under this head can only legitimately compensate for the additional pain and suffering the deceased experienced due to the delay in identifying and treating her AMI in the period between 6 and 8 January 2013. It is clear from the evidence that AMI is an inherently painful, unpleasant and distressing condition; it requires major surgery and complex medical intervention. It is inevitable that a patient who has the misfortune to develop AMI will suffer substantial pain, discomfort and inconvenience. In these circumstances, any award for solatium to reflect the additional suffering flowing from Dr Izzath's negligence should, in my view, be modest. It should, so far as this can be done

by an award of damages, be grounded on the hypothesis that the deceased would (absent the negligence) have been in a hospital environment from the evening of 6 January where her pain could have been, at least to some extent, controlled. She would still have had to undergo major surgery and endure the after-effects of that. But the surgery would have been carried out at an earlier stage than it in fact was, and the pursuer's suffering would have been somewhat alleviated.

[173] None of the limited material drawn to my attention by parties on this issue is of any real assistance in quantifying damages in these unusual circumstances. Taking a broad view of matters, I consider that the appropriate award under this head is £2,000. I will allow interest on that sum at 8 per cent per year from 8 January 2013. To the date of decree, this comes to a total of £2,992.44.

The deceased's life expectancy

[174] The first question to address in the context of the pursuer's direct claim for damages is the deceased's life expectancy had she undergone successful surgery for her ischaemic bowel. There was not a great deal of evidence on this. Mr Wyatt suggested that if the deceased had generalised atherosclerosis, her life expectancy would have been between 3 and 5 years; there was no evidence of her having that condition, however. Mr Chalmers considered that the CT scan did not disclose signs of chronic mesenteric disease. Dr Vallance said that given her mild to moderate chronic obstructive pulmonary disease and on the assumption that her hypertension would have been successfully treated by medication, the deceased could have lived for between 5 and 10 years. In his closing submissions, counsel for the defenders proposed that a figure of 5 years should be taken, whereas the pursuer proposed 10 years. Having regard to Dr Vallance's evidence and the

inherent uncertainties and imponderable factors, it seems to me that a reasonable approach would be to adopt the mid-point figure of 7.5 years.

Section 4(3)(b) of the 2011 Act

[175] Section 4(3)(b) of the 2011 Act provides that the damages payable to the relative of a deceased person ("A") should be:

> "(b) such sum, if any, as the court thinks just by way of compensation for all or any of the following –
> (i) distress and anxiety endured by the relative in contemplation of the suffering of A before A's death,
> (ii) grief and sorrow of the relative caused by A's death,
> (iii) the loss of such non-patrimonial benefit as the relative might have been expected to derive from A's society and guidance if A had not died."

[176] In a signed statement, which was agreed to contain his evidence insofar as relevant to *quantum*, the pursuer explained that he and the deceased first met 42 years ago. They were partners and lived together for 20 years before her death. They were both retired from their respective employments. The pursuer described how he and the deceased spent almost all their time together; they were extremely close to one another. They were a contented couple, enjoying the same pursuits and interests. In particular, they enjoyed travelling in Scotland and abroad, eating out, going to the gym, jogging, and attending the theatre.

[177] The pursuer described how he was shocked and became angry following the deceased's death. He considered that she never received justice in Glasgow Royal Infirmary. He still has flashbacks to events in the hospital and nightmares of hearing the deceased screaming in pain. He continues to be troubled and distressed by the fact that the deceased lost her dignity. He misses her companionship and their life together. He can no longer bear to receive Christmas cards. He is lonely. The pursuer has tried to go on holiday

on two occasions but hated it. He paid to come home a week early. He no longer goes to restaurants and hates sitting by himself at meal times. Around 6 months after the deceased's death the pursuer sold the house they used to occupy together.

[178] Taking each of the elements of section 4(3)(b) in turn, it is clear that the pursuer was distressed and anxious over the period between 6 and 8 January 2013. He continues to endure distress and anxiety in contemplation of the deceased's suffering before she died (subparagraph (i)). So far as subparagraph (ii) is concerned, I have no difficulty in accepting that the pursuer has experienced and continues to experience profound grief and sorrow as a result of the deceased's death. She died suddenly; the pursuer had no opportunity to prepare himself for this. He has no family or children to console him. The pursuer misses the deceased greatly and has had substantial difficulty in adjusting to her death. He has had to sell the house they lived in and can no longer enjoy Christmas and going on holiday. Subparagraph (iii) covers matters such as the inability to share holidays, to pursue mutual interests and to go out socially together.

[179] A number of cases were cited to me; they included: *Gallagher* v *SC Cheadle Hume Limited* [2004] CSOH 103, *Bellingham* v *Todd* 2011 SLT 1124, *McGhee* v *RJK Building Services Limited* 2013 SLT 428 and *Manson and others* v *Henry Robb Limited* 2017 SLT 1173. As well as these judicial awards, reference was made to some jury awards. Having regard to the guidance provided by these cases, to the deceased's life expectancy of 7.5 years, and to the pursuer's evidence, I consider that an appropriate figure for damages under section 4(3)(b) of the 2011 Act is £75,000. I shall apportion £60,000 of that sum to the past and allow interest at the rate of 4 per cent per year from 8 January 2013 until the date of decree.

Loss of support

[180] On the basis of a life expectancy of 7.5 years for the deceased, damages for loss of support in terms of section 4(3)(a) of the 2011 Act were agreed in the sum of £65,620, exclusive of interest. I shall allow interest on £55,000 at 4 per cent per annum from 8 January 2013 until the date of decree.

Personal services under section 9 of the Administration of Justice Act 1982

[181] On the basis of his signed statement, the pursuer's evidence was that the deceased did all the ironing and the dusting; the parties shared the cooking. It seems reasonable to proceed on the footing that the deceased would have prepared around half of the parties' evening meals and that she would have spent several hours a week ironing and dusting. On that basis, I shall allow 3 hours per week at £7.00 per hour for the personal services rendered by the deceased to the pursuer at the time of her death. This brings out a multiplicand of £1,092 per year. Since the parties had no children or other family, it would be inappropriate to allow a discount to take account of increasing age. Table E of the Ogden tables gives a multiplier of 0.91 years for the factor by which pre-trial damages should be multiplied in the case of a 75-year-old deceased female with a 6 year wait for proof. It seems appropriate to use that as the multiplier for loss of the deceased's services to date. The calculation is: 6.05 years (from death to date of decree) x 0.91 x £1,092 = £6,012. I shall allow interest on that at 4 per cent per annum from 8 January 2013 until the date of decree.

[182] Taking the life expectancy of the deceased to have been 7.5 years, future loss of services should be calculated over 1.45 years. Using Ogden table 28, I shall take as the multiplier applicable to the term of the future loss the figure of 1.51; that is the midpoint between 1 and 2 years in the table for a discount rate of -0.75 per cent. The post-trial

multiplier from table F of the Ogden tables (again adopting the case of a 75 year old female with a 6 year wait for trial) is 0.81. Accordingly, the calculation is: 1.51 x 0.81 x £1,092 = £1,335.62 for future loss of services.

Funeral expenses

[183] These are agreed in the sum of £4,436.85. I shall allow interest at 8 per cent per annum from the date of payment of the bulk of the expenses, namely 25 January 2013, to the date of decree.

Conclusion

[184] I have sustained the pursuer's first plea-in-law and repelled the defenders' pleas. I have awarded damages of £2,992.44 in terms of the first conclusion of the summons.

[185] In terms of the second conclusion of the summons, the following table sets out the damages I have awarded:

Damages under section 4(3)(b)	£75,000
Interest on £60,000 thereof	£14,886.58
Loss of support	£65,620
Interest on £55,000 thereof	£13,646.03
Past loss of services	£6,012
Interest thereon	£1,491.63
Future loss of services	£1,335.62
Funeral expenses	£4,436.85
Interest thereon	£2,185.12
Total	£184,613.83

[186] I have reserved all questions of expenses.