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IN THE CORONERS COURT FOR NORTHERN IRELAND

IN THE MATTER OF AN INQUEST INTO THE DEATH OF BRIAN MAGILL

Before: Coroner Mr Patrick McGurgan

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[1] The Deceased, Brian Magill, born on the 5 June 1933, of Corrstown Park, Hopefield Road, Portrush, died on the 30 December 1999.

[2] By way of background, on 3 November 2014 the Attorney General for Northern Ireland, using his power under section 14(1) of the Coroners Act (Northern Ireland) 1959, directed that an inquest be held into the death of the Deceased. This direction to hold an inquest followed a civil action before the High Court in Northern Ireland brought by the widow of the Deceased lasting some forty five days and resulting in a 170 page judgment delivered by the then Honourable Mr Justice Gillen on 28 January 2010 (*Magill v Royal Group of Hospitals and Anor* (2010) NIQB 10).

[3] The Attorney General directed that the Coroner should investigate a number of issues which he believed had not been effectively dealt with or answered at the civil hearing. I will deal with these issues throughout these findings.

[4] In addition to hearing from a number of witnesses giving oral evidence at the inquest, I ruled on 22 June 2016 that the transcripts of evidence from the civil hearing, the judgment of the Learned High Court Judge and the decision of the Court of Appeal all be admitted into evidence for the purposes of the inquest. I also had available to me and have considered as part of the evidence, expert reports from Professor Van der Valk, Pathologist; Dr Rauws, Gastroenterologist; and Professor Carr-Locke, Director of Endoscopy. These experts had originally been retained by the widow of the Deceased for the purposes of the civil hearing and they also gave evidence at that hearing. There was also an Interventional Radiologist, Professor Lameris, relied on by the Deceased's wife. Professor Lameris did not provide a report but gave evidence at the civil hearing which I have considered.

[5] In addition, I have considered expert reports from Mr Rowan Parks, Consultant Surgeon; Dr H O'Connor, Consultant Gastroenterologist; Mr Moorehead, Consultant Surgeon; Dr McEniff, Consultant Interventional Radiologist; Ms Christine Kydd, Nursing Consultant; Professor Pat Price, Professor of Radiation Oncology; and Mrs Eby, Nursing Consultant. These reports were originally prepared on behalf of the various defendants for the civil hearing.

[6] The Coroner also engaged the following experts: Dr F.A. O'Connor, Consultant Gastroenterologist; Professor Burt, Head of Clinical Services Department of Cellular Pathology; and Professor Nicholls, Consultant Surgeon.

History

[7] On 7 December 1999, the Deceased's wife suggested that he, the Deceased, attend Portrush Medical Centre for a blood test as she was concerned about an itch on his back and chest areas which had developed over several days. The Deceased attended the medical centre and informed his wife that the nurse whom he had seen thought that he may have jaundice. As a result of this, the Deceased made an appointment to see Professor Roy Spence at the Ulster Independent Clinic on 9 December 1999.

[8] On Friday 10 December 1999, the Deceased was admitted to the Ulster Independent Clinic. An ultrasound scan performed by radiologist Dr Crothers and a CT scan showed marked intra-hepatic duct dilatation with a dilated common hepatic duct measuring 1.1cm but no obvious abnormality in the head of the pancreas.

[9] As a result, the Deceased was referred to Dr John Collins, Consultant Gastroenterologist at the Royal Victoria Hospital for an Endoscopic Retrograde Cholangiopancreatography (ERCP) examination. Dr Collins examined the Deceased on the evening of 10 December 1999 and agreed with Professor Spence's earlier findings that the Deceased was suffering from obstructive jaundice. Dr Collins agreed that an ERCP examination was necessary in order to define the cause of the obstructive jaundice.

[10] The Deceased was admitted to the Royal Victoria Hospital on 14 December 1999 in order to undergo the ERCP examination. The ERCP, performed by Dr Collins, demonstrated a complex, narrow stricture of the common hepatic duct, involving both the right and left hepatic ducts. Dr Collins felt that the appearances were suggestive of a cholangiocarcinoma. Dr Collins was able to place two plastic stents into the left hepatic duct only. After this procedure, the Deceased returned to the Ulster Independent Clinic that evening. Following the ERCP, Professor Spence consulted Mr Tom Diamond, Consultant Hepato-biliary Surgeon, for his assessment. Mr Diamond considered that the complex stricture was irresectable and he suggested the best palliation would be drainage of both the right and left hepatic ducts by way of further stenting performed by a Radiologist.

[11] Professor Spence referred the Deceased to Dr P K Ellis, Consultant Radiologist at the Royal Victoria Hospital, who gave evidence to the inquest. When giving evidence, Dr Ellis explained the various images that had been taken throughout the Deceased's inpatient stay in hospital. Dr Ellis demonstrated to the inquest that Dr Collins had managed to obtain some drainage following the ERCP procedure. Dr Ellis described the Deceased as having painless obstructive jaundice which he described as being "*a harbinger of doom*". Dr Ellis visually demonstrated how he was able to measure the stricture at being approximately 1cm on the ERCP and that while he could not see the tumour he explained that there was a clear stricture involving the bifurcation of the common hepatic duct and involving the origins of both the right and left hepatic ducts. He suspected from his clinical experience that this was a cholangiocarcinoma and he was of the opinion that one could not develop a tumour in a worse place and that given the invasive nature of a cholangiocarcinoma, it was a devastating but not a difficult diagnosis.

[12] I have considered the evidence of all of the medical experts who gave evidence at the civil hearing and at the inquest and I find on the balance of probabilities that the Deceased had an inoperable cholangiocarcinoma at the stage of the ERCP.

[13] I find that the decision to perform an ERCP was both timely and appropriate. From 14 to 17 December, I find that the Deceased did not suffer any complications post ERCP save for a temperature spike and nausea and abdominal crampy pain on 15 December, the latter of which would be in keeping with the after effects of an ERCP. In particular, I find that there was no perforation of the bile ducts at that time.

[14] Dr Ellis explained that on 15 December 1999, Dr Collins contacted him in order to discuss the Deceased. Dr Ellis described to the inquest how he performed the Percutaneous Transhepatic Cholangiography (PTC) procedure in the Royal Victoria Hospital. The Deceased underwent the procedure on 17 December after Dr Ellis had explained in some detail to the Deceased the potential complications of the procedure. During the course of the PTC the right posterior sectoral duct was accessed using a 20 gauge needle and Dr Ellis was able to confirm the previous findings of Dr Collins, namely a very high Klatskin tumour, involving the bifurcation of the ducts and extending into the secondary ducts. The tumour was extremely rigid but eventually, after some 1.5 hours, a wire was persuaded through it and drainage was obtained on the right side via the placement of a metal stent.

[15] Dr Ellis then proceeded to gain access to the left hepatic duct and again he found the tumour to be very firm and he was unable to pass a wire through it to get a stent across the lesion. However, he placed an external drain on the left side to allow decompression of the ducts on this side and to guard against infection.

[16] Following discussions with Professor Spence and Dr Collins, Dr Ellis performed a further PTC on 20 December 1999. On this occasion, due to the success of the drainage from the stent placed on 17 December, Dr Ellis was able to place a

further metal stent into the previously placed stent in a "T" configuration. After both PTC's the Deceased had metal stents inserted into both the right and left hepatic ducts. Dr Ellis explained that it is impossible to drain all of the ducts completely but that he was satisfied that he had achieved a good result. To support this view, Dr Ellis explained the Deceased's bilirubin levels and the fact that after the insertion of the two metal stents the levels began to initially stabilise and then to fall.

[17] Dr Ellis also explained that during the PTC procedure he pushed one of the plastic stents which had initially been placed by Dr Collins down the common bile duct. He further indicated that this would not present any issue for the Deceased and that it and possibly the second plastic stent had been voided by the Deceased at some time preceding his death. Dr Ellis demonstrated to the inquest by way of reference to scans, the two metal stents in situ and their performance.

[18] On the evening of Tuesday 21 December 1999 the Deceased developed a raised temperature and was treated with antibiotics. On 22 December the Deceased complained of crampy abdominal pain and his antibiotics were modified.

[19] Dr Ellis was contacted by Dr Collins on 23 December 1999 informing him that the Deceased had developed the clinical signs of septicaemia "*in the early hours of the morning*". In his evidence to the inquest Dr Ellis explained that this had been his first ever statement for a Coroner and that he believed that he worded his statement poorly. He felt that it was more likely that Dr Collins contacted him in or around 11am with this information and he arranged a CT scan as a matter of urgency, namely for approximately 1pm.

[20] The CT scan on 23 December noted good decompression of the right sided ducts and partial decompression of the left-sided ducts. The bilateral metallic biliary stents were noted. Two plastic stents were seen in the lower bile duct. Dr Ellis indicated that there was no evidence of haematoma, no free fluid identified around the liver or in the peritoneal cavity which meant that there had been no perforation of the bile ducts. Dr Ellis explained that the CT scan revealed no obvious cause of the septicaemia.

[21] Dr Ellis was adamant that the deceased had not sustained any bile duct injury on any of the procedures and that there was no bile in the abdomen. I will discuss the use of the terms '*bile*', '*bile stained fluid*' and '*free fluid*' later in these findings in relation to notes and records.

[22] Dr Ellis stated that there was no bile leak demonstrated on the ERCP, none on either of the two PTC's on 17 and 20 December and virtually no fluid on the CT scan of 23 December some 9 days post ERCP. In addition Dr Ellis on performing the first PTC looked at the bile and confirmed that there was no evidence of sepsis. As a result he was able to proceed with inserting a stent as opposed to a drain at that time.

[23] On Friday 24 December 1999, the Deceased's urinary output had not risen and Dr Collins contacted Dr Peter McNamee, Consultant Nephrologist. The Deceased was subsequently transferred to the Renal Unit at Belfast City Hospital.

[24] In his statement to the Inquest admitted under Rule 17, Dr K.A. George, Consultant Anaesthetist, now deceased, indicated that the Deceased became more drowsy whilst in the Belfast City Hospital and more confused over the following few days. At this stage the Deceased was on dialysis, antibiotic treatment and full supportive therapy but unfortunately his condition continued to deteriorate.

[25] On 29 December the Deceased became hypoxic, hypotensive and tachycardic. He was deemed unfit by Dr George for anaesthesia or surgery. As a result the Deceased was given palliative care and he passed away on the 30 December 1999 with life being pronounced extinct at the Belfast City Hospital at 3.40am.

The Voiding of a Metal Stent

[26] In her evidence to the inquest, the widow of the Deceased, described how on 27 December 1999, she was at the Deceased's bedside whenever she witnessed the Deceased void a metal stent. She further explained that a nurse, Sister Kathleen O'Kane, entered the room and placed the said metal stent in a specimen bottle. Sister O'Kane has since passed away but in her evidence to the High Court during the civil hearing, she denied that this ever happened. The widow of the Deceased stated to the inquest that the late Sister O'Kane was wrong in her evidence to the High Court on this point.

[27] Dr Ellis, in his evidence demonstrated to the inquest by reference to various scans the two metal stents in situ and he further explained that it would be virtually impossible for the metal stents because of interlock to move let alone be voided. He advised the inquest that both metal stents were in position on the CT scans of 23 and 28 December.

[28] Dr Ellis did accept that it would be perfectly feasible for either one or both of the two plastic stents that Dr Collins had inserted at the ERCP to be voided.

[29] In his evidence to the inquest, Professor Jack Crane, former State Pathologist for Northern Ireland, explained that at autopsy he removed two metal stents and photographed them. They were found in situ where Dr Ellis had originally placed them.

[30] I find that the Deceased did not void a metal stent at any time and that Sister O'Kane gave a truthful account on this issue.

The Disappearance of Two Plastic Stents

[31] During the course of the ERCP procedure, Dr Collins advised that he had placed two plastic stents in the biliary system. These plastic stents were inserted in order to offer some relief to the Deceased by way of drainage of the bile ducts. However, I find that they were not meant to be a permanent drainage solution for the Deceased. Dr Ellis explained at inquest that whenever he performed the PTC procedure he pushed one of the plastic stents down the common bile duct with his guide wire. Dr Ellis opined that the ERCP or PTC did not cause any perforations and that this was evidenced on the scans taken which he indicated clearly showed contrast in the ducts but not in the abdominal cavity or the peritoneal cavity. There was no leakage of dye as shown in the image on 20 December. The x-ray on 25 December 1999 showed the plastic stent on the part of the metal stents. On 23 and 28 December 1999 CT scans confirmed the presence of the two metal stents – one going out to the right and one going out to the left as well as a plastic stent in the biliary tract. In a letter to the Coroner dated 25 June 2004 Dr F A O'Connor, an expert instructed on behalf of the Coroner, stated as follows:

> "*Thus it would appear that up to 28/12/99 there was still 1 plastic stent in situ along with the 2 metal stents in the biliary tree. The other plastic stent had been evacuated by Mr Magill. The second plastic stent, which was not found at post-mortem could also have passed spontaneously in the interim or perhaps it may have become encased in tumour and been difficult to discover at autopsy. The migration of plastic stents is not an unusual occurrence. The vast majority of such migrations do not cause any significant problems and the stents are usually evacuated from the bowel along with motion. This may or may not be noticed by the patient. It is highly unusual for a migrating stent to cause any significant problem*."

[32] Whilst I accept that perforation by plastic stents is a recognised complication following an ERCP I find on the balance of probabilities that there was no perforation caused by a migrating plastic stent.

The Diagnosis of an Inoperable Cholangiocarcinoma Which Was Not Detectable By the Naked Eye Post Mortem

[33] In his evidence to the Inquest, Professor Crane indicated that at autopsy he could not see signs of a cholangiocarcinoma to the naked eye. He said that what he was seeing was "*the hepatic duct in this area, at the root of the liver, was thickened and had a rather gritty texture*" and whilst that was a clue that there might have been something going on, it wasn't possible for him to positively say that it was cancer. Professor Crane advised that a dissection was carried out of the liver proximally from the extrahepatic biliary system towards the hepatic ducts. He reported that two metal stents were in place, one having been partially inserted into the other. On the dissection, Professor Crane noted:

> *"…in one of the sections taken from the area of the hepatic ducts where the stents had been inserted, there was infiltration of the tissue by an adenocarcinoma which was showing a marked desmoplastic reaction. Also some mucin-laden signet ring cells were identified. The appearances were those of an infiltrating cholangiocarcinoma…."*

[34] Professor Crane was in no doubt that the Deceased had a cholangiocarcinoma. This diagnosis was supported by Professor Burt who relied upon the histological samples from the liver and biliary system. It was also agreed by the other relevant experts in the matter.

[35] In his evidence, Dr Ellis stated that he had no doubt that the Deceased had a cholangiocarcinoma and he described this as an invasive cancer which grew along the outer walls of the duct and not a mass. As a result of the invasive nature of the tumour it is not visible to the naked eye. Dr Ellis told the inquest that it was not remotely a surprise that the tumour was not visible to Professor Crane's naked eye.

[36] As stated earlier, in his oral evidence, Dr Ellis demonstrated how he came to measure the carcinoma. Using the diameter of an ERCP scope as a reference point and identifying the nearest point to where the duct is normal and thereafter there is the involvement of the tumour on the left side he could obtain a measurement. Dr Ellis accepted that the measurement was not exact but he was confident that the area affected by the tumour on the left side was approximately 1cm. Again Dr Ellis was at pains to point out that he could not see the tumour but simply the effects of the tumour by observing the areas where contrast could not be evident due to blockage.

[37] Whilst I note that Dr Rauws, a Gastroenterologist, was of the opinion that only a shadow was evident on the ERCP I preferred the evidence of Dr Ellis and I find that the Deceased had a cholangiocarcinoma that extended approximately 1cm into the left duct.

[38] I find that the tumour was not visible to Dr Ellis or Dr Collins but its effects were radiologically visible and this explains entirely why Professor Crane had to examine the tissue microscopically and why it was not visible to him on naked eye examination at post-mortem.

Inadequate Drainage

[39] In his evidence to the inquest Dr Ellis stated that it is impossible to gain 100% drainage of the liver following the insertion of stents in the presence of a Klatskin tumour. The aim of the drainage procedure is to try and obtain adequate drainage in order to make the patient or in this case, the Deceased, as comfortable as possible. Dr Ellis was able to demonstrate to the inquest by reference to the cholangiograms of 17 December and 20 December that some drainage had been achieved. Nursing notes on 19 December recorded 200mls drainage in the left external drain.

[40] Dr Carr-Locke, instructed on behalf of the widow of the Deceased, in his evidence at the civil hearing stated in relation to the drainage that the "*right side has been successful…and the left side is probably successful but not completely so*."

[41] In addition, a CT scan taken on 23 December 1999 showed that the right system had decompressed and that there was some albeit less decompression on the left side. This scan illustrated therefore that the drainage procedure was at least partially successful.

The Attendance of Dr Collins and Dr Sloan at various stages of the Post Mortem

[42] On the 30 December 1999 the widow had asked a Dr Michael McCormick to record in the Deceased's notes her request that:

> "*for the patient's wife has stated that in the event of a post-mortem, that this should take place in an independent institution, separate from both the RVH and the Belfast City Hospital. Her reasons for this are that she is worried about the same said institutions having access to or influencing the post-mortem findings*."

[43] In a letter dated 18 January 2000 from Dr Collins to Professor Crane, Dr Collins thanks Professor Crane for permitting him to attend "*the section of the hepato-biliary system on Mr Magill the other day*". Dr Collins goes on to write:

> "*I was talking to Roy Spence this morning he would be very keen to know your final comments on the case. I spoke casually to Jimmy Sloan in the corridor last week and he was able to let me know that you did find a malignant process there. Roy Spence and I are particularly keen to know whether this seemed to be progressive into the smaller proximal bile ducts which would, of course, leave the patient open to more decreased delayed drainage and probable risk of sepsis*".

[44] In his evidence to the Inquest, Dr Sloan, advised that he had been requested by Professor Crane to review a tissue slide in order to provide his opinion on the histology. Both Professor Crane and Dr Sloan stated that he, Dr Sloan, did not attend the post-mortem. Rather he was asked by Professor Crane, as he often was, for his opinion on a tissue slide. Dr Sloan stated that he was neither aware of the history of the matter nor of the Deceased's details.

[45] Dr Sloan was of the opinion that this was a cholangiocarcinoma.

[46] Professor Crane explained that he had been the State Pathologist for some thirty years and that he never before nor since this death had his independence

questioned. He explained that he is totally independent of the hospitals and that he performs a post mortem at the request of the Coroner as was the case here. He stated that he sought Dr Sloan's opinion at the time as he, Dr Sloan, was the leading authority in these types of matters at the time.

[47] Professor Crane confirmed that at the time of his request to Dr Sloan, he did not inform Dr Sloan of any of the details pertaining to the Deceased. Professor Crane also advised that he often seeks opinions from others if he feels the need to do so. I find that Dr Sloan did not attend the post-mortem and that he was unaware of any of the details pertaining to the Deceased at that time. I further find that it was and is entirely appropriate for the State Pathologist to seek opinions from others when he feels the need to do so. During his evidence, Professor Crane confirmed that Dr Collins was not present at the post mortem. He was present at the dissection of the biliary tract and the liver. I find that his presence during that dissection did not compromise Professor Crane from providing an impartial opinion.

[48] I find that Professor Crane performed an independent post mortem.

Nursing and Medical Notes

[49] During the inquest there was considerable discussion around the terminology "bile stained fluid" vis a vis "free fluid" and the entries pertaining to this particular aspect in the nursing and medical notes. In particular, the note of Dr Fogarty, who at the time was a Senior Registrar in Nephrology at Belfast City Hospital, on 29 December 1999 recorded that fluid aspirated from the abdominal cavity on the 28 December 1999 during a CT scan procedure carried out by Dr Sheil '*demonstrated as bile*'. During evidence at the civil hearing Dr Fogarty accepted that he had no evidence to suggest that it had been bile and if he was writing the same note again he told the High Court he would have written "*bile stained fluid*".

[50] Dr Ellis during evidence to the inquest explained that the fluid was most definitely not bile as the test results on the fluid in the laboratory to which it was sent proved so and that it is not possible to confirm fluid is bile without the laboratory confirming so. Dr Ellis explained that Dr Fogarty had no experience with biliary disease and that the laboratory results should be relied upon and therefore the entries in the notes relating to this particular matter on 28/29 December are incorrect.

[51] It then appears that this misconception was recorded in the Deceased's nursing notes. In his judgment in relation to Sister O'Kane's use of the phrase "*free flowing bile*" the then Honourable Mr Justice Gillen stated:

> "*Dr Shiel was the expert and she certainly did not describe this as free flowing bile. I felt this was a classic example of a nurse, not being well versed in the essential distinction between bile and bile stained material, drawing a wrong*

conclusion. Dr Shiel's note, the genesis of the whole matter, was an unequivocal reference to bile stained fluid and not bile."

[52] In relation to the notes made on early 23 December 1999, I find that they were deficient in detail. "*No acute problems. Slept well*" recorded by Nurse Crossey does not sit with the fact that the Deceased received treatment and was prescribed painkillers. I will deal with these notes in more detail later.

[53] I bear in mind that this death occurred in 1999 and whilst I accept and acknowledge that there were deficiencies in parts of the notes and records to include inaccurate descriptions this aspect of the inquest serves to highlight the absolute importance of accurate recording, I find that the errors did not have an effect on the final outcome. In addition, I was reassured by the evidence of Brenda Creaney, Director of Nursing in the Belfast Health and Social Care Trust, when she outlined the improvements that have been made and continue to be made as regards the standards of record keeping.

Medical Care in the Early Hours of 23 December 1999

[54] Mr Alwyn Trimble gave evidence to the Inquest. He had also given evidence in the High Court case and has subsequently provided new testimony in the Court of Appeal at the request of Mrs Magill in her attempt to appeal the judgment of the then Honourable Mr Justice Gillen.

[55] Mr Trimble stated that he was an inpatient on Ward 10 of the Royal Victoria Hospital from 17 December 1999 and that he began to form a friendship with the Deceased and his wife. According to Mr Trimble, the Deceased's skin was a yellow kind of colour and he complained often of irritation to the skin. The Deceased's condition remained much the same and his eating habits became lesser. Mr Trimble told the inquest that in the early hours of 23 December 1999 at around 1.30am – 2am the Deceased awoke from his sleep and appeared to be in a lot of pain and discomfort. The Deceased appeared to be shivering and shaking. His yellowish appearance became worse. Mr Trimble went over to the Deceased and according to Mr Trimble the Deceased stated that he was in awful pain. Mr Trimble informed the Inquest and the High Court and put it in his statement made 2 July 2002 that he then went to the nurses' station. There were three nurses on duty and he informed them all that the Deceased was unwell and in a lot of pain. Mr Trimble then witnessed an auxiliary nurse attend to the Deceased and tell him to be quiet "*you'll waken all the patients up*". She placed a blanket over the Deceased and left the ward. As the night continued the Deceased became worse in Mr Trimble's opinion and he began to cry out in pain. Mr Trimble again went to the Deceased and queried if he wanted his wife contacted but the Deceased did not. The auxiliary nurse re-attended and began to rub the deceased's legs, placed a blanket over him and left.

[56] Mr Trimble has subsequently given evidence by way of affidavit dated 27 March 2018 and then orally before the Court of Appeal on 10 June 2019. In that hearing Mr Trimble stated that whenever he first approached the nurse's station two nurses were fast asleep and that he had overlooked this detail in his witness statement, in his evidence to the High Court and the inquest. This evidence was rejected by the Court of Appeal.

[57] Whilst I accept that the Deceased was in pain in the early hours of 23 December 1999 I am not persuaded that it was to the degree suggested by Mr Trimble. I do not find that any nurses were asleep as described by Mr Trimble to the Court of Appeal.

[58] In the civil judgment, the then Honourable Mr Justice Gillen stated:

> "*I consider the notes made by Nurse Crossey on that occasion to have been inadequate. No account is given of the reason why the pain killers were given, the site of the pain or the reasons why the JHO was called. These events simply are not reflected in a note recording, "No acute problems. Slept well*."

I have reviewed all of the Deceased's medical notes and records, together with the civil trial transcripts of the evidence and judgment and I find that the notes and records were inadequate in this regard.

[59] The Learned Judge went on to state –

> "*That conclusion, however, does not determine this man was suffering from septicaemia at that time. The temperature recorded at 7.00 am of 36 degrees, which I have no reason to doubt is accurate, is a strong contraindication. It seems to be fairly common case on the part of both Mr Trimble and the nurses that he did sleep for some hours after the nurse and the JHO had seen him. The practised eye of an auxiliary nurse and a junior house officer had been placed on this man and I am satisfied that the very obvious signs of septicaemia during those early morning hours would not have been missed. The deceased had been receiving zydol the previous day and complaining of crampy pains and constipation. It looks as if the JHO simply continued that treatment of zydol and it did result seemingly in the deceased going back to sleep in so far as Mr Trimble was not again disturbed that night. At 8.00 am the medication record notes that the deceased was given his normal medication orally*."

[60] In his evidence to the High Court, admitted under Rule 17, Dr McNamee, Consultant Nephrologist at Belfast City Hospital, stated that in relation to the symptoms being displayed by the Deceased in the early hours of 23 December 1999:

> "*I don't think it's a description of someone in septic shock. I don't know exactly what was wrong with Mr Magill at this time. Crampy abdominal pain and legs [sic] pain I would not regard as typical symptoms of someone in bacteraemic shock.*" Dr McNamee further explained that "*Someone with bacteraemic shock usually collapses and they are very hypotensive and extremely unwell*."

[61] In fact Dr McNamee goes on to state that he looked at the blood pressure record for that morning of 23 December and stated:

> "*I would not have thought that things were very urgent at 9.30. Dr Lee's note indicates that Mr Magill was unwell, his condition had deteriorated. She noted that his blood pressure was lower than previously but it was not critically low*."

[62] Classically, if the Deceased was in septic shock, the blood pressure would be less than 60 systolic. Dr McNamee dated the time of the Deceased falling into septic shock at the time of the reading at 11.30 am when the bp was 72/50 and the Deceased was definitely hypotensive at that stage. Dr McNamee recorded that in his view the blood pressure had fallen very abruptly and that this was typical of the condition of septic shock. Dr McNamee advised that in his experience septic shock can occur on a ward within seconds or minutes.

[63] Dr McNamee was of the opinion that the Deceased was not in septic shock at 9.30am on 23 December. I find that this assessment was correct.

[64] It was Dr McNamee's view that there was not an emergency until 11.30am when the Deceased became critically ill. At that stage the appropriate steps were taken namely that he was given a saline drip and gelofusine. In Dr McNamee's opinion the two hours between 9.30am to 11.30am would not have had any effect in this case and certainly was not critical in the Deceased's deteriorating condition. I agree with this assessment.

Deterioration of the Deceased

[65] According to Dr Ellis as a result of the ERCP, Dr Collins had to perform a sphincterotomy. This involved a small internal cut at the sphincter of Oddi, which is at the junction of the bile duct and the duodenum, in order to allow for equipment to be passed in. This in turn left the bile duct a little bit more liable to ingress of content from the bowel. In addition, Dr Ellis had stented the bile duct thus there is access to the bile ducts via the stent. Therefore, if bowel contents reflux into the bile duct and

up into the ducts they can potentially cause infection and in fact the bacteria that caused the infection here was e-coli which is classically found in the bowel.

[66] Although Professor Van der Valk opines that the Deceased suffered a perforation of the bile duct following the ERCP, having reviewed the transcripts, expert reports and having heard oral evidence I find that the Deceased did not suffer a perforation of either his bile duct or his bowel following the ERCP and PTC procedures.

[67] Dr Rauws, Clinical Gastroenterologist, was retained on behalf of the widow of the Deceased for the purposes of the civil action. He was of the opinion that "*there is a high probability that the source of Mr Magill's sepsis was infected pancreatic necrosis and that the most likely cause of his acute pancreatitis was his ERCP and sphincterotomy*."

[68] Whilst I acknowledge that pancreatitis is a recognised complication of ERCP, Dr O'Connor, retained on behalf of the Coroner explained that such a complication would usually present within a few hours. More importantly I find that the amylase would be grossly elevated with severe pancreatitis but it was normal on 17 December 1999.

[69] Although Dr Rauws was of the opinion that pancreatitis was present on the CT scan on 23 December, Dr Ellis, Dr O'Connor and a Dr Brendan Devlin all of whom reviewed the scan could not see any evidence of pancreatitis. I am satisfied that there were no signs or symptoms of pancreatitis post ERCP or PTC or at all until late in the Deceased's condition.

[70] I find that death was due to:

I(a) Renal failure and Sepsis following Percutaneous Transhepatic Insertion of Biliary Stents

due to

(b) Cholangiocarcinoma