INQUIRY UNDER THE FATAL ACCIDENTS AND INQUIRIES (SCOTLAND) ACT INTO THE SUDDEN DEATH OF ROBERT McLEAN

SHERIFFDOM OF TAYSIDE CENTRAL AND FIFE

Determination by Andrew MacInnes Cubie, Solicitor Advocate,

Sheriff of the Sheriffdom of Tayside Central and Fife at Stirling

of an inquiry held at

Stirling on 18th, 19th, 20th and 22nd December 2006

into the death of Robert McLean,

Stirling, the 24th day of January 2007.

The Sheriff, having considered all of the evidence, determines:-

1. In terms of Section 6(1)(a) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 ("the Act") that Robert McLean, born 21st August 1946, died on 16th January 2005 at 07:20 hours at Stirling Royal Infirmary .

2. In terms of section 6(1) (b) of the act, the cause of death was I (a) Septicemia and Multi Organ Failure due to or as a result of (b) Persistent Surgical wound infection due to or as a result of (c) Elective Left Femero-popliteal bypass and amputation; due to or as a result of (d) Aortic and peripheral atherosclerosis

3. In terms of section 6(1) (c) of the Act there was no reasonable precaution, in the particular circumstances of this case, whereby the death may have been avoided.

4. In terms of section 6 (1) (d) of the Act there were no defects in the system or systems of working which contributed to the death

5. In terms of section 6 (1) (e) of the Act the following facts are relevant to the circumstances of the death:-

(i) that the decision to operate on the 17th November 2004, whereby there was an attempt to re-vascularise the deceased's left leg was an error of judgment by Dr Tosenovsky;

(ii) that the operation should not have been attempted because of a number of factors, including the facts

(a) that the leg had been subject to three previous surgical procedures since the 21st September 2004,

(b) that there were consequently unhealed wounds,

(c) that the number of operations had caused a reduction in resistance to such infection in the deceased,

(d) that there was existing infection and a high risk of further infection,

(e) that there was a high risk of bleeding and infection;

(f) that there is a law of diminishing returns in relation to vascular surgery,

(g) and that there was an absence of any compelling reason such as coldness or sever pain in the leg, gangrene, or ulceration, to necessitate such surgical intervention.

(iii) that if there had not been an attempt to re-vascularise on the 17th November 2004, on a balance of probabilities Mr Mclean would have survived, albeit with the likelihood of amputation.

Parties Represented at the Inquiry

[1] Evidence was presented on behalf of the Procurator Fiscal by Mr McMahon. Mr Mundy, Advocate appeared for the deceased's family, and Mr Fitzpatrick Advocate for the Forth Valley Health Board. I acknowledge my debt to all parties for their assistance in the preparation of and lodging of a joint minute of admissions in relation to formal aspects of the enquiry.

[2] I also take this opportunity to express my sympathy to Mr Mclean's family on his sad death

Legal Framework

[3] The purpose of the Inquiry in terms of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976 is for the Sheriff to make a determination setting out the following circumstances of the death, so far as they have been established to his satisfaction-

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

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

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

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

(e) any other facts which are relevant to the circumstances of the death (all in terms of Section 6(1) of the Act)

[4] The Court proceeds on the basis of evidence placed before it and although described as an Inquiry, the Sheriff's powers generally do not go beyond making a determination in relation to the circumstances established to his satisfaction by evidence following upon investigation by the Procurator Fiscal and any other party if so advised.

[5] This inquiry is not the proper forum for determination of civil liability or of negligence and any findings in any such inquiry should avoid connotations of negligence (See Black -v- Scott 1990 SLT 612 and Dekker 2000 SCLR 1087).

The witnesses

[6] I heard from the following witnesses in this order, although Sir Peter Bell's evidence was interposed in the evidence led by the crown.

1. Mrs. Barbara Duffin (one of the deceased's daughters)

2. Mr Richard Holdsworth, (consultant vascular surgeon, Stirling Royal Infirmary)

3. Mr Roger Baird, (Past President of the Vascular Society of Great Britain and Ireland, consultant vascular surgeon, Bristol Royal Infirmary.)

4. Sir Peter Bell, (Emeritus Professor of Surgery, University of Leicester) Hospital NHS Trust

5. Mr Simon Fraser, (consultant vascular surgeon, Edinburgh Royal Infirmary).

[7] In addition there was a joint minute lodged and a CD-Rom presentation by Mr Holdsworth which very helpfully explained both the general aspects of vascular surgery and some of the particular procedures carried out in relation to the deceased

Conclusions from the evidence

Robert McLean

[8] Mr McLean was 58 at the time of this death. He was described by Mrs. Duffin as a loving father, grandfather and great-grandfather. He was in touch with his family every day and was helpful and approachable.

[9] Although Mr McLean was described by his family as having had no real health problem, it was clear from the evidence and the Productions that he had suffered from a number of health problems, in particular ischemic heart disease, cirrhosis, and previous transient ischemic attacks. He was previously an alcoholic but had abstained from alcohol for some time. He smoked, although the medical records reflected that he smoked 10-15 cigarettes per day, having previously been a much heavier smoker. These contributed to his atherosclerosis. In addition he suffered from a number of minor ailments. He was initially referred to Mr Holdsworth, the Vascular Surgeon at Stirling Royal Infirmary as a result of intermittent claudication. Although both legs were affected, Mr Holdsworth concluded that his legs should be

operated on at separate times and in April 2004 Mr Mclean underwent an arterial bypass by way of a femoro-popliteal by-pass which succeeded.

[10] He continued to suffer intermittent claudication on his left leg and was admitted to Stirling Royal Infirmary on *21 September 2004* for a femoro-popliteal by-pass on his left leg. I was satisfied that had the matter come to a choice, Mr Mclean would have chosen to have undergone an amputation rather than risk a further by pass attempt, if that by pass attempt had carried risks of infection.

Admission history

[11] *19th April 2004*; Mr Mclean had a right Femero-popliteal reversed vein bypass which was successful.

20th September 2004; Mr Mclean was admitted to Stirling Royal infirmary for a left Femero-popliteal bypass due to intermittent claudication.

21st September 2004; Dr Turco, a locum consultant vascular surgeon who was of Italian nationality, performed the left femero-popliteal bypass using Dacron, a prosthetic graft material. The notes did not disclose a reason why autogenous vein was not used.

24th September 2004; after reasonable recovery Mr Mclean was discharged home.

1st October 2004; Mr Mclean was admitted as an emergency through casualty. He was in pain and the wound was discharging a yellow clear fluid.

2nd October 2004; a course of antibiotics was begun.

3rd October 2004; Mr Holdsworth carried out exploratory surgery, drained the wound and inserted a suction drain. The operation notes disclosed the evacuation of a "large amount of what appeared to be perigraft fluid.....[which] didn't appear to be overtly infected." This was treated by packing the wound with a Gentamicin sponge and a suction drain applied. The wound was almost certainly infected by that stage. The treatment carried out by Dr Holdsworth was apt for an infection in any event.

5th to 12th October 2004; the suction drain remained. The daily drainage of fluid was about 100mls until the 11th October when the fluid was minimal, the drain was removed and intra venous antibiotics discontinued. Mr Mclean was discharged home and the discharge noted described him as follows:-"He has been well post operatively."

17th October 2004; Mr Mclean was re-admitted to hospital as an emergency. He appeared to have a local infection but no discharge from the wound.

18th October 2004; Mr Mclean was seen by Dr Tosenovsky, a new locum consultant vascular surgeon who was a Czech national; an ultrasound scan disclosed fluid around the distal graft. Intra venous antibiotics were started.

19th *October 2004*; Dr Tosenovsky operated to excise the Dacron graft. The operation noted disclosed the graft floating in pus. The former proximal anastomosis was patched using a vein harvested from below knee. The removal of the infected graft was a sensible and correct decision given the infection.

23rd October 2004; Mr Mclean complained of significant pain in his left leg. Analgesics were prescribed to help with the pain management.

25th October 2004; at a ward round Mr Mclean complained of significant pain in his left leg. He was allowed home that day but asked to return for review.

8th November 2004; Mr Holdsworth sent two letters to Mr Mclean's General Practitioner. Although sent on the same date, the first of these was plainly dictated between the 3rd and 19th October. It confirms the procedure of 3rd October and concludes: -"In general I would be expectant that this could be managed conservatively." The second letter reflects Dr Tosenovsky's removal of the infected graft and concludes: - "This [removal of graft] leaves us in quite a complex situation as to what to do with the left leg and once everything is settled down I will consider whether a further bypass might be achievable."

Early November 2004; Mr Mclean returned as an outpatient. He still complained of severe pain.

17th November 2004; Dr Tosenovsky re did the left femero-popliteal bypass using saphenous vein harvested from both legs. The operation notes reflect that the operation was difficult. The graft was achieved by means of a "patchwork" of veins harvested from the left and right legs. There was much blood loss. 19th November 2004; Mr Mclean was noted to be stable and was transferred from the High Dependency Unit to a surgical ward

20th November 2004; Mr Mclean was noted to be feverish

21st November 2004; the wounds were leaking substantially. The wound was packed

22nd November 2004; Mr Mclean was still feverish; an infection was suspected and intravenous treatment undertaken.

23rd November 2004; the groin wound was swabbed; the microbiology report (which would not have been available for some 72 hours or so after the swab was taken) reported "MRSA moderate growth"

25th November 2004; Dr Tosenovsky undertook a re-exploration of the wound. He found that the subcutaneous tissue was infected and "unvital". The graft was described as "extremely fragile and bleeding even when touched with a finger" The wound was left open and Mr Mclean was retuned to the HDU for close observation of the graft site. There was a conversation noted between the doctor and the McLeans, but the precise nature and extent of that discussion cannot be determined from the evidence.

26th November 2004; Dr Tosenovsky undertook a further attempt at re-vascularisation by way of an obturator by-pass using PTFE Inguinal ligament split. It was intended to use autogenous vein from the arm but the prosthetic graft was used. The surgery took about three hours. Not all wounds could be closed.

4th December 2004; Mr Mclean suffered very heavy bleeding from a blown artery in his left leg. The bleeding was coming from vessels in the leg and not from any anastomosis. There was nothing to stop the bleeding because the wound had been left open. At 9.50 pm an above knee amputation was carried out by Mr Holdsworth. Mr Mclean was admitted to the Intensive Care Unit

6th December 2004; Due to the worsening renal failure Mr Mclean was transferred to Edinburgh Royal infirmary for heamofiliation

14th December 2004; there was a left hip disarticulation and excision of necrotic or dead tissue from the left thigh.

22nd December 2004; Mr Mclean was transferred back to Stirling. By this time the wound was infected with MRSA

31st December 2004 until 11th January 2005; Mr Mclean's wound was debrided and redressed on at least three occasions. Mr Mclean was noted to be confused during this period.

12th January 2005; Mr Mclean was transferred to the High Dependency Unit, with suspected sepsis. He was confused agitated and having hallucinations. A further specimen was taken which disclosed in due course that there was a heavy growth of MRSA.

16th January 2005; 7.20 am Mr Mclean died; the cause of death was as narrated on the death certificate

Medical evidence

[12] Much of this evidence was an uncontroversial narration of the history from Mr Mclean's admission on the 21st September until his death. It is, I think, only necessary to rehearse the evidence where there was a dispute, or in respect of which I have been invited to make a recommendation. Accordingly I hope that I do no disservice to the clear, helpful, careful, and honest evidence given by all witnesses to the enquiry by not repeating at length all aspects of the evidence given.

[13] Mr Holdsworth is the consultant vascular surgeon at SRI. He carried out the right leg re-vascularisation which was successful in April 2004. He had dealings with Mr Mclean although Dr Turco and then Dr Tosenovsky both performed surgery and the latter was the principal consultant involved.

[14] In relation to the use of the Dacron graft in September he deponed that although he would not have used Dacron preferring autogenous vein or PTFE, another prosthetic material, it was a reasonable choice, and available to the surgeon.

[15] Mr Holdsworth operated on 3rd October 2004. He was not, at the stage of draining the fluid, convinced that there was infection. He deponed that the peri-graft fluid was not necessarily evidence of infection.

[16] So far as the procedure on the 17th November 2004 was concerned, he very fairly said that it was difficult for him to be objective and he was plainly uncomfortable about judging the professional decisions of a colleague, especially one who was not there to give his own direct account. Mr Holdsworth did say that he would have waited and not operated on the 17th November; however, he expressed the view that the decision to attempt re-vascularisation did fall within the range of options open to the consultant involved, and he was reluctant to criticise Dr Tosenovsky for the decision which he made on that date. I felt that Mr Holdsworth gave a very frank and honest account of his involvement with this matter, including the recognition that it was difficult for him to be as objective as he would like.

[17] Mr Baird was instructed for the Crown. He is an eminent vascular surgeon of thirty years experience. He modified his opposition to the use of the Dacron graft (disclosed in his report) having heard the evidence. He accepted that the choice of prosthetic graft was understandable having regard to the difficulty of obtaining suitable autogenous material.

[18] He was of the view that the procedure of the 17th November was the critical procedure in terms of an inevitability of outcome. In his view the decision to operate was "plain wrong". In his view there should have been no further attempt to re-vascularise at that time. He would have waited and commended a "wait and see" approach. By waiting all options would have been preserved; the situation was not such that there was a need to operate and the consequence of the operation was to make the spread of the infection and subsequent death inevitable. Indeed in his evidence he stated that the fact that the operation of 26th November 2004 went wrong merely emphasised the folly of the attempted re-vascularisation carried out on the 17th November. He considered that the decision to operate on the 17th November was when the "die was cast" about Mr Mclean's subsequent death. If there not been an operation on that date he considered that Mr Mclean would have been likely to have survived, although an amputation, even an above knee amputation, was a possibility

[19] Sir Peter Bell is a similarly eminent vascular surgeon with a number of qualifications and publications to his name. He spoke largely to his report (lodged on behalf off the family); he had also, after hearing evidence about the quality of the saphenous vein, reconsidered the use of Dacron and did not regard that as a decision which fell outside normal practice. He agreed that the autogenous vein material may have been of insufficient quality, and that being the case, the use of prosthetic material was reasonable, and well within the discretion of the surgeon. He had no criticisms of Dr Turco's role.

[20] His impression was that up until the surgical procedure on the 17th November 2004, Mr Mclean's treatment was appropriate and competent. He deponed that the decision to operate on the 17th was plainly wrong for the following reasons; there had been too much surgical intervention, there was plainly infection, and there was no need to operate in terms of the criteria which he would apply. He recognised that

there was pain, but in the circumstances where there was no gangrene, and no ulceration, he would not have intervened surgically. He said that to go back into a wound is difficult. It is invasive, and likely to cause serious damage and bleeding. There would be adhesions from the previous operations. Any prosthetic graft would be infected; the autogenous sources were limited. The more anastomosis, the greater the chance of infection. Nothing in his view pointed to the operation of 17th being appropriate. It was wrong to proceed on the 17th due to the risk of infection He accepted that the surgery was, on one view, competently carried out even on the 17th, in that the re-vascularisation was a technical success (although he pointed out that in that operation both the femoral vein and the common femoral artery were damaged), but his evidence was that Mr Mclean had no prospect of survival because the infection, which had been present, would lead to organ failure; in the event he recognised that the bleeding on the 4th December did not as he had assumed come from the anastomosis, but from blood vessels in the leg. That did not alter his opinion that even if there had not been such bleeding the infection would have given rise to the same consequences of major organ failure. If there had been no operation on the 17th November, in his view, on a balance of probabilities, Mr Mclean would have survived, even if amputation had followed.

[21] His unequivocal opinion was that on the 17th of November there should have been no surgical intervention. There was a high risk of bleeding and of infection, given a reduced resistance to infection. The operation on the 26th November was also an error of judgement, but the earlier operation had been where the problem started. Both Mr Baird and Sir Peter gave evidence that the decision to operate on the 17th November would not be supported by a reasonable body of opinion.

[22] Mr Simon Fraser was involved at Edinburgh Royal infirmary and spoke to his dealing with the deceased. There was some cross examination about the existence or otherwise of MRSA at the time of his admission to Edinburgh and readmission to Stirling.

[23] I was impressed by the clear evidence of the independent experts.

SUBMISSIONS

Submissions for the Crown

[24] Mr McMahon for the Crown, invited me to make the formal findings in relation to Sections 61(a) and 61(b) to the effect that Mr McLean died at Stirling Royal Infirmary on *16 January 2005* as a direct result of medical and surgical intervention between *21 September* and *14 December* at Stirling and Edinburgh. He invited me to adopt the reasons given in the Post Mortem Report.

[25] In his Submissions there were no defects in any system which could be pointed to but he did consider there were areas where the Court might consider identifying a precaution in terms of Section 61(c) of the Act whereby the death may have been prevented.

[26] He accepted on the evidence that the material used in the initial graft, that was a prosthetic material known as Dacron, was not a relevant factor in the deterioration. In

his view, it was more clearly the case that the decision making in relation to surgical procedure may have given rise to the death. He reminded me that Doctor Tosenovsky's decision to operate on *17 November 2004* had been described as just "plain wrong" and this wrong decision was compounded by the surgical intervention of *26 November 2004*.

[27] He submitted that both Doctor Turco and Doctor Tosenovsky, although apparently well qualified and experienced surgeons were unknown quantities in particular in relation to their suitability for appointment at consultant level. They had provided references but as Mr Holdsworth himself had recognised, the referees themselves were not known to him.

[28] He submitted that both of these doctors, at the consultant level, were not really subject to any form of supervision because of their status and were not under any obligation to consult or to discuss procedures before these were carried out. He postulated that Doctor Turco's decision to use a Dacron graft might have been open to change of mind had he consulted.

[29] In his Submissions, some measure of supervision or consultation may have given rise to a different decision and could be regarded as a precaution, which should have been taken.

[30] He also raised, as an area "fertile for the inquiry," the procedures for the recruitment of doctors from other nationalities as locum consultants as this could have contributed to the chain of events resulting in Mr McLean's unfortunate death.

Submissions on behalf of the Family

[31] In relation to the function of the Inquiry, Mr Mundy referred me to *MacPhail Sheriff Court Practice, Third Edition, Paragraph 28.14* and the cases *Black* and *Dekker*. He reminded me that the Court has no power to make findings as to fault or to apportion blame. He invited me to make the formal finding in relation to Section 61(a). In relation to Section 61(b) he invited me to follow the wording of the death certificate but to add words to the effect that the decision by Doctor Patrick Tosenovsky to carry out the procedure on *17 November 2004* to re-do the by-pass revascularisation was a major contributory factor and at the very least materially contributed to the death of Mr McLean.

[32] He then went on to consider what reasonable precautions may have prevented the death. In his Submission the first of these was non-intervention on *17 November 2004*. In his Submission, if there had not been surgery Mr McLean would, in all probability, have survived and he pointed to the evidence of Sir Peter Bell and Mr Baird in support of this Submission; a second precaution, which may have prevented the death, would have been the amputation of Mr McLean's left leg below the knee on or about *17 November 2004*, or shortly thereafter; in any event, in his Submission it would have been a reasonable precaution given the surgical intervention and the consequences thereof, to have amputated Mr McLean's left leg above the knee on or about *25 or 26 November 2004*.

[33] He accepted that there were no defects in the system to which he could properly point although he did express sympathy with sentiments expressed about the lines of communication between the locum surgeons who did not have English as their first language and the resident surgeon, although he accepted there was an inadequacy of evidence for the Court to make any findings either by way of precaution or defects in the system in that context.

[34] He adopted the chain of events set out by Mr Baird in his Report. On *21 September* Doctor Turco carried out the first procedure on the left leg. It is possible that infection was introduced although, on a balance of probabilities, it was not possible to determine. By *3 October* fluid required to be drained and there was a suggestion at that stage of an infection supported in particular by Sir Peter Bell. By *19 October* it was determined that the infected graft should be removed. After that procedure on 1*9th October* there was a question about the viability of the leg but Mr Holdsworth had concluded it was just viable that there was an infection present. The critical procedure took place on *17 November*. Mr Baird and Sir Peter Bell were firmly against any idea of surgical intervention. The phrase "plain wrong" was used. He submitted that the evidence was clear, that because of the risk of infection there should be no further attempt at re-vascularisation at that time. Sir Peter Bell had indicated his criteria for surgical intervention had not been met. Although Mr Holdsworth was not as unequivocal, Mr Holdsworth recognised that he was too closely involved in the events to be objective.

[35] In Mr Mundy's Submission, having decided to operate on *17 November,* Dr Tosenovsky should have aborted the attempt due to difficulty. The damage to the femoral vein and artery demonstrated the difficulty of the surgery, exacerbating an already difficult procedure. It was at that stage that consideration should have been given to amputation. Had that occurred, on balance of probability, it was more likely that Mr McLean would have survived. In his Submission at *17 November* there were 3 options; surgeons could have waited to see the result of Mr McLean's previous operations, they could have amputated the left leg below the knee or they could have considered reconstructive surgery. If I accepted the evidence of Mr Baird and Sir Peter Bell, by *17 November* re-vascularisation was not an option but in any event that option had disappeared by *25 November* (the operation notes number 19) and amputation should have occurred. In his Submission on *26th November* the procedure which should have been adopted was amputation and not the obturator by-pass. It was clear from the evidence that Mr McLean would have chosen life over limb. In his Submissions, the last chance to amputate on *26 November* was lost by the decision to carry out the obturator by-pass which made the situation worse.

[36] He accepted that there was no causative effect between the operation and the bleeding because the bleeding was from vessels and not from the graft or an anastomosis. However, it was inevitable that there would be a problem with the graft because of the infection, even if it hadn't manifested itself by *4 December*. The operational intervention on *17 November* would have led inevitably to the organ failure even if there had not been the intervening blood loss on 4th December He narrated the circumstances that followed including the transfer to Edinburgh Royal Infirmary and the transfer back to Stirling but in his Submission, the precautions which he sought to have introduced all arose from decisions taken while Mr McLean was subject to the care of the doctors at Stirling.

[37] He had no Submission to make in relation to any other factors which might arise. In his Submission for the family, the death was avoidable. His wife and family continue to suffer. It is regrettable when this could have been avoided.

Submissions for the Health Board,

[38] Mr Fitzpatrick had very helpfully produced written Submissions to which he referred and if necessary added. He had no observations in relation to the formal findings under Section 61(a).

[39] In his Submission there should be no qualification in the formal section of the determination to the cause of death given in the Post Mortem Report and that the additions suggested by neither the Procurator Fiscal nor Mr Mundy had a place in the formal finding of the cause of death.

[40] In his Submission there was no scope for any findings beyond the formal findings. In his Submission what both the Crown and the families' representatives were trying to do, however they worded it, was to visit a finding of fault upon doctors involved in circumstances when what was at stake was issues of clinical management in relation to the use of a prosthetic graft and the appropriateness of the re-vascularisation.

[41] He reminded me of the *Black* case in the words of Lord Present Hope and also of Sheriff Principal Mowat's approach in the Lockerbie Fatal Accident Inquiry.

[42] So far as the graft material was concerned, evidence was to the effect that vein was preferable but Dacron was a proper substitute and indeed the expert witnesses both softened to the use of Dacron in the circumstances of this particular case. He referred also to the articles lodged on behalf of Forth Valley Health Board demonstrating there was a general acceptance of Dacron which had a patency comparable with veins. In any event, it was not clear from the evidence whether there was a suitable vein which could have been harvested by Doctor Turco. In his Submission there was no suggestion that the use of a prosthetic material was a wrong decision and the decision about whether or not to use Dacron could not be characterised as a precaution but rather as an exercise in a clinical judgement.

[43] The next issue which he addressed was the decision made on *17 November 2004*. He accepted that none of the three medical witnesses asked about it were in favour of the decision taken to re-vascularise. Mr Holdsworth's evidence was that he would not have elected to re-vascularise but that that decision was within the range of treatment option available to Doctor Tosenovsky.

[44] In his Submission the decision to wait for a longer period could not be regarded as a precaution because, as in relation to the choice of graft material, it was the exercise of a clinical judgement. Similarly, an amputation cannot be regarded as a precaution if it is a necessity in order to save a leg. The Submissions of the Crown and the family trespassed into areas of clinical judgement which are not areas apt for this Inquiry to explore.

[45] Furthermore, there was a conflict of expert evidence in that Mr Holdsworth had a different opinion from Professor Bell and Mr Baird. In his Submission to prefer the evidence of Professor Bell and Mr Baird to that of Mr Holdsworth would be to foreclose the issue of clinical judgement. In his Submission what the Court was being asked to do in this case was not identify a precaution that might have avoided the death but rather make a judgement about the soundness of an exercise of clinical judgement which was nothing to do with identification of a precaution.

[46] In his Submission if it was an option for Doctor Tosenovsky to re-vascularise then the Court could not conclude that he should have exercised his judgement some other way. That was not the function of a Fatal Accident Inquiry. He admitted that in any event the Court could not be left certain as to what should have been done.

[47] He submitted that there were no defects which did contribute to the death. He submitted that there had been no enquiry whatsoever into the system of appointments of foreign locum doctors nor the supervision by such appointees by consultants. In his Submission the findings should be restricted to formal findings.

Conclusions

The decision to operate on the 17th November 2004

[48] I have considered the matter in some detail and in particular the helpful submissions about what precautions if any might have prevented the death. I had considered that refraining from operating on the 17th November might be on one view a "precaution".

[49] However, I have in the event determined that such a matter could not be characterised as a "precaution", in circumstances where I would be unable to qualify that by, for example, giving a timescale before any further intervention was required, or a comprehensive set of criteria to be met before such an operation could be undertaken. It seems to me that a "precaution" denotes a step or check in a procedure which is susceptible to some proper definition, and where there is a potential application beyond the instant case.

[50] I have found, upon the evidence which I heard, and in relation to this particular case rather than as a generality, that the decision to operate was an error, the avoidance of which might have prevented the death. Dr Tosenovsky should have managed the matter conservatively in order to determine what the reaction to the previous surgery and the medication was, and to allow the wound to "settle down", to use Mr Holdsworth's phrase. Nothing would have been lost by such a decision and everything would have been preserved. There was no compelling need to operate; from the evidence there was not such discomfort or pain to Mr Mclean, nor any clinical need for intervention that required that operation so soon after the previous operations. I am satisfied that waiting would, until compelled to act either by the discomfort or by a continuing concern about the level of infection or delay in healing, have been the correct decision.

[51] I am influenced in this decision not only by the impressive evidence of Mr Baird and Sir Peter Bell, who were unequivocal in their condemnation of the decision to operate, but also by the more hesitant evidence of Mr Holdsworth, supported by the letters which he wrote on the 8th November 2004. Despite this understandable hesitancy in expressing a view, Mr Holdsworth plainly would not have operated on the 17th November. His evidence was supported by the letters; in the first of these, Mr Holdsworth anticipated no further surgical intervention in the short term. In the second letter, which narrated the removal of the infected graft, conservative management was again plainly contemplated by Mr Holdsworth. For these reasons I do not accept Mr Fitzpatrick's submission that there was a divergence of medical opinion in relation to the decision to operate on the 17th November 2004

[52] The reasons for refraining to operate were clear and are rehearsed in more detail in the evidence of Mr Baird and Sir Peter Bell. The left leg had been subject to three operations since the 21st September; the chances of a successful operation reduce with each successive operation. The previous wounds had not healed. There had been an infection and there was a predictable risk if not inevitability about further infection, the resistance to infection was reduced.

[53] Neither the evidence which I heard, nor the information provided to the two independent experts in compiling their reports, pointed to any compelling need for further surgical intervention at that stage.

[54] I do not consider it necessary to make any findings in relation to the steps taken after the 17th November. The evidence of both Mr Baird and Sir Peter Bell was to the effect that the operation on the 17th November sealed Mr Mclean's fate. The subsequent operation on the 26th November whereby the obturator by pass was attempted was ill advised; it was not intended to use prosthetic graft, but rather autogenous veins from the arm, but the nature and extent of the infection and the course of operations had already, according to the evidence, rendered any further intervention as having virtually no prospect of success

Use of a Prosthetic Graft

[55] As is reflected by Mr Baird in his Report, good autogenous vein is the best material in terms of patency and resistance for arterial graft. The long saphenous vein is ordinarily used although the operation takes longer and involves more invasive surgery. It was clear from the evidence of Mr Baird himself, Sir Peter Bell, and Mr Holdsworth that while Dacron was not the first choice, the unanimous view being that autogenous vein was best, Dacron was a reasonable and intelligible choice by Doctor Turco. There was some evidence in relation to the preference of continental surgeons to use prosthetic as opposed to autogenous material but I was satisfied that the decision to use the Dacron graft fell well within the range of the reasonable exercise of clinical judgement.

The System of Appointment of Foreign Consultants

[56] I was surprised that this matter was raised in Submissions. Although the Health Board, as referred to by Mr Fitzpatrick in his Submission, had lodged extensive material including the Curriculum Vitae of Doctor Tosenovsky, this was not the

subject of any examination or cross-examination during the course of the Inquiry. There was nowhere near enough evidence for me to draw any conclusions about what the system for appointment of foreign doctors is, far less to form any judgement about whether there are precautions or defects arising from it which should be the subject of any observations from the Court. Whilst it is no doubt the case that a language barrier may in some circumstances impede lines of communication, there is no suggestion in this case that the language barrier caused any difficulty.

[57] I should also observe that I took from the evidence the views of all the doctors that, as a *technical* surgeon, Doctor Tosenovsky had formed the operations competently. Each operation could be characterised as a "success" on the basis that the graft worked, securing a blood supply to the lower limb, (although there was damage occasioned to the femoral vein and common femoral artery on 17th November); the real issue was his judgement in deciding to operate.

Supervision of Consultants

[58] Again in Submissions, Mr McMahon raised the issue of supervision/discussion between consultants. As I understand the position, and again there was a lack of evidence in relation to this matter, consultants are autonomous practitioners. The National Health Service does not have a hierarchy of consultants and, once appointed, a consultant in any discipline has no obligations to either take advice from, or supervise any other physician at consultant level. If, as was being suggested, I was to pass comment on the appropriateness of such an arrangement, the matter cannot be addressed in the context of a Fatal Accident Inquiry involving the scrutiny of the management of one patient.

Vein mapping

[59] There was some evidence about the benefits of vein mapping which both Sir Peter Bell and Mr Baird considered a useful facility tool in the preparation for vascular surgeon. Mr Holdsworth had said in his earlier evidence that there was no vein mapping facility at Stirling. Sir Peter pointed out the existence of the "duplex system" which would have allowed some means of identifying whether any vein could be harvested. Again, I have heard no evidence which allowed me to reach any conclusion about this although I consider that the matter, having been raised, is worth recording.

Standards of Nursing Care

[60] This was a matter which had been flagged-up as a potential area of enquiry. However, when the Nursing Report which the family had ordered was not available in advance of the Fatal Accident Inquiry, I had understood that the matter would not be explored. Whilst there was an attempt to raise this matter by Mr Mundy, on challenge he indicated that he would not be proceeding. Accordingly, the issue of the standard of nursing care and the cleanliness of the ward were not matters which were considered at all by this Inquiry.

[61] I have not made any additions to the cause or causes of death as described on the death certificate.

Sheriff Andrew M Cubie

Sheriff of Tayside Central and Fife at Stirling