

SHERIFFDOM OF LOTHIAN AND BORDERS AT SELKIRK

2010 FAI40

DETERMINATION

of

SHERIFF JAMES A FARRELL

In Fatal Accident Inquiry In Terms Of The Fatal Accidents and Sudden Deaths

Inquiry (Scotland) Act 1976

into

The Circumstances of the Death of PETER SHORT

Selkirk August 2010

The Sheriff having resumed consideration determines as follows:

1. Section 6(1)(a)

Peter Short (DOB 06/10/29) died at 2345 hours on 3rd May 2008 at Borders General Hospital, Melrose.

2. Section 6(1)(b)

The cause of death was acute myocardial infarction due to coronary arterial sclerosis, in the presence of general arterial sclerosis; and intra-cerebral haemorrhage.

3. Section 6(1)(c), (d) and (e)

There are no circumstances of the death to be set out in respect of these provisions

Note

Evidence in this fatal accident inquiry was heard on 16th August 2010 and submissions on behalf of the parties on 18th August 2010. The Crown was represented by Mr Keane, Procurator Fiscal Depute, and Borders Health Board by Mr Fitzpatrick, Advocate. In this inquiry, which involved no contentious issues, parties

entered into a comprehensive minute of admissions which expedited matters considerably, and I am much obliged to Mr Keane and Mr Fitzpatrick for their assistance in this regard. The Determination is what is usually referred to as a formal Determination and contains no recommendations. I hope that the following findings in fact, which I have based upon the minute of admissions and a consideration of the parole evidence and productions, will serve to explain why I have concluded that recommendations were not appropriate in this case.

Findings in Fact

1. Peter Short was born on 6th October 1929. He lived at Station House, Norham, Berwick-upon-Tweed. He was a retired coal merchant
2. Latterly he suffered from osteoarthritis, and in 2004 he was found to have an irregular heart rhythm.
3. In April 2008 Mr Short was seen by his general practitioner with a complaint of persistent right shoulder pain following a fall.
4. On Thursday 1st May 2008 Mr Short had an episode of chest pain which resolved without medical attention.
5. On the morning of Friday 2nd May 2008 Mr Short had chest pain on waking, and his wife called an ambulance. He was taken to the accident and emergency department at Borders General Hospital, arriving there at 0929 hours. ECG monitoring by the ambulance crew suggested a myocardial infarction (or “heart attack”).
6. In the emergency department, Mr Short was reviewed by Dr Goudie, the on call medical registrar. ECG monitoring suggested that the criteria for thrombolysis (the administration of “clot busting” medication) were not currently met, and Mr Short was treated for acute coronary syndrome. He had already been given aspirin and GTN spray by the ambulance crew. At 0950 he was given 105 mg Enoxaparin, along with 10mg Metochlopramide (an anti-emetic). At 1000 he was given 300mg Clopidogrel.
7. Enoxaparin is a low molecular weight Heparin; Clopidogrel is an anti-platelet medication. Both medications are given to contribute to thinning of the blood, by different mechanisms. The blood is made thinner to help it to pass through clogged arteries.

8. Mr Short was then transferred to Ward 5, leaving the emergency department at 1011 hours, and arriving on the ward at 1015, where he was placed in a side room.
9. Normal practice is for a nurse from the emergency department to accompany the patient to the ward, and to give a nursing handover to the receiving nurse, which would include details of medication given in the department. On this occasion, because the emergency department was very busy with another emergency, no nurse was immediately available to accompany Mr Short to the ward; and he was accompanied instead by Dr Goudie and another doctor. Dr Goudie did not specifically “hand over” to the ward nurses details of the drugs which had already been given: there was a record of the drugs already given (Crown production 8, p55); and any further drugs to be prescribed at that stage would be prescribed by him. The records would come up to the ward with the patient. The receiving nurse was Staff Nurse Nicola Wood.
10. The main focus of attention on arrival in the ward was that the ECG now indicated a need for thrombolysis. Dr Goudie therefore gave TNK (Tenecteplase) and IV Heparin, at 1020.
11. SN Thomson was present when Mr Short arrived in Ward 5. She saw his drug Kardex, and she picked it up and looked at it, although not “intently”; and she says that it did not make a lot of sense to her, on account of the crossed out entries, so she put it down again: she was interested to see Mr Short being thrombolysed, as she had not previously seen the procedure performed at BGH, where she had been working for only two months.
12. Dr Goudie began to thrombolyse Mr Short in the side room in the presence of SN Wood and SN Thomson. SN Thomson then left the room briefly and, when she returned, she “walked in on” a conversation between Dr Goudie and SN Wood, in which they were discussing Enoxaparin, and the weight related dose which would be appropriate for Mr Short.
13. Enoxaparin is normally given along with TNK and Heparin as part of thrombolysis treatment; but on this occasion, in Mr Short’s case, it had already been given in the emergency department as part of his treatment at that stage for acute coronary syndrome.
14. SN Thomson did not realise that Dr Goudie and SN Wood were discussing the dose of Enoxaparin which had already been given in the emergency

- department. She thought she was hearing an oral instruction by Dr Goudie to SN Wood to administer a 100mg dose of Enoxaparin to Mr Short.
15. Thinking that it would be helpful for her to do so, SN Thomson asked SN Wood for the keys to the medicine cupboard, in order to fetch the Enoxaparin which she erroneously believed to be required, SN Wood gave SN Thomson the keys, presumably not realising her intent.
 16. SN Thomson fetched the Enoxaparin and returned, by which time Dr Goudie had left the room. It was between 1020 and 1030. She then administered the drug to Mr Short. Before doing so, she did not check with Dr Goudie that the drug or the dose was correct, although she knew that such checks should first be made with the prescribing doctor in the case of any oral prescription or instruction; nor did she check the drug and the dose with SN Wood, which she knew she also should have done in the circumstances. Instead, she told Mr Short what she was doing; and she did so in SN Wood's presence. The drug was administered subcutaneously into the abdomen.
 17. Mr Short's records were not immediately available to SN Thomson to allow her to make an instant record of the administration of Enoxaparin, and may then have been in use by Dr Goudie; and she intended to do so later. However, within 10 minutes, she learned that the matter was being treated as an "incident".
 18. SN Wood had gone to the nurse in charge, SN Julie Bowie, who had in turn gone to Dr Goudie to ask him to write the prescription, and he declined because it had already been given in the emergency department, and any further dose had been given in error.
 19. Dr Goudie reviewed Mr Short at 1030 and wrote the note which appears at page 29 of the records, in which he recorded *inter alia* the erroneous administration of Enoxaparin. There was nothing specifically which could be done other than to observe Mr Short closely. At 1045 Mr Short was noted to have a bradycardia (slow heart rate), which is a recognised rhythm disturbance following TNK, and for which he was given Atropine.
 20. At 2000 Mr Short was noted to have right arm numbness. At 2120 he was noted also to have developed right sided weakness and slurred speech, and intracranial haemorrhage was suspected. A CT head scan was performed and

confirmed that there was at that stage a small haematoma, with minimal mass effect. Fresh frozen plasma was transfused.

21. At 0815 on 3rd May 2008 a dramatic change was noted in Mr Short's condition, with his GCS down to 8. A further CT scan showed a much bigger clot within the brain. Advice was taken whether Mr Short could be transferred to the neurosurgical centre (the Western General Hospital, Edinburgh) for treatment, but the advice was that no intervention would be possible.
22. Dr Whitfield attended at 0008 hours on 4th May to confirm that Mr Short had succumbed, and he noted the time of death to have been 2345 hours on 3rd May.
23. It is impossible to say what effect the double dose had, if any, other than to increase Mr Short's risk of bleeding. The widely held opinion would be that the thrombolytic agent was by far the more powerful drug in terms of the potential to *cause* an intracerebral haemorrhage. To illustrate the point, patients are specifically warned of the risk of haemorrhage when TNK administration is proposed; but they are not so warned in the case of Enoxaparin. It may be said that Enoxaparin would not have helped the situation once the bleeding had started.
24. The possible contributory causes of the drug error in Mr Short's case may be said to be as follows:
 - (a) Unusually, because of the variable nature of his ECG, he had some treatment in the emergency department, and other treatment in ward 5. Had he required thrombolysis in the emergency department, he would have received all three drugs together.
 - (b) Unusually, because the emergency department was very busy with another emergency, there was no nursing hand over of Mr Short to the nurses on ward 5.
 - (c) However, the main cause was the failure to follow the normal rules that a drug should not be given unless prescribed in writing by a doctor (except in cases of *dire* emergency – i.e. where death is considered to be imminent); and that a drug which is orally, i.e. verbally, prescribed should first be checked with the prescriber before administration.
25. There is no evidence that there was any relevant failure to train or induct SN Thomson in correct practices or procedures. She was already highly trained,

and she was aware of the applicable rules for prescribing and administering medication. Any perceived ambiguity arising from the practice of crossing out “once only” prescriptions on the Kardex once the prescription had been given played no part in the making of the drug error, which arose from failure to follow the normal rules, *supra*.

26. The drug error which was made in Mr Short’s case cannot be said to have caused his death or to have contributed to his death, because (a) according to the post mortem evidence, the death was likely to have occurred in consequence of the myocardial infarction alone, whether or not there had also been an intracerebral haemorrhage; (b) any contribution to the death from the intracerebral haemorrhage was from an event (ICH) which – if it was itself caused to any extent by an unwanted effect of medication – is more likely to have been caused by the TNK than by Enoxaparin; (c) any risk arising from Enoxaparin was merely increased to an unquantified extent, rather than caused, by the extra dose; and (d) there is no evidence that the ICH was in fact likely to have been caused to any extent by the extra dose.
27. The drug error which was made in Mr Short’s case was an isolated human error which did not arise on account of any systemic problem or defect in policies or procedures.
28. Nevertheless, Borders Health Board have implemented the following measures: (a) a nursing handover between the emergency department and the ward will always take place, even if it requires to be by telephone; (b) the yellow A&E documentation (Crown production 8, pp6-7) will be clearly marked “Medicine chart in use” in the drug recording box (at page 7); (c) the medicine chart (Kardex) will clearly state what drugs have been given in the emergency department; (d) nursing staff have been reminded that a prescription must be written before administration, (except, in an emergency, as provided in Crown production 15 – NHS Borders Code of Practice for the Control of Medicines – at p9); and (e) the Code is to be made available to all new staff at the commencement of work.
29. Peter Short was pronounced dead at 00:08 hours on the 4th May 2008 at the Borders General hospital, Melrose. The cause of death was 1(a) Acute myocardial infarction, (b) Coronary arteriosclerosis, (c) General arteriosclerosis, 11 Intra-cerebral haemorrhage. An autopsy was carried out

on the 9th May 2008 by Professor (Univ Gott) Dr Gerhard Kernbach-Wighton.
His findings are contained in Crown production number 7 and this is
incorporated as the evidence that he would give to the inquiry.