

Case Reference No. 2B 802/2010

**SHERIFFDOM OF LoTHIAN AND BORDERS AT EDINBURGH**

*Inquiry held under the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976  
Section 1(1) (a)*

**DETERMINATION BY Frank Richard Crowe, Esquire, Sheriff of Lothian and Borders at Edinburgh**

**In inquiry into the circumstances of the death of JOHN DUNLOP (date of birth 4 October 1948)**

**In terms of section 6 of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976.**

**EDINBURGH 25 May 2011**

**The Sheriff determines as follows**

[1] In terms of section 6(1)(a) of the said 1976 Act that John Dunlop who was born on 4 October 1948 and late of Her Majesty's Prison Saughton Edinburgh died on 16 May 2009 at the Royal Infirmary Edinburgh, while a serving prisoner.

[2] In terms of section 6(1)(b) of the said Act that the cause of his death was  
I Ischaemic and hypertensive heart disease  
II Multiple sclerosis.

[3] In terms of section 6(1)(c) of the Act there were no reasonable precautions whereby the death and any accident resulting in the death might have been avoided.

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

[5] In terms of section 6(1)(e) of the Act there are no other facts relevant to the circumstances of the death.

**NOTE**

**Introduction**

[1] This inquiry relates to the tragic death of a 60 year old prisoner who died when in custody on 16 May 2009. The inquiry took place at Edinburgh Sheriff Court on 6 December 2010 and 24 January 2011.

[2] Evidence for the Crown was led by Mrs Christine Ball, Procurator Fiscal Depute at Edinburgh. Ms Jenny Nicholson appeared for Scottish Ministers representing the Scottish Prison Service. Ms Whiteford and Ms McCracken of Messrs Levy and

McRae, solicitors, Glasgow appeared on behalf of the Scottish Prison Officers Association at preliminary hearings of the case but in the event did not consider it necessary to appear at the Inquiry. The family of the late John Dunlop were not represented at the inquiry.

[3] Evidence was led from the following witness. Dr. Ralph BouHaidar BSc MSc MD FRCPATH. The remaining evidence was adduced by way of joint minute of agreement and reference to relevant documents and statements. No evidence was led on behalf of Scottish Ministers.

[4] The deceased had been diagnosed in the past as having a neurological condition linked to Multiple Sclerosis. For most of his prison sentence the deceased had been incarcerated at HM Prison Peterhead. Following a consultation at Aberdeen Royal Infirmary with a neurologist about 6 weeks prior to death the prison doctor had on the advice of the neurologist withdrawn the deceased's pain relief medication (tramadol) which he had been taken for the last 15 years. The deceased was not happy with this change in medication as he felt it controlled pains and muscle spasms he had in his neck, legs and back. He felt very agitated about pain that he experienced subsequently. The deceased had also advised medical staff that he had in the past been seen by a psychiatrist with regard to depression, stress and anxiety which were linked to his neurological problem. He had not been on any anti-psychotic medication since 2006 and had never attempted suicide or self-harmed.

[5] Shortly after the deceased was transferred from Peterhead prison to Saughton prison he visited Dr Gracie, the prison doctor, on 27 April 2009. He was complaining about the side effects of the medication he had been prescribed for pain management namely co-codamol three times a day. He was still complaining of being in pain and having constipation. Constipation is a common side effect of any opiate pain medication. Dr Gracie consulted the deceased's medical notes and saw documentation from two neurological specialists who suggested that the deceased's problems may be neurological with one advising tramadol and baclofen might be of assistance. Accordingly Dr Gracie prescribed the deceased tramadol 200mg twice a day on a supervised basis.

[6] At post-mortem three blood samples and a urine sample were taken from the deceased. Tramadol was found in the blood at approximately 2.1 milligrams per litre. Initially it was suggested by the analyst to the pathologist that the level of tramadol in the deceased's blood lay within the range of values associated with fatal poisoning and accordingly Dr BouHaidar issued an amended cause of death on 11<sup>th</sup> August 2009 as:-

I(a) Tramadol Toxicity

II Ischaemic and Hypertensive Heart Disease, Multiple Sclerosis.

[7] When interpreting drug concentrations in blood the forensic services Edinburgh laboratory uses a document produced by The International Association of Forensic Toxicologists (TIAFT) in addition to other sources of information such as a book by R.C. Baselt entitled 'The Disposition of Toxic Drugs and Chemicals in Man' – Biomedical Publications, Foster City, 8<sup>th</sup> Edition 2008. The document produced by TIAFT lists many of the drugs encountered through toxicological analysis and provides a guide to the expected therapeutic, toxic and fatal ranges of each. In the case of tramadol the information was set out in the list as follows: - Tramadol (263.4) – blood

– [0.01-0.25] – [0.8]. This means that the therapeutic range of tramadol is shown to lie between 0.01 – 0.25 milligrams per litre and any concentration over 0.8 milligrams per litre would be associated with toxicity. No value has been given for fatal poisoning.

[8] After further inquiries were made into this aspect of the case by the Procurator Fiscal's office the analyst, Dr Adams, accepted that when he had consulted the TIAFT list he wrongly assumed the value found in the deceased's blood, namely 2.1 milligrams per litre, was lethal. While this level was some way above ordinary therapeutic levels and lay within the range of values associated with toxicity, a search of medical literature indicated in research done by Tjaderborn et al entitled 'Fatal Unintentional Intoxications with Tramadol during 1995 to 2005' Forensic Science International 173(2007) 107-111, that the ranges of tramadol levels in fatal cases were from 1.1 to 12 milligrams per litre. However where the levels of tramadol were 2.5 or less the role of tramadol assessed by the pathologist was contributory rather than major.

[9] In a paper by J.E. Clarkson et al entitled 'Tramadol (Ultram®) Concentrations in Death Investigation and Impaired Driving Cases Under Significance' Journal of Forensic Science (2004) 1101 – 1105, four fatal cases involving tramadol as the primary cause of death were reported. In one of those cases the deceased had a concentration of 1.6mg/l of tramadol. In all of the cases examined by these authors, other drugs were present and they urged caution in certifying deaths where tramadol is present with other drugs since an interaction might result. It seemed clear, however, that in those cases, in general, the tramadol levels were much higher and the individuals concerned had other problems e.g. drug abuse, alcoholism. After considering the evidence I was satisfied that while a level of tramadol was found in the deceased's blood stream above the generally accepted therapeutic level and within the range said to be toxic in medical terms, that this level of tramadol had not contributed to the deceased's death. I was satisfied from the evidence of Dr BouHaidar that the heart disease suffered by the deceased was such that he could have died at any time. Mr Dunlop had been taking tramadol for many years to alleviate pain and as a result his body had built up a level of tolerance. It was appropriate for the prison medical authorities to prescribe tramadol to the deceased since other drugs such as co-codamol had produced unpleasant side effects which had caused the deceased to complain and request a return to a tramadol prescription. This was prescribed at an appropriate level and appropriately monitored by the prison medical staff.

[10] It is right and proper that there should be a public inquiry in every case where a prisoner dies in custody. I am satisfied from the evidence produced that there were no suspicious circumstances surrounding Mr Dunlop's death. All of the circumstances point to Mr Dunlop tragically sustaining a heart attack as he was getting ready for breakfast on the morning of 16 May 2009. Although Mr Dunlop was found quickly by prison staff and given immediate medical attention, sadly he was pronounced dead less than one and a half hours later having been transferred to hospital.

[11] I am satisfied that a thorough investigation was carried out by the authorities at the time into the circumstances of Mr Dunlop's death and there are no other matters I require to include in my determination nor are there any recommendations I wish to make in this case.

## **Findings in Fact**

[12] I found the following facts admitted or proved:-

1. The late John Dunlop was born on 4 October 1948 and he died on 16 May 2009
2. At the time of his death the said John Dunlop was a prisoner of Her Majesty's Prison at Edinburgh having been detained there on the authority of a warrant of imprisonment from the High Court of Justiciary at Edinburgh dated 19 February 2004. The deceased had been in the course of serving an 8 year sentence of imprisonment from that date.
3. The deceased was due for release on Parole Licence on 19 June 2009. To that end the deceased was transferred from HM Prison Peterhead to HM Prison Edinburgh on 23 March 2009 as part of a pre release programme. It would appear that the deceased was a model prisoner and was classified as requiring only low supervision whilst in custody.
4. About 7.30am on Saturday 16 May 2009 during the unlock of prisoners the deceased was found lying on the floor of his cell in an unconscious state. A pulse was detected and cardio-pulmonary resuscitation was administered. An ambulance was called and the deceased was conveyed to the accident and emergency department at the Royal Infirmary Edinburgh where Mr Dunlop was pronounced dead by the hospital staff at 8.50am at 16 May 2009. The deceased had appeared well when he had been secured for the night in his cell about 8.45pm on 15 May 2009. It would appear that the deceased had collapsed in his cell while getting ready for breakfast. There were no suspicious circumstances surrounding the finding of the deceased unconscious in his cell.
5. An autopsy was carried out by Dr BouHaidar on 20 May 2009. The autopsy confirmed that the deceased had no significant injuries. The examination confirmed that the deceased had been suffering from ischaemic and hypertensive heart disease. His heart at 600 grams was markedly enlarged with evidence of left ventricular hypertrophy. Areas of ischaemic damage were noted by microscope of the type associated with severe coronary artery atherosclerosis consistent with ischaemic heart disease. Both lungs were congested and oedematous showing evidence of sarcoidosis. There was evidence of nephrosclerosis and mild to moderate fatty degeneration of the liver.
6. It was known that prior to death the deceased also suffered from Multiple Sclerosis.
7. After carrying out the autopsy Dr BouHaidar issued a provisional cause of death as:-
  - I(a) Ischaemic and Hypertensive Heart Disease (pending laboratory studies).
8. Thereafter a toxicology report was received indicating there was a significant level of tramadol in the deceased's system. Tramadol is an opioid analgesic drug prescribed to alleviate moderate to severe pain. The concentration of tramadol found in the blood of the deceased lay within the range of values associated with toxicity. The deceased had been prescribed tramadol for several years to alleviate pain and when prescribed a replacement medication

requested a return to Tramadol about a fortnight prior to death and he did not like the side effects associated with the alternative medication.

9. As a result Dr BouHaidar issued a revised autopsy report listing the cause of death as:-

I (a)Tramadol Toxicity

II Ischaemic and Hypertensive Heart Disease, Multiple Sclerosis

10. Subsequently as a result of further investigation by toxicologists the tramadol found in the deceased's bloodstream was at the low end of the toxic range and below the level where it contributes to death. Accordingly Dr. BouHaidar amended his views on cause of death to:-

I Ischaemic and hypertensive heart disease

II Multiple Sclerosis

11. The deceased died of natural causes as detailed by Dr. BouHaidar above. There were no suspicious circumstances surrounding Mr. Dunlop's sudden death. The level of Tramadol found in the Mr. Dunlop's bloodstream at autopsy did not contribute to his death.