SHERIFFDOM OF GLASGOW AND STRATHKELVIN AT GLASGOW

[2018] FAI 33

Case No

DETERMINATION

BY

SUMMARY SHERIFF SHONA GILROY

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

JAMES DUNCAN

Glasgow, 20 September 2017

DETERMINATION

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The Sheriff having considered the information presented at the inquiry determines in terms of section 26 of that Act that:-

James Duncan, born 28 May 1941, formerly of Lossiemouth and residing latterly at Her Majesty's Prison, Barlinnie, 51 Lee Avenue, Glasgow, died at 1955 hours on 9 January 2017 at the Queen Elizabeth University Hospital, Glasgow.

In terms of section 26(2)(a), death occurred at the Queen Elizabeth University Hospital, when the deceased was in legal custody.

In terms of section 26(2)(c) the cause of death was: multiple organ failure, due to an aortoduodenal fistula, due to a ruptured abdominal aortic aneurysm.

No findings were sought or are made in respect of section 26(2)(b), (d), (e), (f) and (g).

NOTE:

Introduction

[1] This is a Fatal Accident Inquiry in terms of section 2(4)(a) of the 2016 Act as Mr Duncan was in legal custody at the time of his death.

[2] The deceased's death was reported to the Crown Office and Procurator Fiscal Service on 10 January 2017.

[3] No preliminary hearing was held.

[4] The representatives of the participants were: Ms Milligan, Procurator Fiscal Depute, for the Crown; and Ms Chalmers, Solicitor, for the Scottish Prison Service.

[5] No witnesses were called and the facts relating to the circumstances of death were presented to the Inquiry in a joint minute agreed by all parties.

The legal framework

[6] A Fatal Accident Inquiry was held under section 1 of the aforesaid 2016 Act

[7] The Inquiry is governed by the Fatal Accident Inquiry Rules 2017

[8] In terms of section 1(3) of the 2016 Act: The purpose of an Inquiry is to—

> (a) establish the circumstances of the death, and
> (b) consider what steps (if any) might be taken to prevent other deaths in similar circumstances.

[9] The matters to be covered in the determination under section 26 are when and where the death occurred and the cause of causes of the death.

[10] The Crown in the public interest is represented by the Procurator Fiscal Depute. A Fatal Accident Inquiry is an inquisitorial process and it is not the purpose of an Inquiry to establish civil or criminal liability.

Summary

[11] The following facts summarise the evidence before the Inquiry:

a. That James Duncan (hereinafter referred to as "the deceased") whose death forms the subject matter of this Inquiry, appeared at a First Diet at Paisley Sheriff Court on 11 February 2016 to answer an indictment. He pled guilty as libelled to all charges on the indictment and sentence was deferred until 10 March 2016 for social work reports and the deceased was admitted to bail. He appeared again at Paisley Sheriff Court on 10 March 2016 at which time he was sentenced to 34 months imprisonment. Crown Productions 3 and 7 comprise relevant documentation in respect of same.

b. That following upon the last mentioned court appearance the deceased was incarcerated in HMP Barlinnie, where he remained until 13 December 2016 when he was transferred to Glasgow Royal Infirmary after becoming unwell. He was thereafter transferred to the Queen Elizabeth University Hospital, Glasgow, on 14 December 2016 where he remained until his death on 9 January 2017. He was accordingly in legal custody as at the date of his death.

c. That healthcare records from HMP Barlinnie, relating to the deceased, form Crown Production 4, hospital records from Glasgow Royal Infirmary, relating to the deceased, form Crown Production 5 and hospital records from the Queen Elizabeth University Hospital, Glasgow, relating to the deceased, form Crown Production 6. These records show that, throughout his time in custody, between 10 March 2016 and 9 January 2017, the deceased's health was monitored and treated by NHS healthcare staff within HMP Barlinnie, Glasgow Royal Infirmary and the Queen Elizabeth University Hospital, Glasgow.

d. That on his admission to HMP Barlinnie on 10 March 2016, the deceased was assessed by Nurse Maria Fraser. At that time it was noted that the deceased had a skin and subcut tissue infection, suspected type 2 diabetes mellitus, that he had had laser surgery the previous year for throat cancer, that he had had a gastroscopy the previous year and that he suffered from blindness and low vision. No other medical conditions were noted at that time. The deceased was thereafter assessed by one of the prison GPs, Dr Grace Campbell, on 11 March 2016. At this time, the GP discussed the deceased's past medical history with him and confirmed what medications required to be prescribed. No additional medical conditions were noted at this consultation.

e. That on 24 June 2016, the deceased was assessed by NHS nurse, Claire Hill, as he had been repeatedly vomiting since his evening meal the previous day.

He was also complaining of pain underneath his belly button area. Nurse Hill carried out observations of the deceased and arranged to review him later that day and inform the Medical Officer. Nurse Hill also advised the deceased to alert prison officers in the Hall if he had any issues or his vomiting continued. Nurse Hill re-assessed the deceased later that morning. He was still complaining of nausea, having vomited once more and continued to have pain in the lower abdomen. Nurse Hill carried out further observations and arranged for the prison Medical Officer to assess the deceased that afternoon.

f. That the deceased had a consultation with Medical Officer Dr Joe Daly on 24 June 2016 and medication was prescribed with a further review planned. However, the abdominal pain significantly worsened and vomiting increased and, as a result, the Medical Officer requested that an emergency ambulance be contacted to transport and refer the deceased to general surgeons at the GRI.

g. That the deceased was taken by ambulance to Glasgow Royal Infirmary on 24 June 2016, arriving there at 14.40 hours. He remained in hospital until 28 June 2016 during which a CT scan of his abdomen was carried out which revealed an infrarenal abdominal aortic aneurysm located 6 cm below the renal arteries. The result was discussed with the vascular team who made the decision that the deceased could be discharged from hospital, as he was clinically well and asymptomatic, and referred for an outpatient appointment

at the vascular clinic for follow up care. The deceased was duly discharged back to HMP Barlinnie on 28 June 2016.

h. That on his return to HMP Barlinnie, the deceased had a consultation with Nurse Deanie. The nurse was in possession of the discharge letter from Glasgow Royal Infirmary which stated the presence of the abdominal aneurysm. Nurse Deanie advised the deceased that, should he experience severe abdominal pain then he should tell staff immediately.

i. That the deceased attended at an outpatient appointment with Gareth Treharne, Consultant Vascular Surgeon at the Vascular Clinic at Gartnavel Hospital on 15 August 2016. Mr Treharne explained to the deceased that, following nationwide guidelines, as his aneurysm measured 5.2cm, this was below the threshold for surgical interventions (which is 5.5cm). As such, Mr Treharne arranged for the deceased to have a further surveillance scan in December 2016 and thereafter the intention was for the deceased to remain under surveillance by the vascular team with six monthly ultrasound scans.

j. That the deceased had an appointment to attend for a surveillance ultrasound scan at Yorkhill Hospital, Glasgow, on 12 December 2016. This appointment had been intimated via telephone to the Health Centre at HMP Barlinnie, but had not been followed up with a letter to confirm. As no confirmation was received, no arrangements were made to take the deceased to his ultrasound appointment on 12 December 2016 and consequently the scan did not take place.

k. That on 12 December 2016, there is note in the prison health records that the deceased was having difficulty in accessing the top bunk in his cell due to his age and ability. No health issues are noted at that time.

l. That on 13 December 2016, the deceased asked to see a nurse as he was feeling unwell and had been for the past 3 days. Nurse Deanie examined the deceased and carried out observations on him and noted he was very tachycardic (accelerated heart rate). He then discussed the deceased with the GP on duty, who made the decision that the deceased should be admitted to hospital immediately by emergency ambulance. An ambulance was requested at 2118 hours, it attended at HMP Barlinnie at 2144 hours and transported the deceased to Glasgow Royal Infirmary, arriving there at 2224 hours. The information provided to the ambulance crew by the deceased was that he had been feeling unwell for the past 3 days. He was feeling shaky with lower abdominal pain radiating into his groin and had chest discomfort which he likened to indigestion. He also stated to the ambulance crew that he had a hernia and an abdominal aortic aneurysm. The ambulance crew had also noted that the health care records from HMP Barlinnie contained information that the deceased had a 5.2 cm abdominal aortic aneurysm.

m. That on his admission to Glasgow Royal Infirmary on 13 December 2016, a CT scan was carried out on the deceased at approximately 2300 hours which revealed that his abdominal aortic aneurysm had increased significantly in

size, to 6cm and that it appeared to be leaking. As a result of this scan, the deceased was immediately transferred to the Queen Elizabeth University Hospital, Glasgow so that he could be treated by the vascular surgeons there.

n. On arrival at the Queen Elizabeth University Hospital, the deceased was examined by vascular surgeons, who also had sight of the CT scan that had been performed. At that time, the vascular surgeons were of the view that the CT scan showed no active bleeding from the aneurysm and that it was at the pre-rupture stage. However, given his symptoms and given there was no other explanation for them, the surgeons came to the view that there had been a rupture of the aneurysm and that they should undertake emergency surgery.

o. That on 14 December 2016, the vascular surgeons carried out emergency surgery on the deceased to fix the rupture to the aneurysm. This surgery went to plan and the surgeons succeeded in repairing the rupture. The deceased was thereafter transferred to the ICU for recovery. Whilst within the ICU the deceased suffered from some organ dysfunction. This was treated, the deceased's condition improved, and he was transferred to the vascular ward on 22 December 2016.

p. That the deceased's condition appeared to be improving until 3 January 2017 when the deceased began to have physiological complications. He had tachycardia, low blood pressure and lactate. He was assessed by vascular surgeons on 4 January 2017. Given his presentation, the surgeons were

concerned that the deceased was suffering from colonic/small bowel ischaemia (meaning part of the gut has died). As a result of this concern, the vascular surgeons made the decision to carry out an exploratory laparotomy to look inside the deceased's stomach. This surgery took place on 4 January. There was no evidence of infarct and no bleeding was found.

q. That following the surgery on 4 January 2017, the deceased was taken to ICU for recovery and a nasogastric tube was inserted into his stomach. On this procedure being carried out, blood came out of the tube and an upper GI endoscopy was immediately arranged in attempt to ascertain the source of the bleed. The endoscopy showed some ulceration in the stomach.

r. That following the endoscopy the deceased was unwell, but stable and he was transferred from HDU to the vascular ward on 7 January. On 8 January his condition deteriorated and he began to vomit blood. As a result of this deterioration, the vascular surgeons were of the view that the deceased may be suffering from an aorto-duodenal fistula (ADF), which is an abnormal connection between the gut and the aorta and is a very rare complication which can develop following aortic surgery. In order to confirm the presence of the ADF, surgery was carried out on the deceased on 8 January 2017. This was performed by Keith Hussey, Vascular Surgeon. The surgery confirmed the presence of the ADF. Mr Hussey made efforts to fix the problem and for the 24 hours following the surgery, the deceased was stable in ICU.

s. That on 9 January 2017 the deceased's condition deteriorated and he suffered from multi organ failure and respiratory failure. He did not respond to treatment for his organ failure and, given his poor prognosis, the clinical decision was taken to withdraw treatment and palliate him. On removal of treatment he died very shortly thereafter and life was pronounced extinct at 1955 hours on 9 January 2017.

t. That the said Keith Hussey has provided the following additional information in relation to the deceased's condition:

- That it is widely accepted that the risk of intervention with an abdominal aortic aneurysm is greater than no intervention. The risk of a ruptured aneurysm carries a mortality rate of less than 1% per year, but the risk of intervention is greater than 1%. The risk of intervention can also increase depending on the shape and location of the aneurysm.
- Mr Hussey is of the view that, once the deceased's aneurysm was discovered in June 2016, his care and treatment, as an outpatient who did not meet the threshold for surgical intervention, was entirely appropriate and is recognised practice throughout the UK. He was due to be monitored on a 6 monthly basis and again, this is standard practice.
- If, at the time of the outpatient appointment with the vascular surgeon in August 2016, the aneurysm had measured above the threshold then the surgeon would have determined whether the deceased was fit for surgical intervention. If he was, then the surgeon would decide what

level of surgical intervention was appropriate. This would then have been discussed with the deceased and the risks of the surgery would be explained. There is a 10% mortality rate for surgical intervention and quite often patients will choose not to undergo the surgery.

- When the deceased was admitted to the Queen Elizabeth University Hospital on 14 December 2016 and his abdomen was opened, it was found that the aneurysm had ruptured, but it was contained. If it had been left untreated, it would have been fatal.
- The surgery on 14 December went well and the deceased did start to improve. It is Mr Hussey's view that this surgery was the only chance of survival for the deceased and if he hadn't had it, he would certainly have died within hours of coming into the hospital as the blood from the rupture would have spread to his stomach.
- It is Mr Hussey's view that the second surgery on 4 January 2017 was appropriate as a visceral infarct can happen following aortic surgery. This infarct was not found and the surgeons were reassured, but they still had no explanation for the deceased's symptoms.
- After the deceased had the upper GI bleed following the surgery on 4 January, a stress ulcer was suspected and this can be quite a common issue in patients in the ICU environment.
- However, once the deceased started vomiting blood on 8 January 2017, the only explanation for this was that an ADF had developed. Mr Hussey

is of the view that an ADF developing so quickly is quite unusual. They can develop following the primary procedure to fix a rupture but, in Mr Hussey's experience, they usually happen months or even years after the primary procedure. They are very rare, and the onset in the deceased's case was unusual, but they are a recognised consequence of the primary procedure. In Mr Hussey's experience, once a patient develops an ADF then they are fatal, even with surgery.

- In Mr Hussey's view, once the ADF had been confirmed, the likelihood was that the deceased was going to die and the only chance of survival was to perform surgery on him on 8 January 2017. However, his risks of surviving, even with the surgery, were slim.
- The surgery itself went well and the deceased did appear to be stable in the hours following the procedure. However, his condition started to deteriorate within the 24 hour period. He suffered multiple organ and respiratory failure and did not respond to treatment. He also lost circulation to his left leg. Had the doctors been able to pull him through the multi-organ failure, he would have had to have had his left leg amputated and his quality of life would have been very poor.
- He did not respond to treatment for the multi-organ failure and the doctors caring for him made the decision to palliate him and he died very quickly thereafter.

- In Mr Hussey's view, there is nothing that should or could have been done differently following the diagnosis of the aneurysm in June 2016. The deceased was treated appropriately and, once he was admitted to the Queen Elizabeth University Hospital on 14 December 2016, every effort was made to preserve his life. Living with an aneurysm always carries a risk of rupture, and any surgical intervention carries considerable risk. Once an ADF has developed, then the chances of survival diminish significantly.
- That the deceased failing to have his surveillance scan on the 12 December 2016 would not have made any difference to the outcome in this case. If he had gone for the scan on 12 December and it showed that the aneurysm had grown bigger than 5.5cm, then a series of tests would have been carried out to determine what course of action would be taken. These tests would have been conducted on an outpatient basis and the target for the Health Board is to have these tests carried out within 40 days.
- It is Mr Hussey's opinion that the aneurysm would not have been ruptured on 12 December when the deceased was meant to have had his scan. When an aneurysm ruptures, a patient will become acutely unwell and requires urgent medical attention. If they do not receive urgent medical attention, they will die within a few hours. In the deceased's case, he became acutely unwell on 13 December and that was when he

was transferred to hospital for emergency treatment. That would suggest that the aneurysm ruptured on 13 December. As such, it is unlikely that the outcome would have been different had the deceased had the scan. All that would have happened is that the process described above would have started when it was discovered that the aneurysm had grown over the threshold and the rupture would still have happened on the 13 December.

- In Mr Hussey's opinion, the only thing that could have been done differently is that, when the deceased was admitted to hospital on 14 December 2016 the decision was taken at that time to palliate him rather than carrying out the surgery. If that had happened, then he would still have died and it would have happened much more quickly. The only reason he survived as long as he did was because the surgery was carried out.

u. That on 18 January 2017 at the Queen Elizabeth University Hospital, Glasgow an external examination was carried out on the deceased by Dr Marjorie Turner, Forensic Pathologist. The External Examination Report forms Crown Production 2. The cause of death was found to be

1a: Multiple organ failure

due to

1b: Aortoduodenal fistula (operation 8/1/17)

due to

1c: Ruptured abdominal aortic aneurysm (operation 14/12/16)

Discussion and conclusions

[12] The Procurator Fiscal invited the court to make a formal determination in respect of Mr Duncan's death, which submission was adopted by Ms Chalmers. Having considered the terms of the joint minute and the productions, I am satisfied that such a formal determination is appropriate in the circumstances of Mr Duncan's death.