MAGISTRATES COURT *of* TASMANIA

CORONIAL DIVISION

Record of Investigation into Death (Without Inquest)

Coroners Act 1995
Coroners Rules 2006
Rule 11

I, Olivia McTaggart, Coroner, having investigated the death of Stavroula Skrepetos

Find, pursuant to Section 28(1) of the *Coroners Act* 1995, that

a) The identity of the deceased is Stavroula Skrepetos;
b) Mrs Skrepetos died of natural causes in the circumstances described below;
c) The cause of death was haemoperitoneum/retroperitoneal haematoma due to a rupture of the abdominal aorta; and
d) Mrs Skrepetos died on 18 March 2018 at Hobart, Tasmania.

In making the above findings I have had regard to the evidence gained in the investigation into Mrs Skrepetos' death. The evidence comprises the police report of death; an opinion of the forensic pathologist who conducted the autopsy; life extinct, identification and next-of-kin affidavits; medical records and reports; and a review by the coronial medical consultant.

Mrs Skrepetos was born on 17 February 1938 and aged 80 years at the time of her death. She was widowed and lived in West Hobart with her son, Konstantinos Skrepetos and his children. She was very active, generally healthy and engaged with her family.

Mrs Skrepetos suffered occasionally from 'dizzy spells' which caused her to lose balance. Mr Skrepetos would drive his mother to Calvary Hospital for medical attention when this occurred. Mr Skrepetos believed that Mrs Skrepetos may have been experiencing an increase in the frequency of her 'dizzy spells' and that she was not advising him of these occurrences.

At 8.00am on Saturday 17 March 2018 Mr Skrepetos located his mother injured in her bed. She was conscious but had blood coming from her mouth and had been vomiting. Mrs Skrepetos told him that she had fallen twice during the night. It appeared that she had hit her head in one of the falls.

Mrs Skrepetos was conveyed to the Emergency Department of the Royal Hobart Hospital. Medical evaluation at the hospital included a CT scan of the head that identified no acute intracranial pathology. There was a simple fracture of her fourth cervical vertebra.

At 5.00am on 18 March 2018 Mrs Skrepetos developed undifferentiated shock, the symptoms of which comprised abdominal pain and distension, and hypotension. She was diagnosed as having sepsis. With subsequent medical intervention, including

intravenous fluid and antibiotics, it appeared that her symptoms improved and that she was reasonably stable. However, at 11.00am her blood pressure again fell drastically and intravenous fluid was again administered on the basis that the diagnosis was still considered to be sepsis. A medical emergency team was called. Arterial blood gases showed very low haemoglobin levels and a severe metabolic acidosis with high blood lactate. After 50 minutes of attempted resuscitation Mrs Skrepetos went into asystole and, unfortunately, passed away.

The death of Mrs Skrepetos was properly reported to the Coroner as it was unexpected and possibly arose from the falls. Although treating doctors identified a catastrophic intra-abdominal bleed as the reason for death, it was unclear to them why this had occurred.

As part of the coronial investigation, an autopsy was performed by forensic pathologist, Dr Donald Ritchey. At autopsy, Dr Ritchey noted that there was no presence of life-threatening head injury to account for death. Dr Ritchey stated in his report:

"There was copious partially clotted blood within the peritoneal space (haemoperitoneum) and abundant blood trapped within the retroperitoneum (retroperitoneal haematoma). The source of this blood was a 4cm infra-renal (below the level of the renal arteries) abdominal aortic aneurysm (AAA) that had perforated.

AAA is a complication of long-standing atherosclerosis. They represent a focal weakness of the aorta at the site of bulging ulcerated atherosclerotic plaque. They often bleed in small amounts over a period of days to weeks and may cause abdominal pain and hypotension (episodic low blood pressure). AAAs are at risk of spontaneous perforation causing catastrophic internal bleeding that has a high mortality rate. The mechanism of death was hypovolemic shock."

Dr Ritchey concluded that the cause of death was haemoperitoneum/ retroperitoneal haematoma caused by a ruptured abdominal aortic aneurysm caused by generalised atherosclerosis.

Dr A J Bell, coronial medical consultant, also reviewed the medical aspects of this case. He noted that although an abdominal aortic aneurysm was diagnosed in 2011, there is no further record of the aneurysm in the medical records available. In his report, he stated that the records provide no clear indication as to how the aneurysm was found or whether follow-up was in place. At Mrs Skrepetos' presentation in hospital on 17 March there is no reference to the existing aneurysm by Mrs Skrepetos or her son.

It is likely that the aneurysm was not previously symptomatic and thus was not mentioned at the time of history-taking in hospital. In support of this, Dr Bell noted that, at post mortem, the aneurysm was reported to be 4.0 cm in diameter whereas the usual size for concern is 5.5 cm. He therefore suggested that Mrs Skrepetos' severe atherosclerosis may have led to a localized aorta rupture rather than an actual rupture of the aneurysm. I do not need to resolve the exact mechanism of the bleed in this finding.

Dr Bell further opined that the hypotension suffered by Mrs Skrepetos at 05.00am and 11:00am probably indicated separate aortic artery bleeds and did not relate to the issue

of the vertigo, which was the likely cause of her falls. He indicated that an arterial bleed would cause rapid blood loss causing a low blood pressure. The bleeding may then stop with surprising speed due to formation of a clot. In this case, it appears that Mrs Skrepetos made a partial recovery from the first bleed. Typically, however, the arterial bleeding recurs some time later, as in this case. Dr Bell stated that the vertigo and falls were therefore probably unrelated to the aortic artery bleed. Specifically,the initial fall did not appear to be due to a bleed, mainly because there was no abdominal pain described. I accept his opinion.

In his report, Dr Bell discusses the difficulties of correctly diagnosing an aortic aneurysm/haemorrhage in this situation and does not make criticism of the non-diagnosis of the aortic haemorrhage by medical staff.

I accept that the haemorrhage suffered by Mrs Skrepetos was not medically predictable and, once it had occurred, her prognosis was very poor. This case represents the diagnostic difficulties of a patient who develops undifferentiated shock and who is suffering occult arterial bleeding with a recovery phase.

The medical care given to Mrs Skrepetos was conscientious in the circumstances. It is unlikely that, even if the aortic aneurysm/haemorrhage was diagnosed shortly after the initial blood pressure drop, she would have survived.

I do not reproduce the full report of Dr Bell in this finding. I intend, however, to forward Dr Bell's report to the Royal Hobart Hospital for its information and processes of review.

Comments and Recommendations

The circumstances of Mrs Skrepetos' death are not such as to require me to make any comments or recommendations pursuant to Section 28 of the *Coroners Act* 1995.

I convey my sincere condolences to the family and loved ones of Mrs Skrepetos.

Dated: 31 January 2019 at Hobart Coroners Court in the State of Tasmania.

Olivia McTaggart
Coroner