



MAGISTRATES COURT *of* TASMANIA

CORONIAL DIVISION



Record of Investigation into Death (Without Inquest)

*Coroners Act 1995
Coroners Rules 2006
Rule 11*

I, Simon Cooper, Coroner, having investigated the death of Eva Fay Davies

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

- a) The identity of the deceased is Eva Fay Davies;
- b) Mrs Davies died as a result of a closed head injury sustained in a fall from standing;
- c) The cause of Mrs Davies' death was left frontal/temporal subdural haematoma; and
- d) Mrs Davies died on 22 December 2017 at the Whittle Ward, Royal Hobart Hospital, 88 Davey Street, Hobart, Tasmania.

Circumstances of death

1. On 12 December 2017, 87-year-old Mrs Davies tripped over an electric cord at her home, fell, hit her head and suffered a nosebleed. She activated her personal alarm. Ambulance Tasmania attended and transported her to the Mersey Community Hospital (MCH).
2. Mrs Davies was admitted to the MCH after being triaged in the emergency department. She was lucid and her vital signs were stable. A critical medical issue was that Mrs Davies was being medicated with an anti-coagulant. I will return to this issue later in the finding.
3. An urgent CT scan of her brain was performed which showed she had suffered a subdural haematoma on the left frontal and temporal convexity and along the interior anterior hemispheric fissure with no midline shift or mass effect. After consultation with the neurosurgical registrar at the Royal Hobart Hospital (RHH) a decision was made to observe Mrs Davies in hospital and repeat the CT scan of her brain in 24 hours. However, her condition deteriorated and she was transported to the Royal Hobart Hospital for urgent neurosurgery later the same day.
4. Brain surgery commenced at 6.00pm the same day. After surgery, Mrs Davies was admitted to the RHH Intensive Care Unit (ICU) at about midnight. At that time she was stable albeit on life support. A CT scan of the brain the following morning was

significantly improved with no evidence of mass effect. However, Mrs Davies did not awaken.

5. Another CT scan of the brain on 17 December 2017 was thought to show a left frontal cerebral infarction with no apparent cause. After family discussion all active treatment was ceased and palliative care commenced. Mrs Davies was moved to the hospital's Whittle Ward where she died several days later, on 22 December 2017.
6. In accordance with the requirements of the *Coroners Act 1995* the fact of Mrs Davies' death was reported. After her body was formally identified, it was externally examined by experienced forensic pathologist Dr Donald MacGillivray Ritchey. Dr Ritchey also reviewed her medical records. He expressed the opinion, which I accept, that the cause of her death was a left frontal temporal subdural haematoma following a closed head injury sustained in a mechanical fall from standing. Dr Ritchey noted several significant contributing factors including anti-coagulation, type II diabetes and hypertension.

Consideration of treatment

7. In October 2017 Mrs Davies had been treated for residual chronic thrombosis extending from her common femoral vein to the popliteal vein. Her GP continued anti-coagulation due to the continued presence of thrombus in the left leg veins. As was noted earlier in this finding, at the time of her admission to the MCH on 12 December 2017, Mrs Davies was on non-reversible anti-coagulation. This consideration was something recognised by the emergency department consultant at the MCH, Dr Williams. Dr Williams as a consequence sought advice from the neurological registrar at the RHH. The advice given was that Mrs Davies could stay at the MCH and have neurological observations and a repeat scan of her brain the following day.
8. However acute symptomatic subdural haematoma after a lucid period (as was the case with Mrs Davies) is, in the opinion of the medical advisor to the coroner's office Dr Anthony J Bell MB BS MD FRACP FCICM, a neurological emergency that usually requires surgical treatment to prevent irreversible brain injury and death caused by haematoma expansion, elevated intracranial pressure and brain herniation. I accept Dr Bell's opinion.
9. I note that both the RHH and the neurosurgical registrar involved were given the opportunity to address this issue as part of the investigation. The registrar indicates disagreement with "the advice that every anti-coagulated patient with acute subdural haematoma should be transferred to [a] neurological facility" pointing out that it depends on the size of the subdural haematoma and the patient's clinical status. I note that this response does not address the situation in relation to patients being anti-coagulated.

10. The registrar also made the point that the RHH is the only neurosurgical unit in the state with limited beds. I also accept this point; however it does not appear to have been a consideration in Mrs Davies' case as I do not understand that a limitation on available beds to have been a factor in the advice offered to the ED Consultant Dr Williams.
11. On the face of it the advice given to Dr Williams by the neurosurgical registrar at the RHH was incorrect. In my view, given the fact that Mrs Davies was on irreversible anti-coagulation and had been identified as suffering from acute subdural haematoma she should have been urgently transferred to a neurosurgical facility (which I note the MCH is not).
12. Finally, I note that Mrs Davies' medical records indicate that staff at the MCH, recognising the significance of the issue, sought urgent advice of a haematological registrar at the Launceston General Hospital, rather than the consultant haematologist on call at the MCH.

Comments and Recommendations

13. The evidence is that apart from seeking advice, no steps were taken to reverse Mrs Davies' anti-coagulant. I acknowledge that her anti-coagulant was irreversible (although I understand steps can be taken to ameliorate the effect of most anti-coagulant drugs). Accordingly, it is not the case in relation to Mrs Davies' death that a failure to reverse her anti-coagulant caused or contributed to her death. However, I still consider it necessary to highlight the issue of reversal of anti-coagulation so as to potentially prevent future deaths.¹
14. I consider it appropriate therefore to **recommend** all hospitals consider the development of need to reverse anti-coagulation protocol. Such a protocol (currently in place in the Queensland and NSW health systems) would, in my view, have the considerable advantage of ensuring that the need to anti-coagulate is considered and acted upon in appropriate cases.
15. I convey my sincere condolences to the family and loved ones of Mrs Davies.

Dated 17 October 2019 at Hobart in the State of Tasmania.

Simon Cooper
Coroner

¹ See section 28 (2) of the *Coroners Act 1995*