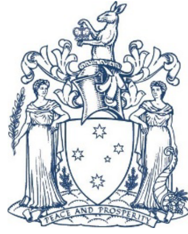


IN THE CORONERS COURT OF VICTORIA AT MELBOURNE	**COR 2023 001741**

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the ***Coroners Act 2008***

Findings of:	AUDREY JAMIESON, CORONER
Deceased:	Sheila Marion Quairney
Date of birth:	27 June 1954
Date of death:	3 April 2023
Cause of death:	1(a) ACUTE MYOCARDIAL INFARCTION 1(b) CORONARY ARTERY ATHEROSCLEROSIS
Place of death:	St Vincent's Hospital, 41 Victoria Parade, Fitzroy, Victoria, 3065
Keywords:	Heart attack, missed diagnosis, natural causes, recommendation

INTRODUCTION

1. On 3 April 2023, Sheila Marion Quairney (**Sheila**) was 68 years old when she died at St Vincent's Hospital after a short admission following an injury she sustained on the day prior. At the time of her death, Sheila lived in Port Melbourne with her partner, Brian Bethune.

Medical History

2. Sheila had had a medical history of osteopaenia – low calcium in the bones, bilateral elbow fractures and a right shoulder replacement.

THE CORONIAL INVESTIGATION

3. Sheila's death was reported to the coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.

4. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

5. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of comments or recommendations in appropriate cases about any matter connected to the death under investigation.

6. Victoria Police assigned an officer to be the Coroner's Investigator for the investigation of Sheila's death. The Coroner's Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as family, the forensic pathologist, treating clinicians and investigating officers – and submitted a coronial brief of evidence.

7. This finding draws on the totality of the coronial investigation into the death of Sheila Marion Quairney including evidence contained in the coronial brief. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for

narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.[1]

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Circumstances in which the death occurred

8. On 1 April 2023, Sheila was using a stationary bicycle and fell forwards onto the handlebars, striking her ribcage. She experienced *'sharp'* pain around her left ribs but did not consider it to be *'debilitating'*.

9. On 2 April 2023, the pain persisted and at approximately 1pm, Sheila consumed paracetamol, ibuprofen and codeine. At approximately 2pm, she developed nausea and pain in her upper abdomen and left lower ribs.

10. Sheila's pain intensified and at approximately 8:15pm, she arrived at the St Vincent's Hospital emergency department (**ED**). Upon arrival, Sheila had *'stable vital signs'* including blood pressure, heart rate and oxygen saturation. She had a Glasgow Coma Scale[2] score of 15 and rated her pain at a five out of ten.

11. At 10:47pm Sheila was assessed by a clinician of the Rapid Assessment Team (**RAT**) who noted she was *'dry retching, pale and appeared uncomfortable'*. On examination, Sheila was alert, had normal vital signs, *'a clear chest with no difficulty breathing and her abdomen was not tender'*. An abdominal ultrasound yielded normal results, and the clinician formed the impression: *'presentation more suggestive codeine [adverse drug reaction] rather than delayed surgical presentation of trauma'*. This was based on Sheila's previous adverse reaction to morphine, which like codeine, is an opioid.

12. On 3 April 2023, at 12:37am, Sheila was assessed by a second clinician who documented she presented with upper left abdominal pain, was nauseated and vomiting. She was *'stable, tender over her left lower ribs and had a soft and non-tender abdomen'*. The second clinician also concluded that her symptoms were due to an adverse reaction to the codeine. A plan was

[1] Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

[2] The Glasgow Coma Scale (**GCS**) is used to determine the consciousness of a patient in response to defined stimuli.

made for a chest x-ray, blood tests, pain killers, anti-nausea medication and to admit Sheila to the short stay unit for symptomatic treatment and to discharge her if she improved clinically.

13. On 3 April 2023, at 3:30am, while having an intravenous cannula inserted, Sheila deteriorated and experienced a pulseless electrical activity cardiac arrest.[3]

14. Cardiopulmonary resuscitation (**CPR**) was commenced however, Sheila could not be revived. At 4:45am, Sheila was declared deceased.

Identity of the deceased

15. On 3 April 2023, Sheila Marion Quairney, born 27 June 1954, was visually identified by her partner, Brian Bethune, who completed a Statement of Identification.

16. Identity is not in dispute and requires no further investigation.

Medical cause of death

17. Forensic pathology registrar Dr Michael Duffy (**Dr Duffy**) of the Victorian Institute of Forensic Medicine (**VIFM**) conducted an autopsy on the body of Sheila Quairney on 5 April 2023.[4] Dr Duffy considered the Victoria Police Report of Death for the Coroner (**Form 83**), the e-Medical Deposition Form, the post-mortem computed tomography (**CT**) scan and medical records and provided a written report of his findings dated 29 May 2023.

18. The post-mortem examination revealed a ruptured anterior left ventricular acute myocardial infarction evidenced by a haemopericardium, and large right haemothorax of 1200 mL with a defect in the right pericardium. There was also a small left haemothorax of 150 mL and severe coronary atherosclerosis of the left anterior descending coronary artery with plaque haemorrhage.

19. Dr Duffy stated that an acute myocardial infarction – colloquially referred to as a *'heart attack'* – occurs where there is a lack of blood flow to the heart muscle. In this instance, the reduced blood flow was due to coronary artery atherosclerosis - blockages in the blood vessels by plaques in the vessel walls.

[3] A pulseless electrical activity (**PEA**) cardiac arrest occurs where the heart stops beating despite the appearance of cardiac electrical activity on a cardiac monitor.

[4] When conducting the examination on Sheila, Dr Duffy was supervised by Dr Gregory Ross, a forensic pathologist of the VIFM.

20. Of the right haemothorax – blood in the right chest cavity – and the disruption to the pericardium – the fibrous sac that encases the heart – Dr Duffy stated these were likely due to the rupture of the heart wall due to the myocardial infarction, which can be exacerbated by CPR.

21. Post-mortem biochemistry demonstrated troponin levels of 20,263 ng/L, significantly greater than the normal range of < 16 ng/L. Troponin is a marker for heart muscle damage and the significantly elevated concentration is in keeping with a myocardial infarction. Histological changes indicated the myocardial infarction likely commenced more than several hours prior to death.

22. Dr Duffy opined that it was likely that the nausea and vomiting experienced prior to hospital admission, were symptoms of an evolving myocardial infarct.

23. Toxicological analysis of post-mortem samples identified the presence of amiodarone, metoclopramide and ondansetron, which were documented to have been administered in hospital.

24. Dr Duffy provided an opinion that the medical cause of death was 1 (a) ACUTE MYOCARDIAL INFARCTION and 1(b) CORONARY ARTERY ATHEROSCLEROSIS.

CORONERS PREVENTION UNIT

25. In light of Sheila's admission to hospital on the day prior to her death, and in the interests of a comprehensive investigation, I sought the assistance of the Coroners Prevention Unit (**CPU**) to consider the appropriateness of the medical treatment provided.[5]

26. In a statement provided by St Vincent's Hospital, a representative addressed Sheila's clinical course on 2 and 3 April 2023 and the clinicians' assessment and diagnosis.

27. St Vincent's Hospital acknowledged that a myocardial infarction was not identified nor considered by clinicians when assessing Sheila:

[5] The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the Coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations. The CPU also reviews medical care and treatment in cases referred by the coroner. The CPU is comprised of health professionals with training in a range of areas including medicine, nursing, public health and mental health.

> *'Unfortunately myocardial infarction was not considered as a potential cause of the presentation at the time. It is extremely unfortunate that given the history of the chest/upper abdominal trauma on the previous day it was that which was considered to be the likely cause of the presentation. The additional symptoms of epigastric pain and nausea/vomiting were considered likely related to an adverse reaction to medication'.*

28. The representative continued that acute coronary syndrome could present atypically amongst female patients. They stated that *'it is a huge challenge in emergency medicine to consider all potential diagnoses for any presentation and this can be made even more challenging when there are seemingly other causes'.*

29. It was put to St Vincent's Hospital whether they considered that Sheila's fall on the stationary bike the day prior was due to a medical episode requiring investigation. St Vincent's Hospital confirmed that clinicians considered whether a medical episode precipitated the fall, however, explained that Sheila described the fall to have been *'mechanical'* in nature, such as a trip or slip rather than a lapse in consciousness.

30. Regarding blood tests conducted during Sheila's admission, St Vincent's Hospital stated that routine blood tests were conducted to check blood count and kidney, liver and pancreatic function. Given that an acute coronary syndrome was not considered by clinicians, Sheila's troponin level was not initially tested. It was not until the morning of 3 April 2023, during CPR, that a troponin test was undertaken and demonstrated marked elevation at 13,076 ng/L.

31. The CPU considered the responses provided by St Vincent's Hospital and determined the acknowledgement of a missed diagnosis to be appropriate. The justifications put forward by St Vincent's Hospital of recent trauma, a history of adverse drug reactions and the atypical presentation of acute coronary syndrome amongst females, were considered reasonable by the CPU.

32. More broadly, the CPU considered the use of Rapid Assessment Teams (**RATs**) in EDs. While RAT clinicians can provide an initial assessment sooner than would normally occur, and are generally undertaken by an experienced doctor, the assessments are necessarily brief or limited. Assessments by RATs are intended to be followed by a more comprehensive assessment by a second clinician however, the CPU considers this may introduce a bias which could affect the conclusion of the second clinician. I note there is no evidence in this instance to suggest that the second clinician who assessed Sheila was biased or that they would have

reached a different conclusion in the absence of the RAT clinician's assessment. Nonetheless, I still consider the views of the CPU on RATs to be pertinent in this investigation.

33. Accordingly, I make the following apposite recommendation.

RECOMMENDATIONS

Pursuant to section 72(2) of the Act, I make the following recommendations:

(i) In the interests of promoting public health and safety and with the aim of preventing similar deaths, I recommend that **St Vincent's Hospital** and the **Australasian College for Emergency Medicine** consider adopting Sheila Marion Quairney's matter as a case study to highlight the importance of a comprehensive primary and secondary assessment and of the consideration of acute coronary syndrome in females who may present atypically.

FINDINGS AND CONCLUSION

1. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:

   a) the identity of the deceased was Sheila Marion Quairney, born 27 June 1954;

   b) the death occurred on 3 April 2023 at St Vincent's Hospital, 41 Victoria Parade, Fitzroy, Victoria, 3065; and

   c) I accept and adopt the medical cause of death ascribed by Dr Duffy and find that Sheila Marion Quairney died due to an acute myocardial infarction and coronary artery atherosclerosis,

2. AND I find that Sheila Marion Quairney died due to natural causes in the context of a short hospital admission.

3. AND I have considered the medical management provided by St Vincent's Hospital and find that they failed to consider and identify that Sheila Marion Quairney was experiencing a myocardial infarction during the course of her admission.

4. AND FURTHER I have considered and commend the response provided by St Vincent's Hospital in the time since Sheila Marion Quairney's death and find that it has appropriately identified the factors which lead to the missed diagnosis.

I convey my sincere condolences to Sheila's family for their loss.

Pursuant to section 73(1A) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

I direct that a copy of this finding be provided to the following:

Brian Bethune, Senior Next of Kin

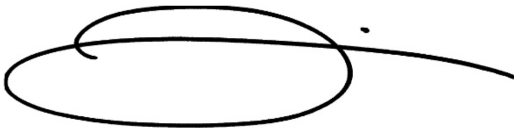
Catherine Tominey

St Vincent's Hospital

Australasian College for Emergency Medicine

Senior Constable Reuben Mascaro, Coroner's Investigator

Signature:



AUDREY JAMIESON

CORONER

Date: 2 January 2025

NOTE: Under section 83 of the ***Coroners Act 2008*** ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.