



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2020 001509

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the Coroners Act 2008

*Amended on 16 May 2022 pursuant to section 76 of the Coroners Act 2008 (Vic)*¹

Findings of:	Coroner Simon McGregor
Deceased:	Trevor Anthony Peterson
Date of birth:	23 August 1962
Date of death:	17 March 2020
Cause of death:	1(a) Sepsis from ischemic bowel 1(b) Superior mesenteric artery thrombus
Place of death:	Western Health, Footscray Hospital, 160 Gordon Street, Footscray, Victoria, 3011

¹ The name of the Coroner's Investigator was amended to read "Senior Constable Ashley Rowe, Victoria Police, Coroner's Investigator".

INTRODUCTION

1. On 17 March 2020, Trevor Anthony Peterson was 57 years old when he died at the Western Hospital from sepsis caused by ischemic bowel. At the time of his death, Trevor lived in Yarraville with his wife, Lisa. He is also survived by his son, Benjamin.

THE CORONIAL INVESTIGATION

2. Trevor'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.
3. 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.
4. 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.
5. Victoria Police assigned an officer to be the Coroner's Investigator for the investigation of Trevor'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. Following receipt of the coronial brief of evidence I requested additional statements from Western Health clinicians and advice from the Coroner's Prevention Unit.
6. This finding draws on the totality of the coronial investigation into the death of Trevor Anthony Peterson 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.²

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

Circumstances in which the death occurred

7. Trevor's past medical history included duodenal ulcer, diverticular disease, shingles, hypertension, orchidectomy for testicular cancer in the 1980s, a partial tongue resection for tongue cancer in 2013, and he had a significant smoking history.
8. Trevor had chronic issues with gut ischemia,³ which were first diagnosed at colonoscopy in August 2018.
9. In October 2019, Trevor was admitted to Western Hospital with ischaemic colitis⁴, which settled with conservative (non-operative) treatment. A CT angiogram⁵ showed severe disease in the arteries supplying the gut putting him at risk of recurrent ischemia. Trevor was educated about the importance of stopping smoking and counselled about proposed procedures. He was discharged on aspirin and atorvastatin⁶ amongst other medications. He had planned follow up with the vascular unit and was booked for a category 2⁷ mesenteric angiogram with angioplasty and/or stent⁸ as indicated.
10. On 18 February 2020, Trevor underwent the mesenteric angiogram and superior mesenteric artery (SMA) plasty and stent. This had been rescheduled three times due to theatre logistics. The procedure was difficult due to tight stenosis and angle, but there were no immediate complications. A note from interventional radiologist (on the procedure report) stated that Trevor should commence Dual Antiplatelet Therapy (DAPT)⁹ to ensure patency of the covered stent. Aspirin and atorvastatin were documented as medications on admission and discharge notes. No record of the need for DAPT was on the discharge letter to Trevor's GP.

² 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.

³ Impaired blood supply to the gut, symptoms include abdominal pain, often worse after eating, nausea and vomiting.

⁴ Inflammation of the large bowel (colon) due to inadequate blood supply

⁵ Specialised CT scan using the injection of dye to visualise the arteries supplying the gut

⁶ Lipid lowering medication, which reduces illness and mortality in people at high risk of cardiovascular disease

⁷ Semi urgent, aim for treatment within 90 days

⁸ A minimally invasive vascular procedure to widen narrow or obstructed arteries, the stent is a tiny expandable tube to keep the artery open. Mesenteric means the arteries supplying the gut

⁹ Aspirin and another antiplatelet agent such as clopidogrel

11. On 8 March 2020, Trevor was admitted to the Western Hospital with three days of abdominal pain associated with nausea and vomiting. He had stopped taking aspirin the week prior as he reported he did not have a prescription, and apparently his general practitioner had told him he did not need the atorvastatin. He was not taking clopidogrel.
12. A CT abdomen and pelvis showed 11mm of likely in stent (SMA) thrombosis¹⁰ associated with large areas of submucosal oedema¹¹ of the small bowel. He was admitted under the vascular unit with the general surgical unit consulting. There was a discussion between the vascular Registrar and the Interventional Radiologist that he was for a heparin infusion but not for thrombolysis.
13. Trevor remained stable for two days on heparin. However, Lisa noted he remained in significant pain. Western Health Medical records indicted medical reviews as follows:
 - a) 8 March 2020: 3.43pm: Pain resolved, abdomen soft and non-tender, possible dark red blood in stools indicating possible upper GIT bleed, commenced on pantoprazole;¹²
 - b) 9 March 2020: 10.26am: Intermittent abdominal pain overnight, nil currently, abdomen soft and non-tender, lactate 1.2¹³, continue heparin and pantoprazole, start diet;
 - c) 10 March 2020: 6.54am: intermittent abdominal pain, currently under control, feeling much improved, vital signs all stable;
 - d) 10 March 2020: 3.13pm: discussed with Vascular Surgeon as patient has no pain and tolerating diet can cease heparin and discharge home on aspirin, clopidogrel and atorvastatin;
 - e) 10 March 2020: 4.15pm: ongoing pain, 6/10 intensity, patient seems improved since last review but not for discharge today;
 - f) 10 March 2020: 5.14pm: not unwell looking, walking around room holding hand over umbilicus, had total 15mg oxycodone and paracetamol 2g since 12.00pm, thought had inadequate analgesia so given further analgesia;

¹⁰ Blood clot

¹¹ Swelling

¹² Medication to reduce acid in the stomach

¹³ A raised lactate can indicate gut ischemia, this level would be non-concerning

- g) 11 March 2020: 00.05am: Reviewed for ongoing abdominal pain, abdomen soft and non-tender; and
 - h) 11 March 2020: 6.40am: Examination: wide pulse pressure, voluntary guarding but not peritonitis, generalised tenderness mostly on left side, for general surgical review.
14. At surgical review on 11 March 2020, it was documented that Trevor's abdominal pain was getting worse and he was planned for a repeat angiogram. Angiogram that evening confirmed the occluded SMA. It was not possible to unblock the stent radiologically, so Trevor was transferred to the operating room (OR).
 15. Trevor underwent a laparotomy. There was extensive ischemia of the distal jejunum and ileum which required resection and an Iliac artery to SMA bypass, performed by the vascular surgeons. He was transferred to the Intensive care Unit (ICU) post operatively. The abdomen was left open with a Vacuum-assisted closure (VAC) dressing and he had some haemodynamic instability requiring inotropic support.
 16. On 13 March 2020, a second laparotomy was performed. Despite the arterial bypass to the SMA, there was progression of the small bowel ischemia and further sections of ischaemic bowel were resected. At this time the family were informed of Trevor's poor prognosis.
 17. On 15 March 2020, a third laparotomy was performed and there was only 15cm of non-ischaemic gut remaining which was considered incompatible with life. There was a family meeting that day and Trevor was transitioned to end of life care. He subsequently passed away on 17 March 2020.

Identity of the deceased

18. On 17 March 2020, Trevor Anthony Peterson, born 23 August 1962, was visually identified by his wife, Lisa Peterson.
19. Identity is not in dispute and requires no further investigation.

Medical cause of death

20. Forensic Pathologist Dr Paul Bedford from the Victorian Institute of Forensic Medicine (VIFM) conducted an autopsy on 20 March 2020 and provided a written report of his findings dated 16 June 2020.

21. Dr Bedford commented that Trevor had a history of interventions related to disease of the artery (superior mesenteric) which is an important blood supply to the bowel. He had a stent placed to improve blood flow to the bowel, however approximately one month later he developed abdominal pain which was diagnosed as being related to a thrombus (clot) in the stent. This led to surgery to remove ischaemic bowel. He continued to have problems with viability of the bowel. Dr Bedford explained that non-viable bowel is a source of infection which can become generalised this being referred to as sepsis.
22. Dr Bedford stated that on the basis of the information available to him, he was of the opinion that Trevor's death was due to natural causes and that the medical cause of death was *I (a) Sepsis from ischemic bowel I (b) Superior mesenteric artery thrombus.*
23. I accept Dr Bedford's opinion.

FAMILY CONCERNS

24. In correspondence with the court, Trevor's wife, Lisa Peterson raised concerns about the care and treatment provided to Trevor at Western Health. Her concerns included, that Trevor was in severe pain for several days before he underwent surgery, that he was considered for discharge on 10 March 2020 despite ongoing pain, and a variety of communication issues.

REVIEW OF CARE

25. In light of the concerns raised by Lisa, I referred this matter to the Health and Medical Investigations Team (**HMIT**) of the Coroners Prevention Unit¹⁴ to provide advice on the appropriateness of the medical care provided to Trevor. The HMIT reviewed the coronial brief of evidence, medical records and clinician statements.
26. In order to assess whether there were any prevention opportunities the HMIT requested additional statements from clinicians at Western Health, regarding communication around discharge plans/instructions after his February 2020 procedure, whether there was an earlier opportunity to diagnose ischemic gut and intervene on his during his March 2020 admission, and whether any review was conducted following Trevor's death.

¹⁴ 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.

Western Health Reviews

27. Vascular Surgeon Dr Michael Wu confirmed that Trevor's death was discussed at the Vascular Surgery Unit Monthly Audit. Issues discussed were:
- a) Handover of discharge instructions from Diagnostic Imaging (February 2020) and how to improve this. This has been improved with more direct communications from Diagnostic Imaging Department to the vascular surgery team about any critical follow up or discharge instructions.
 - b) Communicating and working with patients, their family and GP's when critical medications are required as part of follow up from their procedure (DAPT, statins, smoking cessation).
 - c) Timing, access, and availability of endovascular procedures (delays from October 2019 to February 2020) and how vascular surgery involvement can improve this.
 - d) Progress of Trevor after his admission on 8 March 2020, timing of his endovascular intervention and subsequent operative intervention.
28. Dr Paul Eleftheriou, Chief Medical Officer, Western Health, confirmed that in addition to the review performed by Vascular Surgery, a multidisciplinary investigation was undertaken with contributions from General Surgery, Radiology, Vascular Surgery and Quality and Safety Departments. The review identified the following issues:
- a) Trevor self-ceased aspirin and statin following the initial stent procedure.
 - b) Potential delayed escalation following initial subjective improvement with medical (heparin infusion) therapy post readmission for thrombosis. This was likely also impacted by a holiday weekend.
 - c) Opportunity for improved communication between interventional radiology and vascular clinical teams to guide medical and procedural decision making.
29. Several recommendations arose from the multidisciplinary investigation:
- a) Radiology and vascular surgery units have liaised regarding interdisciplinary communication and education of junior staff for care escalation processes.

- b) Additional resources (extra Vascular Registrar) have been secured to assist with workload cover.
- c) A separate vascular hybrid suite will exist at the new Footscray Hospital. In the interim advocacy for access and utilisation of the angiogram suite has been challenging due to recurrent pandemic restrictions.

HMIT Review

- 30. Following his admission to Western Health from 12 to 17 October 2019, Trevor was instructed on preventative measures (smoking cessation, aspirin, and statin). Trevor did not stop smoking and stopped taking the recommended medications: aspirin, because he did not have a prescription, and statin on apparent instruction from his GP.
- 31. The HMIT considered there was an opportunity to improve communication with patients, their families, and GPs to ensure the importance of preventative measures are fully understood and optimised. However, the HMIT also acknowledged that aspirin is widely available without prescription in many outlets including supermarkets, and that it would be unusual for a GP to stop a statin without a good reason.
- 32. The HMIT considered it was unfortunate that Trevor's angiogram was rescheduled on two occasions but unfortunately, this is often inevitable with other competing pressures in the health service. Trevor underwent his angiogram and stenting on 18 February 2020 and the discharge instructions from the interventional radiologist, that Trevor should commence DAPT, were not adequately communicated to the treating team (vascular).
- 33. The HMIT concluded that the medical care provided to Trevor at Western Health during his admission from 8 March 2020 was appropriate. He had regular reviews by the general surgical and vascular team. He initially appeared to improve on conservative therapy but then deteriorated. There did not appear to have been an opportunity to detect the deterioration earlier, and adopting a 'wait and see' approach was appropriate in the initial stage of the admission.

Improvement opportunities

- 34. The HMIT identified two areas where care could have been improved at Western Health, both relating to communication.

35. The HMIT observed that it appeared Western Health had reviewed the issue of communication between Interventional Radiology and Vascular Surgery and implemented steps to try to prevent this occurring in the future.
36. However, it did not appear they had addressed the opportunity to improve communication between patients, families, and GPs about preventative measures. The HMIT recognised this would not be an issue specific to Western Health and improving primary prevention in partnership with the patient and GP would be beneficial to many. Smoking related diseases carry a huge health care burden, alongside obesity and drug and alcohol use. HMIT also recognised that some responsibility lies with the patient. In this case, Trevor ultimately died of a smoking related disease having a significant smoking history. I have made a recommendation in respect of this issue.

FINDINGS AND CONCLUSION

37. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:
 - a) the identity of the deceased was Trevor Anthony Peterson, born 23 August 1962;
 - b) the death occurred on 17 March 2020 at Western Health, Footscray Hospital, 160 Gordon Street, Footscray, Victoria, 3011, from sepsis from ischemic bowel due to superior mesenteric artery thrombus; and
 - c) the death occurred in the circumstances described above.
38. Having considered all of the evidence, whilst some opportunities for improvement were identified, I am satisfied that the care provided to Trevor at Western Health was reasonable in the circumstances.

RECOMMENDATION

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

1. In light of the circumstances of Mr Peterson's death already identified by Western Health reviews, and with the aim of promoting public health and safety and preventing like deaths, I recommend that Western Health identify and implement actions to improve communication

with patients, their families, and their General Practitioners to ensure that preventative measures, particularly as part of post-procedure treatment, are understood and preventative options are maximised.

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

Pursuant to section 73(1B) 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:

Lisa Peterson, Senior Next of Kin

Western Health

Millennium Medical Centre Footscray

Senior Constable Ashley Rowe, Victoria Police, Coroner's Investigator

Signature:



CORONER SIMON McGREGOR

CORONER

Date: 6 May 2022

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.
