IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2015 005014

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

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

Findings of:	Paresa Antoniadis Spanos, Coroner
Deceased:	Bryan Lindsay Cleeman
Date of birth:	9 July 1929
Date of death:	2 October 2015
Cause of death:	Complications post laparoscopic cholecystectomy
Place of death:	Ballarat Base Hospital

I, PARESA ANTONIADIS SPANOS, Coroner,

having investigated the death of BRYAN LINDSAY CLEEMAN without holding an inquest:

find that the identity of the deceased was BRYAN LINDSAY CLEEMAN

born on 9 July 1929

and that the death occurred on 2 October 2015

at Ballarat Base Hospital, 1 Drummond Street North, Ballarat, Victoria 3350

from:

1 (a) COMPLICATIONS POST LAPAROSCOPIC CHOLECYSTECTOMY

Pursuant to section 67(1) of the **Coroners Act 2008** there is a public interest to be served in making findings with respect to **the following circumstances**:

BACKGROUND AND PERSONAL CIRCUMSTANCES

1. Mr Cleeman was an 86-year-old man who lived in Sebastopol, a suburb of Ballarat and is survived by his wife, Maureen.
2. Mr Cleeman's medical history included type 2 diabetes mellitus, osteoarthritis, ischaemic heart disease, high blood pressure and gastro-oesophageal reflux.

CIRCUMSTANCES PROXIMATE TO DEATH

3. At 3.00pm on 30 September 2015, Mr Cleeman, accompanied by his wife, attended an appointment with Dr Pickavance, a general practitioner at the Alfredton Medical Centre. Mr Cleeman complained of pain in the upper right part of his abdomen and reported having lost his appetite. Dr Pickavance diagnosed cholecystitis[1] (inflammation of the gallbladder) and referred Mr Cleeman to Ballarat Base Hospital (part of Ballarat Health Services) for further treatment, alerting the hospital that Mr Cleeman required urgent treatment.
4. At 3.23pm, Mr Cleeman was triaged at the Ballarat Base Hospital Emergency Department (**ED**). At 4.30pm, an ultrasound of Mr Cleeman's abdomen confirmed acute cholecystitis, and he was administered intravenous pain killers, antibiotics and

[1] Cholecystitis is commonly caused by a gallstone blocking the flow of bile out of the gallbladder, leading to the build-up on bile and causing inflammation. Left untreated this may lead to serious, sometimes life-threatening complications such as gallbladder rupture.

fluids. At about 8.20pm, Mr Cleeman was transferred to the ward, with a plan for laparoscopic surgery the following day.

5. Mr Cleeman's procedure was booked for the emergency operating list commencing at 1.30pm on 1 October 2015. However, when this time arrived, a case with a higher clinical priority took precedence over Mr Cleeman's case. This resulted in Mr Cleeman's intended surgical team being engaged in theatre from 1.15pm until 7.35pm. The team was therefore unavailable to perform Mr Cleeman's procedure as planned. As Mr Cleeman's vital observations as documented on the ward were all within normal limits, and given the time of day, Mr Cleeman's surgery was postponed until the following day.

6. Medical records from the Ballarat Health Services (**BHS**) indicate that, between his admission and surgery, Mr Cleeman remained alert, oriented and ambulatory. All vital observations were within normal limits, including the final observations taken at 6.40am on 2 October 2015, although on one occasion his pulse was irregular, and on another occasion, he was mildly febrile (37.6°C). Two blood tests undertaken during Mr Cleeman's admission showed significantly raised inflammation markers, indicating the his clinical condition was worsening.

7. Mr Cleeman's procedure commenced at about 10.15am on 2 October 2015. The pre-operative anaesthetic assessment indicated an understanding that Mr Cleeman's anaesthetic procedure would carry a high risk, given his history of sinus tachycardia and the fact that he had been dosed with Asasantin[2] at 5.20pm the day before.

8. The cholecystectomy commenced laparoscopically. The operative diagnosis was recorded as 'acute gangrenous, perforated cholecystitis'. During the procedure, at about 11.50am, heavy bleeding was encountered around the hepatic artery. The procedure then continued with an open incision to facilitate surgical access to address the bleeding. A brief period of cardio-pulmonary resuscitation (**CPR**) was administered while surgeons worked to control the bleeding, and blood volume was restored with blood transfusions and fluids. However, as the surgery continued, cardiac monitoring revealed changes consistent with myocardial infarction (heart

[2] Asasantin is the trade name for a medication containing two blood thinning agents: dipyridamole and asprin. It is relatively long acting and exerts effects, primarily on the platelets by inhibiting their function of forming clots. This conveys risk of bleeding.

attack) and a subsequent loss of cardiac output. Despite extensive resuscitative efforts, Mr Cleeman was unable to be revived.

MEDICAL CAUSE OF DEATH

9. On 6 October 2015, forensic pathologist Dr Paul Bedford, from the Victorian Institute of Forensic Medicine (**VIFM**), reviewed the police report and medical records from the Ballarat Base Hospital, post-mortem computer assisted tomography scanning of the whole body (**PMCT**) and performed an autopsy. Dr Bedford's anatomical findings included recent gallbladder surgery, repair efforts for bleeding around the porta hepatis[3], coronary artery atheromatous disease[4], bilateral pleural effusions[5] and hemoperitoneum[6].

10. Dr Bedford noted that Mr Cleeman had a perforated gangrenous gallbladder. Dr Bedford commented that the attempted laparoscopic gallbladder surgery was complicated by bleeding. There were numerous clips in the porta hepatis region which appeared to involve hepatic arterial branches. Dr Bedfrod observed that with a background history of heart disease, Mr Cleeman was not able to survive the decreased blood in circulation.

11. Dr Bedford concluded that the cause of Mr Cleeman's death was *complications post laparoscopic cholecystectomy.*

FAMILY CONCERNS

12. In a letter to the Court dated 23 October 2015, Mr Cleeman's wife, Maureen, raised a concern that the delay between Mr Cleeman's admission to hospital and the operation being performed may have contributed to Mr Cleeman's death. Mr's Cleeman noted that there was a delay of about 42 hours between Mr Cleeman's appointment with Dr Pickavance on 30 September 2015 and the operation on 2 October 2015.

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[3] The porta hepatis is where major vessels and ducts enter or leave the liver.
[4] The build-up of fats, cholesterol and other substances in and on the artery walls.
[5] A build-up of fluid between the tissues that line the lungs and the chest.
[6] Hemoperitoneum is a type of internal bleeding where blood accumulates in the peritoneal cavity, a small area of space located between the internal abdominal organs and the inner abdominal wall.

HEALTH AND MEDICAL REVIEW TEAM ADVICE

13. In the course of this investigation, I asked the Health and Medical Review Team[7] (**HMIT**) to review the circumstances of Mr Cleeman's death and to provide advice as to the standard of clinical management and care provided to Mr Cleeman at Ballarat Base Hospital. A summary of the advice provided by the HMIT is as follows.

    a) Broadly speaking, acute cholecystitis can be managed in one of two ways. Uncomplicated cholecystitis can be treated conservatively with antibiotics and analgesia, possibly as an outpatient. The alternative is surgical treatment – a cholecystectomy – and laparoscopic cholecystectomy is considered the standard of care amongst the surgical options with a preference for an early operation, within 72 hours of admission, performed by surgeons with adequate experience in laparoscopic cholecystectomy.

    b) Although it is not clear which specific factors influenced the surgical team's plan to admit Mr Cleeman and manage his cholecystitis surgically, this appears to have been a reasonable decision, based on the perforated gangrenous gall bladder ultimately found at operation. Based on handover notes from the ED to ward staff, it is clear that surgery was the plan from the outset, which suggests that BHS clinicians shared Dr Pickavance's view that the treatment was urgent.

    c) All surgery is associated with a risk of bleeding. In Mr Cleeman's case, the bleeding appears to have originated from vessels recognised as being most at risk of bleeding during cholecystectomy. Acute inflammation in the area also makes surgery more complicated and increases the risk of inadvertent damage to vessels and consequent bleeding. The surgical team's response to Mr Cleeman's substantial bleeding during surgery and the activation of a massive transfusion protocol were appropriate.

    d) Mr Cleeman's case was reviewed internally by BHS at the General Surgical and Anaesthetic Mortality and Morbidity meetings and was twice reviewed at the Mortality Review Committee. No issues were identified with the care provided. Mr Cleeman's death was considered to have been unavoidable and no

[7] The HMIT is a specialist service within the Court comprising of highly skilled and experienced investigators, researchers, and health care clinicians. The HMIT provides advice to Coroners and assists them the fulfil their prevention role and contribute to a reduction in preventable deaths.

recommendations for improvements were made. The conclusion that Mr Cleeman's death was unavoidable is reasonable from the perspective that significant inflammation of the gall bladder was probably present at the time of admission and probably conferred high surgical risk of bleeding at that time.

e) Mr Cleeman's operation was delayed because the responsible surgical team was required to perform another surgery on a case considered to have a higher clinical priority. Given that the surgical team completed this lengthy six and a half-hour procedure after 7.00pm, the decision to delay Mr Cleeman's operation until the following day was not unreasonable.

f) Mr Cleeman's operation was delayed due to a combination of a lack of theatre and surgical availability and due to him appearing relatively well at the time. Although Mr Cleeman's surgery was delayed, he did reach theatre within the recommended 72-hour time frame.

g) Mrs Cleeman's concern that the delay between the time of Mr Cleeman's triage in the ED on 30 September and his operation on 2 October 215 may have contributed to Mr Cleeman's death is correct. While it is *possible* that an earlier operation may have had a different outcome, it is impossible to say so with any degree of certainty.

h) Had another surgical team been able to perform Mr Cleeman's operation in another operating theatre at some time on 1 October 2015, it is conceivable that any risks attributable to the delay of the operation may have been mitigated. Accordingly, BHS should review emergency surgery capacity with a view to ensuring patient access to clinically-indicated emergency surgery is optimised even in the setting of multiple competing demands on surgical resources.

BALLARAT HEALTH SERVICES RESPONSE

14. In a letter dated 12 May 2017, BHS advised the Court that, since Mr Cleeman's death, BHS has made the following changes to emergency operating theatre access:

a) Changes to staffing configurations so that the designated emergency theatre can continue unabated from 1.30pm until 11.00pm.

b) Additional nursing resources are now available to reduce delayed access to the emergency theatre between 5.00pm and 7.00pm Monday to Friday, with access to emergency theatre to interrupt the elective surgery lists if clinically indicated.

c) Additional staffing numbers to ensure that elective theatres can continue without impacting on the emergency theatre.

15. BHS reiterated that, in Mr Cleeman's case, the emergency theatre was staffed and available between 6.00pm and 8.00am and, had a clinical decision been made that Mr Cleeman required surgery on 1 October 2015, the facilities were available for that to be carried out. BHS maintained that the decision for surgery to be postponed until 2 October 2015 was made by the responsible consultant, along with the consultant anaesthetist, and was not due to a lack of emergency operating facilities.

16. Having received this letter, I asked the HMIT to provide advice as to the adequacy of the response. The HMIT advised that although the BHS had taken some reasonable steps to increase theatre availability, this is a somewhat different issue to ensuring that there are also surgeons available to operate.

17. However, the HMIT noted that, in Mr Cleeman's case, the surgical team made the judgment that Mr Cleeman's surgery could be delayed on the basis of his condition and the time of day, and this decision was reasonable. The HMIT advised that it is a matter of speculation whether an earlier operation would have changed the outcome and reiterated that the operation occurred within the recommended 72-hour timeframe.

FINDING/CONCLUSION

18. I find that Mr Bryan Lindsay Cleeman, late of 70/19A Charlotte Street, Sebastopol, died at the Ballarat Base Hospital, 1 Drummond Street North, Ballarat, on 2 October 2015 from complications post laparoscopic cholecystectomy.

19. The standard of proof for coronial findings of fact is the civil standard of proof on the balance of probabilities, with the *Briginshaw* gloss or explication.[8]

20. Adverse findings or comments against individuals in their professional capacity, or against institutions, are not to be made with the benefit of hindsight but only on the

[8] *Briginshaw v Briginshaw* (1938) 60 C.L.R. 336.

basis of what was known or should reasonably have been known or done at the time, and only where the evidence supports a finding that the individual or institution involved departed materially from the standards of their profession, and in so doing, caused or contributed to the death under investigation.

21. Applying that standard to the available evidence, I am unable to make a finding that the delay in commencing Mr Cleeman's surgery *probably* caused or contributed to his death.

COMMENTS

Pursuant to section 67(3) of the ***Coroners Act 2008***, I make the following comments on a matter connected with the death, including matters relating to public health and safety or the administration of justice.

1. While BHS has allocated additional resources to increase the availability of the emergency operating theatre, the greater issue in Mr Cleeman's case was not a lack of theatre availability, but a lack of capacity within the surgical team. The written response from BHS is silent on this issue.
2. Although the decision to delay Mr Cleeman's surgery from 1 October to 2 October was reasonable in all the circumstances, it is also the case that surgery was planned for Mr Cleeman from the time he was triaged at the ED on 30 September. It therefore stands to reason that, had the theatre and surgical resources been available, Mr Cleeman would have undergone surgery a day earlier than he did. While the evidence does not allow me to make a finding that earlier surgery would probably have prevented his death, this *possibility* remains open.

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

The family of Mr Cleeman

Ballarat Health Services, Level 4, BRICC, Drummond Street North, Ballarat

Leading Senior Constable Peter Byvoet (#33716) c/o Ballarat Police

Manager, Coroners Prevention Unit, Health and Medical Investigation Team

Signature:

CORONER PARESA ANTONIADIS SPANOS

Date: 24 January 2019