IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: 3362/09

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)
Section 67 of the ***Coroners Act 2008***

I, KIM PARKINSON, Coroner having investigated the death of DAVID ROMANIN

without holding an inquest:

find that the identity of the deceased was DAVID ANDREW ROMANIN

born on 6th October, 1987

and the death occurred on 9th July, 2009

at 44 Bales Street, Mount Waverley , Victoria 3149

from:

1a. SEPSIS
1b. STREPTOCOCCUS PYOGENES NECROTISING FASCIITIS

Pursuant to Section 67(2) of the **Coroners Act 2008**, I make findings with respect to **the following circumstances:**

1. David Romanin was born on 6 October 1987 and was 21 years old at the time of his tragic death. David resided with his parents, Mr Denis and Mrs Sarah Romanin in the family home at 44 Bales Street, Mount Waverley. David was a full time university student, who worked part time. He was by all accounts an active, fit and healthy young man.

2. The circumstances of David's death have been the subject of investigation by Victoria Police. Senior Constable Matt Anderson of Clayton Police Station provided a brief to the coroner dated 24 December 2010, setting out the investigations undertaken by police. I have drawn from those investigations in my finding. Supplementary information was also sought from the examining forensic pathologist and an expert forensic radiologist. Those reports have also assisted me in this finding.

3. On 5 July 2009, at approximately 7.00am, David arrived home from an evening out with friends. He told his parents he had injured his ankle during the evening. On 6 July 2009 at approximately 3.00am his father, Mr Denis Romanin received a text message from his son to say that he had taken himself to the emergency department of the Monash Medical Centre at Clayton, as he was in pain from his ankle injury. Mr Romanin attended the hospital to assist his son.

4. During the course of the admission, it had been apparent to the clinicians that David was in a significant amount of pain and an admitting doctor commented upon this to David's father and inquired as to whether David had been using any illicit substance. Whilst it is reported that David had a recent past history of cannabis and ecstasy use, there is no evidence that David had used illicit substances on the evening of the injury being sustained and nor is there any evidence at all of his having engaged in intravenous drug use.

5. Examination and x ray did not reveal any fracture. There was no skin tear or wound and sensation to the area was normal. Dr Evan Cameron, Senior Emergency Registrar examined David and reviewed the x-ray. He diagnosed a sprained ankle. David was administered analgesia and his pain appeared to improve. His only tenderness remaining over the anteromedial ankle. He was discharged home with crutches, and advised to take analgesic medication for the pain and to rest, ice and elevate the injury.

6. On 8 July 2009, when his ankle had not improved he attended at his general medical practitioner, Dr Feiber at Oakleigh Medical Centre. It does not appear that at this time he was exhibiting symptoms of an infective process. David also reported that his right knee was also hurting. Dr Feiber referred David for an x-ray, instructing that David should return to discuss the result. David did not have the x ray taken that evening. Later that evening he was in severe pain, however analgesia appeared to be of assistance.

7. On 9 July 2009, David remained in bed during the morning. At approximately midday, Mrs Romanin noticed that David was asleep on his bed. At approximately 4.00pm, she located David unresponsive on his bed. Ambulance paramedics attended however, David was deceased. Police report no suspicious circumstances.

8. An autopsy was performed by Dr Linda Isles, Senior Forensic Pathologist with the Victorian Institute of Forensic Medicine. Dr Isles reported:

> *"David Romanin, aged 21 years, reportedly sustained a sprain to his left ankle on the morning of July 5th 2009. X-rays did not demonstrate any evidence of fracture however, the subsequent days his ankle pain did not subside despite analgesia. He was found dead in his bedroom on the 9th of July 2009. Post mortem examination demonstrates florid inflammation and necrosis of tissue to the left lower leg consistent with necrotising fasciitis. Streptococcus pyogenes has been cultured from his left lower leg. In addition this organism has been grown from swabs from the undersurface of the sternum and the right antecubital fossa, in keeping with systemic streptococcal infection.*
>
> *Streptococcus pyogenes necrotising fasciitis can follow a relatively minor soft tissue injury, even when there is no apparent break within the skin. Whilst this type of infection is rare, it is well described, and can have a rapidly fatal, fulminating course. It may present as a relatively minor soft tissue injury in which the pain described by the patient appears disproportionate to the described mechanism of injury and an injury evident externally. It is thought that exotoxins produced by this strain of bacteria are response for its rapid fatal, fulminating course.*

Post mortem toxicological studies performed on blood have demonstrated the use of codeine, paracetamol, ibuprofen and cannabis prior to death. In addition, segmental analysis has been performed on a sample of the deceased's hair, in order to exclude complications of intravenous drug use precipitating the deceased's fatal infection. Segmental analysis of hair has suggested the consistent use of MDMA (Ecstasy), methamphetamine, ketamine, oxycodone, codeine, diazepam and cannabis prior to death. However none of these findings are pathognomonic of intravenous drug use, thus there are no definitive features to suggest that this man has acquired this infection as a result of intravenous drug use.

Post mortem biochemical studies have demonstrated features of acute renal impairment in keeping with systemic sepsis."

9. Dr Christopher O'Donnell, Diagnostic Radiologist with the Victorian Institute of Forensic Medicine, has reviewed the radiography and was asked to comment upon the diagnostic possibility of X-ray in the circumstances of this case. Dr O'Donnell advised the coroner:

> *"Post mortem CT findings of asymmetrical soft tissue swelling in a lower limb are not specific for any pathological diagnosis and would include trauma or infection. The issue of whether an x-ray performed prior to death ~may have revealed anything to raise alarm bells' is an interesting one. It can be looked at in 2 ways i.e. if the x-ray was reported as normal or near normal would this have concerned the GP (who ordered the x-ray) as the patient's symptoms of severe pain would seem to have been disproportionate to the imaging possible prompting the GP to seek further investigation.*
>
> *a. If the x-ray was abnormal, would this have raised the possibility of severe infection? Based on the post mortem CT scan findings, there is no reason to suspect that a plain radiograph performed prior to death would have shown anything other than soft tissue swelling and given the history of trauma would most likely have been construed as being consistent with trauma.*
>
> *b. On the basis of my radiographic analysis, I think it is unlikely that an x-ray performed a day or so before death would have been diagnostic for fasciitis.*
>
> *c. In some cases, gas is seen within the soft tissue in necrotising fasciitis and this would certainly have rung alarm bells if detected on a radiograph but on my review of the post-mortem CT, no such gas was present at least after death.*
>
> *d. The only possible positive outcome of having an x-ray prior to death would have been the fact that a patient usually makes an appointment with their doctor for review of the results, and at that time it may have been evident to the GP that his patient was very sick (i.e. systematically with infection) rather than just suffering from a sore ankle post trauma."*

10. It is evident from the reports of the pathologist and the radiologist that the infective process, which caused David's death, was rare and unusual in a young healthy man who was not an intravenous drug user.

11. Dr Isles provided supplementary comment in relation to her examination and reported that it the nature and existence of the infection was not apparent to her until her internal examination. Dr Isles reports that the lack of an external wound was unusual and that necrotising fasciitis most frequently occurs in people with underlying medical vulnerabilities.

12. Having considered all of the available evidence I am satisfied that no further investigation is required. Tragically, David's presentation did not exhibit features, which a medical clinician would readily have identified as indicative of a severe infective process.

13. I find that David Andrew Romanin died on 9 July 2009 and that the cause of his death was Sepsis and Streptococcus Pyogenes Necrotising Fasciitis, Left Leg.

Comments:

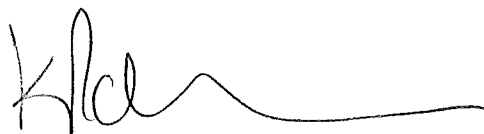
Pursuant to Section 67(3) of the Coroners Act 2008, I make the following comments and directions connected to the death:

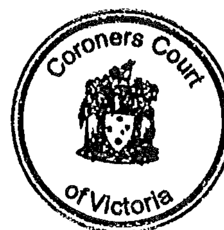
14. Because David was a fit healthy young man, the possibility of necrotising fasciitis being the cause of the severe pain he was experiencing, did not form part of the differential diagnosis considered by the clinicians. The circumstances of David's death would be usefully brought to the attention of medical practitioners, both in the hospital and in the general practice environment.

15. With this in mind, I direct that a copy of this finding be forwarded to the Chief Health Officer (Victoria), to each of the major teaching hospitals for their information and also to the College of General Practitioners, with a request that the circumstances be brought to the attention of their clinicians and members.

16. I also direct that a copy of this finding be published on the court website.

Signature:





KIM PARKINSON
CORONER

23rd November, 2011