

IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2011 0859

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

Section 67 of the Coroners Act 2008

I, IAIN TRELOAR WEST, Deputy State Coroner, having investigated the death of VINCENT BONANNO

without holding an inquest:

find that the identity of the deceased was VINCENT ANTHONY BONANNO

born on 14 September 1988

and the death occurred on 6 March 2011

at 3 Greenglades Court, Wandin North, Victoria 3139

from:

- 1a. ISCHAEMIC HEART DISEASE
- 1b. CORONARY ARTERY ATHEROSCLEROSIS
- 1c. HEALED CORONARY ARTERY ANEURYSMS IN THE SETTING OF KAWASAKI DISEASE

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

1. Vincent Bonanno was a 22 year old male and fruiterer by occupation, who resided at 3 Greenglades Court, Wandin North. He had a past medical history that included Kawasaki Disease as a child of 9 months, gastro oesophageal reflux disease, asthma and ligament reconstruction. He was a senior player at Sylvan football club, and had played junior and senior football for several years.
2. On 6 March 2011, the club organised a fund raising match at Sylvan Recreational Reserve, with the match commencing at midday and comprising two 20-minute halves, with a 10 minute half time break. Mr Bonanno played for the first half, during which time there was no indication that he sustained any significant form of impact, or injury. Being an intra-club game, the physical intensity was far less than would normally be experienced in a competitive

game of Australian Rules football. Players from both teams at the end of the first 20 minute session had huddled on the ground and were just breaking away from their huddle, when Mr Bonanno collapsed. He had shown no signs of being unwell during the game, or during the break. Following the collapse he was seen to by an experienced sports trainer and qualified nurse and on failing to obtain a pulse, both commenced cardio pulmonary resuscitation (CPR) pending ambulance arrival. Despite the attendance of ambulance paramedics and continued resuscitation attempts, Mr Bonanno could not be resuscitated.

3. On 8 March 2011, an autopsy was performed by Dr Matthew Lynch, Forensic Pathologist with the Victorian Institute of Forensic Medicine. Dr Lynch performed an external and internal examination of Mr Bonanno at the mortuary, reviewed the circumstances of his death, the ambulance clinical notes, the post mortem CT scan and provided a written report of his findings. At autopsy, Dr Lynch found evidence of significant coronary artery disease, which had occurred as a result of coronary artery atherosclerosis, in the setting of healed coronary artery aneurysms. Coronary artery aneurysm formation is a recognised complication of Kawasaki disease. Toxicological analysis of post mortem body fluid was negative for drugs, or alcohol. Dr Lynch reported that in all the circumstances a reasonable cause of death appeared to be ischaemic heart disease, due to coronary artery atherosclerosis, due to healed coronary artery aneurysms in the setting of Kawasaki disease.
4. This case was reviewed by the Coroner's Court Health and Medical Investigation Team, who concluded that Mr Bonanno's past medical management appeared appropriate and reasonable. A literature review undertaken by the team found that the extent to which Kawasaki disease is a cardio vascular risk factor for the future development of atherosclerosis, is unknown. Currently there are no established guidelines for the evaluation and treatment of adult patients who have had the disease. There is no evidence to suggest that even had Mr Bonanno had regular medical check-ups, that this would have prevented the tragic outcome. Given that there are no established protocols, it is probable that he would not have been investigated unless he had symptoms referable to the cardio vascular system and it appears likely that his collapse at the football was the first such indication. His disease had occurred 21 years earlier and due to the lack of knowledge and research of this illness, there is little direction for cardiologists regarding follow-up of children who have had the disease. It appears that only in Japan, have attempts been made to systematically collect mortality figures on patients with Kawasaki disease. Given that there are no established guidelines for the evaluation and

treatment of adult patients, his parents, nor doctors, should not be criticised for failing to routinely review his progress. Similarly, in respect to the doctor's advice to parents following diagnosis of Kawasaki disease over 20 years earlier, there would have been much less known then about the possibility of long term consequences of the disease and hence criticism of failing to advise, is inappropriate. There is no evidence before me to indicate that Mr Bonanno was not treated in accordance with the state of medical knowledge at that time. Even in relatively recent times, the American Heart Association's updated guidelines, for the care and management of children with Kawasaki disease, provides little direction to cardiologists regarding follow-up of these children.

5. I find that Vincent Bonanno died of natural causes with the cause of death being ischaemic heart disease, due to coronary artery atherosclerosis, due to healed coronary artery aneurysms in the setting of Kawasaki disease.

RECOMMENDATION:

Pursuant to section 72(2) of the Coroners Act 2008, I make the following recommendation connected to the death:

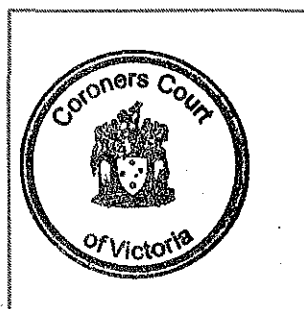
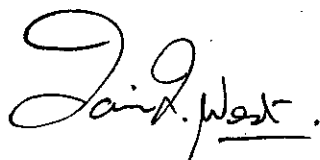
1. That the Royal Australasian College of Physicians give consideration to creating, or reviewing, guidelines for follow-up evaluation and treatment of adult patients with Kawasaki disease.

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

The family of Mr Vincent Bonanno,

The Secretary, Royal Australasian College of Physicians
Investigating Member, Victoria Police.

Signature:



IAIN WEST
DEPUTY STATE CORONER
Date: 27 February 2013