MAGISTRATES COURT of TASMANIA

CORONIAL DIVISION

Record of Investigation into Death (Without Inquest)

Coroners Act 1995
Coroners Rules 2006
Rule 11

I, Rod Chandler, Coroner, having investigated the death of Margaret Rita Richardson

Find, pursuant to section 28(1) of the Coroners Act 1995, that:

a) The identity of the deceased is Margaret Rita Richardson;
b) Mrs Richardson was born in Ulverstone on 28 November 1949 and was aged 67 years;
c) The cause of Mrs Richardson's death was a right coronary artery dissection following angiography stenting and attempted rotoborr instrumentation due to an occluded right coronary artery by ischaemic heart disease. Other significant conditions included hypertension, renal scarring and emphysema; and
d) Mrs Richardson died on 24 January 2017 at the Launceston General Hospital (LGH) in Launceston.

Background

Mrs Richardson was the partner of Mr Kerry Webb. She had two sons from her previous marriage, now both adults. Her medical history included a heart attack approximately 20 years ago, hypertension and arthritis.

Circumstances Surrounding the Death

Mr Webb reports that in the morning of 14 January 2017 Mrs Richardson complained of feeling tired. Rather than go out to the bowls club as planned she instead went to her bedroom to rest. Later she reported feeling *"pretty unwell"* and an ambulance was called. She was then taken to the Mersey Community Hospital (MCH) where she was reviewed by emergency medicine consultant, Dr Kulawickrama. He assessed her as having an ST elevation myocardial infarction or heart attack and arrangements were promptly made for her to be ambulanced to the LGH. She initially presented at its Emergency Department and shortly afterwards was admitted to the care of the cardiology team. On 16 January Mrs Richardson was transferred to the catheter laboratory for angiography. Her right coronary artery was found to be 95% occluded. There was also occlusion of the circumflex artery. Normal blood flow was successfully established in her right coronary artery but a highly calcified and fibrotic lesion in the mid-portion of that vessel could not be successfully dilated

using standard pressure balloon techniques. The procedure was ended and the decision was made to allow Mrs Richardson some time to recover from her infarct before a further attempt was made to fully revascularise the artery.

On 23 January Mrs Richardson was returned to the catheter laboratory for rotational atherectomy. This involves use of a rapidly rotating device designed to remove calcified tissue within the artery. During the procedure Mrs Richardson's right coronary artery was perforated but the perforation site was successfully stented. However, Mrs Richardson became profoundly hypotensive and a repeat echocardiogram showed a pericardial effusion attributable to a leak at the site of the rotational atherectomy. While a covered stent was being put in place Mrs Richardson had a cardiac arrest and CPR was started. She was successfully resuscitated and repeat injection of the right coronary artery showed that it was patent although clotting was noted. It showed the leak to be sealed.

Mrs Richardson was transferred to the Intensive Care Unit. Her condition was unstable and she was critically unwell. Despite escalating therapy with inotropic medication her blood pressure continued to drop and she died at 3.30am on 24 January 2017.

Post-Mortem Report

This was carried out by State Forensic Pathologist Dr Christopher Lawrence. In his opinion the cause of Mrs Richardson's death was a right coronary artery dissection following angiography stenting and attempted rotoborr instrumentation due to an occluded right coronary artery by ischaemic heart disease. Other significant conditions included hypertension, renal scarring and emphysema. In plain English Mrs Richardson died from a rupture of the heart artery while trying to clear a blockage in that artery.

I accept this opinion.

Investigation

This has been informed by:

- A Police Report of Death for the Coroner.
- An affidavit from Mr Webb.
- A review of Mrs Richardson's hospital records carried out by clinical nurse, Ms L K Newman.
- A report from Associate Professor Brian Harman where he states inter alia that:
    - In his opinion Mrs Richardson was not a suitable candidate for bypass surgery.
    - In his opinion Mrs Richardson's situation rotational atherectomy was the most suitable treatment option.
    - Rotational atherectomy has been employed at the LGH since 2009 with Associate Professor Harman as its lead practitioner. In this time the procedure has been undertaken on approximately 50 occasions and all have been successful with the exception of this case.
    - In his opinion, backup by a surgical team would not have enabled Mrs Richardson to have survived the complication arising during the rotational atherectomy.

- Rotational atherectomy is a required tool for any advanced coronary interventional laboratory and complications involving this procedure are no greater than the complications overall of all percutaneous revascularisation.

I have also been assisted in this investigation by a review carried out by Dr A J Bell as medical adviser to the coroner. Dr Bell has provided me with a report where he expresses these opinions:

1. That rotational atherectomy does have a role to play in percutaneous revascularisation.
2. That it was necessary for Mrs Richardson to undergo the rotational atherectomy to treat her heart condition.
3. That the complication which did arise is well recognised and appropriate steps to salvage the situation were employed.

Findings, Comments and Recommendations

The evidence clearly shows that Mrs Richardson suffered from advanced heart disease which necessitated medical intervention if her life was to be extended. Associate Professor Harman is an experienced and senior cardiologist. It was his opinion that Mrs Richardson's clinical situation was best suited to treatment by rotational atherectomy and I accept this to be so. Regrettably a complication arose during that procedure which caused a severe deterioration in Mrs Richardson's condition leading to her death. This most unfortunate outcome occurred despite, in my opinion, all reasonable care being employed during the procedure and all proper steps being taken to try to preserve life once the complication presented.

I have decided not to hold a public inquest into this death because my investigation has sufficiently disclosed the identity of the deceased, the date, place, cause of death, relevant circumstances concerning how her death occurred and the particulars needed to register her death under the *Births, Deaths and Marriages Registration Act 1999*. I do not consider that the holding of a public inquest would elicit any significant information further to that disclosed by the investigation conducted by me. The circumstances of the death do not require me to make any further comment or to make any recommendations.

I convey my sincere condolences to Mrs Richardson's family and loved ones.

Dated: 16 day of November 2018 at Hobart in the State of Tasmania.

Rod Chandler
Coroner