IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: 4197/06

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
Section 67 of the ***Coroners Act 2008***

Inquest into the Death of ELIZABETH MARYANNE HOLLEY

Delivered On:	23 January 2012
Delivered At:	Coroners Court of Victoria Level 11, 222 Exhibition Street Melbourne
Hearing Dates:	23 January 2012
Findings of:	IAIN TRELOAR WEST, DEPUTY STATE CORONER
Police Coronial Support Unit:	Senior Constable Kelly Ramsey

I, IAIN TRELOAR WEST, Deputy State Coroner having investigated the death of ELIZABETH HOLLEY

AND having held an inquest in relation to this death on 23 January 2012
at Melbourne

find that the identity of the deceased was ELIZABETH MARYANNE HOLLEY

born on 15 April 1954

and the death occurred on 1 November 2006

at Royal Melbourne Hospital, Grattan Street, Parkville, Victoria 3052

from:

1a. HYPOXIC BRAIN INJURY
1b. HYPOTENSION IN A WOMAN WITH DOCUMENTED ELECTROCARDIOGRAM ABNORMALITY
1c. CORONARY ARTERY DISEASE AND TREATMENT WITH ANTIPSYCHOTIC MEDICATIONS

in the following circumstances:

1. Elizabeth Holley was a 52 year old woman, who at the time of her death was an involuntary psychiatric patient at the John Cade Ward, at the Royal Melbourne Hospital. She was a married woman with two children and her mental illness had been managed by Dr Monica Cooper, of Lygon Court Medical Centre.

2. Mrs Holley was admitted as an involuntary patient to the John Cade Ward on 23 October 2006, with a history of three weeks of decreasing mental state and non compliance with medication. During the evening of 23 October, Mrs Holley became very agitated and refused oral medication and in the early hours of the following morning she was give Diazepam intermuscularly and 10 grams of Olanzapine intermuscularly, following which she calmed down and slept. Later in the morning, Mrs Holley was assessed as agitated and in a highly aroused state and following the assessment, further medications were ordered, which included Zuclopenthixol acetate, Benztropine and Clonazepam. At 2.00pm, Mrs Holley appeared to be responding to the medication, however after going to the bathroom, she informed staff that she was feeling dizzy and sat on the floor. Staff assisted her to a chair and whilst a staff member went to get equipment to take Mrs Holley's blood pressure, another staff member called for oxygen. Mrs Holley had walked to a couch where she laid down, with staff reporting that she looked cyanosed. A medical emergency team was called when she was found to be unresponsive at 2.15pm. Mrs Holley had stopped breathing and had an unrecordable blood pressure, resulting in cardio pulmonary resuscitation being commenced and her being intubated and given adrenalin and sodium bicarbonate. After eight minutes, she attained a narrow complex rhythm and was transferred to the intensive care unit.

3. On 25 October, Mrs Holley experienced myoclonic jerks and seizures, resulting in propafole and clonazepam being administered. There was no improvement in her neurological state and following further seizure activity, fenotyn and clonazepam were required. Over the next few days there was a

similar pattern of seizure activity resulting in further orders for clonazepam, morphine and phenytoin subcutaneously, however, there was no improvement in her neurological state. On 30 October, a family meeting was arranged to discuss the poor prognosis. Mrs Holley was subsequently excubated and transferred to the palliative care ward on 30 October. Elizabeth Holley died at 11.00pm on 1 November 2006.

4. On 6 November 2006, a post mortem examination was performed by Dr Michael Burke, Senior Forensic Pathologist with the Victorian Institute of Forensic Medicine. Dr Burke performed an external and internal examination of Mrs Holley at the mortuary, reviewed the circumstances of her death, the medical deposition and clinical notes, the post mortem CT scan and provided a written report of his findings. Dr Burke concluded that death was due to hypoxic brain injury. Following a review of the medical records that detailed Mrs Holley's clinical decline, Dr Burke commented that Mrs Holley suffered a conduction system abnormality, as an electrocardiogram showed a prolong QT interval. Dr Burke commented that electrocardiogram abnormalities are rare, but well described in the literature, as a complication of anti psychotic medications. He further stated that conduction abnormality within the heart may trigger a significant cardiac arrhythmia, leading to cardiac arrest and subsequent brain injury. Dr Burke also noted that CT pulmonary angiogram showed multiple pulmonary emboli within the lungs. Internal examination during the course of the autopsy disclosed significant coronary artery stenosis, an enlarged heart and mitral valve prolapse. Dr Burke reported that in all the circumstances a reasonable cause of death appeared to be 1a. Hypoxic brain injury; 1b. Hypotension in a woman with documented electrocardiogram abnormality; 1c. Coronary artery disease and treatment with antipsychotic medications.

5. I find that Elizabeth Anne Holley died from hypoxic brain injury, due to hypotension (in a woman with documented electrocardiogram abnormality), due to coronary artery disease and treatment with antipsychotic medications.

Pursuant to section 67(3) of the **Coroners Act 2008**, I make the following comment connected with the death:

On the evidence before me, I am satisfied that Mrs Holley's medical care and management was within the normal parameters of reasonable health care practice.

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

- Family of the deceased
- Chief Medical Officer, Royal Melbourne Hospital
- Dr Monica Cooper, Lygon Court Medical Centre

Signature:

IAIN WEST
DEPUTY STATE CORONER

Coroners Court of Victoria

23 January 2012