

SOUTH



AUSTRALIA

FINDING OF INQUEST

An Inquest taken on behalf of our Sovereign Lady the Queen at Adelaide in the State of South Australia, on the 21st day of March and 7th day of April, 2000, before Wayne Cromwell Chivell, a Coroner for the said State, concerning the death of Desmond Martin Falkenberg.

I, the said Coroner, do find that Desmond Martin Falkenberg, aged 73 years, late of Tanunda Lutheran Home, Bridge Street, Tanunda, died at Tanunda on the 9th day of January, 2000 as a result of dehydration and hyperthermia. I find that the circumstances of death were as follows:-

1. **Background**

- 1.1 Mr. Falkenberg had been a resident of the Tanunda Lutheran Home in Bridge Street, Tanunda since 20 September 1999. He suffered from mild dementia. He was described by the Director of Care, Ms. Helen Walters, as 'quite active'. He would regularly go for walks by himself. She said that he would 'always seem to find his way home' (Exhibit C4a, p1-2), although on one occasion, only two days after he commenced at the home, he had to be taken back by police as he had wandered off.
- 1.2 Mr. Falkenberg's medication included Neulactil (Pericyazine) at 5mg per day, Serenace (Haloperidol) 5mg twice a day, and Oxybutynin (Ditropan). On 9 January 2000, Mr. Falkenberg had his dose of Neulactil and Serenace at 8.00a.m., and his Oxybutynin at 12.00 noon.
- 1.3 On Sunday 9 January 2000, Mr. Falkenberg was last seen at the Home at 12.45p.m. When he did not arrive back for tea at 4.50p.m. a search was made of the Home and grounds, and when he had not been located by 5.50p.m. the police were notified.

- 1.4 The police then patrolled various areas around Tanunda, Nuriootpa and Lyndoch without success (see the statements of police officers Norman - Exhibit C.9a, Weaver - Exhibit C.10a and Underwood - Exhibit C.11a). Many community members, including those out walking, the local taxi service, a security firm, bus service and hospital were all alerted to keep a lookout for him (Exhibit C.10a, p2). When Mr. Falkenberg had not been located overnight, the police S.T.A.R. Division was called in, as was the Polair 1 helicopter, and 50 C.F.S. volunteers joined the search the next day.
- 1.5 Mrs. J.M. Steinert, a resident of Murray Street at Tanunda, says that she saw an elderly man on Magnolia Street, Tanunda between 2.00 and 3.00p.m. on 9 January 2000. She said that he was behaving in an unusual way, holding on to the fence as he walked and lifting up one of the legs of his trousers. She saw him appear to speak to a young woman who had stopped her car to speak to him. She then saw him walk towards Murray Street and she lost sight of him.
- 1.6 Mrs. Steinert said that she could see a white object among some bushes on a vacant block on the opposite side of the road but she did not investigate further as she was unwell at the time and the weather was hot (Exhibit C.6a).
- 1.7 The young woman referred to by Mrs. Steinert was probably Ms. L.R. Leith, of Tanunda, who said that she stopped her car at about 2.45p.m. on 9 January 2000 to ensure that the man was alright. Although the man did not speak clearly but “grumbled something” to her, Ms. Leith concluded that he was alright so she took no further action (Exhibit C.7a).
- 1.8 On 10 January 2000 Mrs. Steinert heard on the radio that a man was missing from the Tanunda Lutheran Home. She told her sister about what had happened the day before, and her sister checked the vacant block on the opposite side of the road and discovered Mr. Falkenberg’s body. She immediately called the police (Exhibit C.8a).
- 1.9 Detective S.P. Kahl of the Nuriootpa Crime Management Investigation Unit said that, according to the Bureau of Meteorology, the temperature at Nuriootpa was 31.3°C on 9 January 2000, the minimum overnight was 15.2°C, and the maximum on 10 January 2000 was 31.5°C (Exhibits C.12a, 12b). Of course, these are shade temperatures, and the temperature in the direct sun could have been 10°C or more above these figures.

- 1.10 A post mortem examination was carried out on the body of the deceased by Dr. R.A. James, forensic pathologist, on 12 January 2000. Dr. James found no evidence of anti-mortem trauma. The body showed evidence of extensive attack by ants. He attributed the cause of Mr. Falkenberg's death to dehydration and hyperthermia (Exhibit C.15, p1).
- 1.11 In relation to Mr. Falkenberg's medication, Dr. James pointed out that the MIMS Prescribing Guide for 1998 gives the following cautions:-
- Neulactil, or pericyazine, is a major phenothiazine, which is an anti-psychotic medication used to quell agitation in people suffering dementia. MIMS cautions that "it should be used with caution in the elderly, particularly during very hot or very cold weather (risk of hyperthermia or hypothermia). The elderly are particularly susceptible to postural hypotension";
 - Serenace, or haloperidol, is a butyro-phenone, and is also an anti-psychotic medication. MIMS advises "rare cases of sudden and unexpected death have been reported in association with the administration of Serenace although the nature of the evidence makes it impossible to determine the contributory role, if any of the drug ... A potentially fatal syndrome called Neuroleptic Malignant Syndrome has been reported in association with anti-psychotic drugs. This syndrome is characterised by muscular rigidity, fever, hyperthermia, altered consciousness and autonomic instability ...";
 - Ditropan or oxybutynin is an anti-spasmodic agent which enables people, particularly the elderly, to exercise better bladder control. MIMS cautions "avoid dosage in high environmental temperatures and excessive exercise in high temperatures since Oxybutynin hydrochloride administered under these conditions can cause heat prostration (fever and heat stroke due to decreased sweating). ... The anticholinergic effect of Ditropan is enhanced by its concomitant use with other agents with anticholinergic properties. These include the phenothiazines, butyro-phenones, ...".
- 1.12 The anticholinergic effect referred to in MIMS is the effect of a drug on that part of the nervous system which provides, among many other things, the ability to perspire. The anticholinergic effect of all three of the drugs discussed above may well have potentiated each other in this case, and combined to prevent Mr. Falkenberg from perspiring, rendering him more susceptible to heat stroke.
- 1.13 Dr. James was anxious to point out that he was not critical of the prescription of any of these drugs for Mr. Falkenberg, or the dosage thereof. He merely wished to point out that, during periods of sustained hot weather, medical practitioners and staff of nursing homes, and indeed anybody involved in the care of the elderly, should take particular precautions when dealing with people on these medications, and particularly when they are receiving such medication in combinations which will potentiate the anticholinergic effect of each other. In particular, he suggested that,

during hot weather, such people should be kept indoors, kept cool and be encouraged to keep their fluid levels up (T.12). I am happy to adopt Dr. James' reasoning in this regard, and to issue a public warning concerning these matters.

2. **Recommendation**

2.1 Section 25(2) of the Coroners Act empowers me to make recommendations which may prevent, or reduce the likelihood of a recurrence of an event similar to Mr. Falkenberg's death. Pursuant to that section, I make the following recommendation:-

- that a public warning be issued to medical practitioners, nursing homes, and indeed anyone concerned with the care of the elderly, that where an elderly person is taking one or more medications which have anticholinergic properties, which reduce the ability of the body to perspire, special care should be taken during periods of hot weather to ensure that such people are kept indoors as much as possible, kept cool, and are encouraged to keep their fluid levels up.

Key Words: nursing home; dehydration; anticholinergic drugs.

In witness whereof the said Coroner has hereunto set and subscribed his hand and

Seal the 7th day of April, 2000.

.....
Coroner