



FINDING OF INQUEST

An Inquest taken on behalf of our Sovereign Lady the Queen at Mount Gambier in the State of South Australia, on the 6th, 7th, 8th, 9th days of March 2006, 12th, 13th, 14th days of September 2006 and the 30th day of October 2006, by the Coroner's Court of the said State, constituted of Mark Frederick Johns, State Coroner, into the death of Sally Anne Gordon.

The said Court finds that Sally Anne Gordon aged 20 years, late of 3 Maroonga Crescent, Mount Gambier died at the Royal Adelaide Hospital, North Terrace, South Australia on the 30th day of November 2000 as a result of cerebral anoxia consequent upon a severe acute asthmatic event. The said Court finds that the circumstances of her death were as follows:

1. Introduction

- 1.1. Sally Anne Gordon died in the Royal Adelaide Hospital on 30 November 2000 having been transferred on 26 November 2000 from the Mount Gambier Hospital. She was aged 20 years.
- 1.2. Ms Gordon had a longstanding history of severe asthma and had presented to the Mount Gambier Hospital for treatment of her asthma on many occasions. Her medical records from the Mount Gambier Hospital record some twenty-two admissions dating back to 1986. Her most recent presentation prior to 26 November 2000 was on 17 November 2000 when she was admitted for two days for an asthma attack.

- 1.3. On 26 November 2000 Ms Gordon was residing in her home at Maroonga Crescent, Mount Gambier. At about 7:00am on 26 November 2000 she became short of breath. She took three doses of Ventolin using her inhaler. At 11:52am, almost four hours later, an ambulance was called to her home address. The ambulance arrived at 11:55am and the ambulance record reveals that Ms Gordon simply requested oxygen and to be left at home. Her condition worsened while the crew were present and they administered adrenalin with some beneficial effect. The crew persuaded Ms Gordon to allow herself to be taken to the Mount Gambier Hospital. The ambulance departed from her house at 12:14pm and arrived at the hospital at 12:17pm that day. Ms Gordon was seen immediately upon her arrival.
- 1.4. The evidence presented at the Inquest focused on the events of 26 November 2000 at the Mount Gambier Hospital. The subsequent admission to the Royal Adelaide Hospital was not examined for reasons which will become apparent in due course.
- 1.5. An admission note prepared by Nurse Patzel of the Mount Gambier Hospital reveals that Ms Gordon had an extremely tight chest and a faint inspiratory audible wheeze. She was assessed as an emergency triage category 1 patient and seen immediately by Dr Naidu. He noted symptoms similar to those observed by Nurse Patzel. Her presentation on arrival in the Emergency Department was consistent with a severe acute asthma attack. She was unable to speak, had chest tightness, central cyanosis and tachycardia.

2. Dr Ajay Naidu

- 2.1. Dr Naidu gave evidence at the Inquest. Dr Naidu had been working at the Mount Gambier Hospital for approximately 5 or 6 weeks prior to 26 November 2000 as a Salaried Medical Officer at that hospital. He was on duty in Accident and Emergency on 26 November 2000.
- 2.2. Dr Naidu said that he obtained his medical degree at the University of Madras in India in 1988. He then worked in South Africa and obtained a High Diploma in Internal Medicine in 1998 and thereafter came to Australia in the year 2000, obtaining a Fellowship of the Australian College of General Practitioners in 2003. Dr Naidu had therefore had some 11 or 12 years post-graduate experience in medical practice in the year 2000. He stated that his experience in South Africa was obtained in a public hospital setting. Dr Naidu had responded to advertisements in the South African

Medical Journal for a position as a Salaried Medical Officer at the Mount Gambier Hospital.

- 2.3. Dr Naidu said that he was, in his work in the Accident and Emergency Department at Mount Gambier Hospital, working under the general supervision of Dr Geoffrey Williamson who also gave evidence at the Inquest. Dr Naidu stated that because of his level of experience he worked largely independently and only under limited supervision from Dr Geoffrey Williamson¹. Dr Naidu stated that there was, available to him and the other Salaried Medical Officers, a specialist roster. They could, if they considered it necessary, obtain assistance from doctors on a list of specialists within the fields of general surgery, orthopaedics, obstetrics, ophthalmology and anaesthetics.
- 2.4. Dr Naidu was asked to identify his entries in Ms Gordon's medical notes for 26 November 2000 and he did so. The notes were admitted in evidence as Exhibit C8 in these proceedings. Dr Naidu confirmed that he first saw Ms Gordon in the Emergency Department. He was aware that she was coming in, having been alerted by the ambulance officers, and was waiting with nursing staff.
- 2.5. He stated that on arrival he found that Ms Gordon's condition was consistent with severe acute asthma, she had central cyanosis, chest tightness with minimal wheeze and tachycardia. She was placed on cardiac monitoring equipment which included pulse, oxygen monitoring, blood pressure monitoring as well. Dr Naidu said that he nebulised Ms Gordon with adrenaline and gave her hydrocortisone intravenously. Dr Naidu said that the hydrocortisone was given to reverse the underlying process of asthma. Salbutamol or Ventolin was also administered. However Ms Gordon's condition did not improve. Dr Naidu explained that his next step in treatment was to prescribe Aminophylline². Aminophylline is a class of bronchodilator, which works in a slightly different way from Ventolin. However he stated that it cannot be given rapidly and needs to be administered intravenously over a period of some 20 minutes. At about that time a decision was also made to move Ms Gordon to the High Dependency Unit where further resources, both staff and equipment, would be available to assist in her treatment.

¹ Transcript, pages 21-22

² Transcript, page 37

- 2.6. Dr Naidu said that his reason for moving Ms Gordon to the High Dependency Unit was in order to enable more advanced forms of treatment to be provided than were available in the Emergency Department. He stated that at this point her condition was continuing to deteriorate³.
- 2.7. Dr Naidu stated that in the Accident and Emergency Department, in order to assist Ms Gordon's breathing, basic resuscitation protocols were utilised. Ms Gordon was on oxygen, she had the intravenous line, there was a Guedels airway, there was a bag valve with oxygen connection, and Ms Gordon was being monitored via the cardiac monitoring already mentioned. Dr Naidu explained that a Guedels airway is simply an artificial airway opener, a "simple airway opening measure".
- 2.8. At about the time of the move to the High Dependency Unit, Dr Naidu had started to contemplate the need or possible need for intubation and ventilation. Because that would require the services of an anaesthetist, he had, before leaving the Accident and Emergency Department, asked the nurses to contact the on-call specialist anaesthetist, Dr Hubert Goodman inform him of the patient's condition and request that he attend immediately⁴.
- 2.9. Dr Naidu stated that once in the High Dependency Unit he himself made the decision to intubate Ms Gordon. He did not wait for Dr Goodman to arrive, although he gave consideration to that option but rejected it because, to use his words, "I was losing my patient rapidly"⁵. Dr Naidu gave a detailed account of what was involved in the process of intubating a patient. He said that he had had previous experience in intubation⁶. He explained that in order to intubate a patient it is necessary to advance a tube down the larynx and between the vocal cords, proceeding some three to four centimetres beyond the vocal cords. He stated that it is not possible to visualise vocal cords without the aid of an instrument called a laryngoscope. He stated that in order to intubate a patient it is essential to visualise the vocal cords. He said that it was necessary to be assisted by at least two other people. One person attempts the intubation. A second person, usually a nurse, applies cricoid pressure to the cartilage of the larynx or the Adam's apple, in order to prevent regurgitation of stomach contents. A third nurse is present to administer drugs that the doctor orders.

³ Transcript, page 38

⁴ Transcript, page 40

⁵ Transcript, page 41

⁶ Transcript, page 40

Dr Naidu explained that in order to intubate a patient it is necessary to administer two forms of medication. One is an agent to sedate the patient and the second is an agent to paralyse the patient's breathing⁷.

- 2.10. Dr Naidu provided a long and detailed explanation in his evidence of the procedure required to intubate a patient. It was clear from his description that he had a very good theoretical understanding of the process. There was no element of his description which did not accord with the description of the procedure that was subsequently provided by the evidence of Dr William Griggs. Dr Griggs provided an overview to the Court and an expert opinion in this case.
- 2.11. Dr Naidu said that he prescribed the drug midazolam in the amount of 15mg in order to sedate Ms Gordon⁸. He stated that Ms Gordon was "fighting vigorously" at this time. He did not mean this in a pejorative sense; he was conveying that such a reaction is normal in a patient who is unable to breathe and is a part of the ordinary response. Dr Naidu explained that the medication which he chose to paralyse Ms Gordon temporarily for the purposes of intubation was the neuromuscular blocking agent pancuronium⁹. He stated that he used pancuronium because he accessed it first on the High Dependency Unit "crash trolley". He stated that he was hesitant to use the paralysing agent at all because there was no anaesthetist present at that time to assist in Ms Gordon's ventilation. He stated that he was aware that pancuronium acted marginally more slowly than the alternative drug of choice for this procedure, suxamethonium¹⁰. He stated that there was a difference of approximately a minute or two in the speed of action of these drugs. He stated that suxamethonium would have paralysed the patient immediately and then he would have been "faced with managing ventilating a patient, which can be extremely difficult especially in a severe asthmatic". He stated that the alternative to that was to use pancuronium which was marginally slower. He was also aware that pancuronium is known not to cause acute tightening of the chest and bronchospasm, which is a possible reaction in some patients to the drug suxamethonium. Furthermore, he was aware that the effect of pancuronium was longer lasting than suxamethonium. He stated that this reasoning process was carried out in a very short space of time. He prescribed 4mg of

⁷ Transcript, page 45

⁸ Transcript, page 51

⁹ Transcript, page 53

¹⁰ Transcript, page 56

pancuronium. He stated that this was half the dose that is normally given. There was a note of another 4mg of pancuronium being ordered but it was not administered because of the events which then occurred.

- 2.12. Dr Naidu stated that at his first attempt at intubating Ms Gordon he was not successful in visualising the vocal cords¹¹. He stated that at this point she was “still not 100% sedated. There was still movement and resistance to it”¹².
- 2.13. Dr Naidu stated that he chose to use an intubating tube of the size 6.5¹³. He stated that a 7 would normally be recognised as appropriate for a woman but that he had decided to step down one size because this was not going to be an easy or routine intubation and he thought that the smaller tube would be easier to insert. Dr Naidu stated that before the intubation attempt, it was necessary to remove the Guedels airway. Then if the attempt failed, it was necessary to replace the Guedels airway and continue to “bag” the patient, or manually ventilate the patient.
- 2.14. Dr Naidu described his second intubation attempt¹⁴. Unfortunately during this attempt, Ms Gordon either vomited or otherwise regurgitated stomach contents. As a result of this, it was not possible for Dr Naidu to visualise Ms Gordon’s vocal cords. He therefore had to abandon that attempt at intubation also.
- 2.15. Dr Naidu stated that shortly after the abandonment of the second attempted intubation, Dr Goodman arrived. Immediately after the second intubation attempt, suctioning was being carried out to remove the stomach contents from Ms Gordon’s pharynx in order to prepare for a third intubation attempt. Dr Goodman was successful in intubating Ms Gordon. Dr Naidu gave evidence that following the successful intubation Ms Gordon suffered a cardiac arrest.
- 2.16. Dr Naidu was able to identify by reference to the hospital records, that his first attempt at intubation was made at 1301 hours, and Dr Goodman’s successful attempt took place at 1308 hours¹⁵. The notes show that cardiopulmonary resuscitation also commenced at 1308 hours.

¹¹ Transcript, page 58

¹² Transcript, page 58

¹³ Transcript, page 60

¹⁴ Transcript, page 61

¹⁵ Transcript, page 66

- 2.17. Dr Naidu was informed in the course of his evidence that Dr Griggs had expressed the view that suxamethonium would have been a better paralysing agent to use for this intubation than pancuronium¹⁶. Dr Naidu responded that he did not think that the use of suxamethonium would have made any difference because the real difficulty he encountered was the inability to visualise the vocal cords because of the presence of stomach contents from regurgitation or vomiting.

3. Dr Hubert Goodman

- 3.1. Dr Goodman gave evidence at the Inquest. He obtained his medical qualification in London in 1969. He has a Diploma in Anaesthetics and has practised as an anaesthetist since 1986.
- 3.2. Dr Goodman stated that he was the specialist anaesthetist on call for 26 November 2000¹⁷. In that capacity, Dr Goodman was required to be available to attend at the Mount Gambier Hospital within 20 minutes of being called.
- 3.3. Dr Goodman stated that when he received the telephone call to attend at the hospital on 26 November 2000 he was at home. He made a note two days after 26 November 2000 in which he wrote that the call came at 1430 hours. He acknowledged that to be an incorrect record. After referring to other documents Dr Goodman put the approximate time of the telephone call at 1230 hours¹⁸. Dr Goodman was asked whether he had any independent recollection of the approximate time of the telephone call¹⁹. He replied:

‘It would have been about five minutes, seven minutes before I arrived at the hospital.’²⁰

- 3.4. Dr Goodman informed the Court that, based on the hospital notes and his recollection that the telephone call would have been five to seven minutes before his arrival at the hospital²¹, he was able to conclude that the call would have been made at 1300 hours. He stated that as he was in his car driving out of the driveway, he wife came out and said she had received a further call to advise that the hospital was now treating the matter as a medical emergency. On arrival at the hospital Dr Goodman went into the

¹⁶ Transcript, page 85

¹⁷ Transcript, page 108

¹⁸ Transcript, page 131

¹⁹ Transcript, page 134

²⁰ Transcript, page 134

²¹ Transcript, page 135

Emergency Department but could not see any signs of the patient there and so he ran around the corner to the High Dependency Unit²².

- 3.5. Dr Goodman described Ms Gordon as being in status asthmaticus and described Dr Naidu's medical treatment of Ms Gordon up until the intubation procedure as appropriate. He said that it was exactly the same as he would have carried out in that situation²³.
- 3.6. Dr Goodman stated that he recalled, prior to his intubation of Ms Gordon, asking for 100mg of suxamethonium. It was at that stage that one of the nurses asked him whether he knew that Ms Gordon had already been given pancuronium²⁴. In light of that fact, he determined not to administer the suxamethonium.
- 3.7. Dr Goodman stated that as he passed the laryngoscope down Ms Gordon's throat he noticed that there was still a large amount of stomach content in the back of her throat, which he removed with suction and then passed the tube²⁵. He stated that he used a size 7 tube. Dr Goodman stated that suxamethonium is available in the High Dependency Unit at the Mount Gambier Hospital and would have been available on the day in question²⁶. Dr Goodman stated that when he intubated Ms Gordon:

‘At that stage she was paralysed, she was basically moribund, so she was basically as per a cardiac arrest stage.’²⁷
- 3.8. Dr Goodman explained that after he had carried out the successful intubation, Ms Gordon arrested and he and the rest of the team then carried out the Intensive Care Unit protocol for cardiac arrest²⁸. Dr Goodman stated that the cardiopulmonary resuscitation attempts continued until approximately 1331 hours when Ms Gordon was placed on a ventilator. At 1330 hours Dr Goodman arranged for the administration of dexamethasone. He said that he administered that because it had the benefit of reducing brain swelling. He stated that at that stage he knew and felt that Ms Gordon has suffered severe hypoxic brain damage. He had noted that Ms Gordon's pupils were dilated at 1320 hours and he observed them on a number of other occasions noting that there was no change.

²² Transcript, page 135

²³ Transcript, page 113

²⁴ Transcript, page 128

²⁵ Transcript, page 137

²⁶ Transcript, page 138

²⁷ Transcript, page 142

²⁸ Transcript, page 145

- 3.9. Dr Goodman stated that he believed that Ms Gordon had suffered severe brain hypoxia and her chance of survival was not good, but that her best chance of survival would be in a major centre where she could be treated for a brain injury²⁹. For that reason he arranged for her retrieval to the Royal Adelaide Hospital.
- 3.10. Dr Goodman acknowledged that if Ms Gordon's condition at the time of the first intubation attempt at 1301 hours was the same as it was at 1308 hours when Dr Goodman first saw her, that Dr Naidu's decision to intubate at 1301 hours was a correct decision³⁰.
- 3.11. Dr Goodman stated that it may have been that when Dr Naidu first attempted to intubate Ms Gordon she was incompletely paralysed because the pancuronium would not have had full effect at that time³¹. Dr Goodman was asked whether, at the time he arrived and attempted his intubation, paralysis had set in³². His answer was that paralysis had set in or that at that point Ms Gordon was actually dead. He stated that when a person is dead it is possible to intubate them without any blocking agents or other medication because the vocal cords are totally relaxed.
- 3.12. Dr Goodman acknowledged that it was possible that even if Dr Naidu had successfully completed an intubation at 1301 hours that Ms Gordon may still have suffered a hypoxic brain injury and eventually died³³.

4. Dr William Griggs

- 4.1. Dr William Griggs provided two reports for the Court in these proceedings, the first of which was dated 17 December 2001 and admitted as Exhibit C15, and the second of which was dated 16 August 2002 and admitted as Exhibit C15a. Dr Griggs is an eminent expert in the field of Intensive Care Medicine and Trauma Medicine. He obtained his ordinary degree in medicine at the University of Adelaide in 1980. He obtained a Fellowship of the Australian and New Zealand College of Anaesthetists in 1987 and a Fellowship in the Joint Faculty of Intensive Care Medicine in 1989, and a Graduate Diploma in Aviation Medicine in 2001. He is the Director of the Trauma

²⁹ Transcript, page 158

³⁰ Transcript, page 173-174

³¹ Transcript, page 177

³² Transcript, page 178

³³ Transcript, page 186

Service at the Royal Adelaide Hospital and a Senior Consultant in the Intensive Care Unit and the Senior Consultant in the Retrieval Service.

- 4.2. Dr Griggs examined the hospital records for Ms Gordon, and also considered a number of the statements obtained by the investigating officer in this matter, including a statement taken from Dr Naidu.
- 4.3. Dr Griggs stated that from the information he had read he concluded that Ms Gordon had been an asthmatic for some time. He stated that it was described in the nursing notes on the transfer on 26 November 2000 from the Mount Gambier Hospital to the Royal Adelaide Hospital that she was a “very brittle asthmatic”³⁴. Dr Griggs noted that Ms Gordon had had multiple admissions to the Mount Gambier Hospital. His review of the notes found twenty two admissions related to asthma.
- 4.4. Dr Griggs stated that there are three broad classes of drug for asthma treatment. The first category he referred to were the preventers which are steroid based drugs. Ms Gordon was taking such a preventer under the name of Flixotide. The second class of drugs are the relievers. These include Ventolin (salbutamol) and they come in the form of inhalers. The third class of drugs are what Dr Griggs described as longer acting beta agonists or symptom controllers. He stated that Ms Gordon was on all three classes of these drugs.
- 4.5. Dr Griggs provided a description of the physiology of how an asthma attack actually happens. He said that it is triggered by a release of a chemical in the body. The chemical is released from particular cells, which can be sensitised to a trigger factor such as pollen that the person is allergic to. The preventers actually try to stabilise these cells so that even if they are exposed to the trigger factor, they do not release the chemical which triggers the asthma attack³⁵.
- 4.6. Dr Griggs gave as an example, the chemical histamine, which will trigger the muscles that line the airways of the lungs³⁶. The histamine causes the muscle to contract which causes the airways to become narrow, impeding the flow of air. At the same time, the lining of the airways (the mucosa) can become swollen or oedematous. The amount of secretions within the lungs are likely to increase also. The overall result is

³⁴ Transcript, page 567

³⁵ Transcript, page 569

³⁶ Transcript, page 570

that the secretions can actually plug or block off passages in the airways. Dr Griggs stated that the relievers such as Ventolin primarily act on the receptors in the muscles that cause the muscles to spasm. The object of these drugs is to relax the muscles thus enabling the patient to get air to flow into the breathing passages.

- 4.7. Dr Griggs also explained the effect of adrenalin when administered during an acute asthma attack. He said that it can be applied by nebuliser in which case it operates focally within the lungs. However if the patient is not breathing well because of the asthma attack, it can also be applied intravenously. Dr Griggs stated that adrenalin has the effect of stabilising the cells that release histamine. It will also reduce muscle spasms in the lungs thus easing breathing.
- 4.8. Dr Griggs described the treatment received by Ms Gordon in the Emergency Department up until the transfer to the High Dependency Unit as being adequate and reasonable. He stated that “it was certainly acceptable treatment and it was certainly good treatment”³⁷.
- 4.9. Dr Griggs stated that there are 200 or 300 deaths every year in Australia from asthma, many of which occur in big hospitals. He stated that despite all of the drugs and all of the available treatments that the big hospitals can provide, practitioners sometimes cannot reverse asthma attacks. He stated that he was very disappointed that Ms Gordon’s asthma attack was unable to be reversed, but he also commented that this is not an entirely unexpected phenomenon³⁸.
- 4.10. Dr Griggs agreed that on arrival at the hospital Ms Gordon was in status asthmaticus which he defined as an asthma attack which does not respond but continues³⁹.
- 4.11. Dr Griggs had no criticism of the treatment provided by the ambulance crew at Ms Gordon’s house and en route to the hospital. He regarded the time spent by the crew at her house as reasonable. He noted that Ms Gordon wished to stay home and requested oxygen from the ambulance crew to alleviate her symptoms. Dr Griggs noted that oxygen will not solve the underlying problem. The symptom being experienced by Ms Gordon was that she felt that she was not getting enough oxygen. The desire to stay home was understandable in a person such as Ms Gordon who had

³⁷ Transcript, page 574

³⁸ Transcript, page 575

³⁹ Transcript, page 575

managed her asthma condition for many years. Dr Griggs noted that the ambulance crew did not wish to leave Ms Gordon at home even though she did not wish to go to hospital. He commented that it is not uncommon for anyone with a chronic medical condition to wish to avoid hospitalisation if at all possible.

- 4.12. Dr Griggs commented that part of the assessment in the Accident and Emergency Department involved observation over a period of time. It was necessary to provide the treatment of salbutamol, adrenalin, oxygen, and hydrocortisone and then to observe the result. Dr Griggs noted that the hospital records of earlier admissions by Ms Gordon suggested that she may not have been completely punctilious in her use of preventive medications.
- 4.13. Dr Griggs stated that studies into the circumstances surrounding asthmatic deaths have emphasised the fact that a major factor common to bad outcomes is late presentation at hospital.
- 4.14. Dr Griggs described the decision to transfer Ms Gordon from the Accident and Emergency Department to the High Dependency Unit as appropriate and reasonable. He stated that part of the assessment of the severity of the condition is the patient's response to the treatment that is provided. He stated that the expectation of a clinician at the start would have been that the patient would respond to the treatment being provided. Dr Griggs stated that he considered that the decision to defer the administration of Aminophylline until Ms Gordon arrived at the High Dependency Unit was also a reasonable decision.
- 4.15. Dr Griggs noted that a "Code Blue" was called soon after Ms Gordon's arrival in the High Dependency Unit. He stated that this was probably triggered by the serious reductions in oxygen saturations as revealed by pulse oximetry metering.
- 4.16. Dr Griggs very helpfully provided a timeline of events in Exhibit C15. He noted that the times as shown in the medical records did not always match in a logical way. He said that different people were simultaneously recording events in different parts of the notes and some of them probably resorted to their personal watches while others looked at the times being shown on clocks or other timing devices in the room. Dr Griggs attempted to reconcile the various timing differences. In particular he

compared the times manually entered in the cardiac arrest chart⁴⁰ with the electronically recorded times shown in the electrocardiograph chart⁴¹. By comparing the ECG rhythm as shown on the latter with the various events as recorded in the former, he was able to deduce that those two primary sources of information contained a three minute error, which once allowed for, enabled a reconciliation of any apparent differences in the two sources of information.

- 4.17. Dr Griggs said that Dr Naidu could not have continued to maintain management of Ms Gordon's airway in the High Dependency Unit without attempting to intubate her. He said that on the basis of the oxygen saturation figures and the changes in the ECG rhythm and rate that occurred, he did not believe that it would have been possible to maintain oxygenation without intubating⁴². He commented that the only alternative that was available was ventilation manually by bag and mask. However he said that this form of ventilation is very difficult in asthmatics because their chests are very tight. He stated that the air from a bag under pressure would tend to go into the stomach because there is so much resistance in the lungs. This in itself creates a further problem in that the patient is more likely to regurgitate stomach contents in such a situation with the risk of aspiration of stomach contents into the lungs. Dr Griggs stated that "intubating asthmatics is fraught with difficulty and there is no guarantee that even if you get the tube in, that you are going to fix the problem because all the tube does is mean that you can now apply your pressure and force it into the lungs". Dr Griggs explained this again very helpfully in the following terms:

'The pharynx has two openings going off, the oesophagus down into the stomach and the trachea down into the lungs. Normally the oesophagus is closed unless there is food going through it. But with enough pressure the oesophageus will open and gas will go down there. Normally with someone who has got a relaxed chest, you apply a little bit of pressure and the air just flows into the open airways and the chest expands. With the asthmatics you apply that pressure and you are not getting air going in because of the obstruction from the muscle constriction and the oedema etc, so you have to apply more pressure and more pressure. Eventually you can apply so much pressure now the oesophagus opens up and the gas goes into the stomach instead.'⁴³

- 4.18. Dr Griggs provided an account of the process of intubation which accorded very much with the accounts provided by Doctors Naidu and Goodman.

⁴⁰ Exhibit C8, pages 339 and 340

⁴¹ Exhibit C8, pages 352-353

⁴² Transcript, page 586-587

⁴³ Transcript, page 588

- 4.19. Dr Griggs was asked about Dr Naidu's decision to employ midazolam at the rate of 15mg as a sedative agent. Dr Griggs suggested that he may have used a slightly lesser dose than 15mg, but he made it clear that no adverse effect would have arisen from the use by Dr Naidu of slightly more midazolam than he would have used⁴⁴.
- 4.20. Dr Griggs was critical of Dr Naidu's choice of pancuronium as a paralysing agent. He stated that pancuronium will take a certain amount of time before it becomes really effective. He said that if one uses a big dose of pancuronium to try and intubate it will still take one to two minutes to get it to work. He said that with a smaller dose a clinician might have to wait four or five minutes for the dose to work. Dr Griggs stated that if pancuronium were to be used the recommended dose for Ms Gordon would have been in the order of 12 to 15mg and "certainly at least eight"⁴⁵. However, according to the evidence of Dr Naidu, only 4mg was administered. Dr Griggs emphasised that it is important not to try and start intubating too soon. He said that if the patient is still able to move and still has their reflexes, the placement of a laryngoscope down the throat may trigger vomiting. Dr Griggs stated that the muscles of the larynx itself and the vocal cords will also tend to close off if one attempts to intubate a patient who is not paralysed⁴⁶.
- 4.21. Dr Griggs confirmed the need to employ cricoid pressure. He stated that cricoid pressure should stop passive regurgitation if it is well maintained. However he stated that it is not a simple matter. He stated that ideally the cricoid pressure should be maintained from the start of the first intubation attempt until the tube is finally in place⁴⁷. Therefore in theory the cricoid pressure should have been in place from 1301 hours for the first intubation attempt until 1308 hours when the tube was in and the cuff blown up. He had noted in his first report that there was no mention of cricoid pressure in the notes. However at the Inquest he acknowledged that cricoid pressure was, according to the evidence of all of the other witnesses, duly applied.
- 4.22. Dr Griggs was asked about Dr Naidu's reasoning in using pancuronium rather than suxamethonium, namely that pancuronium takes longer to have effect. Dr Griggs stated that he thought in retrospect that Dr Naidu's logic was somewhat flawed⁴⁸. As

⁴⁴ Transcript, page 593-594

⁴⁵ Transcript, page 597

⁴⁶ Transcript, page 600

⁴⁷ Transcript, page 604

⁴⁸ Transcript, page 609

Dr Griggs pointed out, the aim of giving the paralysing agent was to intubate the patient. Dr Naidu's reasoning in employing a drug that would operate more slowly than suxamethonium in order to give him more time really just resulted in delaying the inevitable. It may also have meant that at Dr Naidu's first intubation attempt Ms Gordon was not fully paralysed, thus inducing the vomiting or regurgitation which subsequently impeded his second attempt at intubation.

- 4.23. While Dr Griggs was critical of Dr Naidu in this respect, it was not a strong criticism. He could see how Dr Naidu might have made the decision that he did, having regard to the circumstances in which he found himself. Dr Griggs certainly was not suggesting that the use of pancuronium rather than suxamethonium was in itself causative of Ms Gordon's death. As Dr Goodman had already noted, even had the first intubation attempt been completely successful, Ms Gordon may already have suffered the hypoxic brain injury which ultimately led to her death even at that time.
- 4.24. Dr Griggs was not critical of Dr Naidu's choice of a smaller than normal intubation tube⁴⁹.
- 4.25. Dr Griggs noted that Ms Gordon's oxygen levels started to plummet at around 1300 hours⁵⁰. By 1308 hours there was a tube in and there were attempts to ventilate her. However, for the following 18 minutes there was poor cardiac output, so even if there was oxygen going to the lungs at that point, the blood flowing to the brain may not have been flowing as well as it should with the result that it would not have been delivering much oxygen to the brain. He concluded:
- 'So trying to balance whether it's the oxygen deprivation during the intubation attempts or the oxygen deprivation during the cardiac arrest or a mixture of both is impossible.'⁵¹
- 4.26. Dr Griggs noted that it was unclear when Dr Naidu first called Dr Goodman⁵². Dr Griggs made it quite clear that he was not critical of Dr Naidu for not having called Dr Goodman earlier⁵³. I agree with Dr Griggs in this regard. The notes do not make it clear when Dr Goodman was first called in any event, so it is difficult to be critical of Dr Naidu in regard to this matter. There are a number of other things to consider, including the fact that it was necessary for Dr Naidu to monitor the effects

⁴⁹ Transcript, page 611

⁵⁰ Transcript, page 614

⁵¹ Transcript, page 614

⁵² Transcript, page 614

⁵³ Transcript, page 615

of the treatment he was providing in the early stages of Ms Gordon's arrival at the Accident and Emergency Department. I do not think that there is any room for criticism of Dr Naidu for some supposed failure to call Dr Goodman at an earlier stage.

- 4.27. Dr Griggs commented about the successful intubation of Ms Gordon by Dr Goodman at 1308 hours⁵⁴. Dr Griggs noted that the pancuronium would have had an effect by that stage. Secondly he thought that if Ms Gordon was not in actual cardiac arrest at that stage she was very close to it and therefore completely unconscious. Dr Griggs stated:

To some extent this is effectively intubating a cardiac arrest which you don't need drugs for.⁵⁵

- 4.28. Dr Griggs drew attention to Ms Gordon's heart rate as revealed by the electrocardiograph. At 12:59pm her heart rate was showing 145 beats per minute. At 1:02pm the heart rate was down to 71 beats per minute. Dr Griggs stated:

'If you starve a heart of oxygen, initially... what happens is the heart speeds up trying to pump blood around faster because there's just not enough oxygen, it's trying to get the oxygen around faster but eventually as it fails, what happens is it slows down, slows down, slows down and stops.'⁵⁶

- 4.29. Dr Griggs states that 71 beats per minute was dangerously slow for Ms Gordon having regard to her tachycardia only minutes before⁵⁷. Dr Griggs stated that Ms Gordon "was in trouble before the intubation and that would have progressed"⁵⁸. Dr Griggs acknowledged that even if the correct dose of suxamethonium had been administered it was still possible that exactly the same sequence of events might have happened⁵⁹. He said that even in that situation Ms Gordon may have regurgitated her stomach contents, and Dr Naidu may have been faced with exactly the same obscured view, with the result that the same cardiac failure would have or could have transpired. Dr Griggs stated that unfortunately he has seen a number of cases of asthmatics who have died despite every medical strategy being performed in the correct way⁶⁰. He stated that it can be a very difficult disease process to deal with.

⁵⁴ Transcript, page 619

⁵⁵ Transcript, page 620

⁵⁶ Transcript, page 634

⁵⁷ Transcript, page 635

⁵⁸ Transcript, page 635

⁵⁹ Transcript, page 636

⁶⁰ Transcript, page 636

5. Mount Gambier Hospital – Community concerns concerning Sally Anne Gordon’s death

- 5.1. Following the death of Ms Gordon, a petition was circulated in Mount Gambier requesting an inquest into the death of Ms Gordon. The petition was signed by a number of persons and forwarded to the then State Coroner under cover of a letter dated 24 September 2004 from the Honourable Angus Redford MLC.
- 5.2. On 15 October 2003 a Select Committee of the Legislative Council was established to investigate and report on the operation of the Mount Gambier and Districts Health Service (Mount Gambier Hospital). The Select Committee was established as a result of a range of concerns raised by the Honourable Angus Redford MLC in the Legislative Council on Wednesday, 17 September 2003. The Select Committee finally delivered its report on 14 February 2006. A perusal of the report indicates that there was a high level of community concern about various aspects of the operation of the Mount Gambier Hospital. It was clear that a number of members of the Mount Gambier community, and in particular, the medical community, had concerns about the operation of the Mount Gambier Hospital, and that some members of the community had drawn links between the perceived problems at the hospital and the death of Ms Gordon.
- 5.3. Accordingly, letters were sent by Counsel Assisting in the following terms:

‘Dear ...

Re: Sally Anne Gordon deceased

I write to inform that this matter has been listed for inquest to commence on 6 March 2006. It is anticipated that the majority, if not all of the evidence will be heard in Mount Gambier during the week commencing 6 March 2006. Your name has been put forward as someone who may be able to provide comment on this matter. The State Coroner has asked that I write to you and ask whether you would like to appear at the inquest to give evidence in regard to the death of Ms Gordon or the circumstances surrounding her death. Alternatively, the State Coroner has indicated that he is happy to accept affidavit evidence in regard to any matters relevant to the death of Ms Gordon.

If you intend to give oral evidence then you will be asked to either swear or affirm prior to giving evidence and you may be cross-examined by counsel representing interested parties.

If you would like to give oral evidence during the inquest then you will need to advise me of your intention by no later than Monday, 20 February 2006.

If you decide to prepare affidavit evidence, I am obliged to advise you that your affidavit will be made available to the other interested parties.

If you intend to prepare affidavit evidence then this will need to be received by no later Monday, 13 February 2006.

Further, you may be required to give oral evidence if the Coroner or any of the other interested parties request that you do so. If you are required to give oral evidence we will attempt to accommodate your other commitments.

In the meantime if you have any queries in respect of this matter then please do not hesitate to contact me.

Signed Counsel Assisting'

5.4. Letters in those terms were sent to the following persons:

Dr Eugene Gilligan
 Mr Glenn Brown
 Professor Christopher Baggoley
 Mr Barney McCusker
 Mr Mark Landy
 Professor Brendan Kearney
 Professor Ross Kalucy
 Mr Henry Forbes
 Dr Kevin Johnston
 Professor Bryant Stokes
 Dr Trevor Hodson
 Mr Christopher Overland
 Dr Peter Charlton

- 5.5. A letter was also sent to the Honourable Angus Redford MLC inviting him to identify any potential witnesses he thought might usefully give evidence at the Inquest. He did not put forward any suggestion as to witnesses whom he thought should be called.
- 5.6. Only Doctors Hodson, Johnston and Forbes wished to avail themselves of the opportunity of providing information, by way of oral evidence, at the Inquest.
- 5.7. I do not propose to set out in detail the evidence given by those witnesses. It is sufficient to record that each of them raised concerns about the manner in which the Mount Gambier Hospital moved, during the year 2000, from a method of structuring the Accident and Emergency Department by the use of on-call general practitioners from local medical clinics, to staffing the Accident and Emergency Department by the use of Salaried Medical Officers employed by the hospital. Dr Naidu was one such Salaried Medical Officer.
- 5.8. The evidence of these witnesses reflected a high level of commitment to the successful operation of the Mount Gambier Hospital. Each of the witnesses appeared

to have a genuine desire to advance the interests of the hospital and the provision of medical services to the community of Mount Gambier.

- 5.9. However, these witnesses had no personal involvement in the treatment of Ms Gordon. They had no personal knowledge of the events of 26 November 2000. They were unable to provide evidence which addressed the cause and circumstances of Ms Gordon's death.
- 5.10. The analysis of the events of 26 November 2000 as seen through the evidence of Doctors Naidu, Goodman and Griggs leads me to conclude that Ms Gordon's unfortunate death was not attributable to any systemic difficulty involving the staff of the Accident and Emergency Department at Mount Gambier Hospital.
- 5.11. There was an assertion that the Salaried Medical Officers in general, and Dr Naidu in particular, were very junior, and that they were not properly supervised. I cannot comment on the other Salaried Medical Officers apart from Dr Naidu.
- 5.12. Dr Naidu had, on the evidence, some ten to eleven years post graduation experience. Dr Griggs gave evidence that a practitioner of Dr Naidu's qualifications and experience would potentially be able to function as a sole medical practitioner in a country town. Furthermore, Dr Griggs stated that, having read Dr Naidu's qualifications and experience, he believed that Dr Naidu had a reasonable level of medical experience "to be able to do the task he was doing" (in the sense of Dr Naidu's general duties as a Salaried Medical Officer at Mount Gambier Hospital). Indeed, Dr Griggs, who in his role as a retrieval specialist has seen most if not all of the country hospitals in operation, believed that there are a number of doctors with as much, and in some cases less, experience as Dr Naidu performing similar roles around South Australia and elsewhere in Australia⁶¹.
- 5.13. One of the contentions of the witnesses who were critical of the Salaried Medical Officer arrangement was that there should have been consultant supervision available at the Accident and Emergency Department while they were on duty. But Dr Griggs stated that there is no hospital in Australia including all the teaching hospitals where there is a consultant in the emergency department twenty-four hours per day⁶².

⁶¹ Transcript, page 625

⁶² Transcript, page 626

- 5.14. It may be that the consultation with the local medical community and the relationship between the hospital and the local medical community was strained and not well handled during the year 2000. However, the evidence of Doctors Hodson, Johnston and Forbes did not demonstrate a causal link between the introduction of Salaried Medical Officers at Mount Gambier Hospital and Ms Gordon's tragic death.
- 5.15. The analysis of the evidence of those directly concerned with Ms Gordon's death, and the expert overview and evidence provided by Dr Griggs, shows that Dr Naidu did all that he reasonably could in order to treat Ms Gordon on 26 November 2000. It is true that Dr Griggs was critical of Dr Naidu's choice of pancuronium as a paralysing agent in the intubation process. However, Dr Griggs' criticism was muted in this regard, and Dr Griggs was far from suggesting that the choice of pancuronium was causative of Ms Gordon's death. Indeed, Dr Griggs allowed the possibility that even had the correct drug, suxamethonium, been employed, Ms Gordon's outcome may have been no different.
- 5.16. In my opinion Ms Gordon's cause of death was cerebral anoxia consequent upon a severe acute asthmatic event and I find accordingly.

Key Words: Asthma; Country areas - medical services; Emergency Departments; Hospital treatment.

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

Seal the 30th day of October, 2006.

State Coroner