

IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2012 4563

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)

Section 67 of the Coroners Act 2008

Inquest into the Death of Baby Mabel Windmill

Delivered On:	15 July 2015
Delivered At:	Coroners Court of Victoria 65 Kavanagh Street Southbank Victoria 3006
Hearing Dates:	10 - 16 February 2015
Findings of:	Coroner Jacqui Hawkins
Representation:	Ms D Foy of counsel for Windmill family Dr P Halley of counsel for Dr Girgis Mr R Harper of counsel for Dr Watters Ms F Ellis of counsel for the Latrobe Regional Hospital
Police Coronial Support Unit	Sergeant S Wade appeared to assist the Coroner

I, Jacqui Hawkins, Coroner, having conducted an inquest into the death of Baby Mabel Windmill on 10 – 16 February 2015

at Coroners Court of Victoria, 65 Kavanagh Street, Southbank, Victoria, 3006

find that the identity of the deceased was Baby Mabel Windmill

born on 10 October 2012

and the death occurred 10 October 2012

at Latrobe Regional Hospital, Princes Highway & Village Avenue, Traralgon, Victoria, 3844

from:

1(a) CONGENITAL *STREPTOCOCCUS AGALACTIAE* (GROUP B) PNEUMONIA IN THE SETTING OF COMPLICATED LABOUR

in the following circumstances:

1. On 10 October 2012, Mrs Kathryn Windmill, who was pregnant with her first child, underwent an emergency caesarean section after an unsuccessful vaginal delivery. Baby Mabel Windmill (Baby Mabel) was born in a moribund state at 1757 hours at the Latrobe Regional Hospital (LRH) in Traralgon. An umbilical pulsation was felt by a member of the obstetric team however by the time the baby was passed to the paediatric team there were no signs of life. During extensive resuscitation efforts, a transient heart rate was heard and recorded at 30 minutes of age. Unfortunately, the resuscitation attempts were unsuccessful and Baby Mabel died.

BACKGROUND

2. In February 2012, Mrs Windmill's pregnancy was confirmed by her general practitioner, Dr Ghattas at the Healthcare Centre in Morwell. The estimated date of delivery was 26 October 2012. As part of this consultation Mrs Windmill was referred to Dr Sherif Girgis for specialist obstetric care due to risks associated with having a Body Mass Index (BMI) of 48. Mrs Windmill's obstetric care was to be shared between Dr Ghattas, Dr Girgis and midwives at LRH.
3. Mrs Windmill attended LRH for a number of antenatal appointments and was regularly seen by midwives. Mrs Windmill had three appointments booked with Dr Girgis. Two were cancelled for unknown reasons at 22 and 26 weeks and consequently, she requested a referral to another obstetrician.
4. On 31 July 2012, Midwife Jacqueline McNabb and Obstetric Registrar Dr Shaun Francis advised Mrs Windmill that as her BMI was above the limit prescribed by LRH she would

likely be referred to Monash Medical Centre for delivery. Midwife McNabb also advised Mrs Windmill that she would need to be seen by an anaesthetist who would determine her suitability for delivery at LRH.

5. Consultant Anaesthetist Dr Frederick Mattheyse met with Mrs Windmill on 14 August 2012 and confirmed that her BMI exceeded the limit set by LRH. Nevertheless, Dr Mattheyse was of the opinion that, from an anaesthetic perspective, Mrs Windmill could deliver safely at LRH. However, he also advised her that there was an increased risk of caesarean section and possible complications with the use of an epidural as a result of her high BMI.¹
6. Mrs Windmill's first appointment with an obstetrician was on 21 August 2012 at 30 weeks gestation with Dr Saher Sadek. According to Mrs Windmill, Dr Sadek said the anaesthetist had given approval for her to give birth at LRH. Mrs Windmill believed this was a short appointment and Dr Sadek did not discuss the pros and cons of delivering at LRH or discuss the pregnancy with her.²
7. On 4 October 2012, Mrs Windmill had commenced maternity leave and attended an appointment with Midwife McNabb. Mrs Windmill states that she was upset at this appointment because she had not been feeling much movement from the baby and she felt that she was not receiving adequate acknowledgement or response to the concerns she was raising. After all the necessary tests were conducted Mrs Windmill was sent home with no further medical assessment or treatment required at that time.
8. On 9 October 2012, Mrs Windmill's waters broke at home at approximately 0140 hours and she was advised by staff at LRH to attend the hospital. Mrs Windmill attended the Thomson Ward at 0800 hours and was seen by Midwife Tania Kovacs and Obstetric Registrar Dr Sybille Japhary-Dobber. Vaginal swabs were taken to test for infection, she was placed on a cardiotocograph (CTG) and further observations were taken. Mrs Windmill was advised to go home and return the following day, or earlier if she developed a temperature.³ As Mrs Windmill's membranes had ruptured, she was given a list of things to do and not do as part of LRH's Premature Rupture of Membranes (PROM) Policy.⁴
9. On 10 October 2012 at approximately 0400 hours, Mrs Windmill re-attended the Thomson Ward and was seen by Midwife Wendy Cartledge and Dr Japhary-Dobber. Dr Japhary-Dobber ordered the commencement of benzylpenicillin and reviewed Mrs Windmill again at 0545 hours.

¹ Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p506.

² Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p507

³ Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p508

⁴ Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p508

10. At this time, Dr Japhary-Dobber made the following notes:

CTG non reassuring.

Cervix unfavourable for IOL/augmentation

High surgical risk, esp, for emergency LUSCS

Plan: discuss management plan with obstetric team in am. Might be better off with elective LUSCS.⁵

11. Midwife Snell was subsequently assigned to care for Mrs Windmill and first saw her at approximately 0715 hours. Midwife Snell noted that it was difficult to feel the position of the baby and the strength and duration of the contractions due to Mrs Windmill's high BMI.⁶ At approximately 0800 hours, Mrs Windmill was complaining of pain and Nurse Snell arranged for the anaesthetist to insert an epidural to relieve her pain. Midwife Snell continued to monitor the CTG although due to the amount of adipose tissue over the abdomen, she was required to manually mark the CTG printout when she palpated the contractions.
12. A formal handover was conducted between Dr Japhary-Dobber and Dr Philip Watters at approximately 0800 hours and he met Mrs Windmill during the morning round approximately 30 minutes later.
13. At 1000 hours, Midwife Snell observed that Mrs Windmill's contractions had begun to decrease in duration and strength and requested Dr Watters to assess her. Approximately 10 minutes later, Dr Watters made an order for Mrs Windmill to commence Syntocinon⁷ to assist with the augmentation of Mrs Windmill's labour. Midwife Snell commenced Syntocinon at a rate of 40ml per hour in line with LRH's protocol⁸.
14. At 1110 hours, Dr Watters noted that Mrs Windmill was febrile, with a temperature of 38.2 and changed her antibiotics to Kefzol. Subsequently, Midwife Snell noted that there was a high baseline fetal heart rate of 170bpm with reduced variability and again raised her concerns with Dr Watters who advised her to increase the Syntocinon to assist with dilation.
15. At some time after the commencement of Syntocinon, Midwife Snell started to prepare the paperwork for a caesarean section because she wanted to ensure that there was no delay if one was required. Midwife Snell also advised Mrs Windmill that this was a possibility and would need to occur before the baby became too tired. Due to the abnormal CTG trace and the

⁵ Exhibit 10 – Notes of Dr Japhary-Dobber dated 10 October 2012, Inquest brief, p278

⁶ Exhibit 11 – Statement of Stephanie Snell dated 12 May 2014, Inquest brief, p37

⁷ Syntocinon, also known as oxytocin, is used to stimulate contractions in inducing or augmenting labour and to contract the uterus to control post partum bleeding. *Mosby's Medical, Nursing and Allied Health Dictionary, Elsevier Science, 9th edn, 2013.*

⁸ Exhibit 4 – Clinical/Departmental Guidelines – Maternity intrapartum care - Syntocinon infusion for induction of labour protocol.

decreased variability, Midwife Snell remained quite concerned over the wellbeing of the baby.⁹

16. Throughout the day, Midwife Snell remained concerned about the baby's fetal heart rate and what she considered to be an abnormal CTG trace.¹⁰ She regularly raised her concerns with Dr Watters and also spoke to another member of staff, Kylie Osborne.
17. Midwife Elspeth Dove received a handover from Midwife Snell and assumed responsibility for Mrs Windmill's care at 1525 hours and conducted observations and noted that they were outside normal limits; her BP was 162/96mmHG, HR 130bpm, Temp 37.2, respiratory rate 24bpm. She also noted that the CTG was difficult to report as contractions were not detected by the tocograph and there were periods where contact was lost. Midwife Dove also marked the CTG manually when contractions occurred and recorded that:

*the baseline fetal heart rate was estimated at 165-170bpm, variability was reduced and there were persistent variable decelerations with 'overshoots'. This indicated ... that there was foetal distress.*¹¹
18. She was concerned by this and reported her concerns to Dr Watters, who confirmed that he was already aware of the abnormal CTG.
19. At 1640 hours, Midwife Dove noticed prolonged deceleration of the fetal heart rate which prompted her to seek immediate review by Dr Watters. Midwife Dove remembered seeing the Associate Unit Manager (AUM), Debra Pattle, having a conversation with Dr Watters about the situation.
20. At 1645 hours Dr Watters decided to attempt an instrumental delivery and Mrs Windmill was transferred to theatre.
21. At 1727 hours Dr Watters attempted a vaginal delivery by vacuum extractor however after two attempts to pull, the baby was unable to rotate or descend and he determined that a vaginal delivery was no longer appropriate. Accordingly, an emergency caesarean section was performed and Baby Mabel was born at 1757 hours.
22. Cardiopulmonary resuscitation (CPR) was initiated approximately one minute after Baby Mabel was delivered and initial intubation was attempted. Extensive resuscitation measures were undertaken including continuous CPR. Following a dose of adrenaline, a heart rate of approximately 60 beats per minute was detected however this was not associated with a definite cardiac output and CPR was continued. Resuscitation was discontinued at 1846 hours and Baby Mabel was officially declared deceased.

⁹ Exhibit 11 – Statement of Stephanie Snell dated 12 May 2014, Inquest brief, p39

¹⁰ Exhibit 11 – Statement of Stephanie Snell dated 12 May 2014, Inquest brief, p39

¹¹ Exhibit 17 – Statement of Elspeth Dove undated, Inquest brief, p33

JURISDICTION

Enlivenment of the coronial jurisdiction

23. A Coroner has jurisdiction to investigate a reportable death. The term, 'reportable death' is defined in section 4 of the *Coroners Act 2008 (Vic)* (Coroners Act). A necessary precursor to my jurisdiction, therefore, is that a 'death' in the relevant sense has occurred. Victorian Coroners do not have jurisdiction to investigate a "still-birth" which is defined as a child of at least 20 weeks gestation or, with a body mass of at least 400 grams at birth, that exhibits no sign of respiration or heartbeat, or other sign of life, after birth.¹²
24. The reportability of deaths involving babies who are born in a moribund state is often difficult to determine. Particularly in the time immediately following the birth, the distinction between a stillborn child and a neo-natal death can seem ambiguous and factually difficult to navigate. Further, what constitutes a life and subsequent death in law does not always align with the medical view or community perceptions. Nevertheless, having considered the relevant legislation and case law in line with the facts of Baby Mabel's birth, I determined that the death was reportable because it met the threshold criteria of a 'death' in the relevant sense and it was unexpected.

Nature of the coronial jurisdiction

25. The Coroners Court of Victoria is an inquisitorial jurisdiction.¹³ Section 67 of the Coroners Act provides that a coroner must find, if possible, the identity of the deceased, the cause of death and, in some cases, the sufficiently proximate and causally relevant circumstances in which the death occurred.¹⁴ It is not the role of the coroner to lay or apportion blame, but to establish facts.¹⁵
26. The role of a coroner in this State includes the independent investigation of deaths to contribute to a reduction in the number of preventable deaths, the promotion of public health and safety, and the administration of justice.
27. A coroner may comment on any matter connected with the death, may report to the Attorney-General and may make recommendations to any Minister, public statutory authority or entity, on any matter connected with the death, including recommendations relating to public health and safety or the administration of justice.¹⁶

¹² A still birth child as defined in the *Births, Deaths and Marriages Act 1996*

¹³ Section 89(4) of the Coroners Act.

¹⁴ This is the effect of the authorities, see for example *Harmsworth v The State Coroner* (1989) VR 989; *Clancy v West* (unreported, 17/8/1994, Supreme Court of Victoria, Harper J).

¹⁵ *Keown v Kahn* (1999) 1 VR 69.

¹⁶ Sections 72(1) and (2) of the Coroners Act.

CORONIAL INVESTIGATION¹⁷ AND INQUEST

Request for inquest

28. In August 2013, the Windmill family requested that an investigation be conducted into the death of Baby Mabel due to concerns they had with the medical care and management provided to Mrs Windmill and Baby Mabel.
29. Based on the circumstances of Baby Mabel's death, further investigations were conducted and in light of this request, I exercised my discretion to hold an inquest.¹⁸ To assist with identifying the scope of the inquest and the witnesses required, I held directions hearings on 15 September and 10 December 2014.

Expert opinion

30. The expert opinion of Dr Christine Tippett, Clinical Head of Obstetrics from Monash Health¹⁹ assisted my understanding of the clinical management and circumstances surrounding Baby Mabel's death.

Evidence at inquest

31. The following witnesses gave *viva voce* evidence at the Inquest:
- Ms Kathryn Windmill, mother of Baby Mabel
 - Dr Christine Tippett, Director of Maternal Fetal Medicine and Clinical Head of Obstetrics, Monash Health
 - Dr Yeliena Baber, Forensic Pathologist, Victorian Institute of Forensic Medicine.
 - Dr Frederick Mattheyse, Consultant Anaesthetist, Latrobe Regional Hospital
 - Dr Sybille Japhary-Dobber, Obstetric & Gynaecology Registrar, Latrobe Regional Hospital
 - Ms Stephanie Snell, Registered Midwife, Latrobe Regional Hospital
 - Ms Elspeth Dove, Registered Midwife, Latrobe Regional Hospital
 - Ms Debra Pattle, Associate Unit Manager, Latrobe Regional Hospital
 - Dr Trisha Nicholls, Senior Obstetrics & Gynaecology Registrar, Latrobe Regional Hospital
 - Dr Catherine Coates, Consultant Paediatrician, Latrobe Regional Hospital

¹⁷ I am grateful for the assistance of the Coroners Prevention Unit (CPU) which strengthened my prevention role throughout the investigation process.

¹⁸ Section 52(1) of the Coroners Act

¹⁹ The potential difficulties associated with any professional conflict for Dr Tippett was raised with Interested Parties at the second directions hearing. All parties agreed that Dr Tippett was acceptable as an expert witness and did not raise concerns about any actual or perceived conflicts.

- Dr Saher Sadek, Specialist Obstetrician & Gynaecologist, Latrobe Regional Hospital
- Dr Philip Watters, Locum Specialist Obstetrician & Gynaecologist, Latrobe Regional Hospital
- Angela Scully, Nurse Unit Manager, Latrobe Regional Hospital
- Dr Simon Fraser, Chief Executive Officer, Latrobe Regional Hospital

32. At the conclusion of the inquest, counsel for all interested parties provided written submissions and submissions in reply. In writing this Finding, I have considered all of the evidence including these written submissions.²⁰

Issues investigated

33. Section 67 of the Coroners Act requires me to find:

- a) the identity of the deceased
- b) the cause of death, and
- c) the circumstances in which the death occurred.

34. I now consider the evidence in relation to each of these points in turn.

IDENTITY OF THE DECEASED

35. I find that the identity of Baby Mabel Windmill was without dispute and required no additional investigation.

CAUSE OF DEATH

36. The death of Baby Mabel was not initially reported to the Coroners Court of Victoria and therefore an autopsy was performed at the Monash Medical Centre, rather than at the Victorian Institute of Forensic Medicine (VIFM) as would ordinarily be the case in coronial investigations. Consent from Mr and Mrs Windmill for a hospital-based autopsy was not able to be immediately obtained and therefore the autopsy was not performed by Dr Dhaval Joshi until 16 October 2012, some six days after the death occurred.

37. Dr Joshi's opinion was that the cause of death was "*without a doubt sepsis secondary to Streptococcus agalactiae (GBS) infection and severe acute pneumonia*".²¹ He noted that the placenta was not available for examination but it "*would be expected to show severe chorioamnionitis*".²²

²⁰ The absence of reference to any particular aspect of the evidence, either obtained through a witness or tendered in evidence does not imply that it has not been considered.

²¹ Amended Autopsy Report, Inquest brief, p421

²² Amended Autopsy Report, Inquest brief, p421

Request for supplementary Medical Examination Report – Expert opinion of Dr Baber

38. In December 2014, Dr Sadek wrote to the Coroners Court with concerns, including that the clinical history as written in the PM Report did not mention the abnormal CTG trace, the use of Syntocinon for several hours that in his opinion reflected severe and prolonged intra-partum asphyxia of the fetus and that there has been no fetal cord blood at delivery to negate this.²³
39. Accordingly, Dr Sadek suggested that another forensic pathologist might usefully review the case to specifically consider the potential that these factors had caused or contributed to the death of Baby Mabel. Having considered this request, I agreed with Dr Sadek's suggestion and asked Dr Yeliena Baber, Forensic Pathologist at VIFM, to review the original and amended autopsy report and the Inquest Brief including the medical records of both Mrs Windmill and Baby Mabel.
40. I note that Dr Baber did not have the benefit of seeing Baby Windmill and there is significant difficulty in performing a fetal autopsy without the placenta. Dr Baber stated that the "*placenta is like the black box of pregnancy and it shows changes that have gone on through the pregnancy*".²⁴ Dr Baber further indicated her preference of conducting an autopsy within 24 hours of a baby's death because of the rapid microbiological changes that can occur.²⁵ In relation to the opinion provided by Dr Baber, I accept and have taken into consideration the limitations to which these issues give rise.
41. Dr Baber agreed that the swabs taken at autopsy show the presence of GBS in the lung and further that there was evidence of early bronchopneumonia. However, in her opinion the pneumonia did not appear to be well established. She notes, "*there [were] maternal neutrophils in the foetal lungs and airways which confirm the presence of inhaled amniotic fluid*".²⁶
42. Dr Baber further stated:
- the documentation of prolonged abnormalities in the CTG in the setting of Syntocinon use, and difficulty intubating in the immediate post-partum period also raise the possibility of perinatal asphyxia.*²⁷

²³ Exhibit 26, Letter to Coroners Court of Victoria from Dr Saher Sadek dated 9 December 2014, Inquest brief p527

²⁴ Transcript of evidence, p108

²⁵ Transcript of evidence, p109

²⁶ Exhibit 6 - Expert Opinion of Dr Yeliena Baber dated 2 February 2015, Inquest brief, p544

²⁷ Exhibit 6 - Expert Opinion of Dr Yeliena Baber dated 2 February 2015, Inquest brief, p544

43. Dr Baber was not able to exclude the contribution of hypoxia to Baby Mabel's death because there was proof on the CTG trace that the baby had been affected.²⁸ Dr Baber stated that the placenta:

*[...] would reflect the presence if there had been chronic hypoxia throughout the pregnancy, it would certainly have confirmed the presence of chorioamnionitis if it had been there, and it may have reflected some acutely hypoxic changes as well.*²⁹

44. However, without histology of the placenta, Dr Baber advised that it was impossible to say whether it did show evidence of chronic and or acute hypoxia. Dr Baber further stated that:

*this infant is likely to have died from congenital pneumonia with Streptococcus agalactiae (GBS) from inhalation of infected amniotic fluid, and possible associated sepsis. GBS can cause severe congenital infection even in the presence of intact membranes.*³⁰

45. In addition, Dr Baber noted that she: "could not separate foetal infection from the difficult labour: what contribution has been made by either is impossible to say"³¹ which warranted the inclusion of "in the setting of a complicated labour" in the cause of death.

46. Accordingly, Dr Baber provided an opinion that a reasonable medical cause of death for Baby Mabel would be 1a) CONGENITAL *STREPTOCOCCUS AGALACTIAE* (GROUP B) PNEUMONIA IN THE SETTING OF COMPLICATED LABOUR.³²

Submissions as to cause of death

47. In submissions, Counsel for Mr and Mrs Windmill, invited me to find that intrapartum hypoxia was a further cause of death. Support for this was said to be found in the evidence of Dr Tippett and Dr Baber.³³ Based on this evidence, Counsel for Mr and Mrs Windmill contended that I could comfortably change the cause of death to 1a) intrapartum hypoxia, 1b) streptococcus agalactiae (Group B) isolated from lung and liver 1c) severe acute pneumonia, both lungs.
48. In contrast, Counsel for LRH and Dr Watters submitted that there was insufficient evidence to support the inclusion of hypoxia in the cause of death.

²⁸ Transcript of evidence, p111; Expert Opinion by Dr Yeliena Baber dated 2 February 2015, Inquest brief, p545

²⁹ Transcript of evidence, p108

³⁰ Exhibit 6 - Expert Opinion of Dr Yeliena Baber dated 2 February 2015, Inquest brief, p544

³¹ Transcript of evidence, p111

³² Exhibit 6 - Expert Opinion of Dr Yeliena Baber dated 2 February 2015, Inquest brief, p539

³³ Submissions on behalf of the Windmill family dated 8 May 2015, paragraphs 7-9.

Conclusions as to cause of death

49. Having considered all of the evidence and in light of Dr Baber's evidence, I am not satisfied to the requisite degree that there is enough evidence to support the contention that intrapartum hypoxia caused or contributed to Baby Mabel's death.
50. I accept the cause of death as formulated by Dr Baber and find that Baby Mabel Windmill died on 10 October 2012 from 1 (a) *CONGENITAL STREPTOCOCCUS AGALACTIAE* (GROUP B) PNEUMONIA IN THE SETTING OF COMPLICATED LABOUR.

CIRCUMSTANCES IN WHICH THE DEATH OCCURRED

51. I do not propose to recount or summarise all of the evidence but rather refer to the parts that are necessary touching upon the relevant circumstances investigated as part of the inquest.

Issues investigated as part of the Inquest

52. There were a number of complex and interrelated issues surrounding Baby Mabel's death, however for the purpose of this Finding I have separated them into issues relating to:
 - The appropriateness of ante-natal care; and
 - The appropriateness of intra-partum care and management of labour.

APPROPRIATENESS OF ANTE-NATAL CARE

Management of risks associated with a high BMI

53. There are risks associated with any pregnancy, these risks increase in a woman with a high BMI. An issue explored at inquest with respect to the ante-natal care was the management of risks associated with having a high BMI and whether Mrs Windmill was appropriately advised of those risks.
54. Mrs Windmill was initially advised by her GP that she was likely to be treated as a high risk obstetric patient due to her high BMI.
55. Mrs Windmill said at an appointment with Midwife McNabb on 26 July 2012, that she was advised that her BMI was above the hospital's limit but that the anaesthetist would need to decide if she could deliver at LRH.³⁴ Midwife McNabb was referring to the LRH protocol about the management of obese women³⁵ which was in place at the time of Mrs Windmill's ante-natal care.

³⁴ Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p505

³⁵ Maternity Care – Management of Obese Women Protocol, Inquest brief, p88

56. The hospital protocol recognised that obesity is a risk factor for pregnant women and outlined the potential risks associated with obesity and how those risks should be managed at LRH including requiring:
- that all obese women be referred to the pre-admission anaesthetic clinic for an anaesthetic risk assessment; and
 - referral of care and management to a tertiary centre where the BMI is over 45.

Anaesthetic risk assessment

57. Consistent with the advice of Midwife McNabb, at 27 weeks pregnancy Mrs Windmill consulted with Dr Shaun Francis, Obstetric Registrar who advised her that she would need to be assessed by an anaesthetist and that she may need to be referred to the Monash Medical Centre for her obstetric management in compliance with the hospital policy.³⁶
58. Mrs Windmill consulted with Dr Mattheyse on 14 August 2012 and he evaluated her anaesthetic risk. He indicated that he generally advises patients that there is an increased risk of caesarean section with obese patients and informs them about spinal anaesthetics and their potential complications such as failure of the block, postdural puncture, headaches and temporary and permanent neurological damage.³⁷ At the end of the consultation he gave anaesthetic approval for Mrs Windmill to give birth at LRH.³⁸
59. Dr Mattheyse acknowledged that he was aware of the hospital protocol for the management of obese women³⁹ however his understanding was that the basis of the referral to a tertiary centre would ultimately be on obstetric assessment.⁴⁰
60. Dr Sadek also agreed that Dr Mattheyse was not able to assess Mrs Windmill for any obstetric risk.⁴¹

Assessment for delivery at LRH

61. Dr Sadek gave evidence that he saw Mrs Windmill for the first time on 21 August 2012 when she was 31 weeks pregnant.⁴² Dr Sadek stated that at this consultation he conducted a thorough review of Mrs Windmill and the fetus and he noted her antenatal course was uneventful, her tests were within normal range and there were no complications associated

³⁶ Exhibit 1 – Statement of Kathryn Windmill dated 21 October 2014, Inquest brief, p506

³⁷ Exhibit 8 – Additional statement of Dr Frederick Mattheyse dated 7 October 2014, Inquest brief, p466

³⁸ Exhibit 7 – Statement of Dr Frederick Mattheyse dated 8 May 2014, Inquest brief, p22

³⁹ Transcript of evidence, p125

⁴⁰ Transcript of evidence, p127

⁴¹ Transcript of evidence, p305

⁴² I note Dr Tippett's opinion that it was not appropriate for a woman with a BMI of 48 not to be seen by a consultant until 30 weeks.

with her pregnancy whether linked to her obesity or otherwise (such as gestational diabetes, preeclampsia/hypertensive disease, fetal macrosomia/large for dates).⁴³

62. Dr Sadek determined that Mrs Windmill's intrapartum care and delivery was able to be provided by LRH. Although he acknowledged in retrospect that this was contrary to the LRH protocol in place at the time, Dr Sadek's evidence was that he was not then aware of the protocol.
63. Dr Sadek's opinion was that based on his personal assessment of Mrs Windmill's body habitus, that a surgical delivery was within the ability of the average specialist obstetrician who is Fellowship of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (FRANZCOG) qualified. He noted that LRH is covered 24 hours a day, 7 days a week by a qualified FRANZCOG specialist.⁴⁴ Dr Sadek was of the firm opinion that LRH had the resources to provide the appropriate intrapartum care, including facilities for monitoring the mother and fetus throughout labour, adequate anaesthetic service, adequate facility to undertake surgical delivery and adequate neo-natal care service.⁴⁵

Reliance on anaesthetic risk assessment

64. Concern was raised that, in effect, approval had been granted for Mrs Windmill to deliver at LRH on the basis of the anaesthetic approval alone, despite this being only one aspect required to be taken into account in accordance with the hospital protocol. Dr Tippett confirmed that "*at the end of the day in many ways the obstetrician probably has the last call*".⁴⁶
65. According to Dr Tippett:

*the decision as to whether or not a women should be transferred to a tertiary centre from a rural consultant based service should not be based solely on the anaesthetic assessment as apparently occurred in this case but also on the capacity of the maternity staff to care for the mother and in consultation with the mother.*⁴⁷
66. Dr Sadek gave evidence that although there are other risks, he believed that they had not or were not likely to manifest and therefore, following a suitable assessment in relation to the anaesthetic risk and his assessment of her, he was of the opinion that Mrs Windmill was suitable for delivery at LRH.

⁴³ Exhibit 24 – Witness statement of Dr Saher Sadek dated 19 January 2015, Inquest brief, p606

⁴⁴ Exhibit 24 – Witness statement of Dr Saher Sadek dated 19 January 2015, Inquest brief, p606

⁴⁵ Exhibit 24 – Witness statement of Dr Saher Sadek dated 19 January 2015, Inquest brief, p606

⁴⁶ Transcript of evidence, p72

⁴⁷ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p626

Conclusions as to management of risk of high BMI

67. Dr Sadek has over 32 years experience as a Consultant Obstetrician, including the management of high risk pregnancies. Submissions made on his behalf note that he used his clinical experience and professional judgement when he assessed whether Mrs Windmill would receive appropriate care and support during her pregnancy and could safely deliver at LRH, including in the case of an emergency situation.⁴⁸ I accept these submissions and also accept that Dr Sadek was unaware of the LRH protocol at that time.
68. I acknowledge there was some confusion surrounding the Management of Obese Women Protocol, in particular as to whether a pregnant woman with a BMI over 45 should be referred to a tertiary centre. I accept that the policy has been amended and now clarifies that any woman with a BMI over 45 should be referred to a tertiary hospital.
69. As part of the overall assessment process, anaesthetic approval was required, however I accept that it was never considered by Dr Sadek to be determinative. Rather, it was just one factor that Dr Sadek considered as part of the overall clinical picture.

Communication about risks associated with having a high BMI.

70. Mrs Windmill indicated that they lived in Traralgon at the time and they were concerned about being referred to Monash Medical Centre and having to travel two hours for her care and management. Therefore her preference was to stay at LRH if it was safe to do so.⁴⁹
71. Mrs Windmill understood she was overweight and that this was not ideal.⁵⁰ However, apart from being advised by Midwife McNabb that she should try not to put on any weight during the pregnancy, Mrs Windmill denied being told that there were any specific risks associated with having a high BMI and how it may impact her pregnancy.⁵¹
72. Submissions for the Windmill family indicate that, had Mrs Windmill been informed of the risks associated with her high BMI, she and her husband may have had a greater understanding of her antenatal and intrapartum care which would have enabled them to have significantly greater involvement in the decisions which were made about the nature of that care.⁵²
73. In his evidence, Dr Sadek said he was unaware of the hospital policy⁵³ at the time but he was aware of the RANZCOG Management of Obesity and Pregnancy Guideline which lists 23 risk

⁴⁸ Submissions on behalf of Dr Sadek dated 22 May 2015, p7

⁴⁹ Transcript of evidence, p23

⁵⁰ Transcript of evidence, p22

⁵¹ Transcript of evidence, p22

⁵² Submissions on behalf of the Windmill family dated 8 May 2015

⁵³ Transcript of evidence, p293

factors associated with women with a high BMI. Dr Sadek stated that it is unreasonable that in any antenatal consultation an obstetrician would counsel the pregnant mother of all potential risks associated with her pregnancy.⁵⁴ Given Mrs Windmill's pregnancy was relatively uncomplicated, he did not advise her of potential risks that might arise from her high BMI.

74. Further, he commented that if he believed at the time that there would be benefit gained from advising Mrs Windmill of potential risks associated with obesity he would have advised her of the necessary risks.⁵⁵

Conclusion as to communication about risks associated with having a high BMI.

75. I find that risks associated with having a high BMI were not adequately communicated to Mrs Windmill to enable her to have a proper understanding of the potential complications associated with her intra-partum care and delivery. She was therefore not afforded an opportunity to appreciate these risks and accordingly her expectations were not sufficiently managed.
76. It does appear that Nurse McNabb spoke to her about the importance of not putting on weight and that generally Mrs Windmill understood that she may have been at an increased risk obstetrically due to her weight, however I do not think that Mrs Windmill had a good understanding of the possible complications that had the potential to arise due to her weight.

INTRA-PARTUM CARE AND MANAGEMENT OF LABOUR

77. I considered a number of aspects with respect to the intra-partum care and management of labour as part of the inquest, including the:
- Morning handover on 10 October 2012
 - CTG monitoring
 - Use of Syntocinon
 - Risk of continuing labour compared with the risk of caesarean section; and
 - Survivability of Baby Mabel.

⁵⁴ Transcript of evidence, p293

⁵⁵ Transcript of evidence, p295

Morning handover on 10 October 2012

78. After review of Mrs Windmill at 0545 hours, Dr Japhary-Dobber wrote detailed notes and a suggested management plan for Mrs Windmill's continued labour. Dr Japhary-Dobber:

*was concerned about the situation as the mother would be prone to a failed induction of labour during that day with such an unfavourable cervix, and a baby that could not be properly monitored and already showed some signs of foetal distress.*⁵⁶

79. Dr Japhary-Dobber's evidence was that she spoke with Dr Trisha Nicholls at approximately 0730 hours about her concerns about Mrs Windmill's labour. It was agreed that Dr Japhary-Dobber would raise these concerns with Dr Watters at handover later that morning.⁵⁷

80. Dr Watters said he would have attended the handover however he could not recollect the details of it. Dr Japhary-Dobber's vague recollection of the handover was that she read out her notes, expressed her concerns and mentioned the possibility of a caesarean section.⁵⁸ Dr Watters said it is possible that Dr Japhary-Dobber did discuss Mrs Windmill but it would not have been in any great detail.⁵⁹ Dr Watters does not have any personal recall of seeing Dr Japhary-Dobber's plan, however he agreed it would be his normal practice to read the medical notes when he takes over care.⁶⁰

81. Dr Japhary-Dobber was not optimistic that her opinion would have "*counted for much*" because she was only a junior medical officer. This appears to have been an accurate prediction because Dr Watters told the Court he considered that she did not have the experience of managing women with difficult labour and that he placed little weight on her opinion.⁶¹ Dr Watters testified that because he was the most senior obstetric clinician working that day he had clinical responsibility.

Conclusions as to the morning handover on 10 October 2012

82. Although I acknowledge Dr Watters' significant experience, I consider that the attitude he held towards the handover provided by Dr Japhary-Dobber to be problematic. Dr Watters was obviously the more experienced clinician of the two, and therefore it is understandable that he would approach the handover with a view to using his 35 years experience to determine the appropriate course of action to take for himself.

⁵⁶ Exhibit 9 – Statement of Dr Sybille Japhary-Dobber dated 29 April 2014, Inquest brief, p26

⁵⁷ Transcript of evidence, p138

⁵⁸ Transcript of evidence, p139

⁵⁹ Transcript of evidence, p321

⁶⁰ Transcript of evidence, p322

⁶¹ Transcript of evidence, p323

83. Nevertheless, there is evident danger in assuming, as Dr Watters appears to have done, that a more junior clinician has little value to add to the decision making process.
84. I find Dr Japhary-Dobber's assessment of Mrs Windmill and proposed management plan was reasonable and appropriate in the circumstances. It is not just in hindsight that the wisdom of an earlier delivery was apparent. In this regard, I note that the assessment and management plan documented by Dr Japhary-Dobber was prescient and I find that Dr Watters should have given it more weight than he did.

CTG monitoring

85. CTG monitoring is an important diagnostic tool for managing women in labour, particularly those that are high risk, however CTG output should always be interpreted in conjunction with a consideration of the complete clinical picture.
86. Dr Tippett explained that the CTG has two components: a cardio-component which measures the fetal heartbeat and the toco-component which measures uterine contractions.⁶² It is important that both aspects are measured because the former is one measure of the baby's response to the demands placed on it by the latter. In this case, the second component was missing.
87. Midwife Snell monitored the CTG throughout the day however due to the amount of adipose tissue over the abdomen, the toco-component of the CTG could not produce an accurate record of contractions.⁶³ Accordingly, Midwife Snell needed to manually mark the CTG printout when she palpated the contractions. Midwife Snell states that it was difficult to feel the position of the baby and strength and duration of the contractions due to Mrs Windmill's high BMI.⁶⁴ Nevertheless, she recorded her observations on the CTG itself, the partogram and in the medical notes.

Use of an interuterine device

88. Dr Tippett advised that when the toco-graph is incomplete and the contractions are difficult to palpate, the use of an interuterine device is recommended. This device is inserted into the vagina to provide accurate information about the contractions including duration and strength, thus allowing the obstetrician to overcome the limitations of the usual CTG when it is difficult to assess contractions and to gain a complete picture of the relationship between the contractions and the fetal heart rate.

⁶² Transcript of evidence, p33

⁶³ Transcript of evidence, p95

⁶⁴ Exhibit 11 – Statement of Stephanie Snell dated 12 May 2014, Inquest brief, p37

89. The interuterine device, however, has a number of drawbacks of its own including that it is invasive and uncomfortable for the mother. The evidence of a number of witnesses was that the use of interuterine devices was not common in Victorian, or indeed Australian hospitals.
90. Accordingly, although this may have assisted the medical professionals to gain additional insight into the clinical picture, and I initially formed the view that recommending the use of these devices would improve public health and safety, I am not satisfied that there is sufficient evidence to recommend the implementation of this practice more broadly than it already is.

Was the CTG abnormal?

91. There was an irreconcilable difference of opinion as to the extent of the abnormal CTG trace between Dr Tippett and Dr Watters.
92. Dr Tippett stated between 0950 and 1230 hours the CTG showed continued deterioration and by 1230 the trace was consistent with a severely hypoxic fetus.
93. Dr Watters agreed that the CTG trace was abnormal⁶⁵ however disputes Dr Tippett's analysis and further states that following his review of Mrs Windmill between 1050 and 1100 hours⁶⁶ and further review at 1153 hours the CTG "*looked better than it did earlier in the piece*".⁶⁷ His interpretation of the CTG trace between 1050 and noon was:

*That's a fairly typical trace of somebody who is in established labour. The baseline is somewhere in the region of 160, there are deep type 1 decelerations with prominent shouldering and there is, in my mind, acceptable beat-to-beat variability.*⁶⁸

94. Dr Tippett indicated that beat-to-beat variability is a term not generally used any more and the term variability is used instead.⁶⁹

*Variability is just the inherent variation in the heart rate, not so much from each beat to each beat because you can't really measure that on a trace which is sometimes called beat-to-beat variability, but it's how much the heart rate changes.*⁷⁰

95. Further she explained that:

*[V]ariability should be up to about 15 beats per minute in a normal healthy baby. That's very important, it's one of the most important things you look at in a term baby to make sure the baby's well.*⁷¹

⁶⁵ Transcript of evidence, 317-319; 329

⁶⁶ Transcript of evidence, p342

⁶⁷ Transcript of evidence, p334

⁶⁸ Transcript of evidence, p34

⁶⁹ Transcript of evidence, p42

⁷⁰ Transcript of evidence, p33-34

⁷¹ Transcript of evidence. p34

96. Dr Tippett was highly critical of Dr Watters' interpretation of the CTG trace. She said "*I think his assessment of the CTG does not concur with my assessment of the CTG at all*". Her strong opinion was that the trace was significantly abnormal⁷² and she considered that there was a failure by Dr Watters to recognise the severity of the trace abnormalities.⁷³

97. Similarly, Midwife Snell had been reporting her concerns about the CTG trace on a number of occasions throughout the day. So too had Midwife Dove and by the time AUM Pattle saw it:

it looked abnormal and to me, [and] showed that the baby had significant foetal compromise".⁷⁴

98. She explained that the abnormalities included "*foetal tachycardia, there was absent variability, [and] there was large amplitude decelerations lasting more than 60 beats a minute*".⁷⁵

Conclusion as to whether the CTG was abnormal

99. I find that the evidence is overwhelming from Dr Tippett and other witnesses, including Dr Watters, that the CTG trace was abnormal at various times throughout the day of 10 October 2012. However how they assessed the abnormality and the implications this had for Mrs Windmill's management differed significantly.

Appropriateness of action taken in light of the abnormal CTG

100. Accepting, as I do, that the trace was abnormal at various times throughout the day of 10 October 2012, I now turn to consider the appropriateness of the obstetric management in light of the abnormality.

101. Midwife Snell's evidence was that she regularly advised Dr Watters of the abnormal trace and requested him on approximately six to nine⁷⁶ occasions to review it. Midwife Snell believed this to be a high number of requests for assistance from a midwife to a consultant obstetrician and that the situation was quite unusual.⁷⁷ Similarly, Midwife Snell felt she was not being taken seriously by Dr Watters and that he seemed to downplay her concerns.⁷⁸

⁷² Transcript of evidence, p91

⁷³ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p628 "*I really think that's actually a fact*". Transcript of evidence, p96

⁷⁴ Transcript of evidence, p203

⁷⁵ Transcript of evidence, p210

⁷⁶ The evidence in relation to the exact number of times varies.

⁷⁷ Transcript of evidence, p154-155

⁷⁸ Transcript of evidence, p155

102. In line with the evidence about his interpretation of the CTG, Dr Watters confirmed that in his mind, what occurred was not a failure to recognise the abnormality; he “*absolutely recognised [it] but then put a lot of thought into trying to ascertain why it was abnormal*”.⁷⁹
103. Dr Watters tried to rationalise why he thought the trace was appearing as it did and why he thought they should take certain steps to try and ameliorate some of the factors that were predisposing to the appearance of the trace and then assess how the labour progressed.⁸⁰
104. He considered there were three potential factors that could have made the CTG abnormal including infection, dehydration or ketosis.⁸¹
105. Dr Watters believed that the CTGs over the following four or five hours suggested the baby was under stress but it had not run out of coping mechanisms.⁸² Dr Watters stated:
- babies have reserve capacity to cope with stress, and observing the changes of a CTG over time gives the clinical information to make a decision about whether the baby is still capable of [a] stress response or not. I made the clinical call that this baby hadn't run out of its coping mechanisms and on that I disagree with Dr Tippett.*⁸³
106. After conducting further tests in an attempt to eliminate dehydration and ketosis as causes, Dr Watters eventually “*came to the conclusion that the abnormality was the foetus was under stress from a developing, if not already established infection*”.⁸⁴

Conclusion as to appropriateness of action taken in light of the abnormal CTG

107. I acknowledge Dr Watters' evidence that he recognised the abnormality of the CTG and accept that his focus was on investigating and managing the cause.
108. However, it is evident to me that Dr Watters did not appreciate the severity of the abnormality or the implications this had for the medical management of Mrs Windmill's labour. While it is true that Dr Watters was required to undertake a difficult and delicate balancing exercise to minimise the potential risks for mother and baby, my view is that he placed undue weight on the potential risks to Mrs Windmill in the case of a caesarean section.
109. The consensus opinion of Dr Tippett and the midwives was that the abnormal trace was of such concern that more urgent action should have been taken in response to it. To this end, the evidence supports a conclusion that Dr Watters' understanding of the CTGs abnormality may not have been consistent with current interpretation methods.

⁷⁹ Transcript of evidence, p317

⁸⁰ Transcript of evidence, p355

⁸¹ Transcript of evidence, p329

⁸² Transcript of evidence, p319

⁸³ Transcript of evidence, p351

⁸⁴ Transcript of evidence, p319

CTG interpretation training

110. At inquest, many of the witnesses agreed that ongoing training with respect to the interpretation of CTGs is important. At LRH, midwives and employee obstetricians are required to attend annual refresher training. However, locum obstetricians, like Dr Watters, fall outside of this educational mechanism because of the transient nature of the work and not being linked in to any one hospital's regular internal professional development training. Rather, locum obstetricians tend to undertake more online training. Accordingly, there is the potential for both a knowledge and skills gap in the consistent interpretation of CTGs.
111. Dr Watters believes that, as he has been reviewing and interpreting CTGs for 35 years, he is more of a trainer than a trainee. I consider this attitude to be of concern and note that it presents the risk of becoming complacent. The importance of maintaining a current knowledge base of best practice by engaging open-mindedly in ongoing education cannot be underestimated.
112. The difficulty with the attitude adopted by Dr Watters is that experienced practitioners can lose touch with current CTG interpretation practices. I consider that this was evident with respect to Dr Watters' interpretation and response to the abnormal CTG in this instance.

Conclusion as to CTG interpretation training

113. The evidence of the midwives and consultant obstetricians at LRH was that they are required to attend annual training on the interpretation of fetal surveillance to maintain their skills in interpreting CTGs.
114. Further, the evidence of Nurse Scully and Dr Sadek was that LRH have now re-initiated weekly CTG review for all nursing and medical staff to attend if they wish to discuss the interpretation of CTGs. I commend this practice.
115. In addition, the evidence at inquest was that locum obstetricians working at LRH are now required to show evidence of fetal surveillance education within the preceding 3 years.⁸⁵ I also commend this practice and have used it as the foundation for a recommendation to RANZCOG.

Was the use of Syntocinon appropriate?

116. Dr Watters ordered the commencement of Syntocinon at approximately 1000 hours at a level of 40mls per hour as Mrs Windmill's contractions were incoordinate at that stage and he considered that this was the safest course of action⁸⁶ because you need adequate uterine

⁸⁵ Transcript of evidence, p425

⁸⁶ Transcript of evidence, p319

activity⁸⁷ for the labour to progress. Dr Watters said he “made a clinical call on the day based on [his] best available evidence and [his] experience of the last 35 years”.⁸⁸

117. Dr Tippett stated:

*Syntocinon is used to induce or augment labour and in this situation it was used to augment labour, she was clearly already in labour, she'd had an epidural for analgesia, so it wasn't as if they were just starting her labour.*⁸⁹

118. Dr Tippett was highly critical of Dr Watters' decision to use Syntocinon. She said “the augmentation of labour was inappropriate when the uterine activity could not be assessed due to the maternal habitus and the CTG was non-reassuring”.⁹⁰ By way of explanation, she said that when the uterus contracts the amount of oxygen that is going to the baby and to the uterus is reduced and therefore the placenta acts as a reservoir for oxygen.⁹¹ If the contractions are coming too frequently, the baby becomes more and more hypoxic.

119. Dr Nicholls concurred with Dr Tippett in that she probably would not have given Syntocinon in the circumstances.⁹² Dr Sadek similarly said it was not common practice or advisable to augment labour in the presence of an abnormal CTG and when there was no prospect of imminent vaginal delivery, because it leads to an exacerbation of suspected intrauterine hypoxia of the foetus.⁹³

120. There was also conflicting evidence in relation to the acceptable amount of Syntocinon to use. According to Dr Tippett:

*there is no doubt that Syntocinon is very effective as a uterine stimulant and used judiciously its very valuable, but if its used in high doses it can increase the frequency of contractions to such a state where the baby doesn't recover between contractions or the contractions become very strong and that's something that when you're monitoring labour and Syntocinon is being used, one must be very aware that that can happen.*⁹⁴

121. Dr Tippett said commencing Syntocinon at 40mls per hour was not acceptable.⁹⁵ She stated that most hospital protocols say Syntocinon should not be used when there are more than 5 contractions in 10.⁹⁶

⁸⁷ Transcript of evidence, p330

⁸⁸ Transcript of evidence, p334

⁸⁹ Transcript of evidence, p28

⁹⁰ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p629

⁹¹ Transcript of evidence, p29

⁹² Transcript of evidence, p240

⁹³ Transcript of evidence, p280

⁹⁴ Transcript of evidence, p29

⁹⁵ Transcript of evidence, p52

⁹⁶ Transcript of evidence, p30

122. Dr Tippett was concerned that in this instance:

*the foetal heart rate trace was abnormal when the Syntocinon was commenced and one of the golden rules if you like, is you do not commence Syntocinon unless you've got a normal CTG and you would not commence Syntocinon when you are confident that you could palpate adequately the contractions.*⁹⁷

123. She commented that without the ability to measure contractions, as was the case with Mrs Windmill,⁹⁸ it was not possible to ascertain the effectiveness of the Syntocinon and modify the dose accordingly.

Guidelines for the use of Syntocinon

124. The LRH Guideline for Syntocinon Infusion⁹⁹ in place at the time included a Syntocinon dose regime that represented the consensus of obstetric opinion at LRH.¹⁰⁰ The dosage given by Midwife Snell at the direction of Dr Watters was consistent with this policy.

125. Dr Watters understood that there were guidelines in place and that these reflected current professional knowledge.¹⁰¹ However, maintained that “*its up to the individual clinician to make an assessment of the global picture when a CTG is abnormal*”.¹⁰²

126. Submissions on behalf of the Windmill family asserted that I should:

accept that the guideline or the golden rule, as Dr Tippett referred to it, is based on expert obstetric clinical reasoning that Syntocinon should not be used when the CTG trace is abnormal.

127. The submissions further contended that I should accept that Dr Watters' departure from the guideline and the reasoning underlying it constituted an idiosyncratic clinical view that was not warranted.¹⁰³

128. The evidence of Dr Tippett was that Dr Watters' use of Syntocinon was not consistent with the Maternity and Newborn Clinical Network (MNCN) guidelines¹⁰⁴ that were developed in 2012 as a response to variable hospital policies surrounding this issue. The evidence is that LRH developed *Oxytocin Infusion for Induction of Labour* protocol after the death of Baby Mabel in 2014 which now accords with the MNCN guidelines.¹⁰⁵ The new Guideline states

⁹⁷ Transcript of evidence, p84

⁹⁸ Transcript of evidence, p30

⁹⁹ Exhibit 4 – Clinical/Departmental Guideline – Maternity Intrapartum Care – Syntocinon Infusion for Induction of Labour Protocol, dated 23 August 2011.

¹⁰⁰ Transcript of evidence, p390

¹⁰¹ Transcript of evidence, p331

¹⁰² Transcript of evidence, p330

¹⁰³ Submissions on behalf of the Windmill family dated 8 May 2015 at p10

¹⁰⁴ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p664

¹⁰⁵ Exhibit 5 – Clinical/Departmental Guideline – Maternity Intrapartum Care – Oxytocin Infusion for Induction of Labour dated 29 May 2014.

that one should never proceed with an induction of labour when a woman has gone into spontaneous labour and there is an abnormal CTG. It also confirms the commencement dose of 10 units of Syntocinon to one litre.

Conclusion as to the appropriateness of using Syntocinon

129. I am satisfied that the new LRH Guideline is consistent with the most up to date and accepted obstetric practice and there is no need to make a recommendation in relation to this issue.
130. I accept Dr Tippett's evidence that the golden rule on the use of Syntocinon when there is evidence of an abnormal CTG trace is to not use it.
131. I find that Dr Watters' decision to use Syntocinon to augment labour was based on his incorrect assessment of the severity of and reasons for the abnormality of the CTG trace. Having reached the conclusion that Dr Watters underestimated Baby Mabel's distress at this time and therefore the urgency with which actions were required to be taken, I consider that the decision to augment labour with Syntocinon was inappropriate.

Risk of continuing labour compared with the risk of caesarean section

132. At inquest there was discussion about the risk of continuing labour in the circumstances faced on the day with Mrs Windmill versus the risk of performing a caesarean section. Most of the obstetricians agreed that the risk of a caesarean section was increased in a woman with a high BMI.
133. The opinion of Dr Japhary-Dobber early on 10 October 2012 was that Mrs Windmill would probably need to progress by way of a caesarean section.
134. In contrast, Dr Watters' evidence was that Mrs Windmill's BMI meant he was keen to see a well conducted trial of labour, keeping in mind the risks to both mother and baby of a vaginal birth compared with a caesarean section.¹⁰⁶ Dr Watters believed that the risk of a caesarean section was far greater than the risk of a vaginal delivery¹⁰⁷ to Mrs Windmill because:

[T]he foetal head was very high but the pelvis was roomy.¹⁰⁸

[T]he cervix was in early stages of effacement and did not feel like it would be slow to dilate.¹⁰⁹

[T]he baby's head had descended to a point in the pelvis where operative vaginal delivery was considered to be safe and it was a matter of trying to deliver the baby as quickly as possible in the safest possible manner.¹¹⁰

¹⁰⁶ Exhibit 27 – Statement of Dr Philip Watters dated 24 April 2014, Inquest brief, p8

¹⁰⁷ Exhibit 27 – Statement of Dr Philip Watters dated 24 April 2014, Inquest brief, p8; Transcript of evidence, p324

¹⁰⁸ Exhibit 27 – Statement of Dr Philip Watters dated 24 April 2014, Inquest brief, p8

¹⁰⁹ Exhibit 27 – Statement of Dr Philip Watters dated 24 April 2014, Inquest brief, p8

By the time she became fully dilated, the fetal heart rate had again risen to a complicated tachycardia so I arranged transfer to the operating theatre for trial of assisted vaginal delivery by vacuum extractor.¹¹¹

[Y]ou must be prepared at all times to abandon what you are doing if its not working and could lead to unacceptable delays.¹¹²

135. He further stated:

I had to strike a balance between caring for the mother and caring for the baby and so I made a decision that attempting a vaginal delivery would be a safer method as long as the baby was continually able to cope with the stress under which it was being put.¹¹³

136. Interestingly, in evidence, Dr Watters noted that “if the CTG had looked like that in a woman with a BMI under 35 who did not have GBS [he] would have done a caesarean straight away”.¹¹⁴

137. Dr Sadek took a different approach stating that sometimes it is wrong to aim to achieve a vaginal delivery.¹¹⁵ Dr Tippett was similarly minded, noting that there is evidence that women with a high BMI do not generally labour well.¹¹⁶ She said:

there is no doubt an awareness that sometimes elective caesarean section can be a reasonable option notwithstanding the risks of surgery and the difficulties of surgery in a big woman.¹¹⁷

138. Ultimately, Dr Tippett considered that there was an unacceptable delay in performing a caesarean section.¹¹⁸ She believes that a caesarean section should have been conducted prior to but no later than 1030 hours, before there was significant indication of fetal compromise.¹¹⁹

139. According to Dr Tippett:

[A]n earlier caesarean section would have resulted in the delivery of an infant who was not severely compromised due to intrauterine hypoxia and in a pre-terminal state, who may not have passed meconium and who would have been less likely to have initiated a gasp reflex due to hypoxia and inhaled infected amniotic fluid and meconium resulting in florid GBS pneumonia.¹²⁰

¹¹⁰ Transcript of evidence, p358

¹¹¹ Exhibit 27 – Statement of Dr Philip Watters dated 24 April 2014, Inquest brief, p9

¹¹² Transcript of evidence, p35

¹¹³ Transcript of evidence, p319. Also of interest is that Dr Watters’ curriculum vitae noted that his clinical interests were inter alia “low intervention obstetrics” Inquest brief, p45.

¹¹⁴ Transcript of evidence, p363

¹¹⁵ Transcript of evidence, p302

¹¹⁶ Transcript of evidence, p40

¹¹⁷ Transcript of evidence, p41

¹¹⁸ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p629

¹¹⁹ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p629

¹²⁰ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p629

140. The LRH held a Perinatal Morbidity and Mortality Review meeting after Baby Mabel's death and four obstetricians present at the meeting considered that Baby Mabel should have been delivered earlier; at the time the decision was made to start Syntocinon.¹²¹ Dr Fraser stated that he "*would agree that an earlier delivery would have given a better opportunity, as I've indicated earlier, in terms of the intervention that may be required*".¹²²

141. Submissions on behalf of LRH were such that:

In any event the preponderance of obstetric opinion, reached with the benefit of hindsight and with knowledge of the fulminant infection, was that a caesarean section should have been considered at the time Syntocinon was commenced.

Conclusion as to the risk of continuing labour compared with the risk of caesarean section

142. In attempting to weigh the risks of this birth, Dr Watters favoured continuing with labour as opposed to performing a caesarean section on a woman with a high BMI. However, I am of the view that taking into account the entirety of the clinical picture, the balance he struck here was disproportionate.

143. I find that the evidence supports the view that Baby Mabel should have been born by caesarean section at an earlier time in the day.

Survivability of Baby Mabel

144. The ultimate question I was required to answer was whether Baby Mabel could or would have survived if the medical management had been different. Most of the relevant witnesses were in agreement with respect to my ability to draw a definitive conclusion on the basis of the evidence available to me.

145. Dr Baber's evidence was that: "*it's impossible to say [that Baby Mabel would have survived] but it certainly would have optimised the baby's chances of survival if it had been delivered earlier*".¹²³ Dr Tippett agreed:

*[I]t is probable the baby would have required significant support but it would have had a chance of survival which is most likely proportionate to the earlier the time delivery was undertaken.*¹²⁴

146. This was supported by her opinion that the GBS pneumonia and sepsis were major contributing factors to the baby's demise.¹²⁵ However, in evidence, Dr Tippett acknowledged that she was unable to categorically say that Baby Mabel would have survived had she been

¹²¹ Minutes of the Perinatal Morbidity and Mortality Committee, Inquest brief, p552

¹²² Transcript of evidence, p407

¹²³ Transcript of evidence, p107

¹²⁴ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p629

¹²⁵ Exhibit 2 – Expert opinion of Dr Christine Tippett dated 5 February 2015, Inquest brief, p630

delivered earlier.¹²⁶ Further, Dr Tippett was unable to quantify her chance of survival beyond a possibility¹²⁷ She suggested a consultant neonatal paediatrician would best address the likelihood of a better outcome.

147. Dr Fraser, who is a neonatologist, opined:

*I would agree that an earlier delivery would have given a better opportunity, as I've indicated earlier, in terms of the intervention that may be required, I'm still of the opinion that we have nothing more than a possibility of a better outcome.*¹²⁸

148. Consultant Paediatrician Dr Coates stated that she could not say whether Baby Windmill would have survived or not.¹²⁹

Conclusions as to the survivability of Baby Mabel

149. Ultimately, I am unable to determine whether Baby Mabel would have survived if she had been delivered earlier. Although I acknowledge that her chances of survival may have been improved, I am unable to determine to the requisite level, the degree of that improvement.

150. Further, I find that the evidence supports the view that Baby Mabel would have had a better chance of survival if she had been born earlier, but that this chance was no more than a possibility.

IMPROVEMENTS MADE BY LRH

151. LRH conducted a Root Cause Analysis (RCA) into Baby Mabel's death and provided a copy to the Court which was of great assistance to my investigation.¹³⁰

152. There is evidence that LRH have taken the lessons learnt from the death of Baby Mabel extremely seriously. As a result of this, the hospital made a number of recommendations for improvement and I consider that these changes are worthy of note. LRH provided evidence to the Court that as at the time of submissions they had:

- Developed of a draft Access to Shared Antenatal Care Policy which now requires that obstetrician to identify whether the mother is high or low risk and the intended management plan.
- Reviewed the Maternity Care – Management of Obese Woman Protocol which requires the obstetrician to whom a referral is made to respond to that referral within five days and make it mandatory to refer a woman with a BMI equal to or greater than 45 to a tertiary hospital.

¹²⁶ Transcript of evidence, p81

¹²⁷ Transcript of evidence, p81

¹²⁸ Transcript of evidence, p407

¹²⁹ Transcript of evidence, p267

¹³⁰ Inquest brief, p104

- Fetal Surveillance Education – it is now a mandatory requirement for all nurses and doctors to attend annual CTG training. LRH also require currency of their fetal surveillance education for their assessment of locum medical practitioners. Dr Cordoza, Consultant Obstetrician is responsible for restarting the weekly discussion and review of CTG traces for midwives and obstetricians.¹³¹
- Implementation of Escalation Policy which clearly identifies the hierarchy of escalation when there is a discrepancy between any staff member including a midwife and an obstetrician.
- Formalised the Anaesthetic Risk Assessment form as an LRH document.
- Indicated an intention to purchase a portable CTG machine soon.
- Revised the Policy for Consultant Paediatrician Notification regarding high risk deliveries
- Placed a new emphasis on obstetricians seeking a second opinion in situations of high risk.
- Re-developed stickers which are attach to a CTG when assessed by a midwife.
- Updated the Syntocinon Policy which now conforms with MNCN Guidelines.
- Increased the number of obstetricians employed by LRH from three to five.
- Developed Guidelines for Stillbirth or Neo-natal Deaths.

FINDINGS

153. In making my findings, the appropriate standard of proof to apply is articulated in *Briginshaw v Briginshaw*¹³² which requires me to be satisfied on the balance of probabilities.
154. I find that Baby Mabel Windmill died on 10 October 2012 from 1 (a) CONGENITAL *STREPTOCOCCUS AGALACTIAE* (GROUP B) PNEUMONIA IN THE SETTING OF COMPLICATED LABOUR.
155. I find that when Dr Sadek consulted with Mrs Windmill in August 2012 he was unaware of the LRH policy for the management of obese women which required woman with a high BMI to have an anaesthetic risk assessment and be transferred to a tertiary hospital if the BMI is greater than 45. However, I find that despite this Mrs Windmill should have been able to deliver safely at LRH, especially in light of her favourable anaesthetic review, the absence of other antenatal complications and the continuous coverage of a FRANZCOG accredited specialist.
156. I find that, even though Dr Sadek was satisfied that her pregnancy was progressing without complication, he should have taken more time to ensure that Mrs Windmill was appraised of some of the potential risks associated with having a high BMI in pregnancy and the options

¹³¹ Transcript of evidence, p393

¹³² (1938) 60 CLR 336

available for delivery so that she could make an informed decision about whether she was comfortable with the plan to deliver at LRH.

157. I find that the staff at LRH, in particular the midwives involved in Mrs Windmill's intrapartum care and management recognised the difficulties of Mrs Windmill's labour and were professional and acted appropriately in all the circumstances.
158. I find that Dr Watters was presented with a complex clinical situation which required a series of time-critical decisions. I further find that Dr Watters was genuine in his attempts to use his knowledge and extensive experience to manage Mrs Windmill's labour as best he could in light of the circumstances.
159. Although perfection is not required of our medical practitioners, I have identified a number of areas in which I consider that decisions made by Dr Watters were sub-optimal and which can be meaningfully reflected upon to facilitate continuous improvement.
160. On the basis of the overwhelming evidence, I find that the CTG trace was abnormal at various times throughout the day of 10 October 2012.
161. I find that Dr Watters did not appreciate the severity of the abnormality of the trace or the implications this had for the medical management of Mrs Windmill's labour.
162. I find that Dr Watters' decision to use Syntocinon to augment labour was based on his incorrect assessment of the severity of, and reasons for, the abnormality of the CTG trace and therefore the decision to augment labour with Syntocinon was inappropriate in these circumstances.
163. I find based upon all the circumstances, that Dr Watters should have considered performing a caesarean section at an earlier time in the day, no later than by late-morning. Nevertheless, I do not consider that the course of action taken by Dr Watters was so outside the realm of clinical judgement to have made it completely inappropriate in the circumstances. Accordingly, I am unable to determine to a requisite level that Dr Watters' clinical management of Mrs Windmill caused the death of Baby Mabel.
164. Ultimately, I am unable to find on the balance of probabilities that Baby Mabel would have survived if she had been delivered earlier. Indeed, consistent with the evidence I find that her chances of survival were no more than a possibility.
165. Finally, I find that there was no one single factor that caused Baby Mabel's death, rather a cascade of circumstances which in combination resulted in the fatal outcome.

COMMENTS

Pursuant to section 67(3) of the Coroners Act I make the following comments connected with the death:

166. The circumstances surrounding Baby Mabel's death serve as a timely reminder to the medical and healthcare profession of the important role communication with a patient plays in the provision of medical care.
167. Mrs Windmill had the right to give or withhold fully informed consent to decisions about the medical management of her childbirth. A necessary and important part of this process should have been addressing the information imbalance between medical professionals and Mrs Windmill in relation to delivery options in light of her high BMI. It is unfortunate that Mrs Windmill was left feeling disenfranchised and disempowered throughout the process.
168. Although I am unable to determine any direct correlation between this and the death of Baby Mabel, I consider it important that mothers especially those who are primagravida, are not left feeling like a passenger on the journey of childbirth as a result of its medicalisation.
169. I commend Latrobe Regional Hospital for the transparency and openness with which it participated in the investigation process and its proactive approach to identifying and mitigating issues. It is refreshing to see a hospital adopt the purposes of the coronial investigation so wholeheartedly in their prevention focus.
170. On a more personal note, I acknowledge the grief and loss that Mr and Mrs Windmill have suffered and will continue to endure as a result of the devastating loss of their Baby Mabel.
171. Further, I recognise that the death of a baby is not only a traumatic experience for the parents but so too has a lasting impact on clinicians involved in the birth. I thank all those who participated in the investigation process and acknowledge the difficulty this may have presented for you.

RECOMMENDATION

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

To improve the quality and consistency of cardiotocograph interpretation across hospitals and to ensure that locum obstetricians who do not have the benefit of obtaining continuing professional development within any one hospital, I recommend that the Royal Australian and New Zealand College of Obstetricians and Gynaecologists consider whether it would be both beneficial and feasible to implement a program whereby locum obstetricians are required to demonstrate current competency in fetal surveillance monitoring to maintain their accreditation.

Pursuant to section 73(1) of the Coroners Act 2008, I order that finding be published on the internet.

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

- Windmill family
- Latrobe Regional Hospital
- Dr Watters, Locum Specialist Obstetrician & Gynaecologist
- Dr Girgis, Obstetrician & Gynaecologist, LRH
- Dr Sadek, Specialist Obstetrician & Gynaecologist, LRH
- Dr Tippet, Director of Maternal Fetal Medicine and Clinical Head of Obstetrics, Monash Health
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Signature:



Jacqui Hawkins
Coroner
Date: 15 July 2015

