Coroners Act 1996
[Section 26(1)]

Western  *Australia*

RECORD OF INVESTIGATION INTO DEATH

Ref: 16/17

I, Sarah Helen Linton, Coroner, having investigated the death of ***Baby CJ*** *with an inquest held at the* ***Perth Coroner's Court, Court 51, CLC Building, 501 Hay Street, Perth*** *on* ***2 May 2017*** *find that the identity of the deceased person was* ***Baby CJ*** *and that death occurred on* ***16 March 2014*** *at* ***Kaleeya Hospital*** *as a result of* ***hypoxia due to intrauterine pneumonia and haemorrhage with uterine rupture in a neonate with prolonged rupture of placental membranes*** *in the following circumstances:*

Counsel Appearing:

Ms F Allen assisting the Coroner.
Mr D Brand appearing on behalf of Dr Madigasekara.
Ms J Hook (State Solicitor's Office) appearing on behalf of South Metropolitan Health Service, Dr Sivanna and Dr Rowlands.

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INTRODUCTION

1. Baby CJ was born at 9.15 pm on 16 March 2014 after a prolonged labour. At birth he was floppy, with no signs of respiration and an uncertain heartbeat that was detectable until 10 minutes 28 seconds after birth. Thereafter no heart rate could be detected. Extensive efforts were made to resuscitate him but they were unsuccessful. His death was declared at 9.40 pm.

2. The detection of a heartbeat after Baby CJ was delivered is sufficient for him to be deemed to have been 'born alive' for the purposes of a coronial investigation under the *Coroners Act 1996* (WA).[1]

3. I held an inquest into the death at the Perth Coroner's Court on 2 May 2017.

4. The documentary evidence comprised a single volume of materials.[2]. The witnesses called to give evidence were limited to three doctors involved in the labour and delivery and an additional doctor, not involved in the birth, who was called as an expert witness.

5. Baby CJ's parents no longer reside in Western Australia. They were aware that the inquest was being held and were content for the court to simply have regard to their initial statements provided to the police in August 2014 and some additional information provided in an email to counsel assisting.[3]

6. The inquest focused primarily on the events on 15 and 16 March 2014 at Kaleeya Hospital involving the labour and the birth.

BACKGROUND

7. Baby CJ's parents are from overseas and were living in Australia temporarily in 2013. The couple had three other children together and Baby CJ's mother also had a child from a previous relationship. Her first child was born by caesarean section but her three subsequent children were all vaginal deliveries.

8. Baby CJ's mother stated that her first child was born by caesarean section due to the labour failing to progress and the baby showed some signs of distress. She described it as a traumatic birth, where she was placed on a drip for a long time, which affected her significantly as she has a fear of needles.[4] She also mentioned in her statement that she was "not sure who exactly made the decision but a caesarean section was performed."[5]

9. Baby CJ's mother described the vaginal birth of her second child as involving "some time in the pushing process and the baby was distressed but otherwise it all went well."[6] She stated the birth of her third child went well

[1] *Barrett v Coroner's Court of South Australia* [2010] SASCFC 70.
[2] Exhibit 1.
[3] Exhibit 1, Tab 12.
[4] Exhibit 1, Tab 3 [12] – [14], [53].
[5] Exhibit 1, Tab 3 [14].
[6] Exhibit 1, Tab 3 [9].

and the birth of her fourth child was following her membrane rupturing "but it all went well."[7]

10. As to her general health, Baby CJ's mother described it as very good and indicated that she lived a fairly healthy lifestyle. She noted she rarely needed to see a doctor and has never been on any medications and "won't even take paracetamol for headaches."[8]

11. Baby CJ's mother discovered she was pregnant with Baby CJ in July 2013. He was to be her fifth child. She did not seek medical advice immediately as she was afraid of having to have a blood test as she has a phobia about needles.[9] She also has a phobia about pain.[10] Baby CJ's mother eventually consulted with Dr Cecilia Yap at Metro GP service. She did not have any tests done as apparently Dr Yap accepted her word that she was pregnant. Dr Yap did recommend some blood tests, which Baby CJ's mother returned for about four weeks later.[11]

12. Baby CJ's mother had a 20 week anatomy scan performed at Western Radiology on 1 November 2013, which was reported as normal. Dr Yap referred her to Kaleeya Hospital (which has subsequently closed but was still operating in 2013/2014) for antenatal care and delivery of the baby.[12]

13. Baby CJ's mother was seen at the Kaleeya Hospital Antenatal Clinic for the first time at 24 weeks' gestation. Her routine antenatal bloods were noted to be normal, apart from a low haemoglobin of 103. Her estimated delivery date was recorded as 22 March 2014. Note was made of the previous delivery by caesarean section. It was also noted that a vaginal birth was planned for the current pregnancy. There was a routine practice at the antenatal clinic to provide patients planning a vaginal birth after caesarean (VBAC) with a copy of the FRANZCP handout for a VBAC.[13] Her antenatal records also indicate that the issue of scar rupture was discussed with a Consultant Obstetrician at the Kaleeya Antenatal Clinic at a later visit.[14]

14. Kaleeya Hospital had in place a policy for women who wanted to pursue a vaginal birth after caesarean section.[15] Baby CJ's mother queried whether she could have a water birth and was told that under the VBAC guidelines it was not allowed.[16]

15. Baby CJ's mother was reviewed again at 29, 33, 36 and 38 weeks' gestation. Her pregnancy appeared to be progressing normally, apart from iron deficiency anaemia, for which she was prescribed iron supplements.[17] At the 38 week review it was noted that her Group B Streptococcus swabs were negative.

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[7] Exhibit 1, Tab 3 [12].
[8] Exhibit 1, Tab 3 [17].
[9] Exhibit 1, Tab 3 [22].
[10] Exhibit 1, Tab 3 [94].
[11] Exhibit 1, Tab 3 [25] – [26].
[12] Exhibit 1, Tab 3 [29] – [32].
[13] T 33 – 34.
[14] Exhibit 1, Tab 8 and Tab 9 [27] – [28].
[15] T 26; Exhibit 1, Tab 9, Attachment.
[16] Exhibit 1, Tab 7, Outpatient Notes 24.2.2014 and Tab 9, Attachment, p. 6.
[17] Exhibit 1, Tab 3 [38].

16. Baby CJ's mother was reviewed by the anaesthetist on 28 January 2014, where an epidural was discussed.

FIRST ATTENDANCE AT KALEEYA - 15 MARCH 2014

17. Baby CJ's mother attended at Kaleeya Hospital just after midnight on 15 March 2014 when she was at 38 weeks and 6 days' gestation. Her membranes had spontaneously ruptured at about 10.00 pm, so an hour or so earlier. She had telephoned the hospital and been told to come in for assessment. She was admitted and examined. The liquor was noted to be clear and she was contracting mildly, with 1 to 2 contractions every 10 minutes. On examination the baby was cephalic (head presenting) and the cervix was 1 cm dilated and 0.5 cm effaced. Given those findings, she was not considered to be in active labour at this time.

18. Baby CJ's mother recalled being told by a midwife that a foetal heart trace was a bit flat and that it was possibly due to Baby CJ's mother being dehydrated or the baby was sleeping. The midwife recommended that Baby CJ's mother be placed on a saline drip. Baby CJ's mother told the midwife she would rather not have a cannula due to her fear of needles. Baby CJ's statement indicates she recalls she then agreed to the drip relying upon the midwife's advice and wishing to make the best decision for her baby.[18]

19. The medical notes record that Registered Medical Officer Rodrigues came to insert the intravenous cannula and was told by Baby CJ's mother that "it was not required" and from past experience she knew she "did not like the sensation in her arm."[19] The RMO wrote in the notes that they counselled Baby CJ's mother for 35 minutes about the need for fluids to improve CTG (cardiotocography) tracing and although she was still unwilling and required coaxing from her husband, she eventually agreed. The insertion was performed and a drip attached and bloods taken at about 12.45 am.[20]

20. Baby CJ's mother described herself as having then spent an uncomfortable night at the hospital on the drip, due to being aware of the drip, the sounds and lights of the hospital and some niggling pains.[21]

21. Baby CJ's mother was reviewed by the Head of Department, Consultant Obstetrician and Gynaecologist Dr Philip Rowlands,[22] at around 4.45 am. Dr Rowlands read through Baby CJ's mother's handheld maternity notes before he examined her, so that he had a general understanding of her birth history and current situation. In particular, Dr Rowlands was aware from the information that Baby CJ's mother was intending a vaginal birth after caesarean section for this pregnancy.[23] This automatically categorised the pregnancy as a 'high risk pregnancy' and the documentation confirmed that

[18] Exhibit 1, Tab 3 [50] – [56].
[19] Exhibit 1, Tab 7, Integrated Progress Notes, retrospective note 20.3.2014.
[20] Exhibit 1, Tab 7, Integrated Progress Notes, retrospective note 20.3.2014.
[21] Exhibit 1, Tab 3 [57] – [58].
[22] Dr Rowlands was also the Head of Department at the time.
[23] T 25.

the risk of scar rupture had been discussed with Baby CJ's mother.[24] The fact that Baby CJ's mother was about to have her fifth baby was also a risk factor.[25]

22. After reviewing Baby CJ's mother's history, Dr Rowlands examined Baby CJ's mother. Dr Rowlands noted she was pre-labour ruptured membranes of the order of seven hours when he saw her and she was stable and the baby's CTG was perfectly normal. He noted that Baby CJ's mother was still keen to pursue a vaginal delivery at that stage and did not want an emergency caesarean section. Based on the history and his examination, Dr Rowlands found no contraindicators for a vaginal birth.[26] Further, Dr Rowlands explained that the literature states that women who have had a previous caesarean section and then in a later pregnancy come in spontaneous labour are more liable to end up with a successful vaginal birth.[27]

23. Dr Rowlands gave Baby CJ's mother the option of starting Syntocinon (an agent used to induce labour) to initiate contractions if she hadn't started contracting by midday, which would have been 12 to 14 hours after she ruptured her membranes the previous night. He did not go through elaborate counselling about Syntocinon at that stage as he wasn't actually going to start the Syntocinon, but he did discuss its use and the increased risk of scar rupture generally. The alternative to not using Syntocinon to augment/initiate uterine activity after the membranes have ruptured is either to wait for spontaneous uterine activity (which has an increased risk of infection the longer it takes) or to perform an emergency caesarean section. Dr Rowlands recommended blood tests and that the antibiotic benzylpenicillin should be given at 4.00 pm and then four hourly.[28]

24. Baby CJ's mother did not mention any plan to go home at the time Dr Rowlands saw her. He indicated that if she had done so, he would have advised her not to as the Kaleeya Hospital VBAC policy was for a patient with ruptured membranes to remain in hospital.[29]

25. Dr Rowlands did not see Baby CJ's mother again before he finished his shift at 8.00 am on the Saturday morning.[30]

26. Dr Madigasekara, who later dealt with Baby CJ's mother, recalled that Dr Rowlands told him in a handover that Baby CJ's mother had been a very difficult patient to deal with but he had managed to organise a birth plan for her.[31] Dr Rowlands agreed he would have had a conversation with Dr Madigasekara by telephone to handover patients and accepted he may have said words to that effect, but at the inquest he indicated that he thought Baby CJ's mother could more properly have been described as "a little bit unusual, maybe slightly difficult"[32] and he noted she wasn't

[24] T 25.
[25] T 26.
[26] T 25.
[27] T 26.
[28] T 26 – 27, 29; Exhibit 1, Tab 3 [61] and Tab 10 [21].
[29] Exhibit 1, Tab 9 [24] and Attachment, p. 2.
[30] T 28.
[31] T 29.
[32] T 29; Exhibit 1, Tab 11.

adversarial and didn't counter the plan he put in place. He was surprised to hear later that she had not followed the care plan he had set in place.[33]

27. Baby CJ's mother's observations remained normal overnight. She recalls that in the morning she questioned a midwife about why the saline bag hadn't gone down. She responded with words to the effect of, "Did they not turn it on?"[34] The midwife also suggested that it had been decided that it was not required. Baby CJ's mother was then disconnected from the drip and the cannula was removed.[35]

28. Baby CJ's mother told the midwife that she hadn't slept all night and knew that she needed to be well rested before labour. She recalls the midwife asked her if she wanted to stay or go home. Baby CJ's mother also recalls she said that she wanted to go home and the midwife was supportive of her decision, but did give her some advice about the risks of infection following membrane rupture and the warning signs she should look for, which would then require her to return to hospital. Baby CJ's mother also recalls she was told by the midwife that she needed to return within 19 hours to be placed on a drip for antibiotics as a precaution against infection, which would be at about 5.00 pm or 6.00 pm that afternoon. Baby CJ's mother does not mention talking to a doctor about her decision to return home or receiving any medical advice that she should stay in hospital.[36]

29. The medical notes indicate that at 7.30 am Baby CJ's mother stated that she wanted to go home. Dr Sarala Sivanna, a Senior Registrar, spoke to Consultant Obstetrician Dr Dilum Madigasekara about her request. Dr Madigasekara did not review Baby CJ's mother himself at this stage as he had been told by staff she was happy with the care plan put in place by Dr Rowlands and did not need medical review. He had understood the plan from Dr Rowlands was to wait to see whether Baby CJ's mother went into labour spontaneously and, if not, she was to have a low dose of Syntocinon to facilitate labour.[37] Dr Madigasekara told Dr Sivanna that she should speak to Baby CJ's mother and advise her that it was not their recommendation that she go home at this stage and if she was to leave, it would be against medical advice.[38]

30. Dr Madigasekara explained that his reason for this advice was that he was concerned that she as a mother with a previous caesarean section and also had ruptured membranes, and in those circumstances he did not think it appropriate to leave her in the community. In his opinion she needed to be in hospital so that they could monitor her temperature, blood pressure and other vital signs and conduct any necessary investigations.[39]

31. Dr Sivanna made an entry in the medical record at 10.00 am indicating that she had spoken to Dr Madigasekara and then Baby CJ's mother. She also noted Baby CJ's mother had discharged herself against medical advice and

[33] T 28 – 29.
[34] Exhibit 1, Tab 3 [66].
[35] Exhibit 1, Tab 3 [67] – [68].
[36] Exhibit 1, Tab 3 [69] – [74].
[37] T 35; Exhibit 1, Tab 11.
[38] T 35 – 36.
[39] T 36.

had indicated she would return at 4.00 pm that day (the time Dr Rowlands had indicated was the appropriate time for the commencement of antibiotics) or earlier if she developed decreasing foetal movements, meconium stained liquor, fever or flulike symptoms or she was in established labour.[40] Dr Sivanna also noted that Baby CJ's mother had not made a decision about the Syntocinon at that stage.[41] Both Dr Sivanna and Baby CJ's mother signed the discharge against medical advice form.[42]

32. Baby CJ's mother did not return to the hospital at 4.00 pm, as arranged. She indicated in her statement that she rested in bed all afternoon and felt she hadn't progressed with the contractions and had no danger signs, so she "didn't feel [she] needed to go back to the hospital as they had asked."[43] An attempt was made by hospital staff to contact her at home at 6.00 pm. There was no answer and a message was left. A further attempt was made to contact Baby CJ's mother at 9.00 pm, again without success, and a further message was left advising her she needed to return to the hospital. She did not return to the hospital that day. Baby CJ's mother stated that she felt that she needed to rest "and that was the right decision for me."[44]

SECOND ATTENDANCE AT KALEEYA - 16 MARCH 2014

33. Baby CJ's mother indicated in her statement that at about 1.00 am the following morning she thought about the need for antibiotics and finally made the decision to leave home and go back to the hospital at about 5.00 am. She left home at about 6.00 am and eventually returned to the hospital at 7.00 am on 16 March 2014. This was 33 hours after her waters had broken and 15 hours after she was supposed to have returned the previous day. She was admitted and taken to a delivery suite.[45]

34. Upon her return Baby CJ's mother was reviewed and found to have no fever and normal vital signs. A CTG was commenced, an IV catheter was inserted and she was given a 1.2 g loading dose of benzylpenicillin. The CTG was unconcerning at that stage and she was still not contracting regularly. From the available information it appeared the wellbeing of the mother and baby was satisfactory. Baby CJ's mother indicated she was still happy to proceed with the previous care plan discussed with Dr Rowlands, although she did not want to start the Syntocinon until she had received an epidural. This was due to her pain phobia, and she expressed concern about the pain she would experience from inducing labour.[46] The midwife's entry in the medical notes indicates Baby CJ's mother was very anxious regarding labour and a later note indicated the possibility of using an early epidural before starting the Syntocinon was discussed.[47]

[40] Exhibit 1, Tabs 8 and 9.
[41] Exhibit 1, Tab 9.
[42] Exhibit 1, Tabs 8 and 9.
[43] Exhibit 1, Tab 3 [82].
[44] Exhibit 1, Tab 3 [83].
[45] Exhibit 1, Tab 3 [84] – [88].
[46] Exhibit 1, Tab 3 [97].
[47] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2015, 0700.

35. Although it was unusual to administer an epidural before full labour, there were no major concerns with this proposal and Dr Madigasekara indicated that when consulted by the Obstetric Registrar Dr Antony he indicated he was comfortable with that plan.[48] The anaesthetist was notified at 9.00 am.[49]

36. Sometime around 10.20 am an epidural was inserted. At 11.00 am Syntocinon was commenced with CTG monitoring. It was initially administered at a rate of 6mls/hr but this was increased to 12mls/hr at 11.30 am and she was also given a further dose of benzylpenicillin.[50]

37. At 11.45 am Baby CJ's mother was still experiencing irregular moderate contractions and the CTG showed variable decelerations.[51]

38. At midday Baby CJ's mother was rolled on to her left hand side and the Syntocinon was increased to 24mls/hr. Her blood pressure was noted to be a little low at this stage, being 89/49. It was rechecked manually and found to be about the same, but by 12.20 pm it had increased to 95/50. She was contracting strongly, with 4 contractions every 10 minutes so the Syntocinon was decreased back to 12mls/hr.[52]

39. At 1.00 pm Baby CJ's mother was still contracting strongly, with 5 contractions every 10 minutes and her Syntocinon was decreased again to the original starting dose of 6mls/hr.[53] At 1.10 pm the CTG showed reduced variability and variable decelerations but was recorded to have improved at 1.15 pm. At 1.30 pm the Syntocinon was turned off as she was contracting well.[54]

40. At 1.45 pm Baby CJ's mother was reviewed. The CTG was reported as normal but the contractions had become irregular in strength and frequency so the Syntocinon was restarted at 12mls/hr.[55]

41. At 4.00 pm the CTG showed some early decelerations and a second opinion was requested from a senior midwife, after which Syntocinon was increased to 24mls/hr and Baby CJ's mother was repositioned onto her right lateral side. Around this time Baby CJ's mother was complaining of some discomfort in her right lower abdomen. She had initially felt no pain and had not felt the contractions, but she now felt some small pain on the lower right side of her caesarean scar. The pain progressively worsened and she eventually could feel it all along her caesarean scar line.[56]

42. At 4.50 pm the CTG showed some early decelerations during the last few contractions and the variability was reduced to less than 5bpm. Baby CJ's

[48] T 37; Exhibit 1, Tab 3 [99] – [101] and Tab 7, Integrated Progress Notes 16.4.2014, 0850 and Tab 11.
[49] Exhibit 1, Tab 7, Integrated Progress Notes 16.4.2014, 0900.
[50] Exhibit 1, Tab 7, Integrated Progress Notes 16.4.2014, 1020 1100.
[51] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1145.
[52] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1200 – 1220.
[53] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1300.
[54] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1330 and Tab 8.
[55] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1345 and Tab 8.
[56] Exhibit 1, Tab 3 [104] –[111], [116].

mother was rolled on to her left side. Her temperature was checked, which was normal at 36.5°.[57]

43. At 5.10 pm Baby CJ's mother complained of pain at the site of her caesarean scar, which was remaining after the contractions ended. The Synctocinon infusion was again stopped and a senior midwife review was requested.[58]

44. At 5.15 pm the senior midwife, clinical midwife Ms Kew, reviewed Baby CJ's mother and an internal examination showed her cervix was 6cm dilated and the baby's head was now at the spines. The CTG was reported to still be showing early decelerations and the obstetrician was asked to review at 5.25 pm.[59]

45. Dr Madigasekara recalls he was telephoned and told that Baby CJ's mother was complaining of lower abdomen pain at about 5.45 pm. Knowing she was a VBAC with Syntocinon, Dr Madigasekara was concerned Baby CJ's mother might be showing signs of impending uterine rupture, so he drove immediately to the hospital to examine her.[60]

46. The pain Baby CJ's mother was experiencing around this time was noted as "deep, burning, stinging" and was at the right end of her scar, into her groin.[61]

47. A CTG done at 5.45 pm was normal with some early decelerations.[62]

48. Dr Madigasekara and Dr Antony attended at 5.50 pm and reviewed Baby CJ's mother at 6.00 pm. They noted tenderness over her caesarean scar and considered the possibility of scar dehiscence. The CTG reading had some reassuring signs but overall it looked like the baby was really in distress.[63]

49. Dr Madigasekara spoke to Baby CJ's parents and told them there was the possibility of scar dehiscence and foetal distress and the safest option at that stage was to have a caesarean section to deliver the baby. Dr Madigasekara recalls that Baby CJ's father, in particular, asked how sure the doctor was that there was a uterine rupture. Dr Madigasekara responded that he could not be 100% sure because they were not using intrauterine pressure monitors but from the clinical signs and symptoms it indicated to him that there was something wrong, which he thought was the intrauterine wound adhesion. Baby CJ's father responded "Well, she has done this three times and her labours are normally slow but … from this stage onwards, she progresses really fast."[64]

50. Dr Madigasekara examined Baby CJ's mother again and noted her cervix was at about five centimetres dilation and below the spines. He relayed that information to Baby CJ's father, who again mentioned that his wife's labours

[57] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1650.
[58] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1710 and Tab 8.
[59] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1715.
[60] T 37.
[61] Exhibit 1, Tab 7, 16.3.2014, 1740 and Tab 11.
[62] Exhibit 1, Tab 8.
[63] T 37.
[64] T 37.

were often slow to start and then would happen very quickly. Baby CJ's father indicated that he would like to wait to see whether there was any change, before considering a caesarean section and asked Dr Madigasekara to give them some more time. Dr Madigasekara said he had no option but to oblige his request, although it was against his medical advice.[65]

51. The entry in the note reads that Dr Madigasekara explained the possibility of scar stretching/scar dehiscence/foetal distress and offered a caesarean section if the parents were keen to have it now but they were not keen and Baby CJ's father wanted to wait 30 minutes to see whether there will be any change.[66] The plan written following this conversation was for closer monitoring, observations, a review in 30 minutes but for Dr Madigasekara to be informed immediately if there were any changes.[67]

52. Baby CJ's mother continued to report pain and nitrous oxide for pain relief was commenced at 6.30 pm.[68] Strong contractions were recorded at 6.45 pm and there were three variable decelerations on the CTG. At 6.48 pm the CTG showed the foetal heart rate dropped to 90bpm, which lasted for approximately 1 minute. It improved quickly with a change in position but a review was requested by the obstetric team.[69]

53. Dr Madigasekara reviewed Baby CJ's mother again at 7.00 pm, at which time she was 8 or 9 cm dilated. The head had deeply engaged and she was showing very good signs of progession. Although she had earlier complained of pain, she reported that it had improved at this time. The CTG was noted to be normal with a few late first stage decelerations.[70] Despite the fact that the objective findings were reassuring, Dr Madigasekara's evidence was that he was not happy with the CTG and was concerned that the baby was distressed. He again recommended a caesarean section. Baby CJ's father declined and replied that they were happy to go forward with a vaginal birth and he was confident it wouldn't be a long labour and Baby CJ's mother would push the baby out very quickly. Accordingly, Baby CJ's mother was allowed to progress with her labour normally.[71] The medical notes do not reveal much of the actual content of these conversations.

54. Dr Madigasekara agreed in his evidence that Baby CJ's parents appeared to take a lot of reassurance from what had occurred in their previous children's vaginal births in making their decisions. He also noted that while he spoke to both Baby CJ's parents, Baby CJ's father was more prominent in the decision-making at that time.[72] Baby CJ's mother mentioned in her statement that from the first time she saw Dr Madigasekara everything was a blur, although she did recall some of the discussions that occurred.[73]

[65] T 37 – 38; Exhibit 1, Tab 4 [31] and Tab 7, Integrated Progress Notes 16.3.2014, 1800 and Tab 11.
[66] Exhibit 1, Tab 7, Integrated Progress Notes 16.3.2014, 1800.
[67] Exhibit 1, Tab 7, Integrated Progress Notes 16.3.2014, 1800.
[68] Exhibit 1, Tab 7, Integrated Progress Notes 16.3.2014, 1830.
[69] Exhibit 1, Tab 8.
[70] Exhibit 1, Tab 8.
[71] T 38 – 39; Exhibit 1, Tab 11.
[72] T 39.
[73] Exhibit 1, Tab 3 [121] – [122].

55. Dr Madigasekara said that he tried to explain to both parents that, given it was Baby CJ's mother's fifth pregnancy, that fact in itself increased her risk of a uterine rupture, separate to any history of previous caesarean section.[74] Dr Madigasekara also told Baby CJ's father that although the progression was good, the foetal distress was concerning and the option of a caesarean section was still open. However, Dr Madigasekara understood the decision was made by Baby CJ's parents to continue with the labour and the labour was allowed to progress.[75]

56. Baby CJ's mother recalled that Dr Madigasekara asked them what they wanted to do, and understood that the question was whether they wanted to continue with a vaginal birth or not, but she did not recall any panic or indication of danger or get the feeling that Dr Madigasekara was concerned. She states that she told Dr Madigasekara that "he was the expert and if he thought it was safer for me or the baby [she] would have a caesarean"[76] and she trusted him to make the decision.[77] She then says in her statement that "[s]omehow a decision was made to keep going."[78] After that time she did not remember much except pain and her recollection of events was hazy.[79]

57. Dr Madigasekara advised the midwives to monitor carefully and to inform him immediately if there was any change. He elected not to leave the hospital as he knew the situation was dangerous. Instead, he stayed in the office across from the labour ward and waited.[80]

58. Late decelerations were noted on the CTG at 7.15 pm and the foetal heart rate dropped to 90bpm and took approximately 30 seconds to recover.[81]

59. A review by Dr Madigasekara at 7.55 pm found Baby CJ's mother was contracting well. He examined her and found she was almost fully dilated and had an urge to push. With the contractions he could see the head coming down the perineum. At 8.00 pm pushing commenced and there was a deceleration to 90bpm recorded, which quickly recovered. Dr Madigasekara told Baby CJ's mother it was important to push and have the baby as early as possible as the baby's heart rate had not improved and he needed to be pushed out quickly.[82]

60. Dr Madigasekara was in and out of the labour ward from that stage. At 8.15 pm Baby CJ's mother was moved to the right lateral position and there was some loss of contact with the foetal heart rate. Intermittent auscultation revealed a foetal heart rate of 120bpm. Baby CJ's mother was reported to be reluctant to push, the baby's head was not visible and the clear liquor was draining.

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[74] T 38.
[75] T 39; Exhibit 1, Tab 8 and Tab 11.
[76] Exhibit 1, Tab 3 [127].
[77] Exhibit 1, Tab 3 [128].]
[78] Exhibit 1, Tab 3 [131].
[79] Exhibit 1, Tab 3 [133].
[80] T 39.
[81] Exhibit 1, Tab 7, Integrated Progress Notes, 16.3.2014, 1920.
[82] T 39.

61. At 8.30 pm Baby CJ's mother continued to refuse to push when contractions were palpated. From her statement it is apparent that she was experiencing incredible pain and felt that she could not push due to the pain.[83]

62. The foetal heart rate was not improving but it was also difficult to ascertain a baseline due to loss of contact. Dr Madigasekara said he was aware that Baby CJ's mother was in extreme discomfort and was not cooperating with instructions due to fatigue. A midwife recorded she was difficult to communicate with. She was moving to a side position and not pushing. Dr Madigasekara gave evidence that he thought, "We need to … deliver this baby as fast as we could." With this thought in mind, Dr Madigasekara offered Baby CJ's parents the option of delivering the baby by using forceps but Baby CJ's father responded that there was "[n]o way that you're going to apply forceps on her."[84] He did, however, consent to vacuum delivery.

63. Interestingly, in Baby CJ's mother's statement she recalls hearing someone ask her husband "what do you want to do" and at that time she stated she "knew that things were bad and [she] just wanted them to get the baby out."[85] She understood the medical staff wanted to use suction or forceps but heard her husband say no, at which time Baby CJ's mother recalls she said"get this baby out because the pain was so unbearable."[86]

64. They managed to get Baby CJ's mother lying flat by about 8.50 pm and then they proceeded to try to execute a vacuum delivery. Dr Madigasekara explained that to use the vacuum delivery method there needs to be some form of maternal assistance through pushing, or at least strong contractions. Neither was present at this stage. Dr Madigasekara described himself as "actually helpless at that stage" because the baby's head was visible and he was aware the baby was in severe foetal distress but he had no means to deliver the baby. In that context, Dr Madigasekara made a decision to recommence Syntocinon, and gave the instruction loudly to his obstetric team. It was a decision he said he had never made in his life before but his hands were tied in the sense that he was not permitted to attempt a forceps delivery and he was running out of options. Dr Madigasekara deemed it necessary in the circumstances to try to get contractions started to support the vacuum delivery and although it was not his usual practice, he saw Syntocinon as the only option to do that.[87] The Synctocinon infusion, which had been ceased just after 5.00 pm, was reinstated at a low dose of 24mls/hr. Around this time the foetal heart rate was showing occasional variable decelerations down to 90bpm.

65. Baby CJ's father still didn't want them to use suction[88] and said, "It is too early for instrument delivery. We are going to push more."[89] He encouraged Baby CJ's mother to push for approximately 10 minutes more. Baby CJ's mother was trying to push hard but she was fatigued and in distress and it is apparent from her statement that she wanted the baby to be delivered in

[83] Exhibit 1, Tab 3 [135] – [136], [142].
[84] T 40.
[85] Exhibit 1, Tab 3 [145] – [146].
[86] Exhibit 1, Tab 3 [147].
[87] T 40 – 41.
[88] Exhibit 1, Tab 4 [40].
[89] T 42.

any way necessary.[90] Dr Madigasekara was worried about the welfare of both the mother and the baby by now. He told Baby CJ's father that his wife could not push the baby out and they needed to assist to get the baby out. Dr Madigasekara recalls that Baby CJ's father then gave permission for them to use the vacuum cup. It is recorded in the medical notes that he finally gave permission for instrumental delivery at 9.05 pm but refused an episiotomy.[91]

THE BIRTH

66. At 9.09 pm a Kiwi suction cup was attached but it detached with the first pull, which was as Dr Madigasekara expected. Baby CJ's mother recalls hearing them speak of the forceps and she simply said "try not to cut me."[92] Baby CJ's father recalls seeing the forceps and being confused as to how they were going to be used but he did not express an objection.[93] The Neville-Barns forceps were applied by Dr Antony at 9.11 pm.[94]

67. At 9.15 pm Baby CJ was delivered. He was observed to have the umbilical cord wrapped tightly around his neck as well as his body. Baby CJ was completely flat at birth with no evident respiration or response. Blood was suctioned from his mouth and the paediatric registrar and midwife commenced Intermittent Positive Pressure Ventilation and chest compressions. At 1 minute his heart rate was recorded at less than 60bpm with no respiration, no response and he was completely floppy, pale and congested at the peripheries.[95]

68. Baby CJ was intubated and adrenaline was administered down the ET tube and two doses were given intravenously. Cardiopulmonary resuscitation was continued for 26 minutes but sadly Baby CJ could not be resuscitated. His death was declared at 9.40 pm.[96]

69. The placenta was examined and appeared complete. There was meconium staining of the entire placenta and a clot the size of a 50 cent coin was noted.[97]

70. While resuscitation of Baby CJ was proceeding, his mother's pain also continued, which she described as "horrendous"[98] and preventing her from being aware of anything going on in the room. Dr Madigasekara attended to her. He had serious concerns about her condition as she had been haemodynamically stable but her condition began to deteriorate. Dr Madigasekara had a serious suspicion there was a scar rupture. An ultrasound was performed, which showed fluid in the abdomen. Dr Madigasekara called Dr Rowlands and a senior registrar, Dr Kedar Jape,

[90] Exhibit 1, Tab 3 [147].
[91] Exhibit 1, ab 7, Integrated Progress Notes, written in retrospect 23.00, 16.3.2014.
[92] Exhibit 1, Tab 3 [150].
[93] Exhibit 1, Tab 4 [44].
[94] Exhibit 1, Tab 8.
[95] Exhibit 1, Tab 8.
[96] Exhibit 1, Tab 8.
[97] Exhibit 1, Tab 7, Integrated Progress Notes 16.3.2014, 2238.
[98] Exhibit 1, Tab 3 [153].

who came to the hospital and assisted with performing an emergency exploratory laparotomy. As expected, the operation notes revealed wound dehiscence along the previous caesarean section scar, without any lateral extension. The wound margins were approximated and the bleeding, which was not severe, was controlled. Baby CJ's mother was then transferred to Fremantle Hospital for further medical care, before eventually being transferred back to Kaleeya Hospital some days later.[99]

CAUSE AND MANNER OF DEATH

71. A post mortem examination was performed on 18 March 2014 by Forensic Pathologist Dr White.

72. Dr White found that Baby CJ was a male neonate with congested lungs, bruising to the scalp soft tissues and mild cerebral swelling. Histology showed a florid acute pneumonia with poorly aerated lungs with acute inflammation of the placental membranes and umbilical cord. Microbiology showed no specific pathogens. Toxicology found medication consistent with the care provided to Baby CJ's mother. Neuropathology found a neonatal brain with no significant abnormalities. Post mortem newborn screening showed no evidence of a specific metabolic defect.

73. Dr White also examined the placenta and found it was of good weight with focal scarring and dull opaque placental membranes.

74. At the conclusion of all investigations Dr White initially formed the opinion that the cause of death was intrauterine pneumonia in a newborn in association with acute chorioamnionitis and prolonged rupture of placental membranes.

75. As explained further below, Professor John P Newnham AM reviewed this case and provided an expert opinion to the court in relation to the obstetric care provided. Professor Newnham also expressed an opinion in relation to the cause of death. Professor Newnham's opinion differed from that of Dr White. In Professor Newnham's opinion, the pneumonia was unlikely to have been the direct cause of death. He pointed to the near-death state of the baby at birth as indicating a pre-birth origin and noted that the foetus does not require lung function until after birth. He observed that the signs of pneumonia also suggest Baby CJ may also have had systemic sepsis, which can contribute to death in such a circumstance. Professor Newnham was of the opinion that the principal factor in Baby CJ's death was rupture of the uterus, with a secondary factor of foetal infection.[100] Professor Newnham explained that they are separate events, but combined they led to Baby CJ being extremely ill and caused his death.[101]

76. Professor Newnham expressed the view that if the infection had been the major player, rather than merely a contributor, then the foetus would have had a tachycardia (increased heart rate in the region of 170 to 180bpm),

[99] Exhibit 1, Tab 8.
[100] T 6; Exhibit 1, Tab 6.
[101] T 6, 17.

which was not present here. The labour would also have started quite easily because the chorioamniotis causes the release of prostaglandins, which usually induce labour. Baby CJ's mother would also have had secondary features of infection, such as a temperature, increased heart rate and increased white cell count, which were not seen. In Professor Newnham's opinion the clinical story is one compatible with a standard ruptured uterus with foetal hypoxia, acknowledging that the baby also had an infection.[102]

77. Professor Newnham had reviewed the venous blood gas results from Baby CJ's umbilical cord prior to the inquest and from those results, looking at the level of lactic acid, he was able to conclude that Baby CJ had been sick for hours prior to being delivered and his death was not the result of an acute event such as a cord around the neck during delivery.[103]

78. Following the inquest, Dr White kindly agreed to review the further evidence arising from the inquest in relation to the cause of death. In particular, Dr White was provided with the evidence of Professor Newnham in relation to his opinion on the cause of death and asked whether this additional evidence caused her to change her expert opinion in any way. Dr White indicated that she agreed, in part, with Professor Newnham's opinion but also indicated that her view was that the pneumonia and likely sepsis was also very significant. Dr White explained that the pneumonia was florid, and despite the lack of "signs", had been present for at least a few hours, and probably several hours, prior to death. The pneumonia would also have caused hypoxia and fetal compromise and distress.[104]

79. Based upon all the evidence available to her, Dr White issued an amended report with an amended cause of death as hypoxia due to intrauterine pneumonia and haemorrhage with uterine rupture in a neonate with prolonged rupture of placental membranes.[105]

80. I accept and adopt the conclusion of Dr White as to the cause of death.

81. I find that the manner of death was natural causes.

COMMENTS ON MEDICAL TREATMENT AND CARE

Review by Professor Newnham

82. The death of Baby CJ raised some questions about the medical care provided to Baby CJ's mother during her labour and the delivery; in particular, whether intervention should have occurred earlier and whether the death of Baby CJ was preventable? It was acknowledged that this was a complex obstetric case and, as part of the coronial investigation, Professor John P Newnham AM was asked to review the case and provide an expert opinion on the obstetric care provided to Baby CJ's mother.

[102] T 17.
[103] T 16.
[104] Email from Dr White to Counsel Assisting dated 3 August 2017.
[105] Email from Dr White to Counsel Assisting dated 3 August 2017.

83. Professor Newnham is a Consultant Maternal Foetal Medicine Specialist at King Edward Memorial Hospital, a Professor of Obstetrics in Maternal Foetal Medicine at the University of Western Australia, Head of the Division of Obstetrics and Gynaecology at the University of Western Australia and Chief Scientific Director of the Women and Infant Research Foundation.[106] Professor Newnham provided a written report to the coroner and also gave oral evidence at the inquest to explain, and expand upon, the opinions expressed in his report.[107]

84. After reviewing the case Professor Newnham concluded that the principal factor leading to the death of Baby CJ was rupture of the pregnant uterus, which occurred sometime during labour, probably in the afternoon of 16 March 2016. It was a known risk given she was attempting a VBAC, and the risk was increased with the use of Syntocinon to induce the labour.[108]

85. Professor Newnham explained that if a woman has a birth history of a previous lower segment caesarean section then the risk of uterine rupture in a subsequent labour is classically given as 0.5 per cent or up to 0.7 per cent. As will be discussed later, if you use Syntocinon the risk is approximately doubled and if you use prostaglandins the risk is trebled, so prostaglandins are no longer used in these circumstances. Syntocinon is still used within standard practice provided the woman is advised of the increase in risks.[109]

86. The fact that Baby CJ's mother had had three successful vaginal births did not preclude the risk of her rupturing again, even without the use of Syntocinon. While it may have been psychologically reassuring to Baby CJ's mother that she had successfully given birth vaginally, it is not a reassurance to an obstetrician and the risk remains statistically unchanged at 0.5 – 0.7 per cent, doubling with the use of Syntocinon.[110]

87. Due to the risk of uterine rupture, vaginal birth after caesarean section historically has not always been fully supported by obstetricians. Professor Newnham gave an example of a dictum that used to be used in the United States of America, "Once a caesarean, always a caesarean."[111] However, Professor Newnham advised that it has always had a relatively constant level of support in the public sector in Australia and is now being actively promoted and encouraged by the college and various authorities. For example, at King Edward Memorial Hospital it is promoted by obstetricians and they aim to have a benchmark of somewhere between 50 and 70 per cent of women with a previous lower segment section delivering vaginally in their next pregnancy. Professor Newnham acknowledged that some practitioners, particularly in the private sector, are still less supportive of the practice, but in his experience in the public sector it is supported in the majority of cases.[112]

[106] T 6.
[107] T 6 – 23; Exhibit 1, Tab 6.
[108] Exhibit 1, Tab 6.
[109] T 9 – 10.
[110] T 9, 20.
[111] T 10.
[112] T 10.

88. However, Professor Newnham indicated the caveats on vaginal birth after caesarean being supported are that it is attempted in a highly functioning obstetric unit to make sure that it is safe and that the medical staff are prepared for a uterine rupture. There needs to be ready access to obstetricians, anaesthesia, neonatology, an operating theatre as well as very good CTG monitoring with competent staff who know how to read the trace. It is for this reason that vaginal birth after caesarean is not suitable for a home birth. However, in a competent modern hospital it is viewed as a safe alternative and is being promoted as such.[113] The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) publishes a guideline that sets out this position and a copy was generally given to VBAC patients during the antenatal stage at Kaleeya Hospital.[114]

89. Although Professor Newnham had never worked at Kaleeya Hospital prior to its closure, everything he had read indicated that it was a suitable facility for a vaginal birth after caesarean to be attempted, with attentive doctors and midwives and the appropriate facilities.[115] Professor Newnham was not, therefore, critical of the approach of the medical staff to Baby CJ's intended birth plan of a vaginal birth after caesarean. The problem arose during the labour, when it became apparent that the small risk of uterine rupture was realised.

90. There was also the issue of the premature rupture of membranes and potential risk of infection. In this case, Baby CJ's mother had a routine group B streptococcus swab at 35 weeks, which was negative. However, once the membranes had ruptured and vaginal examinations had commenced, the clock was running as infection was almost inevitable.[116] Professor Newnham agreed that the plan written by Dr Rowlands, to commence antibiotics at 4.00 pm was appropriate standard management. This did not occur as Baby CJ's mother left the hospital. Baby CJ's mother was eventually put on antibiotics when she returned to the hospital, many hours after the original planned time. The administering of antibiotics would not necessarily have prevented the foetus developing an infection, even if administered at the original time. Being administered at a later time increased the risk.[117]

91. Professor Newnham advised that the usual protocol in these cases is to wait 24 hours after ruptured membranes and then strongly advise a caesarean section. If the woman refuses to have a caesarean section she runs the risk that she will develop infection or inflammation of the membranes (the chorion and the amnion) known as chorioamniotis. The chorioamniotis may cause her to go into labour or she may not labour and the foetus will die of infection. Antibiotics can modify this and delay the process by a period of hours, but giving antibiotics won't solve it or clear the intrauterine infection. Intrauterine infection has one treatment and that is to empty the uterus.[118]

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[113] T 10 – 11.
[114] Exhibit 1, Tab 9, Attachment.
[115] T 11.
[116] T 12 – 13.
[117] T 13.
[118] T 12.

92. It is apparent from the amended cause of death that infection did play a significant contributing role in the death of Baby CJ. Thus sadly, in Baby CJ's case, the risk presented by prolonged rupture of membranes was realised.

93. Moving back to the other risk in this case, namely uterine rupture, Professor Newnham noted that this case demonstrated all the classical features of a ruptured uterus. The first and foremost sign is classically described as an abnormal change in the foetal heart rate pattern. Professor Newnham explained that doctors don't know why the foetal heart rate changes, given the placenta is still intact, but nevertheless it always does. Unlike an adult's heart rate, which usually remains constant, an unborn baby's heart rate goes up and down with great variability. A normal foetal heart rate sits between 120 and 160 beats per minute. However, with a uterine rupture the foetus experiences a lack of oxygen, which shows a very characteristic pattern of late deceleration at the end of a contraction or at the end of the peak of the contraction. The heart rate goes down and then recovers later. This is because deoxygenated blood is passing back to the foetus, acting on the heart and the brain, and the foetus responds with the slowing of its heart rate. The depth of the deceleration in that context is unimportant. It is the frequency of the occurrence that is important.[119] The method used to detect the decelerations is through continuous recording of the foetal heart rate via CTG.[120]

94. Following a change in foetal heart rate, there are also a variety of less reliable factors, which appear in a variety of orders and usually occur later than the change in foetal heart rate. These include pain between contractions or after the end of a contraction, pain breaking through an epidural, a maternal tachycardia (increase in the mother's heart rate), bleeding from the vagina, slowing of labour as the uterus is unable to contract if the uterus has a hole in it and then an inability to push the baby out at full dilation. Finally, there is cardiovascular collapse if the rupture extends into the uterine arteries.[121]

95. The diagnosis is a clinical one, relying on these symptoms, as well as the science of the foetal heart rate decelerations. In this case, Professor Newnham said the combination of symptoms meant it was "a slam dunk diagnosis of a ruptured uterus,"[122] particularly after the foetal heart rate pattern became abnormal and started showing late decelerations, and was unlikely to be anything else.[123]

96. A woman can spend months of her pregnancy with a uterine rupture called a dehiscence without knowing it as there can be no bleeding but just a break in the caesarean section scar. Therefore, it is difficult to estimate with absolute certainty when a uterine rupture has occurred.[124] In this case, Professor Newnham thought it probably occurred sometime between

[119] T 7; Exhibit 1, Tab 6.
[120] T 7, 16 – 17.
[121] T 6 – 7.
[122] T 8.
[123] T 8 – 9.
[124] T 7 – 8.

4.45 and 5.10 pm when the pain in the region of the scar developed and 6.00 to 6.30 pm when the foetal heart rate trace showed strong signs of foetal hypoxia.[125] There is evidence in the notes that the medical practitioners considered this possibility and recommended a caesarean section. Professor Newnham believes it is likely that a caesarean section would have resulted in the birth of a live and surviving infant at this time. However, Professor Newnham noted that it "appears patient preference played a role in the delivery being delayed beyond this time."[126]

97. In this case, the rupture could have started as a small dehiscence, which then extended, or Baby CJ's mother could have had a de novo rupture of her uterus.[127] However, irrespective of its origin, in Professor Newnham's opinion by about 6.00 pm or thereabouts, the working diagnosis would have been that the uterus was ruptured.[128]

98. The scar was ruptured across the entire length of the lower segment caesarean section scar, but had not extended laterally, so Baby CJ's mother had not ruptured her major arteries at the site. If she had, she would have collapsed in shock. Also, if the rupture had been higher up in the uterus then that would have been far more serious as the baby would have been delivered into the perineal cavity, the usual result being the baby dies and the mother suffers a catastrophic haemorrhage and also dies.[129] Nevertheless, while the results of the rupture were not immediately catastrophic, they were still serious and it warranted intervention.[130]

99. However, no intervention can be implemented by an obstetrician without consent. Professor Newnham acknowledged that "it is very difficult when parents are fixed on the belief that they want no intervention and we believe that intervention is appropriate."[131] Professor Newnham described it as a "game of persistence,"[132] with the hope that the obstetrician can eventually persuade the parents to accept sound medical advice.

100. The use of Syntocinon in a multiparous patient who has had a previous caesarean section increases the risk of uterine rupture during labour. That is why it was contraindicated although Professor Newnham accepted that most obstetricians will employ intravenous Syntocinon in such a case, but it is to be used with caution.[133] However, Professor Newnham was critical of the continuing use of Syntocinon in the presence of very frequent uterine contractions, which was outside accepted clinical practice. In particular, Professor Newnham stated the "one thing I can't support was the recommencing of Syntocinon at full dilatation. That is not…standard management."[134] Professor Newnham acknowledged that "as to whether or not that would have contributed, probably not"[135] as the scar had probably

[125] Exhibit 1, Tab 6.
[126] Exhibit 1, Tab 6, p.3.
[127] T 8.
[128] T 1.
[129] T 8.
[130] T 11.
[131] T 11.
[132] T 11.
[133] Exhibit 1, Tab 6.
[134] T 11.
[135] T 11.

opened up along its full length by 6.00 pm and nothing would have altered it. Nevertheless, Professor Newnham expressed the view that in the circumstances Baby CJ's mother was extremely lucky that the scar rupture did not extend laterally, with the dire consequences that would necessarily follow.[136]

101. Professor Newnham explained that the problem with the Syntocinon is that it does two things. Firstly, it increases contractions and secondly, it camouflages the messages coming from the woman and her uterus to the health care practitioners. The problem with the second aspect is that if labour does not start easily or progress easily, or if the head is not coming down well, these are signs that will alert an obstetrician that something is wrong. However, the use of Syntocinon blinds the health care practitioners to these signs. In this case, given Baby CJ's mother had given birth vaginally three times before, she should have laboured quickly without any problems. The fact that she wasn't indicated that something was wrong, and what may have been wrong was that her uterus may have been ruptured the entire time. The Syntocinon was increasing the power of the uterine contractions and overcoming these signs that labour was slow, thereby masking the problem.[137]

102. Acknowledging that the use of Syntocinon was outside standard practice, Professor Newnham was asked by counsel representing Dr Madigasekara whether it was really unreasonable for it to be used in the context of this case, given the 'real urgency' to get the baby out and the limited options available. In effect, due to the uterine rupture, Baby CJ's mother was unable to push out the baby and the evidence suggests she had reached the limit of her capacity to try. She needed to be taken to theatre and the baby delivered by caesarean section. When this option was denied, the next preferred option was to use forceps, but that was also denied. The less invasive, but less effective, use of the kiwi cup was permitted but required maternal effort that was not present, so Dr Madigasekara then resorted to Syntocinon.

103. Professor Newnham agreed that "no medical guidelines are absolute"[138] and acknowledged that if Dr Madigasekara was facing a situation where he knew that he had to get the baby out as he suspected the uterus had ruptured, he may have considered something contraindicated in desperation and chosen to use the Syntocinon as "the least worst option."[139] Whilst Professor Newnham would not accept this was 'reasonable', he acknowledged that the whole case was unreasonable, so the choice had to be considered as a matter of the "degree of unreasonableness."[140] In that sense, Professor Newnham appeared to agree that Dr Madigasekara was faced with an extremely difficult situation where his preferred options were declined by Baby CJ's parents, and his decision to use Syntocinon must be viewed in that context.[141] As Professor Newnham described it, it was "all unreasonable."[142]

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[136] T 11.
[137] T 12.
[138] T 19.
[139] T 20.
[140] T 20.
[141] T 20.
[142] T 20.

104. Professor Newnham referred, in this regard, to an important ethical concept in medicine known as the Ulysses contract.[143] It originates from Greek mythology and the story of Ulysses, who bound himself to the mast of his ship so that he could not jump into the sea when he heard the sirens' song and directed his men not to release him, despite what he might say to them. The essential principle is that a Ulysses contract is a freely made decision that is designed and intended to bind oneself in the future. Professor Newnham explained that in obstetrics, it is not ethical for a doctor to enter into such an agreement with a woman, whereby for example she says, "Whatever happens doctor, I don't want a caesarean." A woman must be given the freedom to change her mind in labour and she cannot be forced to continue with her previously expressed view.[144] However, if a woman maintains her position in labour that she does not want a caesarean section, despite medical advice, her decision must also be respected.

105. Professor Newnham spoke of the balancing exercise that obstetricians often deal with between a woman's desire for a particular birthing experience and the safety of themselves and their child. In his experience 98 per cent of Australian women will put safety first and their birthing experience second, but there exists a small percentage of women who will put the birthing experience first and safety second, based upon the assumption that it will all work out well in the end. However, sadly sometimes it does not.[145]

106. Complicating this further is the fact that, although an obstetrician must not enter into a Ulysses contract with a woman going into labour, a woman can make such an agreement with her husband or partner. There is then, the risk that the partner will maintain that position and hold the woman to that position during labour, in the belief that they are respecting and supporting her wishes, without appreciating the flexibility of thought that may be required during a birth when things are not going as planned.[146] Professor Newnham acknowledged that from a reading of the evidence it is likely that something of this nature occurred in this case and Baby CJ's parents may have entered into an unofficial Ulysses contract.[147] He also agreed that the evidence supported the conclusion that Baby CJ's parents were not happy to have obstetric intervention, despite evidence being presented to them that it was in their interests.[148]

107. A question that then follows is whether the seriousness of the circumstances and the reasons behind the medical advice for a caesarean section were communicated sufficiently well to Baby CJ's mother and father.

108. Dr Madigasekara indicated that when he saw Baby CJ's mother at 6.00 pm he recognised the potential for a scar rupture and advised that a caesarean section should occur but that Baby CJ's parents did not want to go ahead with one at that stage. Professor Newnham was asked what can realistically

[143] T 14.
[144] T 14.
[145] T 15.
[146] T 14 – 15.
[147] T 15, 18.
[148] T 18.

be done at that stage by a doctor to change that decision? Professor Newnham indicated that in his view the most important thing to do was to try to maintain the relationships and encourage trust while trying to convince the parents that they are all on the same side and on the same team,[149] in the sense that "[w]e have a single goal and that is a healthy … baby and a healthy mother, and for the least intervention that is possible."[150]

109. Professor Newnham said that if desperate, his final play is to say to women in this circumstance "if all goes badly, they're going to destroy the lives of three or four people in this room," including the lives of their child, their husband, the doctor and the midwife. He tries to convey the message that "[w]e are very invested in your health and if anything goes wrong with this, this is going to hurt us also."[151] Professor Newnham indicated that he makes this statement based on his own experience, as he has seen a lot of careers destroyed by a single case. In Professor Newnham's experience, "there aren't many people who persist after that" discussion.[152]

110. Professor Newnham did not support the approach sometimes taken in the United States of America, where a judge's ruling is sought to override the refusal of the mother. He described the outcome of those cases as "universally catastrophic."[153] Rather, Professor Newnham considered the proper approach is to keep working with the parents and "usually we win"[154] and there is a healthy outcome for all concerned, although he also acknowledged that every now and again the approach is not successful.[155]

111. Professor Newnham chairs the Perinatal and Infant Mortality Committee through the WA Department Health. Indirectly related to this case, Professor Newnham mentioned in his evidence that the committee initiated an inquiry into home births a few years ago and promoted the community midwifery program and the Family Birth Centre at King Edward Memorial Hospital to improve outcomes for those wishing to avoid medical intervention in their births. Professor Newnham explained that "we're trying to meet these women halfway with something that is acceptable to us medically"[156] but that they are also "at the edge of what we can do"[157] as the RANZCOG is opposed to home births.[158] Professor Newnham believes that since the changes have been implemented to alter modern medicine to offer alternatives "in Western Australia, it's a relatively successful story."[159] Professor Newnham stated "we just have to keep working at it"[160] and also noted that they are dealing with only a very small proportion of the population in such cases, in any event.[161]It is relevant to this case as it demonstrates that there are ongoing

[149] T 8.
[150] T 18.
[151] T 19.
[152] T 19.
[153] T 19.
[154] T 19.
[155] T 19.
[156] T 22.
[157] T 22.
[158] T 22.
[159] T 22.
[160] T 23.
[161] T 23.

attempts by doctors to work with families who fall outside the mainstream, to reach outcomes that are satisfactory to both parties but ensure the safety of all involved.

Baby CJ's parents

112. In his role as Head of Department Dr Rowlands saw Baby CJ's mother in the Intensive Care Unit at Fremantle Hospital and when she returned to Kaleeya Hospital on the ward. His impression from dealing with her at that time was that she accepted that she had made decisions along the way that were part of the process that led to the death of Baby CJ.[162]

113. Losing Baby CJ has had a profound effect upon his parents and the event has left his mother with ongoing physical and psychological health issues. Baby CJ's parents did appear to accept that they had been informed of the risks of proceeding with a natural birth after caesarean section. However, they raised concerns about the level of communication with them during the labour as the signs of scar rupture became apparent, as it affected their decision-making.

114. Baby CJ's father expressed concern in his police statement as he did not believe that he was properly advised of their options when complications arose during the birth. He felt that he had the responsibility of deciding on the course of action without having the medical expertise. He saw Dr Rowlands with his wife some weeks after the birth and both parents expressed their concerns to him about the decisions made during the birth.[163] Baby CJ's father stated that he felt he should have been fully informed by the doctors of the severity of the situation and what the best course should have been.[164]

115. In an email to counsel assisting, just prior to the commencement of the inquest, Baby CJ's mother expressed a similar concern about not being informed of the seriousness and urgency of the situation during the birth and the need to carry out a caesarean section. She believes that they were informed of the risks of trying for a natural birth but they were not adequately informed of how serious things were during the labour and the consequences were not explained clearly and urgently enough to them, leading them into a false sense of security. Baby CJ's mother believes they made it clear during the birth they preferred a natural birth but were not against a caesarean section and trusted the medical staff to make the right decision for the safety of both mother and baby. She believes the way the labour was managed and the lack of preparation for taking her to theatre after delivery meant the uterine rupture was "not on their radar at that point."[165]

116. Baby CJ's mother suggests there should be more information regarding the high risk of using drugs to induce labour in VBAC and to ensure that all VBAC births with induction are considered high risk and require to there to

[162] T 30.
[163] Exhibit 1, Tab 4 [63] – [64].
[164] Exhibit 1, Tab 4 [66].
[165] Email from Baby CJ's mother to counsel assisting 2.5.2017.

be a medical team in place to deal with this quickly. She also suggests there should be a better process for communicating urgently the risks and facts to parents during the birthing process when events are not going to plan.[166] However, Baby CJ's mother also indicated that she held no bitterness towards the medical staff and was genuine in her wish that she did not want anyone to live with guilt in relation to Baby CJ's death.[167]

Kaleeya Hospital Review

117. Kaleeya Hospital conducted its own review into the events surrounding the death and the results of the review prompted changes to the VBAC guidelines and the intrapartum guidelines. The changes were directed to clarifying procedures, including very strict adherence to the various cervimetric progress in labour as well as guidance for where there are concerns regarding the CTG that would warrant intervention.[168] Dr Rowlands, who had been Head of Obstetrics at the time, had heard the evidence of Professor Newnham and he generally agreed with the opinions expressed by Professor Newnham about this case.[169]

Comments

118. There are many differing views as to the 'right' way to give birth. It can vary from a strong desire to have as little medical involvement as possible, to the other end of the spectrum. What is the best choice depends upon the individual, and needs to take into account their health history and current circumstances, as well as their personal views. There is a lot more information available to expecting parents today given they have access to unlimited information via the internet. However, none of that information can replace the knowledge that comes from the years of medical training and clinical practice that is behind an obstetrician. The difficulty, at times, is ensuring that that knowledge is effectively communicated to the parents so that they can make informed decisions about the labour and birth.

119. In this case, Baby CJ's parents had already given birth to other healthy children, so they had their own personal experiences to draw upon. They knew what had, and had not, worked for them in the past and used that knowledge to plan for the birth of Baby CJ. Baby CJ's mother attended antenatal visits at Kaleeya Hospital, where her birth plan was discussed with a Consultant Obstetrician, and at that time her birth plan was considered to be achievable. She was told that a water birth could not be added to the plan, and she accepted that advice. At that stage, everything was proceeding well.

120. When Baby CJ's mother's waters broke she contacted the hospital and was told to come in for review, which she did. She was kept in hospital overnight on a drip that she allowed to be inserted contrary to her wishes. Overnight her labour did not progress. In the early hours of the morning Baby CJ's

[166] Email from Baby CJ's mother to counsel assisting 2.5.2017.
[167] Email from Baby CJ's mother to counsel assisting 2.5.2017.
[168] T 30 – 31.
[169] T 31.

mother spoke to Dr Rowlands and a plan for moving forward was discussed and apparently agreed upon

121. However, having spent an unhappy sleepless night in hospital, Baby CJ's mother elected to go against medical advice and return home later that morning. She was told what warning signs of infection to look out for and a time when she should return for prophylactic antibiotics to be commenced. Baby CJ's mother again went against medical advice by deciding not to return at the suggested time. She had not observed any signs of infection and felt that staying home was the right decision for her at that time. She did not communicate that decision to the hospital staff, who tried unsuccessfully to contact her.

122. When Baby CJ's mother did return to hospital the following day, the risk of infection was increasing given the lapse of time and she was put on antibiotics immediately. A CTG taken at that stage found no signs of foetal distress. Syntocinon was commenced to induce labour, which was eventually ceased at 5.25 pm, when Baby CJ's mother complained of pain suggestive of possible uterine rupture. At 6.00 pm a caesarean section was offered, but declined by Baby CJ's parents. It is likely the uterus ruptured around this time and from then Baby CJ was definitely in distress, although there is also the evidence of Dr White that the pneumonia would also have been causing hypoxia and playing a role in fetal compromise and distress at this stage.

123. It is apparent from the accounts given by Baby CJ's parents that they did not fully understand how serious the situation was at this time, and they feel that the decisions they made thereafter were not fully informed as a result. Dr Madigasekara believed he was communicating the urgency of the situation to them, but it is clear that there was a communication failure in the sense that Baby CJ's parents did not process the message being given.

124. Baby CJ's parents had been advised of the risks of scar rupture by the obstetrician at an antenatal visit and been given the RANZCOG information sheet. Dr Rowlands also believes he discussed some of the risks with Baby CJ's mother when he saw her the day before the birth, and would have told her that any failure of labour to progress would warrant an immediate caesarean section. However, they clearly felt reassured that they had had three successful VBAC deliveries already, with a labour that was slow to start, without seeming to appreciate that these previous births did not reduce the risk of uterine rupture and, if anything, increased it. They also did not appear to be factoring in the long delay since the ruptured membranes into their decision making.

125. It might have been better if the doctors had perhaps required Baby CJ's mother or father to sign some documentation acknowledging that they were going against medical advice by not having a caesarean section at that stage, as that would perhaps have brought home to them the seriousness of the situation. However, I recognise that things were happening quickly and it would not be something that would ordinarily be done at that late stage of events.

126. Once Baby CJ's mother became too distressed by her pain to fully engage in the decision-making process, Baby CJ's father appears to have taken over that responsibility. Baby CJ's mother says that they were not against a caesarean section, and only had a preference for a natural delivery, but the acts and decisions of Baby CJ's father in the delivery room suggest something much stronger than a mere preference. His desire to ensure his wife delivered vaginally without instruments, which he had seen her do before, outweighed any concerns expressed by the doctors and led him to refuse them permission to take the emergency steps they believed were necessary for the safety of the mother and baby. I have no doubt if Baby CJ's father had genuinely believed that his wife and child would die if he did not follow medical advice, then that would have changed his decisions, but he appears to have believed that their past experiences would prove the doctors wrong. Sadly, in this instance he was mistaken.

127. The aftermath of these distressing events has been significant not only for Baby CJ's parents, who are understandably devastated by the loss of their baby and the ongoing affect it has had on the health of his mother, but also for the hospital staff. Dr Madigasekara acknowledged that he made decisions that were outside standard medical management but indicated he felt forced to do so as the usual options were not open to him. It was something well outside his general practice and it was apparent that Dr Madigasekara had been deeply affected by the experience when he had to recall events while giving evidence at the inquest. His distress bore out the comments of Professor Newnham that the death of a baby in such circumstances can have much broader effects than just on the baby and immediate family, although their loss will always be the greatest.

128. I agree with Baby CJ's parents that a better process for communicating urgently the risk and facts to parents during the birthing process when events are not going to plan is highly desirable, but there is no blanket way to cover all the different circumstances that can arise and the differences between how individuals process information.

129. Ensuring that the parents are well informed of the possible risks in advance, when things are calm, is an important part of that communication process. That was done in this case. However, it is clear that Baby CJ's parents also placed great weight on their own abilities to make decisions that were right for them based upon their own knowledge and experience. Not having a previously established relationship with the medical practitioners who were managing the pregnancy, labour and delivery may also have encouraged them to place greater weight on their own experiences.

130. Professor Newnham explained that most women will put safety first if they properly understand the consequences of their choices. It is important for expecting parents to understand that for the doctors, the priority is the safety and wellbeing of the mother and baby, and their advice should be considered in that context. It is also important for doctors to do their best to ensure that they convey the seriousness of the situation to the parents, by whatever means they can, and then document that informed decision-making process.

CONCLUSION

131. Baby CJ was born on 16 March 2014 and died shortly after birth. His death occurred as a result of his mother experiencing prolonged rupture of membranes, which allowed infection to be introduced, as well as uterine rupture during her labour, which was a known complication of her plan to attempt a vaginal birth after a previous caesarean section. The doctors became aware of the possibility the uterine rupture had occurred approximately three hours prior to the birth and recommended an emergency caesarean section delivery. However, Baby CJ's parents decided to continue with their original birth plan. Throughout this time Baby CJ experienced foetal hypoxia, both as a result of the developing infection and the effects of the uterine rupture.

132. When it finally became obvious to Baby CJ's parents that Baby CJ could not be delivered vaginally without assistance and the medical staff were becoming increasingly insistent, Baby CJ's father agreed that instruments could be used to assist his delivery. Sadly by the time this occurred it was too late and he could not recover from the insult he had received prior to birth.

133. As Baby CJ's mother noted, no one got up that day with the intention of what later occurred, but at the end of the day a child died and his parents were left grieving at a time when they were expecting to be joyously spending time with their new baby.

134. This case emphasises the need for good communication between expecting parents and doctors prior to, and during, labour, so that informed decisions are made that prioritise the health and safety of the mother and baby and avoid such a tragic outcome for all involved. I am unable to make any particular recommendations as to how this can be achieved, although it is to be hoped that the recording of these events may assist in providing some lessons as to how communication might be done better in a future case.

S H Linton
Coroner
22 August 2017