



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2020 006559

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

*Section 67 of the **Coroners Act 2008***

Findings of:	AUDREY JAMIESON, Coroner
Deceased:	Baby Sidney
Date of birth:	27 November 2020
Date of death:	3 December 2020
Cause of death:	1a: Head injury sustained in a difficult delivery including head impaction and caesarean section
Place of death:	The Royal Women's Hospital, 20 Flemington Road, Parkville, Victoria, 3052
Keywords:	Infant death; foetal head impaction, caesarean section, vaginal delivery, complications of childbirth

INTRODUCTION

1. On 3 December 2020, Baby Sidney¹ was 6 days old when he died at the Royal Women's Hospital (RWH).
2. Baby Sidney was the first child to his parents. Antenatal care was provided at the RWH in the lead up to Sidney's birth and there were no major antenatal issues. All early ultrasounds and genetic screens were normal.
3. At 24 weeks gestation, Baby Sidney's mother was admitted for brown vaginal bleeding and monitored but was discharged the following day. Baby Sidney was noted to be small for his gestational age from 34 weeks gestation. Clinicians planned to induce labour between 38 and 39 weeks gestation. Baby Sidney's mother had weekly reviews in her final weeks of pregnancy.
4. On 26 November 2020, Baby Sidney's mother reported decreased foetal movements. She had a non-reassuring cardiotocograph (CTG)² in pregnancy day-stay with two unprovoked decelerations.³ In the context of Baby Sidney's smaller size, Baby Sidney's mother was admitted to be induced.

THE CORONIAL INVESTIGATION

5. Baby Sidney's death was reported to the coroner as it fell within the definition of a reportable death in the *Coroners Act 2008 (the Act)*. Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.
6. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

¹ Baby Sidney's full legal name is known to the Court, however I will refer to him as 'Baby Sidney' throughout the finding for privacy purposes.

² CTG is electronic foetal monitoring of the heart beat and uterine contractions. CTGs are a widely used technique for assessing foetal wellbeing. A normal CTG has baseline foetal heart rate (FHR) between 110 and 160 beats per minute (bpm), baseline variability of 5-25 bpm and no decelerations. FHR variability is the single most important feature of the CTG trace in determining foetal wellbeing. Normal baseline variability is indicative of adequate foetal oxygenation.

³ Decelerations are an abrupt decrease in the baseline foetal heart rate of greater than 15 beats per minute for greater than 15 seconds.

7. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of comments or recommendations in appropriate cases about any matter connected to the death under investigation.
8. This finding draws on the totality of the coronial investigation into the death of Baby Sidney including evidence contained in medical records, witness statements and expert evidence. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.⁴

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Circumstances in which the death occurred

9. On 26 November 2020, at 38 weeks gestation, Baby Sidney's mother was admitted to the RWH. At 5:10pm, a Cook Catheter⁵ was inserted and she was admitted to the ward overnight.
10. On 27 November 2020, at 8:00am, the Cook Catheter was removed. Baby Sidney's mother had an artificial rupture of membranes (**ARM**) although it was noted no liquor was draining at this time. From 8:15am, syntocinon⁶ and continuous CTG monitoring was commenced.
11. At 10:00am, the first deceleration was documented when Baby Sidney's mother was in the bathroom. She was returned to bed and given a bolus of intravenous fluids.
12. At 12:30pm, the CTG demonstrated complicated variable decelerations. At 12:50pm, the registrar review noted complicated variable decelerations, which had resolved, with a rising baseline.⁷ She noted that the toco⁸ was having tracing difficulties and wondered about cord compression in the setting of the toilet. She planned to observe closely, reduce the syntocinon rate, position change and broke the forewaters, noting Baby Sidney's mother was not yet in labour.

⁴ Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

⁵ The Cooks Cervical Ripening Balloon is a silicone double-balloon catheter. It is intended for mechanical dilation of the cervical canal prior to labor induction with medications.

⁶ Syntocinon is an oxytocic medication that stimulates contraction of the uterus.

⁷ Baseline heart rate for baby was increased from previous.

⁸ Toco is the external device that monitors uterine contractions (as part of CTG).

13. Throughout the afternoon, the syntocinon rate was changed multiple times (increased and decreased) in response to the CTG. At 5:10pm, tachysystole⁹ was noted, and the syntocinon rate was reduced.
14. At 6:15pm, it was noted that Baby Sidney's mother's contractions had increased in strength, with the syntocinon infusing at 48mL/hr. The registrar was happy to continue at this rate unless the trace became complicated.
15. At 7:45pm, foetal bradycardia¹⁰ was documented and at this point, the syntocinon was stopped, staff assist was called, and Baby Sidney's mother was assessed as being 8 centimetres dilated. Although the Foetal Heart Rate (**FHR**) briefly returned to normal, Baby Sidney became bradycardic once again. Baby Sidney's mother was given terbutaline,¹¹ transferred to theatre and a Code Green¹² was called.
16. The obstetric consultant was updated that Baby Sidney was 8th centile and direct occiput posterior (**DOP**)¹³. The anaesthetics team was also updated en route, with the impression that the plan was for a general anaesthetic rather than spinal/epidural anaesthetic, which facilitates a quicker delivery of the baby.
17. In the operating theatre, obstetrician Dr Tracey Gilchrist noted that the FHR was back to baseline, with complicated decelerations in between. It was deemed safe for an epidural anaesthetic, and following assessment at 8:05pm noting Baby Sidney's mother was fully dilated, opted for trial of vaginal delivery with attempted manual rotation. Baby Sidney's mother began pushing at 8:11pm. After a few pushes, they moved to trial a vacuum delivery with an aim for rotational vacuum, then forceps delivery. There were two pulls with vacuum however, it was felt that it was obstructed by pelvic floor tone/strength and they were unable to deliver Baby Sidney.¹⁴ A decision was then made for caesarean section at 8:33 pm. A neonatal code blue was called prior to Baby Sidney being born, as well as a call to a neonatal consultant.

⁹ Excessive uterine contractions during labour.

¹⁰ Low heart rate.

¹¹ A medication that prevents/slows uterine contractions.

¹² Code Green caesarean- birth must be expedited without delay.

¹³ Direct Occiput posterior is the position the baby was in in the pelvis.

¹⁴ At full dilation, either forceps or vacuum delivery device has been applied to the presenting part and traction initiated but failed to effect delivery of the foetus.

18. Baby Sidney was born at 8:47 pm hours via caesarean section on 27 November 2020. He was born in a very poor condition, being floppy and apnoeic¹⁵, with Apgars¹⁶ of 2 at 1 minute of life, 6 at 5 minutes of life, and 6 at 10 minutes of life. He was intubated at one hour of life because of periodic breathing. He also had abnormal neurology noted immediately, with absent gag, dilated non-reactive pupils and no response to pain.
19. In the setting of his neurological examination and initial blood gas results, he fulfilled criteria for therapeutic hypothermia¹⁷ due to severe Hypoxic Ischaemic Encephalopathy (**HIE**)¹⁸. He received 72 hours of therapeutic hypothermia and was then rewarmed on 1 December 2020. He suffered from apnoeas, requiring ongoing intubation and ventilation. He had seizures twice requiring phenobarbital loading and midazolam infusion. The electroencephalography (**EEG**)¹⁹ showed isoelectric trace²⁰. Other complications included end organ dysfunction, including cardiac dysfunction and hypotension requiring inotropes and fluid boluses. He was coagulopathic and anaemic, requiring Fresh Frozen Plasma and blood transfusions. He also suffered hyperglycaemia,²¹ anuria,²² respiratory and metabolic acidosis requiring bicarbonate correction.
20. The MRI scan after rewarming on 1 December 2020, showed '*severe bilateral cerebral and cerebellar infarction, with tentorial herniation of the superior cerebellar hemispheres resulting in temporal lobe compression and aqueduct obstruction, and inferior cerebellar tonsillar herniation with brainstem and cervical cord compression*'. The severity of neurological findings were discussed with the parents, and they decided to commence palliative care. Baby Sidney was extubated in his parents' arms at 5:40pm and he remained comfortable and peaceful until his time of death at 6:25 pm on 3 December 2020.

¹⁵ Not breathing/pauses in breathing.

¹⁶ Score of foetal condition at birth out of 10, assessing breathing, heart rate, colour, tone, reflexes. A score of 7 or higher indicates that the baby is adapting well.

¹⁷ Treatment by which a baby's core temperature is reduced to attempt to reduce brain damage

¹⁸ Hypoxic-ischaemic encephalopathy is a type of neonatal encephalopathy (disturbed neurological function) caused by systemic low oxygen levels and/or reduced cerebral blood flow resulting from an acute peripartum or intrapartum event. It is a condition which can cause significant mortality and long-term morbidity. HIE can be a clinical consequence of perinatal, birth and/or neonatal asphyxia

¹⁹ Electroencephalography is a method to record an electrogram of the spontaneous electrical activity of the brain.

²⁰ A flat (isoelectric) EEG is usually recorded during very deep coma. The isoelectric EEG constitutes, together with evidence of irreversible structural brain damage, one of the criteria for the assessment of brain death.

²¹ High blood sugar.

²² Absence of urine production – indicated by less than 100mL of urine produced in 24 hours.

Identity of the deceased

21. On 3 December 2020, Baby Sidney, born 27 November 2020, was visually identified by his treating medical practitioner, Dr Marta Thio Lluch.
22. Identity is not in dispute and requires no further investigation.

Medical cause of death

23. Forensic Pathologist Dr Sarah Parsons (**Dr Parsons**) of the Victorian Institute of Forensic Medicine (**VIFM**) conducted an autopsy on the body of Baby Sidney on 7 December 2020. Dr Parsons considered materials including the Victoria Police Report of Death for the Coroner (**Form 83**), post-mortem computed tomography (**CT**) scan and e-Medical Deposition Form completed by the Royal Women's Hospital and provided a written report of her findings dated 6 May 2021.
24. The post-mortem examination revealed the following:
 - a) The brain, despite being fixed, was extensively softened and this made examination difficult. There was patchy subdural haemorrhage concentrated about the margins of the falx cerebri and tentorium cerebelli, in association with patchy posterior fossa subdural haemorrhage and subdural haemorrhage about the tip of the left temporal lobe;
 - b) There was also extensive variably haemorrhagic necrosis of the cerebrum, cerebellum and brainstem. Subdural haemorrhage about the cervical cord associated with adjacent brain herniation and proximal haemorrhagic necrosis. These changes are in keeping with injury sustained during a traumatic childbirth; and
 - c) There was evidence of the head being impacted in the pelvis during birth and that the deceased was difficult to remove during the caesarean section at birth, forceps were applied for a short time only. It is most likely that there was a herniation of the cerebellar brainstem due to compression of the head into the pelvis.

25. Toxicological analysis of post-mortem samples identified the presence of morphine²³ (0.09 mg/L), midazolam²⁴ (3.2 mg/L) and phenobarbitone²⁵ (22 mg/L). All of these substances were prescribed to Baby Sidney in hospital.
26. Dr Parsons provided an opinion that the medical cause of death was 1(a) HEAD INJURY SUSTAINED IN A DIFFICULT DELIVERY INCLUDING HEAD IMPACTION AND CAESAREAN SECTION.

FAMILY CONCERNS

27. In communications sent to the Court, Baby Sidney's parents noted concerns and potential areas for process improvements that may prevent a similar situation from occurring in the future. These related to:
- i. The induction of labour process, staffing, hospital resourcing and diagnostics of issues presenting during labour;
 - ii. The competency, qualifications and experience of medical staff involved in the labour and surgical procedures undertaken in Baby Sidney's birth;
 - iii. The surgical procedures undertaken and involved in the caesarean section performed;
 - iv. Whether recommendations following an internal review by the RWH had been fully implemented;
 - v. The number of RWH staff involved in providing responses to coronial enquiries and that there should be more than one medical practitioner responding to queries; and
 - vi. The frequency of CTG notifications that were abnormal or of concern that potentially should have prompted staff to notify the on-duty or on-call consultant.

²³ Morphine is a narcotic analgesic used for the treatment of moderate to severe pain. Morphine is the primary constituent of crude opium and metabolite of codeine, ethylmorphine, heroin, and pholcodine.

²⁴ Midazolam is an imidazobenzodiazepine derivative used as a preoperative medication, antiepileptic, sedative-hypnotic, and anaesthetic induction agent.

²⁵ Phenobarbitone is an anti-convulsant barbiturate used in the treatment of epilepsy. It is also used as a sedative.

CORONERS PREVENTION UNIT REVIEW

28. Having identified several concerns regarding the medical treatment prior to Baby Sidney's death, I requested that the Coroners Prevention Unit (CPU)²⁶ investigate the surrounding circumstances to the death and advise me as to the identification of any prevention opportunities.
29. As part of their investigation, the CPU sought statements from Dr Tracey Gilchrist (**Dr Gilchrist**) and Dr Victoria Carson (**Dr Carson**) both of the RWH as well as copies of any internal reviews conducted by the RWH that related to Baby Sidney's death. The CPU also had to hand the medical records of Baby Sidney's mother and Baby Sidney, including records of imaging.

Royal Women's Hospital Root Cause Analysis

30. The RWH conducted an internal review after Baby Sidney's death and discussed the findings of the review with Baby Sidney's family on 22 April 2021. The hospital review concluded with findings that:
 - i. there was an inappropriate response to Baby Sidney's mother's uterine hyperstimulation with a failure to cease syntocinon;
 - ii. there was inadequate escalation to senior staff; and
 - iii. that Baby Sidney's head was deeply impacted in the pelvis and despite appropriate manoeuvres at the time, a traumatic brain injury occurred.
31. A root cause analysis report (**RCA report**) was undertaken by RWH and the following recommendations were made:
 - i. Pilot regular and standardised reviews by senior clinicians of the progress of labour and the condition of the foetus for all women who have been induced, using translational simulation to develop and refine the process and practice.

²⁶ The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations. The CPU also reviews medical care and treatment in cases referred by the coroner. The CPU is comprised of health professionals with training in a range of areas including medicine, nursing, public health and mental health.

- ii. Provide training for medical staff in a simulation lab environment to confirm they have the skills required to safely deliver a baby when the foetal head is impacted in the birth canal.
 - iii. Provide training for birth centre midwifery and operating centre staff in a simulation environment to confirm they have the required knowledge to support the safe delivery of a baby when its head is impacted in the birth canal; and
 - iv. Disseminate findings and learning from the RCA investigation.
32. RWH acknowledged that *'[Baby Sidney's mother's] labour had been incorrectly managed. Staff had failed to recognise, escalate and respond to Sidney's concerning heart rate, the cause of which was excessive uterine contractions.'* It was also acknowledged that *'baby Sidney would have likely benefited from immediate caesarean section shortly after the bradycardia'*.

EXPERT OPINION OF DR ROBYN ALDRIDGE

33. Upon receiving initial advice from the CPU, I requested an expert report from specialist obstetrician, Dr Robyn Aldridge. Her report dated 24 March 2023 was subsequently provided to the Court.
34. Dr Aldridge was asked to respond to the following questions:
- 1. Please review the antenatal care provided to Baby Sidney's mother. Given it was known that the foetus was small for gestational age (SGA), was the plan for induction of labour at 38-39 weeks gestation reasonable? Should there have been additional or different plans put in place given the known SGA?
 - 2. Please assess the management of labour and delivery on 27 November 2020.
 - a) Can you please comment on the CTG throughout the day and note any deviations from normal?
 - b) Were these deviations escalated and managed appropriately?
 - c) Was uterine tachysystole appropriately identified and managed on this day? If not, what should have been the correct management of tachysystole? Was administration of tocolysis indicated earlier in the day?

3. It appears from the medical records and statements that the consultant obstetrician was only notified of Baby Sidney's mother's progress when the Code Green was called. It is not clear if a consultant obstetrician was aware of her progress earlier in the day.
 - a) Should a consultant obstetrician have been notified or involved earlier in the labour process?
 - b) If so, what were the indications that a consultant obstetrician should be called, and at what time during the labour should this have been done?
4. In your practice and experience, please outline the structure of team members present during a medical handover from day to evening shift, and from evening shift to the night team.
 - a) Is it routine practice for a consultant obstetrician and/or midwife unit manager to be present or called to be involved during handover?
 - b) Do you consider that supervision and staffing of the junior obstetric team in this case was adequate? Please provide reasons why.
5. In your experience, what are some barriers to registrars escalating clinical concerns to their supervising consultant e.g. time of day, workload, culture of the unit etc?
6. Foetal lactate sampling was not performed during labour.
 - a) Do you consider that performing foetal lactate sampling may have changed the management and outcome?
 - b) If so, when would this sampling have been indicated?
7. A Code Green was called at 19:39 hours for foetal bradycardia. Baby Sidney was born at 20:47 hours via Caesarean Section following a failed ventouse delivery. In your opinion, were there clinical indications for delivery earlier than this? If so, what were these indications and at what time should an earlier delivery have occurred?
8. Please review the statement of Dr Tracey Gilchrist. In your opinion, were appropriate steps taken to manage an impacted foetal head in the Caesarean Section?
9. Please review the statement of Dr Victoria Carson, which outlines the RCA conducted at Royal Women's Hospital.

- a) Were the conclusions appropriate?
 - b) Were the recommendations appropriate?
10. Were there any missed opportunities for the possible prevention of Baby Sidney's death?
- a. If so, what were they?
11. Please suggest any further changes you consider are required to be implemented in response to this death.
35. Dr Aldridge's provided a report addressing the above questions. Her report was comprehensive and I have considered it in full, but for the purposes of this finding note the following opinions of Dr Aldridge:

Adequacy of antenatal care and plans for induction

36. Dr Alridge opined that the antenatal care provided to Baby Sidney's mother was satisfactory, and the surveillance of her pregnancy was consistent with guidelines on the management of late small for gestational age foetuses.
37. As part of their concerns raised with the Court, Baby Sidney's parents questioned whether it was reasonable for Baby Sidney's mother to have her labour induced or should Caesarean Section have been offered immediately? Dr Aldridge noted in considering the mode of birth, the wishes of the parents must be considered alongside the safest method of birth. She noted that the medical record indicated that Baby Sidney's mother wanted a vaginal birth, and in her circumstances it would have been reasonable for RWH to offer a vaginal birth and to proceed with induction.

Failure to respond to abnormal CTG and respond to uterine tachysystole

38. The CTG was reviewed by both Dr Carson and Dr Gilchrist from the RWH in their statements, noting numerous times throughout the day where uterine tachysystole was present, as well as findings of an abnormal CTG.
39. Dr Aldridge found multiple instances throughout her CTG analysis where the findings should have been escalated to the senior consultant. She also noted multiple times where the syntocinon should have been ceased or reduced, in response to an abnormal CTG with uterine

tachysystole. This was despite appropriate medical and midwifery staffing on the day of Baby Sidney's birth.

Failure of Consultant to be present at handover

40. As per the policy from the Women's Hospital '*Escalation to Senior Medical Staff Rostered to the Unit*', it notes '*the rostered Birth Centre obstetrician is required to attend the relevant handover in the birth centre at 0800 and 1700. In circumstances where the consultant is unable to be present at the handover due to conflicting clinical demands, a formal telephone briefing will be provided by the registrar*'.
41. The statement from Dr Gilchrist notes that she was only aware of Baby Sidney's mother's case at the time of the Code Green and foetal bradycardia at 7:49 pm, as '*prior to this, no concerns had been escalated to me and I was not actively involved in assessing her labour*'.²⁷
42. Dr Gilchrist did not make note if she was present at the handover but it would be inferred that she was not, given Baby Sidney's mother was present in the Birth Centre at the time of handover (5:00pm on 27 November 2020) and presumably her clinical picture and progress was discussed. It is not apparent why Dr Gilchrist was not present at handover, nor was given a telephone briefing, but I find that this was in clear breach of the RWH Policy.

Failure to escalate to Consultant

43. As I have noted above, Dr Aldridge found multiple instances throughout her CTG analysis where the findings should have been escalated to the senior consultant.
44. The available evidence indicates that the case was not escalated to the consultant or any senior obstetrician at any point throughout the day. Dr Gilchrist was only notified at time of the Code Green, when she was asked to review the CTG at 7:39 pm on 27 November 2020.
45. RWH policy notes that '*Escalation to Senior Medical Staff Rostered to the Birth Centre notes that 'The rostered Birth Centre consultant obstetrician must be advised of the following: If a CTG is abnormal or of concern*'.
46. As per the statement from Dr Woodward, uterine tachysystole (an abnormal CTG finding) is noted on the CTG from 9:30am. Foetal bradycardia (another abnormal CTG finding) is noted from 9:55am. After this time, the CTG was abnormal off and on for the rest of the day. None

²⁷ Statement Dr Tracey Gilchrist, Page 1

of these abnormalities were escalated to a senior consultant by either the midwifery staff or medical staff, in clear breach of the RWH policy.

47. This lack of escalation is acknowledged in the RCA conducted by RWH. The RCA report indicates that the work being done in the cultural safety and escalation space within the hospital, to attempt to reduce barriers of junior staff escalating to their seniors.

Timing, method of delivery and management of impacted foetal head

48. The Royal Women's Hospital has acknowledged that *'baby Sidney would likely have benefited from immediate caesarean delivery shortly after the bradycardia'*. Dr Aldridge agrees that earlier delivery via caesarean section was indicated following arrival in theatre following the bradycardia. However, she did not consider that there were indications for delivery to have occurred any earlier than this – she noted that *'the complicating feature is that, the CTG never remained non reassuring for long enough to raise suspicion and for delivery to be escalated. It is interesting to me that a CTG that has so many poor features then normalises again for a period ... it is understandable that delivery did not occur earlier'*.
49. Dr Aldridge further commented on the use of a foetal pillow assisting with foetal head impaction. She noted it has been very helpful in her experience and considered that it would have been reasonable for clinicians to consider its use in Baby Sidney's case. The foetal pillow is included in the *'Impacted Foetal Head at Caesarean Section'* policy at the RWH as an option for head disimpaction. This is one of several techniques employed by obstetricians. In this case, this was requested by the registrar but not used by the consultant.
50. The RWH, as part of the review, are going to *'provide training for medical staff in a simulation lab environment to confirm they have the skills required to safely deliver a baby when the foetal head is impacted in the birth canal'*. They also plan to *'provide training for birth centre midwifery and operating centre staff in a simulation environment to confirm they have the required knowledge to support the safe delivery of a baby when the foetal head is impacted in the birth canal'*.
51. In managing a caesarean section with the foetal head deep in the pelvis, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (**RANZCOG**) recommends the *'steady elevation of the foetal head vaginally by an experienced assistant.'* The vaginal elevation in this case was performed by a midwife. The Consultative Council on Obstetric and Paediatric Mortality and Morbidity (**CCOPMM**) recommends that disimpaction of the foetal

head at caesarean section should be performed by the most senior obstetrician present. In this case, the obstetrician performed the vaginal examination in theatre and performed the caesarean section.

Were there any opportunities for prevention?

52. Dr Aldridge stated that *'it is hard to know if there were truly missed opportunities or a failure to see the bigger picture'*. She listed the significant features of the birth, which she acknowledged she had done by 'stepping back' (and therefore I assume, having some degree of hindsight):
- i. A small for dates foetus with maternal concern for foetal movements,
 - ii. A mother who has already raised the question of a planned CS,
 - iii. A foetus that repeatedly shows it cannot tolerate multiple contractions,
 - iv. That the mother mobilising to the toilet on two occasions, causes episodes of non reassuring CTG, potentially cord compression adding to the compromise of repeated contractions,
 - v. A foetus that gets to theatre for an urgent delivery following a bradycardia, who continues to have a non reassuring CTG, and is then only delivered an hour and 8 minutes later.
 - vi. Has an instrument applied to its head and a difficult breech extraction
53. Having listed those significant features, Dr Aldridge concluded *'the outcome of this birth was not unexpected when you list all the significant features in this way'*.
54. Given the adverse nature of the above opinions, I provided Dr Aldridge's report to Baby Sidney's parents and to the legal representatives for the RWH on 30 March 2023 to provide the latter with an opportunity to make any response to the report, including any concessions, with the view of assisting me to determine if any Inquest would be required.
55. On 22 May 2023, I was provided with a response by Dr Victoria Carson, a specialist obstetrician employed by the RWH. In summary, Dr Carson commented on the following in her response:

- i. Whilst there was no specific recommendation made in the RCA report regarding uterine hyperstimulation, Dr Carson confirms that there has been new emphasis placed on diagnosis of hyperstimulation in RWH's mandatory CTG training including credentialling of medical staff with the RANZCOG's²⁸ Foetal Surveillance Education Program. There is also ongoing training provided to midwives covering CTG interpretation and responses;
- ii. Dr Carson reiterated RWH's acknowledgment of the missed opportunities to escalate to a consultant. She noted there has been an increase in consultant coverage since the fatal incident for handover reviews in person at 0800, 1700 and 2130 hours, where all patients are discussed in depth. There has also been the establishment of a Clinical Practice Improvement Unit which has been tasked with implementing recommendations of the Maternity Services Patient Safety Review at RWH;
- iii. Dr Carson clarified that uterine activity is checked by palpitation for strength and duration. This was recorded in Birth Suite flow sheet records which were made available to all staff caring for Baby Sidney's mother;
- iv. There are clinical workshops being held to reinforce the potential benefits of the use of a foetal pillow during deliveries; and
- v. Dr Carson further clarified several observations in Dr Aldridge's report which included clarification that there was a neonatal team member present during Baby Sidney's birth; glyceryl trinitrate nitromin (GTN) and salbutamol were administered during surgery and the CTG trace was reviewed prior to the decision making regarding the mode of delivery.

DISCUSSION

56. The circumstances of Baby Sidney's birth and death highlight the challenges faced by medical professionals in the presentation of foetal head disimpaction during deliveries. I find that the medical care provided to Baby Sidney's mother on the day of her delivery fell short of acceptable standards, through inadequate response to hyperstimulation, a failure to cease syntocinon and a failure to escalate to senior staff.

²⁸ The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG).

57. I note that this was accepted by Royal Women's Hospital following their own internal review, and they acknowledged an earlier caesarean section was likely indicated. I confirm that they have met with the family and apologised, which should be commended in these difficult circumstances.
58. I find that the RWH conducted a comprehensive review and agree with both the CPU and Dr Alridge on the findings of the RCA report. I note that significant changes have been made at the RWH, both because of and since Baby Sidney's death. This includes the ability for medical staff to remotely review CTGs, and the update of relevant policies, such as uterine hyperstimulation, induction of labour, and oxytocin administration.
59. I also find that the RWH has undertaken developments in training to medical staff to improve pathways to escalation to senior medical staff, by increasing in person handovers and reviews by consultants. I am concerned that this investigation raises similar concerns to previous coronial investigations including the *Death of Finn Moser (COR 2017 0191)*, in which Coroner McGregor raised concerns about failure to escalate to senior medical staff and the difficulties of disimpaction of the foetal head. In his finding, Coroner McGregor commented '*Finn's death highlights the importance of diligent monitoring of labour progress and early involvement of experienced consultant obstetricians*'. I echo those remarks in the context of Baby Sidney's case.
60. I acknowledge the concerns of Baby Sidney's parents that individual clinicians did not provide responses to the Court's requests for statements. I considered that the statements provided by Dr Gilchrist as the Obstetrics and Gynaecology Consultant involved in Baby Sidney's delivery and Dr Woodward as the Acting Director of Maternity Services (Medical), coupled with the medical record and materials provided by RWH were sufficient for me to establish the facts and fulfil my statutory duties under the Act. It is not within my role to lay or apportion blame to individual clinicians involved in care, but rather to examine the wider factual context with the aim of identifying opportunities for prevention.

RECOMMENDATIONS

Pursuant to section 72(2) of the Act, I make the following recommendations:

1. In the interests of promoting public health and safety and with the aim of preventing like deaths, I recommend that the **Royal Women's Hospital** implement ongoing training to medical staff to appropriately identify risks and address difficulties from disimpaction of the foetal head during deliveries.

FINDINGS AND CONCLUSION

1. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:
 - a) the identity of the deceased was Baby Sidney, born 27 November 2020;
 - b) the death occurred on 3 December 2020 at The Royal Women's Hospital, 20 Flemington Road, Parkville, Victoria, 3052;
 - c) I accept and adopt the medical cause of death ascribed by Dr Sarah Parsons and I find that Baby Sidney died from a from a head injury sustained in a difficult delivery including head impaction and caesarean section;
2. AND I find that the treatment that Baby Sidney's mother received whilst delivering Baby Sidney at the Royal Women's Hospital fell short of accepted standards and the decision making around the delivery of Baby Sidney raises serious concerns about missed opportunities to escalate to senior medical staff where appropriate.

Pursuant to section 73(1) of the Act, I direct that a copy of this finding is published on the internet in accordance with the rules.

I convey my sincere condolences to Baby Sidney's family for their loss.

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

Baby Sidney's parents, Senior Next of Kin

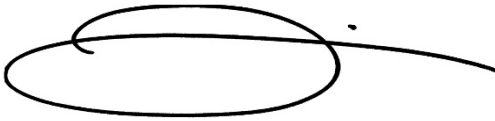
Royal Women's Hospital

Australian Health Practitioner Regulation Agency

Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Senior Constable Alec MacLachlan, Coronial Investigator

Signature:



AUDREY JAMIESON

CORONER

Date: 14 July 2025



NOTE: Under section 83 of the ***Coroners Act 2008*** ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.
