PURSUANT TO S 160(1)(b) ACCIDENT COMPENSATION ACT 2001 THERE IS A SUPPRESSION ORDER FORBIDDING PUBLICATION OF THE APPELLANT'S NAME AND ANY DETAILS THAT MIGHT IDENTIFY THE APPELLANT

IN THE DISTRICT COURT AT WELLINGTON

I TE KŌTI-Ā-ROHE KI TE WHANGANUI-A-TARA

[2021] NZACC 101 ACR 271/19

UNDER THE ACCIDENT COMPENSATION ACT

2001

IN THE MATTER OF AN APPEAL UNDER SECTION 149 OF

THE ACT

BETWEEN OM

Appellant

AND ACCIDENT COMPENSATION

CORPORATION

Respondent

Hearing: 17 May 2021

Heard at: Wellington/Te Whanganui-A-Tara

Appearances: Father on behalf of the appellant

Mr S Bisley for the respondent2021

Judgment: 12 July 2021

RESERVED JUDGMENT OF JUDGE C J McGUIRE [Causation /Treatment Injury s 32 Accident Compensation Act 2001]

[1] In this case the appellant, who is aged 13, is represented by his father who the Court appoints as litigation guardian pursuant to r 4.35 of the District Court Rules 2014.

[2] This is an appeal against an unsuccessful review of the respondent, Accident Compensation Corporation's ("ACC") decision of 24 April 2018 to decline cover for the appellant's treatment injury in the form of left-sided hemiparesis.

[3] The appellant's position is that the treatment injury was caused by a delay in delivery and was exacerbated by a "disimpaction force" on his head during an emergency caesarean.

Background

- [4] In 2007 the appellant's mother became pregnant for the first time. Her lead maternity carer was midwife Debra Carr-Porter. Ms Carr-Porter's midwife notes are not available to the Court.
- [5] On 15 June 2018 an ACC employee had a telephone call with Ms Carr-Porter to ask if she had midwife notes in relation to this pregnancy. Ms Carr-Porter's response was:
 - a) She had not been a midwife for a long time and had not been in New Zealand since 2008.
 - b) She was only required to keep her notes for a period of 10 years and accordingly would have destroyed them.
 - c) She could not provide a report without her notes and she could not provide any details about the birth.
- [6] At 8 am on 9 March 2008 the appellant's mother's waters broke.
- [7] By 5 pm that evening she was 3 centimetres dilated. The on-call registrar noted that the appellant was in an occipito-posterior position.
- [8] At 7.30 pm the appellant's mother (the mother) was between 5 and 6 centimetres dilated, and the appellant's head had come down further into the pelvis. Some caput (that is, a protuberance of the head) and molding (that is, swelling of the foetal scalp as a result of overlap of the foetal skull bones caused by the head being forced down the birth canal) was observed. During labour, the appellant's foetal heart rate was monitored by CTG. From 10.10 am until 8.30 pm the medical notes described the appellant's heart rate as "reassuring" and "normal".

- [9] At 7.30 pm a syntocinon infusion began. Syntocinon is a medication given to induce or progress labour.
- [10] By 9.10 pm the mother was fully dilated. The appellant's head was assessed as being between stations 0 and +1 (meaning his head had descended between 0 cm and 1 cm below the ischial spines of the mother's pelvis with significant caput of 3+).
- [11] At 9.20 pm the mother began to push. This coincided with two decelerations of the appellant's heart rate to 80 beats per minute, lasting 90 to 120 seconds. The syntocinon was switched off.
- [12] At 9.33 pm the registrar was called but was unavailable as she was in theatre. The specialist on call was also called.
- [13] At 9.35 pm the mother was moved to theatre 3. At 9.40 pm the registrar arrived.
- [14] The appellant's heart rate experienced two further decelerations. Following the second deceleration, the appellant's heart rate increased to 180 bpm and then fell gradually to 160 bpm. No further decelerations occurred.
- [15] On examination the registrar found that the appellant's head was at station 0 and in the occiput posterior position (his face was facing towards the mother's front) with significant molding. She decided that an emergency caesarean was required.
- [16] There was some delay in transferring the mother to an operating theatre as none of the surgical rooms were available in the maternity ward.
- [17] The mother was taken to the operating theatre. At 10 pm the appellant's foetal heart rate was 150 bpm. At 10.03pm it had fallen to 140 bpm. The operation commenced at 10.05 pm and the appellant was born at 10.10 pm.
- [18] The appellant's APGAR score was 6 one minute after birth and 9 after five minutes. No resuscitation was required. The umbilical cord was sampled for gas

analysis. The results of this testing were within the expected range for a cord vein. The appellant's weight at birth was 2,740 grams.

- [19] Following the caesarean the appellant went to the ward with his mother where he had regular blood sugar tests, which were all normal.
- [20] The mother's milk did not come in immediately and the appellant had difficulty latching to the breast. He was given expressed breast milk.
- [21] On 11 March 2008 the appellant was reviewed by the paediatric service at 9.50 am. He had not been fed since 3am that day and was described as being "scrawny and dry". Over the next two days he had top up feeds with formula and at 1.35 pm on 12 March 2008 he was described by the paediatric registrar as being pink and well hydrated. He was discharged from paediatric review.
- [22] On 24 May 2012 Dr Richardson sought referral for a neurodevelopmental therapist. He noted that the appellant had made slow progress in all areas in relation to his gross motor milestones and was clearly right-handed from an early stage. Dr Richardson noted that at an examination the previous day, the appellant had exhibited all the signs of left hemiparesis.
- [23] At 6 years of age, on 17 June 2014, the appellant had an MRI which showed an "unremarkable study" with "no structural abnormality or definite evidence of white matter volume loss". The white matter volume, signal and myelination was appropriate.
- [24] On 10 July 2014 Dr Richardson reported on the MRI to the appellant's GP noting that:

It doesn't answer the reason he is like he is but he did have a bad start to his life and it is hard to get past that.

. . .

The other investigations done ... have come back showing no raised levels of metabolic components for example, and as we suspected there is no other metabolic cause being shown for his difficulties. ... while he is keeping up in some respects at school we will be able to tell over the next couple of years how

well he is doing and certainly would think about some overtures to ACC etc. I think about 8 would be a good time where we will see if there is ongoing divergence between him and his peers at school.

- [25] On 13 February 2017 the appellant was described by paediatrician Dr John Sanders as having "very little" difficulty academically, socially or physically.
- [26] On 26 April 2017 Dr Richardson wrote to the appellant's GP, Dr William Chang, and recommended making an ACC claim despite his reservations as to whether the appellant would meet the criteria for cover, saying that:

We had a look through the medical records of his mum and him related to his birth in 2008. The notes were sketchy and on face value probably would not have met the criteria for support through ACC but I have had a long chat to his parents and his dad recollects the day in question very well and I think we will go ahead and put that in now that we have the further information. It is possible that ACC will not be supportive of this but they may be supportive or partially supportive which will be the least that could be done.

- [27] On 26 September 2017 Dr Chang made a claim for ACC cover for "birth trauma" and "left hemiparesis secondary to difficult birth".
- [28] In November and December 2017 ACC sought a report from Dr Richardson as to what the appellant's physical injury was and whether that physical injury was caused by treatment. Dr Richardson did not respond to ACC's request.
- [29] On 24 April 2019 ACC declined the claim on the basis that it did not meet the criteria for a treatment injury. The decision was upheld at review on 4 October 2019.
- [30] Dr Peter Jankowitz, paediatrician, gave an opinion dated 3 April 2018. He commented that:
 - a) Hemiparesis is a muscular weakness that is restricted to one side of the body. Hemiparesis is within the umbrella term of cerebral palsy.
 - b) Prenatal factors account for between 70% and 80% of cerebral palsies. Most cerebral palsies are multifactorial. Birth asphyxia accounts for less than 10% of the cases of cerebral palsy.

- c) To diagnose cerebral palsy as being caused by birth asphyxia, there must be clear evidence that the baby:
 - i. Was acidotic at birth;
 - ii. Suffered a moderate to severe neonatal encephalopathy; and
 - iii. Suffers from restriction to spastic quadriplegia; or dyskinetic or mixed types of cerebral palsy.
- d) 89% of children with cerebral palsy have MRI abnormalities.
- e) If [the appellant's] hemiparesis was caused by a physical injury there would most likely be damage to the cerebral cortex and/or corticospinal tracts in the right hemisphere of the brain. Those physical injuries were not shown on relevant scans.
- f) Nor was there any evidence that [the appellant] had suffered a hypoxic encephalopathy. Although Dr Jankowitz acknowledged that the appellant had some initial feeding difficulties, he observed that:
 - i. There were no other neonatal problems;
 - [The appellant's] 5-minute Appar score was normal and he was not acidotic;
 - ii. Postnatally, he did not exhibit features of encephalopathy in the immediate neonatal period (such as poor feeding, irritability, hypotonia and seizures). Ordinarily, babies exhibiting these features require admission to an intensive care unit.
- [31] Dr Jankowitz concluded that the cause of the appellant's hemiparesis was likely multifactorial, but unknown. There was no evidence that it had been caused by treatment or, more generally, by the circumstances of his birth.

- [32] Professor Rosalie Grivell, an Australian obstetrician, provided a report in February 2019. She said that:
 - a) [The appellant] had suffered a "global neurological injury" without obvious radiological signs.
 - b) A "number of potential insults", which occurred "mostly in the antenatal and intrapartum period" could "have potentially contributed to the physical and other signs/symptoms that [the appellant] presents with now".
 - c) [The appellant's] injury was not caused by a single factor, but rather a "number of compounding and confounding factors are likely to have caused the injury". These compounding factors resulted in a global injury to [the appellant's] neurological system, which manifested through:
 - i. developmental concerns in [the appellant's] eyes, ears and speech;
 - ii. left hemiparesis; and
 - iii. mild dysarthria.

The key factors she identified are:

- i. a likely intrauterine growth restriction;
- ii. foetal distress, evidenced by the requirement for urgent caesarean section at full dilation; and
- iii. a traumatic birth with disimpaction required.
- d) She said it was "likely" [the appellant] had IUGR (intrauterine growth restriction) because:
 - i. [The appellant] "may have been small" for his gestational age;
 - ii. His siblings had higher birth weights; and
 - iii. [The appellant] had a low blood sugar level soon after birth, was feeding "poorly" and had "significant weight loss in his first days".

- e) IUGR makes foetal distress more likely. IUGR and foetal distress, together, reduce the baby's ability to cope with a traumatic labour. She considered that the CTG readings being described as "pathologic" and the fact that the caesarean section was described as "very urgent", happened at full dilation, and required disimpaction to be evidence of foetal distress.
- f) [The appellant] had a traumatic birth. Although the "objective evidence" (in relation to whether or not the birth was traumatic) was of "normal APGARS and no HIE (hypoxic ischaemic encephalopathy), these signs are extremely crude and only indicate when severe damage or distress has occurred". The preceding events of foetal distress and a fully dilated caesarean section with disimpaction are in keeping with a traumatic birth.
- g) The labour ward was busy and based on the accounts of [the appellant's] parents, there was "potentially" delays in transfer to a "labour" room and then to the operating theatre when it became apparent that birth was urgently indicated. Had a caesarean section been conducted earlier, it is "likely" that [the appellant] would have been born with more "reserve" and the caesarean section would have been less traumatic.
- h) The absence of detailed pregnancy notes meant that "it is hard to assume that the care was according to protocols/usual standards of the time and hence hard to rule out any potential influencing factors". In particular, due to the low birth weight/growth restriction, Professor Grivell said she would have wanted to see antenatal records documenting the fundal height to assess the measurements for adequate foetal growth.
- [33] Dr Jenny Westgate, a New Zealand based obstetrician, gave a report dated 26 July 2019 in which she said:
 - a) There was no evidence of [the appellant] having suffered an injury:
 - His APGAR scores were normal at birth and he did not require any resuscitation. His cord gas readings were normal and despite some early difficulty latching there was no recorded hypoglycaemia.

- ii. At age 6 [the appellant] had an MRI which showed no structural abnormalities and no evidence of white matter loss. His deep brain structure appeared to be normal.
- iii. He did not fulfil the criteria for a diagnosis of encephalopathy. He had no respiratory problems, jaundice, seizure activity or evidence of renal impairment.
- b) [The appellant] did not have evidence of IUGR:
 - He was in the 25th centile for babies born at 37 weeks of gestation.
 For a baby to be diagnosed as having IUGR, they must be in less than the 10th centile.
 - ii. Comparisons with subsequent siblings is not a diagnostic tool for IUGR. In the event, subsequent children tend to be slightly heavier.
 - iii. Dr Westgate calculated birth weight centiles for the mother's other two children and found that [the appellant's] sister was in the 38th centile, while his brother was on the 25th centile. This was in line with [the appellant's] birth weight.
- c) As to foetal distress any "potential" delays in transfer to delivery (as suggested by Dr Grivell), the "notes show that transfer to the delivery room occurred very promptly after the first two pushes". The time that elapsed between the decision that a caesarean section was necessary and delivery was less than 25 minutes, which is significantly less than the 30 minutes window expected of a category 1 (the most urgent category) and delivery.

d) There was no evidence of a traumatic delivery. "a five-minute incision to delivery time for a second stage CS where a push up is required to assist delivery of the head indicates a straightforward procedure". She also noted that there was:

> No mention of bruising on his head, neck or face. His subsequent uneventful neonatal progress also does not support the suggestion that he had a traumatic delivery.

The Appellant's Submissions

[34] The father makes these submissions:

- a) [The appellant] suffered physical injury caused by maternity treatment administered during his birth and the injury was exacerbated by a delay in transferring him to the main operating theatre at Wellington Hospital.
- b) The physical injury sustained during treatment was a "global neurological injury".
- c) The injury was caused by a delay in delivery; furthered by disimpaction force on [the appellant's] head which was deeply in the maternal pelvis during emergency caesarean.
- d) The injury cannot be excluded from cover as a necessary part or ordinarily consequence of the treatment, or as wholly or substantially due to an underlying condition.
- e) The clinical records obtained from Wellington Hospital would support a diagnosis of hypoxic ischaemic encephalopathy.
- f) He disagrees with Dr Jankowitz's statement that [the appellant] did not exhibit any features of hypoxic ischaemic encephalopathy in the immediate postnatal period. He submits that the clinical records as well as the evidence of his parents show that [the appellant] did in fact have poor feeding and lethargy in the days following his birth and that his parents were told that if he did not improve he would be admitted to the neonatal unit.

- g) The appellant is disadvantaged by the lack of midwife's notes taken during the pregnancy and is critical that Dr Westgate has not acknowledged this clear gap in the evidence.
- h) The review decision ignores research and specialist medical opinion supporting injury causation from the disimpaction force of [the appellant's] head which was deeply in the maternal pelvis during emergency caesarean and this is supported by Associate Professor Grivell's report where she states:

The preceding events of foetal distress, fully dilated caesarean section with disimpaction are all in keeping with a traumatic birth.

i) The Royal Australian and New Zealand College of Obstetricians and Gynaecologists publication on the delivery of the foetus at caesarean section indicating the risk of injury in a delivery mirrors the circumstances of [the appellant's] delivery where it says:

There is a high risk of injury to mother or baby during a caesarean birth. The risks are highest when the baby's head is deep in the mother's birth canal at the time of caesarean section.

j) The same reference notes:

Where delivery needs to be expedited with the presenting part deep in the pelvis there are added risks of caesarean section including increased risks of foetal injury.

- [35] The father says the key argument that this appeal makes is the narrow interpretation made by the ACC reviewer overlooking complex and subtle mechanisms of injury inherent in childbirth.
- [36] The father points out that when the claim was made the midwife's notes should have been available. The midwife has said she "would have destroyed" the notes after 10 years. In this case the claim was lodged on 6 September 2017 some nine and a half years after the appellant's birth.
- [37] The father also points out that the specialist Dr Richardson, advised him and his wife not to put in a claim until the appellant was about 8 years old. If it had been done earlier the midwife's notes may have been available.

[38] The father advises that physiotherapy is ongoing for the appellant. He has been to hospital for orthotic implants. He did not speak until he was four. He missed socialisation. He suffers a lot of trip injuries. He cannot do anything requiring endurance and strength and he had swallowing problems when he was young.

The Respondent's Submissions

[39] Mr Bisley submits that the key facts in this case are that on 9 March 2008 following an uneventful pregnancy, the appellant was born. During labour he experienced caput and molding. He began to experience decelerations of his heartbeat followed by tachycardia and a decision was made to delivery via emergency caesarean. In the course of the delivery, disimpaction (i.e. pressure upon his head) was required.

[40] The appellant had an APGAR of 6 and 9 at one and five minutes, respectively within normal parameters and his blood pH was normal. Breathing was established at one minute and no resuscitation was required. He weighed 2,740 grams. He was not admitted to the neonatal intensive care unit and was discharged four days later.

[41] He was diagnosed with hemiparesis at four years and two months. This was later described as "very mild".

[42] Mr Bisley notes that to qualify for cover it must be shown that the appellant suffered an identifiable physical injury that was caused by treatment.

[43] ACC accepts that the appellant has left hemiparesis. However as per *Accident Compensation Corporation v Studman* the appellant must identify a physical injury that caused this hemiparesis.¹

[44] He refers to Dr Jankowitz's evidence that there is no evidence of the type of underlying injury that would account for the appellant's hemiparesis: namely, damage to the cerebral cortex and/or corticospinal tracts in the right hemisphere of his brain.

_

¹ Accident Compensation Corporation v Studman [2013] NZHC 2598.

- [45] He submits that even if those underlying injuries were substantiated, Dr Jankowitz explains that there is no basis on which to conclude they were caused by birth events.
- [46] Referring to Dr Grivell's description of the appellant's alleged injury as "a global neurological injury without obvious radiological signs", Mr Bisley makes these points:
 - a) Dr Grivell's suggestion is that because his siblings had a higher birth weight the appellant's birth weight was small for his gestational age. He submits this observation is speculative.
 - b) Mr Bisley notes that the appellant's birth weight was in the 28.6th centile for a child born at 37 weeks.
 - c) He notes that Dr Westgate differs from Dr Grivell in saying that the appellant's birth weight was in keeping with the birth rate range of his younger siblings.
- [47] Mr Bisley submits that Dr Westgate disagrees with Dr Grivell that the need to deliver the appellant's head with assistance of a push up from the vagina is evidence of a traumatic delivery. She notes that the entire procedure from the incision being made to delivery, took five minutes.
- [48] Mr Bisley says there were no observable signs of brain injury postnatally.
- [49] Mr Bisley is generally critical of Associate Professor Grivell's report in that he says it appears she has not gone through hospital records and therefore some of her statements are speculative.
- [50] He further submits that there is no evidence from Associate Professor Grivell of a departure from a standard of medical care.

[51] Mr Bisley concludes by saying that on the totality of the evidence we are not in a position like *Accident Compensation Corporation v Ambros* where a robust inference of causation can be made.²

Decision

- [52] At issue here is whether or not the appellant suffered a treatment injury when he was born leading to his diagnosis of hemiparesis when he was four years old. During the time the mother was expecting her child she was under the care of midwife Debra Carr-Porter.
- [53] Regrettably we must assume that the care notes she took during the pregnancy no longer exist. It appears also that she has no independent recollection of what occurred during the pregnancy.
- [54] As the mother was advised to delay lodging a claim, the fact that the midwife's notes no longer exist is not to be counted against the appellant's case.
- [55] The mother went into labour with her membranes rupturing at 8 am on 9 March 2008. By 5 pm the same day she was 3 centimetres dilated.
- [56] At 6.30 pm an epidural was inserted.
- [57] It would appear that a vaginal examination was performed at 9.10 pm.
- [58] At 9.20 pm the notes record that the mother pushed with the foetal heart rate decreasing to 86 bpm with a slow recovery to the baseline of 120-130bpm up to 156bpm.
- [59] At 9.35 pm the mother was moved to theatre three and again the foetal heart rate decreased to 85 bpm with a slow recovery.
- [60] At 9.40 pm the registrar has recorded as being in the room and various preparations for a caesarean section were commenced.

² Accident Compensation Corporationv Ambros [2007] NZCA 304, [2008] 1 NZLR 340.

- [61] The registrar's note at 9.45 pm was that cardiotocography (the monitoring of the foetal heartbeat) showed decelerations to 80 bpm "lasting seconds with recovery to tachycardia". The registrar recorded under the heading 'impression' "pathologic trace needs urgent delivery lscs".
- [62] The registrar also notes discussing the case with her specialist obstetrician Dr Touhy.
- [63] The next registrar's note, which is not timed, records that the emergency caesarean section has been undertaken with the mother losing 900 millilitres of blood and that haemostasis was required. It is noted also that the delivery of the baby included "pushing from below".
- [64] In the document labelled "operation record" it records that Dr Barlow commenced the caesarean section at 10.08 pm.
- [65] A second document entitled caesarean section record, notes the procedure was performed under general anaesthetic and a live infant male was born at 10.10 pm by caesarean section. APGARs were 6 at one minute and 9 at five minutes. No resuscitation or suctioning was required. The birth was attended by Dr Patel, consultant. It notes that the caesarean section was "for arrested progress and spikes and decels (decelerations) to 80 bpm during contractions/pushing and accelerating to 180 bpm post contraction.
- [66] The caesarean section record notes that the surgeon was J Marlow, assisted by Z Smith.
- [67] It notes that a specialist obstetrician was not present. It notes the surgery started at 10.08 pm and was completed by 10.15 pm.
- [68] The record notes the prioritisation category was "emergency very urgent (decision to delivery aim less than 30 minutes)".
- [69] Under the heading 'primary indication', "malpresentation" is circled. Under the heading 'foetal distress', "cardiotocography pathologic" is circled.

- [70] Under the heading 'secondary indication', "malpresentation is circled". Under the next column of 'secondary indication' once again "cardiotocography pathologic" is circled.
- [71] Under the heading 'foetal presentation', "ROP" (right occiput posterior position) is circled.
- [72] Under the heading 'estimated blood loss', 900 millilitres is recorded. Additional haemostatic sutures are also noted.
- [73] A blood sugar reading at 1 am on 10 March for the appellant was recorded at 3.5 mmol/l. His weight in the delivery suite was recorded at 2,740 grams. At 4.30 am the appellant's blood sugar was 3.4 mmol/l. At 1.45 am the notes record "full assist to latch baby to breast. Good latch achieved".
- [74] At 5 am the notes record the hospital staff assessing the appellant with latching to the breast, but the appellant was "not interested expressed 2 mls (expressed breast milk) and gave baby via a syringe".
- [75] At 9.30 am the notes record "for full assistance to breast feed" and at 10.30 am "attempt breast feed. Latching on/off" again expressed breast milk via syringe was provided.
- [76] At 1.45 am the notes record full assist to latch baby to breast. Good latch achieved. At midday on 10 March 2008 the mother was admitted to the postnatal ward with her baby. She is described as "comfortable on admission". At 4.40 pm she is seen by her midwife Debra Carr-Porter. There is no further note relating to that visit.
- [77] At 11 pm on 10 March 2008 there is again a note "assisted to latch baby to breast. Great colostrum supply. Pain well controlled. Mobilising well".
- [78] At 5.30 am on 11 March 2008 is a note: "assisted in breast feeding and expressing".

- [79] At 10 am is the note: "full assist with breast feeding managing to latch L side. Unable to latch R side".
- [80] At 4.30 pm there was an attempt for the baby to latch to the left breast. Milk was expressed into a syringe and given to the baby.
- [81] At 8.30 pm it is recorded there is a good latch to the left breast.
- [82] At 2 am on 12 March there is again a note that the baby was not latching. Expressed breast milk and formula was given.
- [83] At 8 am on 12 March there is the note: "full assist with breast feeding [the mother] slowly gaining confidence with breast feeding and baby cares. Partner very supportive and helps with syringe feeding baby formula and expressed breast milk".
- [84] At 6.35 pm on 12 March there is a record that the mother is visited by her midwife Debra Carr-Porter but no other note.
- [85] At 9 pm on 12 March there is a note: "baby breast fed for five minutes expressed via pump -10 mils".
- [86] On 13 March 2008 there is this record: "very tired partner concerned with how tired [the mother] is. BP 50/92 will recheck once pain relief has a chance to work".
- [87] At 10.30 am the note includes "b/f (breast feeding) going ok".
- [88] At 2.20 pm on 13 March there is this note "discharged home Maureen Janell is covering for Deb Carr-Porter requested staff give [the mother] formula in case she needs it overnight before Deb is able to Syringes given going to hire an electric breast pump".

[89] Another set of clinical notes following her admission to the postnatal ward include these entries:

a) 10 March 2008 at 2 pm: "assist to latch, latch on L side and suckled well for short time. Good latch unable to latch R side".

[90] There is an entry at 11pm on 10 March: "has fed twice this duty. Bright and alert. Pink and warm. No output as yet".

[91] At 3am on 11 March there is a note: "breast feed attempted not sleeping. Given 5 mils. Expressed breast mild via syringe. Skin pink and warm to touch".

[92] At 9.50 am on 11 March there is a note from the paediatric registrar who notes:

Birth at 37 weeks by emergency caesarean for foetal distress. ... difficulties latching. Has not fed since 3am - 5 mils expressed breast milk. Scrawny looking.

[93] Then under the heading o/e (on examination):

D/c check completed -N.

Scrawny looking baby.

Distressed, dry skin.

HS 1 + 2 + 0 cap refill less than 20.

Chest clear.

Impression: dry small baby.

Plan: feed three hourly on breast -

Weight pleased today.

If not latching on breast or if significant weight loss (more than 8%) needs top ups.

Ebm (expressed breast milk) – formula 25 mils three hourly.

Not for DC (discharge) until feeding well and gaining weight.

Watch for jaundice.

[94] At 9.30 am on 11 March there is this written in retrospect:

Temp 37, woken for feeds. Full assist to latch. Managed to latch L side and suckled well. Hpm (small amount). Attempted R side unable to latch. Expresses and given expressed breast milk 1 mil. On 3 hourly feed. Will need formula top up if not breast feed as per paediatrician's instructions. Weight 2480 loss 260 grams. Almost 9% birth weight.

1:05pm woken for feeds latch on left side and breast feed well almost 12-15 minutes. Hpm small amount of urine.

11 March 1.30pm. breast feed almost 15-20 minutes L side. Given 1 mil colostrum and top up with 18 mils formula via syringe by dad.

4.30pm attempted to latch L breast. Latched well but did not suck. Given 1.5 mils express breast milk and attempt to latch again but not interested. Top up given 12 mils and offered more but would not take. temperature 36.9, nappy changed. Small amount urine.

10.30pm assisted to latch on L breast. Fed 15-20 minutes. Good latch observed. Audible swallows heard. Skin to skin for 20 minutes before attempting latch. Nappy changed ... given 2 mils expressed breast milk and 11 mils formula. Top up taken.

[95] At 1.30 am on 12 March there is this:

Assistance with breast feeding, baby wasn't latching, helped to express colostrum. 2 mils colostrum given by syringe. 2am top up with 10 mils formula.

5.30am few suckles, not breast feeding nor latching on breast. Given 12.8 mils of expressed breast milk by formula. Skin warm to touch. 6am back to cot, sleeping.

At 9am woken for feeds – nappy change – hpm hpu t (temperature) 36.7. assist with breast feeding latch left side. Breast fed well then given formula 15 mils by syringe by dad. Next breast due 1pm.

[96] At 1.35 pm there was a paediatric review:

Review of baby for difficulty feeding and not latching requiring top ups 15 mils. Now beginning to latch on. Mum's milk supply coming in expressed 20 mils this am. Looking better. Pink and well hydrated. Active and alert. Heart rate 140 RR 44.

Weight 2440 down 40 grams. Now lost 11% birth weight.

Plan – not for discharge. Continue to encourage bf (breast feeding). Top up 20 to 25 mils post breast feed as tolerated – weight tomorrow ... review in am.

[97] At 4.30 pm there is the note:

... breast fed for 15 minutes. Given expressed breast milk 5 mils and formula 20 mils.

At 8pm breast feed attempt for 5 mils. Given expressed breast milk 9 mils – formula 11 mils ... next feed at 11pm.

[98] At 11 pm there is this note:

Baby woken for a feed. Breast fed given expressed breast milk 11 mils/formula 15 mils.

[99] At 12.30 am on 13 March there is this:

Baby awake displaying lots of feeding cues/crying. Suggested to put baby to chest. [The mother] not keen to as baby just fed. Discussed feeding cues. Asked if she wanted assistance. Short attempt to attach baby for feed but [the mother] stated she would rather try to settle baby and wait until 2am for next feed. Asked to call if she needs my assistance.

2am baby awake for feed again. Meconium passed. BSL performed 4.3 mmols. Put to breast. Eventually attached and suckled well. independently attached by the mother.

2.50am 25 minute breast feed. Suckled well and able to swallow. Took 13 mils colostrum. Unable to tolerate further. To improve top up next feed.

[100] At 10.45 am the Guthrie (heel prick) test was performed. At 11.05 am the baby was weighed – 2,460 grams up 20 grams from yesterday. The note adds "baby weighed after feed".

[101] At 12.20 pm on 13 March the appellant is seen by the senior house officer paediatrics, Dr Wood. After briefly recording the history Dr Wood notes:

o/e (on examination) looks well, settled, well perfused and hydrated ... plan/okay for discharge.

Discussed with parents importance of regular feeds and top ups over the next few days/weeks – they are agreeable to this.

Midwife to visit tomorrow and weight baby.

[102] At 1.45 pm there is this:

Attempt to latch baby on breast without success. Baby fed 20 mils expressed breast milk via syringe and 10 mils formula.

[103] At 2.20 pm mother and child are discharged home. In the maternal postnatal discharge form the following diagnoses are recorded:

Occipito-posterior – other.

Foetal tachycardia.

Foetal bradycardia.

Abnormal CTG.

Foetal distress – abn CTG.

[104] On 24 April 2008 Plunket nurse Ms Thomson, referred the appellant to general practitioner Dr Kenny. The nurse notes that the appellant's eyes were not tracking, and will only fix for 3-5 seconds, but that the appellant would otherwise turn to his mother's voice. Note was also made of two haemangioma birth marks, and that the parents were concerned in relation to the appellant's vision.

[105] There were two assessments by neonatologist Dr Patel on 7 and 28 May 2008. Dr Patel notes the referral was in relation to parental concerns regarding vision.

[106] Dr Patel notes that when he first assessed the appellant the examination was unremarkable, save for the two areas of haemangioma, noting that he was unable to detect any visible squint, and red eye reflexes were normal. However, Dr Patel was unable to get the appellant to fix on any point at that time.

[107] When reviewed on 28 May 2008 Dr Patel notes that:

Since that time he has started fixing and following, but I understand this is not consistent. He is now smiling quite readily. His parents were concerned that he does not turn his head to the left, and prefers to look to the right most of the time.

[108] Dr Patel reviewed the appellant again on 23 July 2008 and noted:

His parents were happy with his development progress and he is now a very interactive young boy, and his vision is no longer of concern. His parents had no other concerns. Regarding his preference to sleep on the right, he is now turning his head equally well in both directions, although the flattening on the right side persists, postural advice has been reinforced as previously.

[109] On 24 May 2012 when the appellant was aged 4, paediatrician Vaughan Richardson wrote to the neurodevelopmental therapist child development team at the Puketiro clinic saying:

I wonder if this child could be seen by a neurodevelopmental therapist before too long. He is one I have just reviewed and will be following up through the hospital system from now on. He has made slow progress in all areas from the growth motor milestones point of view but he was clearly right handed from way earlier than he should have been and on examination on 23 May 2012 had all the signs of left hemiparesis. This is not too disabling but I am sure it

partially explains all his issues so far. He does have difficulty in pronouncing words however but no feeding difficulties early on and I presume his pronunciation issues are related to this as well. He has made steady progress in the forward direction but has never had any formal input and it is clearly what he needs at the moment to push him along in ways he has trouble with. Balance issues have been identified but not the fact his early right hand dominance was abnormal.

[110] On 17 June 2014 he underwent an MRI scan of his head. Under the heading 'impression' the report says:

Unremarkable study. No structural abnormality or definite evidence of white matter volume loss.

[111] The appellant continued to be seen by Dr Richardson from time to time. In a letter of 26 April 2017 Dr Richardson said:

We have had a look through the medical records of his mum and him related to his birth in 2008. The notes were sketchy and on face value probably would not have met the criteria for support through ACC but I have had a long chat with his parents and his dad recollects the day in question very well and I think we will go ahead and put that in now that we have that further information. It is possible that ACC will not be supportive of this but they may be supportive or may be partially supportive which will be the least that could be done.

[112] In the course of the application ACC obtained a summary of the birth from the appellant's parents. In part they said this:

At some stage during the course of this event the registrar came into the room and took one look at the telemetry and said they needed to move [the mother] immediately to theatre for an emergency caesarean section. She also instructed the midwife to stop immediately administering the drug that they were giving [the mother] through an IV. On stating this the nurses started removing items from the bed in order to be able to move the bed. The registrar said there was no time and they needed to get to theatre straight away, and started pulling the bed out of the room. There was a further delay as all the maternity theatre suites were in use. A further delay was caused by having to move [the mother] to the main theatre, which was some distance and in a different building and level to the maternity suites. During this time [the appellant] continued to be in foetal distress. They advised me (the father) that I could not come into the theatre room. The staff involved all looked extremely concerned.

At some stage the midwife came out of the theatre saying they had to push and pull [the appellant] from both ends as he was completely stuck.

[113] For cover of a treatment injury to be granted the requirements of ss 32 and 33 of the Accident Compensation Act 2001 must be met. On behalf of the appellant it is

submitted that his left hemiparesis was caused by trauma at his difficult birth on 9 March 2008.

[114] The focus in our case is whether the hemiparesis was caused by the treatment (s 32(1)(b)) and this includes a failure to provide treatment, or to provide treatment in a timely manner (s 33(1)(d)). It must also be shown that the injury was not a necessary part or ordinary consequence of the treatment considering all of the circumstances of the treatment including the person's underlying health condition and clinical knowledge at the time of the treatment (s 32(1)(c)).

[115] In his report to ACC dated 3 April 2018 paediatrician Peter Jankowitz notes that the 37-week pregnancy had been uneventful and that the first mention of developmental problems was in the medical notes from Dr Richardson, paediatrician, when the appellant was four years and two months old.

[116] Dr Jankowitz said:

The physical injury that would most likely account for [the appellant's] hemiparesis would be damage to the cerebral cortex and/or corticospinal tracts in the right hemisphere of the brain. However this injury has not been demonstrated and the cause not established.

[117] Dr Jankowitz also addressed the issue of whether the appellant suffered a hypoxic ischaemic encephalopathy at his birth. He said:

No. His Apgar score at five minutes was normal, he was not acidotic and he did not exhibit any features of hypoxic ischaemic encephalopathy in the immediate postnatal period. These features would include poor feeding, irritability, lethargy, hypotonia and seizures. Generally these babies require admission to a neonatal intensive care unit.

[118] A report was obtained from Associate Professor Rosalie Grivell, consultant obstetrician. Her first report is dated February 2019.

[119] She lists the influencing factors that have interacted with each other and contributed to the appellant's clinical scenario:

• Likely intrauterine growth restriction (IUGR)/failure to reach growth potential.

- Foetal distress that required urgent caesarean section at full dilation.
- Traumatic birth with disimpaction required.

[120] She reports further in June 2019 and responds to this question:

On the balance of probabilities is there a causal link between any aspect of treatment and [the appellant's] injury?

[121] Her answer is:

Yes but not a single factor alone, however a number of compounding and confounding factors are likely to have caused the injury.

[122] She again lists IUGR, which "will cause the foetus/neonate to be more susceptible to any other birth insult/stress". Secondly, "foetal distress is more likely in an IUGR baby, and will mean a baby already struggling to cope with labour has less ability to adapt". Thirdly, "both the above will make a baby less likely to tolerate a traumatic birth and more susceptible to birth trauma".

[123] She goes on to say however that without detailed notes of the pregnancy care it is hard to assume that the care was according to protocol/usual standards of the time, and hence hard to rule out any potential influencing factors. "Given the low birth weight/growth restriction I would have liked to see the antenatal records that documented fundal height etc which is used as a marker for adequate foetal growth".

[124] She notes that the appellant's birth weight at 37 weeks was 2,740 grams.

[125] She also notes:

Care in hospital took place in a very busy labour ward and from the accounts of [the appellant's] parents there were potentially delays in transfer to a "labour" room and then to the operating theatre when it became apparent that birth was urgently indicated.

The late part of labour was complicated by foetal distress, with the CTG deemed "pathologic" and eventually birth was by CS, booked by the treating team as "very urgent". It is likely that earlier delivery by CS would have resulted in a baby born with more "reserve" and also as a result a less traumatic CS.

The foetal head was deeply engaged requiring disimpaction from below (this usually involves an assistant inserting their hand into the vagina and pushing the foetal head up by direct pressure on the scalp.

[126] Associate Professor Grivell goes on:

I disagree with the complex claims panel record where it is stated that the birth was not traumatic. Although the objective evidence of a "normal" Apgars and no HIE, these signs are extremely crude and only indicate when severe damage or stress has occurred. More subtle signs such as those exhibiting by [the appellant] can indeed be associated with impaired later development. The preceding events of foetal distress, fully dilated CS with disimpaction are all in keeping with a traumatic birth.

Higher birth weight of his siblings suggest he may have been small for gestational age or growth restricted. This would be supported by his condition soon after birth i.e. low BSL, poor feeding, significant weight loss in first days ... "small dry baby" (all these factors are consistent with a neonate that is IUGR.

. . .

Whilst the objective measures available at the time i.e. Apgars are not in the very abnormal range, it is likely that the events surrounding his birth compounded or confounded each other to produce an insult that while subtle, resulted in a global or broad ranging injury to [the appellant's] neurological system. This is likely to be consistent with the current concerns i.e.

- Subtle developmental concerns eyes, ears, speech.
- Left hemiparesis, mild dysarthria.

[127] Associate Professor Grivell also says this:

Care during pregnancy was almost entirely under the care of a midwife/LMC, and there are no pregnancy notes available for review as they have apparently been destroyed. Without detailed notes of the pregnancy care it is hard to assume that the care was according to protocols/usual standards of the time, and hence hard to rule out any potential influencing factors.

Given the low birth weight/growth restriction I would have liked to see the antenatal records that documented fundal height etc which is used as a marker for adequate foetal growth.

[128] As to the role of disimpaction/pressure on foetal head Associate Professor Grivell says:

CS with impacted head/CS at full dilation is well recognised to be associated with a small chance of foetal injury.

Physical pressure on the foetal head during disimpaction/disengagement may have caused an intracranial haemorrhage which was not diagnosed in the neonatal period.

. .

Traumatic head disengagement/disimpaction is also described in other literature as being associated with foetal injury – "difficult and potentially traumatic disengagement of the deeply impacted foetal head during emergency CS is also common (yet less reported) and associated with a risk of traumatic skull fracture and cervical spine injury.

(Author: Tempest)

The chances of neurological injury as a result of disimpaction are not well described in the literature but in [the appellant's] case were much more likely to happen due to the other complicating factors as described elsewhere in this report (growth restriction and foetal distress).

[129] Regarding intrauterine growth restriction Associate Professor Grivell goes on:

We know from recent reports in the literature that IUGR is increasingly associated with adverse neurodevelopmental outcomes, and that birth weight whilst an important marker is at best a proxy measure for IUGR. Both term and preterm babies are susceptible to the impact of IUGR (Murray et all).

It would be reasonable to expect that this growth restriction would have been detected before birth, at least in the late pregnancy. However the lack of antenatal notes makes it impossible to rule out the presence of missed signs for IUGR during pregnancy.

In a baby with know or suspected IUGR, we know that tolerance to stress in labour is lower, and this known/suspected diagnosis would have impacted labour decision making, i.e. earlier recourse to CS.

On balance, earlier delivery by any interval would have avoided/significantly lessened [the appellant's] injury.

[130] Obstetrics and gynaecology specialist Jenny Westgate commented on Associate Professor Grivell's evidence. Her comments include the following:

Dr Grivell states that [the appellant] was born in a busy labour ward and there were "potentially" delays in transfer to a delivery room and then to the operating room. It is very easy to determine that if there were any delays in response to the decelerations or delivery of the baby. Inspection of the notes shows that transfer to the delivery room occurred very promptly after the first two pushes. ... there is no evidence of delay in response to the sudden onset of decelerations with pushing, the decision that a CS was required was made quickly and the decision to delivery time was less than 25 minutes, which is well within the 30 minute window expected of a category 1 CS.

[131] Dr Westgate also disagrees that the need to delivery the appellant's head with the assistance of a push from the vagina is evidence of traumatic delivery. She notes that there was just five minutes between the surgical incision and the appellant's delivery. She also notes:

There were no tears in the lower segment of the uterus. There was some bleeding from one end of the uterine incision and obviously there was some degree of uterine atony as ergometrine and carboprost were given after the baby was born.

[132] Dr Westgate also says that the appellant did not have intrauterine growth restriction as his population birth weight was in the 25th percentile.

[133] What the contemporary record shows is that following a vaginal examination at 9.10 pm by the midwife, it is noted that the mother was fully dilated. At 9.20 pm the mother pushed and the foetal heart rate fell with slow recovery. At 9.35 pm the mother was moved to theatre 3. Again, the foetal heartbeat is shown as dropping to 85 bpm with slow recovery. The registrar arrived at 9.40 pm and at 9.45 pm he records "pathologic trace needs urgent delivery by lower segment caesarean section".

[134] The following day the time of birth is recorded as 10.10 pm. The contemporary note records "emergency lower segment caesarean section with blood loss of 900 mils with haemostasis required at L angle – delivery of baby pushing from below".

[135] The father's recollection was as follows:

Having been present during the birth (with the exception of the emergency caesarean section) it was clear that the midwife did not know how to respond as complications started to develop during the labour. Watching [the appellant] go into tachycardia, to bradycardia and then increasingly become slow to recover was frightening. When the registrar finally did enter the room, she immediately told the midwife to stop administering syntocinon and that [the mother] needed to be immediately transferred to theatre. A further delay occurred as there is not surgical rooms available in the maternity ward, so [the mother] had to be transferred to the main theatre, during this time there was no monitoring taking place.

[136] I conclude that when the foetal heart rate fell at 9.20 pm with a slow recovery swift actions were required. However, the timeline shows that 50 minutes elapsed until [the appellant] was born.

[137] I acknowledge that the maternity suite operating rooms were occupied, and that the mother had to be transferred to the main theatre in a different building. Such delay is regrettable and on balance I find that for the purposes of s 33 it, along with the failure to respond to the fall in the foetal heart rate and slow recovery at 9.20 pm, amount to a failure to provide treatment in a timely manner.

[138] The question then is whether this failure caused a treatment injury. The ACC Complex Claims panel states that the appellant's birth was not traumatic because his Apgars were normal at five minutes, non acidic and no features of hypoxic ischaemic encephalopathy.

[139] Associate Professor Grivell explains that whilst the objective measures at the time such as Apgars scores did not show abnormality, it is likely that given the events surrounding his birth, there was a subtle insult which resulted in global or broad ranging injury to his neurological system. She says this is consistent with the deficits seen of subtle developmental concerns, left hemiparesis and mild dysarthria.

[140] In the written submissions filed on behalf of the appellant this point is made. The insult was comparatively mild and therefore the family is then disadvantaged in that milder insults will not have all the obvious features that would allow for definitive and immediate diagnosis.

[141] It seems reasonable clear from the hospital notes that the baby did not immediately thrive. This sequence is set out earlier in this judgment.

[142] The next way point is four years later when paediatrician Vaughan Richardson noted:

He has made slow progress in all areas from gross motor milestone point of view but he is clearly right handed from way earlier than he should have been and on examination on 23 May 2012 has all the signs of left hemiparesis.

[143] Matters are compounded somewhat by the midwife's notes no longer being available. The submission is made on behalf of the appellant with the claim being lodged on 6 September 2017 the midwife's notes should have still been available at that stage, even until 23 May 2018 being 10 years after the midwife's last services ended.

[144] Even allowing for the delay in ACC seeking to obtain those notes until 14 March 2018, they should still have been available.

[145] Reference is made to *Accident Compensation Corporation v Langhorne*, both the Appeal Authority and High Court decisions.³ The High Court held:⁴

I agree the Appeal Authority was entitled to take the absence of proper records into account in determining the ultimate outcome. In the absence of proper records it was entirely open to the Appeal Authority to work from material which was admittedly reliable...

[146] On behalf of the appellant the submission is made:

Where the analysis of causation is prejudiced by the destruction of physical files, that should legally have been still in existence at the time the claim was made, and the Corporation did not attempt to obtain them for six months after the claim was lodged, the Corporation should not benefit from its delay in acting at its failure to take additional steps (which as demonstrated by counsel's actions were very simple) to obtain the midwife's contact details.

[147] The experts disagree over whether the baby had intrauterine growth restriction. The appellant plainly had a lower birth weight than his two younger siblings. I find the competing evidence on this issue, as it stands and without the midwife's records, leaves it frankly unresolved.

[148] The appellant's submissions also make reference to *Buckley v ACC*.⁵ In that case the baby was delivered via ventouse extraction 18 minutes after the foetal distress was identified. The Court also noted that there was an eight-minute delay between the midwife calling the registrar after the obstetric emergency was identified. In our case it took 25 minutes to deliver the appellant by emergency

⁵ Buckley v ACC [2019] NZACC 100 (DC).

³ Langhorne v Accident Compensation Corporation ACA18/08, 28 July 2010; and Accident Compensation Corporation v Langhorne HC Auckland CIV-2011-404-415, 12 October 2011.

⁴ At [88].

caesarean after the registrar's examination at 9.45 pm. In our case there was a 50-minute period from the first clearly recorded signs of distress until delivery at 10.10 pm.

[149] In essence, it is the submission on behalf of the appellant that likely intrauterine growth restriction together with foetal distress and a traumatic birth with disimpaction required has on the balance of probabilities caused the appellant's hemiparesia.

[150] Although the hemiparesia was not diagnosed until he was aged 4, I do not regard that as a barrier to finding causation established for a birth injury, given the relatively mild early presentation of the condition.

[151] Overall, the available evidence and professional opinions in this case result in the ultimate issue, the cause of the appellant's hemiparesis, finely balanced: unknown cause versus treatment injury due to delay in the appellant's emergency caesarean delivery.

[152] The Langborne decision allows me to take the absence of the midwife's records into account. According to Professor Grivell, (and this was not challenged by the other professionals) they were relevant to the very important question of adequate foetal growth. I accept that. The absence of these records therefore tips the balance in the appellants favour.

[153] I conclude therefore that it has been proven on behalf of the appellant that he suffered a treatment injury hemiparesis and that it was caused by the failure on the day of his birth to provide the emergency caesarean section in a timely manner.

[154] Accordingly, I allow the appeal and the decision by the respondent of 24 April 2018 is reversed. Should the issue of costs not be able to be agreed the parties have leave to file memoranda in respect thereof.

Judge C J McGuire

District Court Judge

Solicitors: Buddle Findlay, Wellington for the respondent