

IN THE HIGH COURT OF SOUTH AFRICA
(EASTERN CAPE LOCAL DIVISION: MTHATHA)

CASE NO:1742/2015

In the matter between:

APHELELE NONTANGANE

obo ESINAKHO NONTANGANE

PLAINTIFF

AND

MEMBER OF THE EXECUTIVE

COUNCIL FOR HEALTH, EC

DEFENDANT

JUDGMENT

DAWOOD, J:

1. The Plaintiff herein sued the defendant for damages.

2. The Plaintiff alleged inter alia:-

a) That the doctors and nurses who treated the plaintiff wrongfully unlawfully and negligently:-

- i) Failed to monitor the Plaintiff and her foetus either properly or with sufficient frequency.
- ii) Failed to diagnose timeously the onset of foetal distress when he/she/they could and should have done so.
- iii) Failed to provide proper and appropriate treatment to the plaintiff and her foetus and/or to expedite the delivery of the foetus expeditiously.
- iv) Failed to provide the Plaintiff and her foetus with proper or reasonable medical care, treatment and monitoring.
- v) Inadequately managed and monitored the plaintiff labour.
- vi) Permitted or failed to prevent the development of hypoxic ischaemic encephalopathy (hereafter referred to as "HIE") in the foetus.
- vii) The Plaintiff child was born on 3 October 2013 with severe brain defects and was diagnosed with HIE.
- viii) In consequence of the negligent conduct the child suffered HIE of **acute profound nature**, hypoxic cerebral palsy, development delay, and serious brain defects.
- ix) The aforementioned HIE and serious brain defect were caused by the aforesaid negligent conduct and breach of duty of care which rested on the nurses and doctors at All Saints Hospital at all times material hereto.
- x) The aforesaid negligent constitutes a breach by the defendant, his employees and agents.

3. The defendant in its plea:

- a) Admitted that the staff were bound to employ the skill and care as could reasonably be expected of staff in similar circumstances.
- b) Denied any wrongful/unlawful or negligent conduct.

- c) Denied that the minor child suffered foetal distress, **alternatively, that the staff notwithstanding reasonable monitoring could have diagnosed the same.**
 - d) Denied that the minor suffered HIE, alternatively, that the staff could have prevented or taken any reasonable steps to have prevented the same.
 - e) The defendant pleaded that the medical care and treatment of the plaintiff and the minor was done with skill, care, diligence and supervision as could reasonably be expected of staff in similar circumstances.
4. It was common cause between the plaintiff's experts and the defendant expert that there was no compliance with what is required for the proper monitoring of the foetal heart rate.
 5. The report of the radiologist of Professor Andrinico, was also handed up by consent wherein he stated *inter alia*, "*Features are those in keeping with a global insult to the brain due to hypoxic ischemic injury (HIE) of an acute profound nature occurring at term*".
 6. Evidence led
 - a) The plaintiff in her testimony indicated *inter alia*:
 - i) That she went into labour at around 1am on the 1st October 2015 and went to hospital at around 5pm that same day.
 - ii) She had a yellowish discharge of water at around 7pm.
 - iii) She remained in hospital the whole of the second with occasional vaginal examinations.
 - iv) According to her at shift change a young man examined her and took her to another room saying she was about to deliver and told her to push and he left her there and went outside. This was around 6am on the 3 October 2015. She had her phone with her.
 - v) The cleaner lady walking past saw that the head of the child emerged and she shouted for the nurse.
 - vi) A male and female nurse arrived, the female nurse arrived, the female nurse held the baby and shifted her. The baby did not cry and was taken away and she was told that the baby had fits.
 - vii) They had done an episiotomy cutting the plaintiff so that the baby could come out because the head of the baby did not come out fully.

viii) Under cross examination she further denied that the foetal heart rate was monitored at 4am and a vaginal examination was done. She admits that a vaginal examination was done at 6am but denies that the foetal heart rate was monitored.

ix) Then said on the 3rd she asked to go for an operation and was told to go take a bath at 4am instead as she is not an old lady.

x) The hospital notes say that her water broke or the membranes ruptured on the 3rd at 6am whereas her response was that it broke in the first just after her arrival just after they had finished checking her during her 1st examination.

xi) According to her she crawled to the toilet on the night of the 1st and crawled back without being given any assistance by the nursing staff.

b) The next witness for the plaintiff was **Dr Linda Murray** a senior specialist in obstetrics and gynaecology at Tygerberg Hospital.

a) According to her in the latent phase of labour the maternal observations are all performed 4 hourly.

b) The vaginal examination is performed 4 hourly but the foetal heart rate and the contractions strength is performed 2 hourly.

c) The foetal heart rate would be determined by an auscultation which refers to intermittently listening to the foetal heart and listening before, during and after a contraction.

d) A CTG or electronic monitoring would have been preferable since she was 41 weeks and one day pregnant but auscultation would have appropriate, that is, simply determining the heart rate by listening using a stethoscope or a doplone.

e) The reason for measuring the foetal heart rate before during and after contraction is that random measurements of the foetal heart rate not that are not that are not timed to contractions do not give

actual information as to how the foetus is managing the contractions themselves, which are the hypoxic stress in labour and may give the midwife or doctor a false sense of reassurance.

- f) According to her the pathogram was only started at 2am when in fact it ought to have been started when she arrived at 6pm and this constitutes sub-standard care.
- g) They started the pathogram when she had reached her active phase of labour; none of the findings from the latent phase on arrival were plotted.
- h) No foetal heart rate was measured at 2 o'clock.
- i) According to her even though it is noted N to signify no declarations at 6am she does not know how they came to that finding having regard to the fact that there is no indication that they auscultated correctly.
- j) According to her from the notes there was no monitoring noted of the maternal condition or the foetal heart rate from 6pm until 2am and this constitutes substandard labour monitoring.
- k) Failure to monitor increases the risks that the foetus would come to harm or that it would go unnoticed should the foetus come to harm.
- l) Even at 4am there is still no record of foetal monitoring.
- m) All monitoring in the active phase is to be increased.
- n) There is no record that the baby's heart rate was monitored at all during the second stage of labour which lasted 45 minutes.
- o) Hypoxic means lack of oxygen and ischemic means lack of blood.
- p) This injury was in keeping with a baby who had brain injury at term.
- q) According to her there were no obvious ante-natal factors found responsible for the neurological insults since the mother has

seemingly had an uneventful pregnancy and delivered a baby of normal birth weight at term at the correct time.

- r) Although the latent phase appears to be long she does not believe that any intervention was needed or that it impacted.
- s) There is no evidence of a sentinel event, that is, there was no obstetric emergency.
- t) A sentinel event is a variety of events which may occur, all of which have the results that they cause a sudden and severe drop in oxygen delivery to the foetus:
 - i) Placental abruption, bleeding behind the placenta, the placenta erupts early and is unable to function in blood supply to the foetus. This did not occur in this case as there would have been bleeding noted and on the contrary the notes explicitly states that there was no retro placental clot, which makes an abruption unlikely.
 - ii) Uterine rupture resulting baby being delivered into the abdominal cavity through the rupture in the uterus. This did not occur in this case.
 - iii) Cord prolapse occurs when the membranes rupture and the cord slips through the cervix and ends up outside of the uterus and because the compression on the cord from the foetal head and because there is a spasm – the cord then ceases to deliver blood to the baby and the baby gets no oxygen. This did not occur in this case as the cord which is hanging from the vagina would be visible and would have been documented in this case.
 - iv) Shoulder dystocia where the foetal head delivers but the shoulders stick or gets stuck behind the mother's pubic symphysis bone and during that time the baby gets virtually no oxygen. There is no documentation that this occurred either.

- v) Maternal collapse (cardiac arrest/ maternal haemorrhage) of a mother or her collapse during labour would result in her seizure to pump blood around her own body and she would then not be able to perfuse the placenta. None of these occurred in this case.
 - vi) She conceded however that anything that **happened where you were suddenly left with a complete cessation** of blood **supply** or oxygen supply to the foetus would function as **a sentinel event** but stated that from the records there is no identifiable sentinel events.
- u) According to her the cause of the **insult was accordingly labour itself**, as they cannot identify a specific complication or event in the labour to explain the foetal condition.
- v) The monitoring was **not adequate enough to make any inference about the foetal condition** or whether or not the foetal **condition changed** from normal **to abnormal** and at what **point that happened cannot be said**.
- w) In her opinion it may well have occurred and she feels that it probably did occur but the monitoring was **not adequate enough to detect that change**.
- x) In the second stage there is no record that the foetus was monitored at all during that time in the labour documents and accordingly no documentation of the foetal condition during the second stage of labour.
- y) Her conclusion was that the care was **substandard during labour because**:
- i) The monitoring of both/ maternal and foetal condition as well as monitoring of the labour itself were extremely poor during the latent phase of labour with no monitoring for a period of 8 hours

with guidelines being that foetal heart rate be monitored every 2 hours during this phase.

- ii) There was a failure to auscultate adequately or properly even when it was done, that is, it was not done before during and after contractions.

According to the guidelines the foetal heart rate had to be monitored every 30 minutes during the active stage from 2am until delivery meaning there had to be at least 9 references during this time.

- iii) According to her the current neurological condition was most likely caused by intrapartum hypoxia according to the various experts and then the poor intrapartum care received must be considered to be causal and contributory.

- z) It is likely that had adequate foetal monitoring been performed a change in the foetal condition would have been evident during labour and that is the reason for monitoring.

- aa) If she was properly monitored change could have and should have been readily evident to any midwife or doctor.

- bb) There is no reference to any **sentinel event so ample time should therefore have existed both to fully evaluate the foetal condition and optimise it should the condition have seemed to be poor.**

- cc) Any neurological insult arising from intrapartum hypoxia can therefore be seen to have **been probably preventable.**

- dd) Professor Buchman's report was put to her for comment where he conceded that the foetal heart rate assessment in the active phase of labour was not followed as recommended in the national guidelines.

- (i) The heart rate was assessed only 3 times from 2 o'clock to the birth at 6h45.

(ii) He stated however that the foetal heart rate was normal with no declarations at 6 o'clock.

(iii) He conceded that optimal foetal heart rate monitoring would have detected a catastrophic hypoxic ischemic event after 6 o'clock.

(iv) He found that it would have been difficult if not impossible to deliver the infant rapidly enough either by vacuum extraction or caesarean section to rescue her from the acute profound hypoxic ischemic episode."

ee) She stated that she was not convinced that the foetal heart rate was normal at 6 o'clock and although the partogram says there were no declarations she is not sure how the foetal heart rate was auscultated then, if it was auscultated at all.

ff) She is also of the view that because the monitoring throughout the entire labour was of such poor standard and there were so few references to the foetus she is not convinced that simply because of one number documented at 6 o'clock we can confidently state the baby entered the second stage of labour without any signs of foetal distress.

gg) It is possible that optimal foetal heart monitoring would have detected a catastrophic hypoxic ischemic event.

hh) According to her in the second stage it is imperative that it is extremely carefully monitored and managed and there is intervention that should be done. She disagrees with the generalisation that because it was in the second stage and it was an acute event that there was no management that could have altered the outcome.

ii) According to her a forceps or vacuum delivery could be done or if the delivery was not eminent then she could have been turned on her side to buy time to do a caesarean section.

- jj) In this **case no one was aware that the foetus was not coping.**
- kk) According to her a cord compression which usually occurs in the second stage usually **shows itself with bearing down efforts.**
- ll) According to her a **cord compression could be detected** with **monitoring**, if the cord compression was severe enough that the foetus was becoming hypoxic thereon there would be a delay in the **return of the foetal heart rate baseline.**
- mm) It was put to her that according to the guidelines only provide for recording in the partogram during the active phase of labour and she conceded that failure to note findings during the latent phase was not tantamount to substandard care, in terms of the new guidelines. But this occurred in 2013 and she was kept in hospital and was 3cm dilated not far from being in active labour.
- nn) She was kept at a health facility yet not monitored.
- oo) It was put to her that not all partograms made provisions for before during and after monitoring of foetal heart rates and her response was that this one did but it was not noted.
- pp) She accepted that the N meant that there were no decelerations at 6am but said her point is that there was very inadequate monitoring throughout the labour, the labour was not monitored adequately and so she is not convinced that a single N at 6 o'clock connoted good foetal condition up until that time.
- qq) According to her if you find yourself with a very sudden acute and profound sentinel event the foetus may fall quite quickly into a foetal bradycardia. And you may also have a situation where the foetus elicits as a diving reflex where the foetus shunts blood to the brain, just to protect the brain at the expense of the other organs.

It is similar to a child that is drowning. If you take a contraction as a brief period of time when there is no oxygen, it would be like having a

child or a person and you hold the head under water and for that period of time there is no breathing and there is no oxygen. But when the head pops up, you take a big breath and there is oxygen and you are alright. If you were held under for too long then you become too hypoxic to recover easily and if you were held under over and over again you may never actually get enough breath in between to actually maintain full oxygenation. In cases of labour, **ongoing contractions where hypoxic stress occur is similar to a child who falls into a swimming pool and there is a period where the foetus has reserves and tries to maintain his/her oxygenation and you can go in and pull that child out while it flounders but if it flounders for long enough once the child goes under that child is gone.**

rr) It was put to her Acute profound is that moment when everything fails and the oxygen and the blood supply to the brain fails.

ss) According to her this does not mean there was no warning signs or opportunity to take that child out.

It is not **akin to a catastrophic** event such as a sudden **heart attack** or **uterine rupture** where that child went down before you could **pick the child out of the water.**

If it is simply the physiological mechanism of labour being contractions that caused the child to get damaged then there **must have been signs** that the child was struggling and on the **probabilities** there are **normally warning signs.**

tt) She **conceded that this is an acute profound situation** but stated that in many instances where the labours were mismanaged it resulted in an **acute profound injury.**

uu) She **agreed with the definition** that acute **profound** meant a **sudden, unexpected, without warning, great or intense** event but said that that was **the final event that caused the brain damage.**

She persisted that there are signs that babies are not tolerating contractions and labour that is why they are monitoring babies in the second stage of labour.

She accepted the definition of sentinel event in Stetman's medical dictionary as *"an unexpected occurrence resulting in death, serious injury or risk to the patient"*.

vv) She believes on the probabilities that the **foetus would have shown signs that it was beginning to not tolerate labour.**

ww) She accepted that there could be on acute profound event happening without a warning but wanted to know what that unknown event would be that caused a **sudden cessation of oxygen supply.**

According to her there is nothing in the records to explain the event but what is clear is that there was an **unmonitored labour** and **labour is hypoxic stress** and this is a **labour related injury.**

It was put to her that an acute profound incident is not caused by poor intrapartum care.

Her response was that the warning signs **were not detected because of poor intrapartum care.**

Even if that acute profound happened without any warning the monitoring was still so poor that this was completely **unnoticed and there was no attempt to try and alleviate or remedy or deliver the baby.**

xx) It should have been **picked up and action taken accordingly to her even if it was a sudden event happening without warning.**

yy) She accepted that you cannot always prevent the acute profound injury if it occurs as a sudden catastrophic sentinel event. But according to her where the **unexplained sudden event happens and it is picked up** as to whether **there is still an opportunity for intervention**, She believes that the 5/10 minutes can make a huge

difference and **an attempt could be made for a vacuum delivery, forceps delivery or caesarean section.**

zz) According to her in this case the neurological insult arising from intrapartum hypoxia was probably preventable because **she does not think or believe there is evidence of a sentinel event**, none of the typical **obstetric sentinel events**.

aaa) According to her depending on when the injury occurred it was **probably preventable**.

bbb) She cited Professor's Buchman's article as support for her proposition that labour per se caused this incident. At page 32:

"The primary cause of death were labour alone in 82 cases out of the 102 that is 80 percent of cases.

The most striking finding in this study was the failure in most of these deaths to detect signs of foetal distress and it is likely that these babies would have shown evidence of intrapartum hypoxia during labour"

That concluded her testimony

c) **Professor Johan Smith** the head of the Neonatal services at the Tygerberg Children's Hospital thereafter testified on behalf of the Plaintiff.

a) According to him there were **no complications**, disease or illnesses recorded in the Plaintiff, the baby's physical measurements, the weight, the head circumference and length was normal.

b) Foetal growth was not hampered by placental disease or maternal disease.

c) The normal head circumference at birth is in keeping with a probable normal developed and grown brain.

- d) The fact that the child now has microcephaly that is a smaller than expected head circumference for age is evidence that an insult occurred to the foetal brain during labour and/or immediately after birth which stunted brain growth thereafter.
- e) This pregnancy was **low risk and the reasonable expectation was that the outcome would have been an uncomplicated labour followed by birth of a neurological normal baby.**
- f) This did not occur.
- g) The plaintiff was timeously admitted on the 2nd October 2013. She was in early labour or latent phase of labour and her initial examination revealed no abnormalities.
- h) The foetal condition on admission was probably reassuring.
- i) Very poor and inadequate and sub-standard reviews of labour then became evident upon reviewing the maternity case record in that:
 - (i) Between 6pm on the 2nd October and 2 am on the 3rd October – no maternal or foetal observations were checked or recorded.
 - (ii) Between 2am to 7am, the active phase of labour the foetal heart rate was checked on 33% of occasions. It should have been checked at least on 9 occasions according to the recommendations.
 - (iii) The foetal heart rate **was never recorded during the second stage of labour which lasted between 6am and 6:45am on the morning of the 3rd of October.**
 - (iv) The foetal heart rate was never recorded before, during or after a contraction because these would have been indicated by the recording of either a circle or an X on the partogram.
 - (v) The low Apgar score of 5 suggested that **there must have been detectable foetal heart rate abnormalities before**

birth but that these were **not detected because of sub-standard intrapartum foetal monitoring.**

- j) According to him **there is warning** in cases of **acute profound hypoxic injury** and there are **detectable foetal heart rate pattern abnormalities.**
- k) Professor Andrinico described the **injury** as being associated **with acute profound hypoxic ischemic event** and reasonably excluded inflammatory congenital and genetic abnormalities.
- l) According to him you do not need a sentinel event to have this pattern.
- m) **According to him the articles by Yamada quoted sub-optimal, intrapartum obstetric management emerges as the most likely probable cause or factor in cases where there is no sentinel event as in this case.** In that there was failure to detect signs of foetal distress, deficiency in **intrapartum foetal monitoring**, missed **foetal heart rate decelerations**, prolonged second stage of labour.
- n) He is also of the view that in light of the fact that no record exists to show appropriate monitoring and management of the oxygen levels that is highly likely that oxygen was administer irresponsible administered and that hypoxic ischemia occurred which aggravated the brain injury.
- o) He read out Professor Buchman opinion
“Even with optimal foetal monitoring in labour with the detection of a catastrophic event in the last 30 minutes, delivery of the baby would probably not have been sufficiently rapid to prevent hypoxic ischemic brain injury”.
- p) According to him he disagrees with Professor Buchman that there is no evidence of negligence in light of the fact that:
 - i) There was an adverse outcome for which no cause other than intrapartum injury could be identified.

- ii) He acknowledged abnormal and substandard monitoring yet failed to acknowledge that the prescribed appropriate clinical response designated to avert adverse outcome did not occur.
 - iii) An inadequate level of care needs to be considered and his reasoning around what amounts to a breach of legal duty of care is unsustainable.
 - iv) Substandard care led to the outcome as no steps were taken.
- q) He accepted under cross examination that the
- i) M.R.I finding is of an acute profound event which is the classic basal ganglia injury in this stage.
 - ii) The cause of hypoxic ischemic event is unknown.
 - iii) He stated that classically in the clinical realm they cannot speak of a sentinel event if those that he had listed are not there.
 - iv) According to him you can get the **same images in the absence of a sentinel event.**
 - v) He however conceded that it was in the **absence of a known sentinel event.**
 - vi) He then went on to state that if there is an unknown cause of the HI, it is not sentinel.
 - vii) The 1998 article by Okumura was put to him where it was shown that 5 of the 11 cases involved acute profound incidents **where the causes were unknown and where the event occurred without a warning such as the one in this case and he agreed.**
 - viii) According to him the articles did not consider it a sentinel event but considered it an acute profound event.
 - ix) According to him the onus is on the doctors, nurses when they detect a sudden change a conversion pattern in a foetus to act immediately and determine how severely it affects the foetus and institute interventions to relieve that **sudden change in the foetal condition whether it is known or unknown.**

- x) He conceded that in his report he referred to them **as sentinel events** when referring to the article and in court he referred to them **as acute profound events**.
- xi) He accepted that the foetal heart rate at 6 o'clock was 134 which is a normal numerical value but it does not say anything about the foetal heart rate before during and after a contraction and it does not tell anything about variability whatsoever. He stated that **he could not accept that this reading** implied that **the foetus was in a reassuring position** at that time because a number like that on its own does not mean anything, despite the fact that it was noted that there was no decelerations.
- xii) He does not know whether this was taken before the contraction and what happened during the contraction and after the contraction. **According to him the defendant would have to come and give evidence as to what they wrote down here in respect of the contraction.**
- xiii) According to him on admission the foetus was likely in a reassuring condition or else he would have shown signs of partial prolonged hypoxic ischemic brain injury on the M.R.I or may not have survived.
- xiv) He was referred to the 3rd group in Murray's article where 2 with acute bradycardias the causes were not known and they were considered sentinel and there was no warning because the heart rate changed 22 minutes before delivery and he accepted that was so he was then taken to Rennie's article
- xv) It was put to him that this was a catastrophic event, the acute profound and he disagreed saying that it was more likely that there **was forewarning that was not detected because it was not monitored properly and that culminated in a final insult that was catastrophic.**
- xvi) According to him you **cannot conclude from the MRI that it was an acute catastrophic event based on the probabilities.**

- xvii) He was not prepared to concede that from MRI you could similarly **not conclude that it was not an acute profound** event saying he will **leave it in the hands of the case**.
- xviii) He stated that you can have a perinatal, that you can have a basal ganglia, thalamus, so called acute profound MRI image in the absence of a perinatal sentinel event.
- xix) **He conceded that you can also have it in the presence of a perinatal sentinel event.**
- xx) He however did not concede that there are **no probabilities either way** saying that there is more **for the probability that there was forewarning.**
- xxi) It was put to him Professor Buchman stated that even with optimal foetal monitoring in labour with a **detection of a catastrophic event** in the last **30 minutes before** delivery of the baby one would probably not have been sufficiently rapid to prevent hypoxic ischemic brain injury.
- xxii) According to him in 30 minutes you could expedite delivery especially in this case where she was fully dilated at 6 o'clock. It is probable that you would have a relatively good outcome.
- xxiii) He however **conceded that** after a catastrophic event brain injury can occur from 10 minutes upwards.
- xxiv) According to him a vacuum extraction can be performed within 15 minutes.
- xxv) It was put to him that the midwife would have to make that call then call him that the midwife would first have to call the doctor who might take a little time in getting there and assessing the situation then getting the equipment and performing the procedure.
- xxvi) He stated that he would defer to Dr Murray the obstetric expert in this regard.
- xxvii) It was put to him that Professor Buchman states that they may have been insufficient time and that there was probably a catastrophic event in the last 30 minutes. **According to**

Professor Buchman injury occurs within 15 – 25 minutes after acute profound asphyxia.

xxviii) According to him the time period **depends on a balance between foetal reserves, the uterine contraction, the duration, the severity and one never knows** what the severity is.

xxix) It was put to him that studies show that where there was no warning, there was brain injury within 10 – 15 minutes and he agreed with these findings. He also accepted that with an acute profound after 40 – 50 mins the baby will be dead according to same studies.

xxx) He accepted that **children with longer insults tendered to have damage both to the deep grey matter and to the sub-cortical white matter.**

xxxi) He accepted that **in this case there is no damage to the sub-cortical white matter.**

xxxii) It was put to him that in this case there was no evidence of decelerations and his response was that it was not properly monitored.

xxxiii) According to him 134 and 136 are normal heart rates at that point in time but do not indicate what the heart rate was before during or after each contraction and were taken at least 2 hours apart.

xxxiv) It was put to him that the defendant's case is that **after 6 o'clock** an acute **sentinel event occurred** which was **without warning** and because it **is unknown** when it occurred it **cannot be linked to the outcome.**

xxxv) He disagreed with that saying they would have been able to **ameliorate the outcome saying** that there is **forewarning** there is a **change** in the **foetal heart rate** pattern and then when **the foetal reserves** and labour **insult acute profound injury occurs.**

xxxvi) He accepted that Rennies article did not deal with **prolonged partial damage** but with **acute profound injury** with acute profound dealing with damages to the basal ganglia and thalamus and referred to it as a catastrophic event. He went on to read that children with longer insults tend to have a damage to both the deep grey and the subcortical white matter and there was no white matter damage in this case.

xxxvii) According to him one of the examples does show a completely normal preceding heart rate establishing that there are problems coming in some cases. He conceded that in some cases there are forewarnings and in others there are not and effectively he cannot say whether or not there was.

xxxviii) He accepted that acute is usually sudden and profound is deep is great deep or intense damage. That sudden means occurring unexpectedly or without warning or abnormally rapid. Catastrophic means sudden great damage.

xxxix) He **accepted that there could be cord compression without there being any evidence of it because of the intermittent pressure it will not leave an impression or footprint.** Cord compression occurs when the baby comes down and the oxygen is cut off. Cord compression even though it is unidentifiable was linked together with other known perinatal sentinel events.

xl) It was put to him that with an acute HI event the **CTG does not show a warning and therefore what follows cannot be prevented because of a warning.** According to him it can be prevented if you react and **there is enough time.**

xli) His response was that there is forewarning even okumara's second case there was forewarning. Once the incident occurs then time is of the essence.

xlii) It was put to him that Professor Buchmann agrees with him that the first tachycardias, those are the spikes going up, he says that **that is quite normal in the context.**

- xliii) There are one or two that **may be showing a warning** but it was not **such that he would have intervened** and the **graph is compressed**. His response was that there was forewarning that there was a problem that needed investigation.
- xliv) He was then referred to Williams, 2014 edition which defined a sentinel event as adverse obstetrical events that may lead to catastrophic clinical outcome and he agreed.
- xliv) He was in agreement that the listed sentinel events were sentinel events being ruptured uterus, placenta abruption, cord prolapse and amniotic fluid embolism. Adcock the 2014 book by the American college however, as was put by Adv Be Bruyn, listed these as examples and is accordingly not a closed list.
- xlvi) Stedman's Dictionary 7th edition defines sentinel event as "a type of clinical and unexpected occurrence resulting in death or serious injury ... to the patient."
- xlvii) He accepted that in 2013 Nelson Mandela did not do cooling and that all saints did not have an intensive care facility do it.
- xlviii) He conceded that since there were no records with regard to the concentration of oxygen given his views in this regard were speculative.

That concluded his testimony.

d) The next witness called was **Professor van Toorn**:

- i) He is the head of Paediatric Neurology at Tygerberg hospital in Cape Town.
- ii) His conclusion was that the brain injury occurred intrapartum, in other words, during the process of labour.
- iii) He also states in his report that at paragraph 10 page 35
"Acute total asphyxia or near total asphyxia is a complete or near complete interruption in the supply of oxygen to the brain".
- iv) It is expected that only extreme intrauterine events like a placental abruption, uterine rupture, maternal cardiac arrest or problem with the umbilical cord will result in a sudden profound asphyxia.

- v) In the absence of recording of such a catastrophic event the scientific literature reports that **suboptimal intrapartum** obstetric care is the most probable cause.
- vi) According to him there was no sentinel event here.
- vii) Rennie's article states that probably more applicable in humans is that **we have a severe cord compression of an intermittent nature, which it most likely happened in this case because of the absence of a sentinel event.**
- viii) If you have a **total interruption of blood** to the brain **where you have no blood going to the brain then you have an insult.**
- ix) If you have a **severe insult** and if that is **sustained you end up** with **brain damage within 15 to 40 minutes** that the article mentions **from animal experiments.**
- x) You can have a situation that is **intermittent but total** where the **cord is completely blocked** so there is **no blood flow to the brain** and **you cannot shunt blood** but because at the time the **umbilical artery reopens** there is **more time for compensation to occur.**
- xi) Because the insult then occurs over a **longer time** there is **more opportunity for earlier intervention.**
- xii) According to him there is a distinction between cases where there **is a clear sentinel event report** in the **notes** and in those cases **that is not preventable** and predictable and those cases are not pursued.
- xiii) However there are cases where you have **an acute total without a sentinel event which could be due to intermittent complete cord obstruction.**
- xiv) He quotes Professor Buchman's report where it was stated at page 31
"the most striking finding in the study was the failure in most of these deaths to detect signs of foetal distress.
 ...
"It is likely that these babies would have shown some evidence of intrapartum hypoxia during labour ... it appears that there is a serious

deficiency in intrapartum foetal monitoring at the hospitals studied and probably in most south African state hospitals in south Africa.

It seems likely that insufficient time and care is taken with auscultation and that the early sign of foetal heart decelerations, are frequently missed.....

Women who are pushing in the second stage of labour should not be left alone and foetal heart rate auscultation must be done after each contraction to confirm return to the baseline.

This will allow early detection of foetal bradycardia and appropriate action can be taken.

Labour related intrapartum hypoxia is common and avoidable cause of prenatal death in SA and the majority of the death occur in low risk situations where labour appears to be normal, the overwhelming problem seems to be failure to detect evidence of foetal distress.

To prevent these unnecessary deaths the emphasis in the labour ward should be close and careful monitoring of all women in labour with particular attention to detail in foetal heart rate monitoring”.

xv) Under cross examination he indicated that you **do get a forewarning if you have a non-sentinel event example when there is intermittent cord compression**. According to him you can have deep grey matter damage without a sentinel event.

xvi) According to him the M.R.I suggests that there was a **severe injury were there** was no blood going to the brain, but it could have been of an intermittent nature.

The presentation is the same because there is **no blood going to the brain in the situation of an acute profound and partial prolonged**.

xvii) The definition given by Williams, of the sentinel event are “*adverse obstetric events that may lead to catastrophic clinical outcomes*”.

- xviii) According to him what is predictable is if you have foetal heart abnormalities and you do act upon them then that is predictable as the cause of injury.
- xix) He agreed that in this case that it is an acute profound injury of a catastrophic nature.
- xx) He agreed that sentinel events are normally catastrophic events.

His response was that the listed examples the mechanisms of injury is different and both mechanisms can cause an acute severe injury. The one is where you have **no blood going to the brain** because of a uterus that ruptures or a placenta that just detaches or a mother having cardiac arrest and there is nothing you can do about it. The other situation is where you **have a cord that is compressed completely** but the time interval is **different**. It is **not sudden and sustained**. It occurs **suddenly** but it occurs **intermittently, frequently** the difference between the two is the one is **unpredictable and occurs without forewarning**. The other one occurs over **a longer period** and there is **forewarning** because there are **foetal heart rate changes** and **intervention can be offered**.

Both causes acute profound to the brain but the mechanism of injury is different.

It is not a single isolated event, it occurs over a time span.

The MRI would not assist in determining what the cause was

It is most likely that there was intermittent severe cord compression obstruction.

- xxi) According to him intervention can be offered if there are foetal heart rate changes **before the insult becomes injury**.
- xxii) Prolonged cannot be seen on the MRI and that's why the MRI refers to acute total as there is **no shunting during this** period and the brain **cannot compensate and the centre core is damaged**.

- xxiii) According to him it is well described in the literature that you can have an acute profound without a sentinel event and since it is not described in the maternity case notes nor by the obstetric experts why should he doubt it.
- xxiv) Acute total **does not always occur in the context of a sentinel event.**
- xxv) He agreed that acute profound is any unexpected serious event which is the definition of a sentinel event.
- xxvi) He agreed that a **cord prolapse** was a sentinel event.
- xxvii) He accepted that a compressed cord was defined as a sentinel event in one of the articles.
- xxviii) The defendant's case was put to him that it was an acute profound injury with probably not enough time to intervene.
- xxix) According to him it was a **cord compression** and not a classic "**sentinel event**" because the mechanism differs the foetal heart rate changes during the period. **Insult does not equate to damage.**

In the period where you have insult and not damage if you intervene then you may not have a child who is damaged.

That concluded his testimony and the Plaintiff case.

e) Defendant calls its first witness, **Professor Johannes Buchmann**

- i) He accepted that the foetal heart rate was not monitored every 30 minutes during the second stage of labour and that it was only

monitored 3 times from 2h00 to 6h45. However the foetal heart rate was normal with no decelerations at 06h00.

- ii) According to him it was possible that optimal foetal heart rate monitoring would have detected a catastrophic hypoxic ischemic event after 6h00.
- iii) However had such a finding having been made, it would nonetheless have been **difficult**, if not impossible to deliver by vacuum extraction which takes about 20 minutes or caesarean section which takes 30-60 minutes to rescue from the acute profound hypoxic ischemic episode.
- iv) He quoted the articles wherein 19 min was the average in a large well staffed delivery unit with resident senior training obstetricians and anaesthetists present.
- v) According to him the imaging findings of acute profound hypoxic ischemic brain injury suggests a short period of **severe injury close to deliver, probably in the last 30 minutes.**
- vi) According to him even with optimal foetal monitoring in labour with the detection of a catastrophic event in the last 30 minutes of delivery of the baby would **probably** not have been sufficiently rapid to prevent a hypoxic ischemic brain injury.
- vii) The risk of below the standard monitoring is that you will miss something which you **could act upon and prevent a bad outcome**
- viii) The risk in this case created by suboptimal foetal monitoring in his view **did not contribute or cause the hypoxic ischemic event because of the nature of the event, the short duration, the sudden onset without warning that is hallmark of acute profound event.** The event was acute profound acute meaning sudden and short profound means severe and without warning.
- ix) According to him a nurse would have only have written N meaning no decelerations if she had monitored the heart beat before, during and

after contraction. The 134 foetal heart rate was during the second stage of labour where the head rapidly descends and the woman gets the urge to push.

x) He quoted Okumura's article at page 569:

"Although a history of severe and acute problems such as umbilical cord prolapse, uterine rupture was common the origins of foetal bradycardia was not determined in some patients including 2 infants. As to our patients cardiography actually indicated the well being of the foetuses until sudden fall of foetal heart rate. This fact suggests acute near total asphyxia."

xi) Prof Buckmann stated that in this case we have acute profound which would be acute near total asphyxia. Once such a situation occurs it is very difficult to save a foetus from irreversible brain injury.

xii) It was put to him that Dr Murray had stated that because there was no identifiable sentinel event it means that labour itself was the most likely cause.

According to him the drowning scenario would result in a partial prolonged where there is intermittent asphyxia which allows compensation in the baby to move blood.

xiii) According to him the suboptimal monitoring in this labour cannot be considered causal or contributory to the cause, because **the acute profound event was sudden, severe and without warning and it lasted a short time to cause damage.**

xiv) The risk caused by **not monitoring correctly** cannot be **considered causal to the outcome** of hypoxic ischemic injury, because the injury **was sudden without warning**, severe and **of short duration** to cause **severe damage** in the baby and **intervening for example**, vacuum delivery or caesarean section would have taken longer than the duration of the injury.

- xv) He concedes that the monitoring and the treatment of the plaintiff according to the hospital records was inadequate and did not comply with the guidelines of South Africa and that the care was substandard but states it was not causally connected to the outcome.
- xvi) He conceded that he relied on the notes that the baby's condition was probably good at 06:00 **but stated that even if it is found that the partogram is not accurate and reliance cannot be placed on the partogram his opinion would not fall away that the substandard care and monitoring had no causal connection with the outcome because of the fact that you** have an acute profound event which takes 15-25 mins to cause the type of damage that was seen and that it likely happened in the last 30 minutes based on similar causes written up in journals like **Pasternak and Okumura** and the absence **of any evidence** to the contrary **in connection with warning from any other authoritative sources**. So even if the **monitoring was completely absent**, the likelihood that the event happened in the last 30 mins remains and that that event lasted 15 – 25 mins and that **the opportunities for intervention are not likely to effect a good outcome**.
- xvii) According to him if it is acute neonatal asphyxia then you will probably not manage to save the baby by doing all your interventions. But if it is one of those partial prolonged second stage then certainly monitoring will make a difference. The acute profound are exceedingly difficult to prevent
- xviii) He confirmed that he based his report on Rennie who refers to Pasternak and Okumara and he also refers to Murray.
- xix) He stated that he could give an opinion on these articles because the events happened to these unborn babies in the uterus despite being published in paediatric journals. The foetal heart rate was is in the uterus are the acute catastrophic events of the cord, the abruption, the ruptured uterus, all obstetrics, the outcome is a

paediatric neurological outcome. He stated that you have to link outcome with cause and it's multidisciplinary. The result and management of it is paediatric but the cause is multidisciplinary.

xx) He did not concede that the application for the literature on brain damage that a foetus sustained as a result of oxygen deprivation is in the field of paediatrics and not obstetrics stating that if the damage is sustained in the uterus it makes sense that obstetrics is a speciality that is involved and in any event he is a maternal and foetal sub-specialist which involves medical disorders of the mother and disorders of the embryo, the foetus and even going into the newborn period.

xxi) He stated that he noted the following when looking at the partogram:

- a) There is an inconsistency in terms of moulding and caput being charted in at the time at 3am where in fact it looks like no vaginal examination was done.
- b) They left out duration in hours in labour.
- c) They have put in ruptured membranes
- d) They did not write any decelerations under the foetal heart rates at 03:30 and at 04:30 so there is no evidence that they listened before, during or after contraction.
- e) They entered the contraction marks in the oxytocin row.
- f) They have written blood pressure, pulse, temperature and urine
- g) They put up a ringers lactate drip around the time of delivery.
- h) There are errors in the completed partogram and there are deficiencies as well.
- i) He conceded that this partogram provided for columns to denote what the heart rate was before during and after the contraction but

stated that if they were not trained in this format then they would write no decelerations at the bottom because that is what they were used to which would be reassuring to him that they must have listened before, during and after.

- j) He conceded that he interprets it is that she listened properly before during and after and takes it at face value because she has written it.
- k) According to him maternal monitoring was okay and reasonable, foetal monitoring was substandard.
- l) According to him there still is the problem with the event because of **its signature acute profound nature** as seen in the **MRI**, is **still** timed to the **end of labour** and is of **short duration** and **has no warning** and is **severe** and **sudden** so it is **hard to say** that the **suboptimal care** where the plaintiff might have been **left alone** for a period after her last vaginal examination when she was told to push **would have made a difference**.
- m) According to him the nature or acute profound injury to the brain is that it would have happened so **quickly that no action could have prevented or minimised it and he quotes Rennie in this regard**. In the vast majority of these acute profound happen the injury is permanent and severe within 15 – 25 mins and it does not allow a caesarean section or a vacuum delivery and in Murray's article the worse group was 12 to 28 minutes.
- n) It was put to him that Dr Murrays, Prof Smith and Professor Van Toorn often get **acute profound injury** after previous CTG recording showing that at least **there were warning signs, if not in many cases distress**. His response was they should write it up and submit it for peer review then it can be used in court until then they can only rely on what has been published which are the articles discussed. They cannot look at that work unless it is peer

reviewed and has been through the proper methodology and evaluated that it gets published.

- o) According to him decelerations on their own do not imply that there is a warning. If there is warning there should be a partial prolonged event, because it is gradual compensation of the baby to worsening hypoxia. According to him in the case cited by the **Plaintiff there was no agreement on the decelerations in the baby's heart rate** it was of **poor quality** and **could have picked up her mother's heart rate** which might **look like a deceleration** of the baby's heart rate because it is lower.
- p) It was put to him that he as an obstetrician does not know what the effects on various degrees of bradycardia will be on an MRI scan, the clinical picture. His response was that he would know, because the literature has given us the evidence, that acute profound is associated with episodes of severe bradycardia. That in Pasternak, in Okumura and its about obstetrics and the effects of intravertine damage to the foetus through cord compression and then we see the outcomes clinically on MRI scan. That there is scientific evidence which has linked acute profound events, acute catastrophic events, acute profound episodes with a CTG tracing and the bradycardia is severe.

When you get near total or total cord compression there will always be severe decelerations and if it is sustained, severe bradycardia.

That is how a foetus reacts to cord compression.

The scan report is very similar to other cases of acute profound, its basal ganglia,

This one did not affect associated periventricular white matter

It was a very typical acute profound insult on the MRI.

- q) According to him he is an expert in how the aetiology of brain damage occurs in the child and is part of his expertise as they deal with hypoxia and ischemia in the foetus how a foetus deal with the lack of oxygen. This is meant to be part of the basic knowledge of every obstetrician.

He stated that he does not **know as much about paediatric neurology** as Professor Van Toorn but **does know about foetal responses to hypoxia and ischemia** and his knowledge is comparable to that of paediatric neurology and neonatal disciplinary area that we dealing with.

- r) He conceded that the articles dealt with bradycardia of **unknown origin** but if he was asked for an explanation the most likely would be a **cord that gets into a small space** and when there is pushing it is suddenly **compressed and remains compressed until the baby delivers**. There is no other feasible explanation.
- s) It was put to him that both Dr Murray and Prof Van Toorn said that the cord would compress as you would get during a contraction but the heart rate will not recover immediately to its normal level, because of that compression there is slower recovery and that may happen **intermittently**, eventually the foetus cannot handle that anymore and you have a complete bradycardia.

He disagreed that it was intermittent complete because that would have given a partial prolonged picture.

- t) He confirmed that the failure to monitor did not contribute to the outcome because of the **short duration, sudden onset without warning** and severe that it was severe enough to cause the damage that it did. It was so severe that the foetus was unable to shunt blood. In acute profound you would not have a two hour warning because then the brain would make a plan and divert the blood.

- u) He confirmed that this was contrary to the evidence of Professor van Toorn and Professor Smith but re-iterated that we were talking about **matters of the foetus inside the uterus and it is in his area of expertise.**
- v) He confirmed that this is the nature of acute profound but there is always variability in biology so you cannot say that that will be the position in all cases but there is **a very high probability.**
- w) He confirmed that he had done no studies personally to see what periods are relevant for an acute profound injury to show on an MRI scan but relied on the studies that had been conducted. It is an interpretation as well as a background in foetal physiology, obstetrics and knowledge over 26 years. It's a mixture of experience in the speciality of discussions of seeing cases but he had not done any original research on this. According to him if you have a 20 to 25 minute sentinel event with **near total asphyxia more than half of those babies will have damage to the deep grey matter** and will have problems if they survive according to the literature.
- x) It was put to him that Dr Murray had said that if there was proper monitoring in this case they could have turned her on her side, stopped the contractions with medication, given her oxygen etc. His response was that it could not be done in this patient because here the woman is pushing she is delivering. You cannot undo that and take her for a c-section you would have no option there you must deliver her. The head was down the pelvis, the process was irreversible to deliver through the vagina, Caesarean was not an option.
- y) According to him Basal ganglia thalamus injuries are the signature of an acute profound insult and professor Andronico's report states that these are in keeping with **an acute profound.** That is the MRI signature of an acute profound, basal ganglia thalamus, or also

known as deep grey matter. There **are no other causes that he knows** but concedes that he is going into radiological territory.

z) Prof Andranico did not specifically mention the term basal ganglia but did say that the features are in keeping with **a global insult to the brain due to hypoxic ischemic injury of an acute profound nature occurring at term**. A pattern much like this may occur with some metabolic disorders, but the patients with such disorders have a different clinical presentation.

aa) According to him global means the whole brain becomes ischemic and hypoxic and therefore the most vulnerable tissues, which is the deep grey matter, gets damaged because they have the highest metabolic rate and goes first if the global insult continues the whole brain gets involved and then the baby dies. The global insult would have taken 10-40 minutes to occur and he referred to Pasternak and Okomuru in this regard.

bb) He confirmed that Yamada's article found that suboptimal intrapartum care is a major risk factor for the same condition.

There was sub-optimal care in 40 of the 70 cases and no suboptimal care in 43%

He accepted that suboptimal care increases the risk in general of hypoxic ischemia but there are many cases where there is no suboptimal care and they tend **to be in the acute profound range because there is no time to respond**.

cc) He **confirmed the contents of his article and stated that in this case they did miss the signs but if it had been recorded it would not have helped the child but at least they would have had an idea about what was happening** He based his findings on the fact that the injury could have occurred in the last 30 to 46 minutes at the most based on Pasternak's article between 20 – 30 minutes.

dd) He conceded that he had no clue when it started and what the extent of it was. He however stated that we have **probabilities** in terms of how long it takes before delivery and accordingly it takes between 10 – 46 mins. He disagreed with Professor Smith that there would have been **forewarning** stating the **Prof Smith did not quote literature to support** that but his **experience** from **other cases that he was involved in. The literature does not support that there was a forewarning with an acute profound episode.** Okumara, Murray and Pasternak's articles there were no warning.

ee) It was put to him that Professor van Toorn stated that in this instance with the compression of the umbilical cord there would have been forewarning of decelerations. He stated that he disagreed for the reasons that the acute profound is not preceded by a warning. That if there had been a forewarning, then the baby would have suffered progressive hypoxia and been able to **compensate**. Once the baby is compensating it is no longer basal ganglia thalamus injury, **it becomes a watershed injury which is the partial prolonged type**. He conceded that in Okumura's second case there are decelerations but they do not constitute warnings on which one should act. He does not accept the evidence of Professor Van Toorn that in this case you would have had warning the probably cause being intermittent complete compressed umbilical cord because **that would have led to a partial prolonged**.

xxii) It was put to him that what was stated in Yamada and in his own article that the failure to monitor the plaintiff **properly was the cause for the bad** outcome that we have in this case and that by not monitoring properly **they created this risk of a bad outcome**.

He denied this saying **that the risk caused by poor foetal monitoring could not have contributed to or have caused this outcome in this case because of the acute nature.**

That concluded his testimony.

f) Sister Qavane thereafter testified

- i) She holds a general diploma in general nursing that she received and Mthatha general hospital.
- ii) She cannot independently recall the events but her handwriting appears on the 2nd October 2013 at 18H00 in the latent phase of labour
- iii) Foetal heart rate 136 beats per minute.

The foetal heart rate was between 120 and 160 and there were no abnormalities found.

- iv) She took over from the night staff at 6:45am and delivered the baby. The plaintiff was fully dilated baby was on continuous oxygen in incubator after birth.
- v) She was questioned with regard to the whereabouts of sister Zitho whom she stated had resigned from All Saints and she has no idea where she is.
- vi) Under cross examination she stated:

- a) She obtained a diploma in midwifery in 1989 and an advanced midwifery diploma in 2010.
- b) According to her she resumed duties at 6:45 but the night shift is from 7pm to 7am.

According to her in the active stage the foetal heart rate, BP are monitored at 2 hour intervals and pelvic vaginal examinations conducted then.

- c) She conceded that she had failed to record in the assessment document assessment because she had examined the plaintiff once.
- d) The numerous defects in her filling in all the relevant forms were put to her and conceded by her.
- e) It was put to her that there no information in the records as to how much oxygen was given, for how long it was given, what the condition of the baby was clinically.
- f) She conceded this saying that the child is normally given oxygen up until the whole body is pink and without any extremities that are blue and the respiration is back to normal.
- g) According to the notes the child was never right and then the child was transferred to Mthatha.
- h) She denied the Plaintiff version that she delivered at 7am and that is when this witness resumed duties. She explained that her times for resuming duties is quarter to seven and they take reports. The witness asked where the plaintiff looked at the time as she was lying on her back.

That concluded the defendant's case.

7. Issue for determination

- a) The issue in this case is whether or not the sub-optimal care caused or causally contributed to the minor child's condition, that is, was there a causal connection between the failure to monitor and the HIE of an acute profound nature, hypoxic cerebral palsy, developmental delay and serious brain defects suffered by the minor child.
- b) In considering this issue an evaluation of the evidence is necessary as well as the relevant authorities, the legal aspects and arguments presented in order to determine whether or not the Plaintiff has discharged the onus resting upon her to establish the causal

connection between the sub-optimal care and the ensuing insult and injury.

c) Evidence led

- i) The Plaintiff's evidence cannot be relied upon unfortunately as being an accurate account of what had transpired having regard inter alia to the following:
- ii) Her testimony that she was admitted to hospital on the first is not in keeping with her particulars or what was recorded by the sister who admitted her and testified.
- iii) The manner in which she alleged that she went to the toilet crawling appears to be an exaggeration as this is alleged to have occurred on the night of the first.
- iv) The accuracy of the time that she says she delivered the baby is also questionable since she seems to have difficulty with the recollection as to which date she went to hospital but recalls the time of delivery in circumstances where she would in all probability have been in pain from the contractions, have been busy pushing and having to deal with the fact that your baby has to be resuscitated and an incision is made to facilitate the delivery of the baby.
- v) She further did not state that she actually looked at her cellphone to ascertain the time but merely that she had it with her.
- vi) How it was that a cleaner was able to see the baby's head as she passed by.

- vii) Her assessment with regard to when she delivered is questionable and Sister Qavane's testimony with regard to confirming the time she noted is more probable. Sister Qavane did not have any reason to record the incorrect time and she would not have known that the time would be relevant.
- d) The Plaintiff's Experts and Defendant's expert were all clearly leading experts in their fields of expertise and gave evidence in an extremely professional manner discharging their duties to the court in accordance with what is expected of them.
- e) This matter turns on probabilities and credibility does not play a role since all the experts were equally credible.
- f) In *National Employers General Insurance v Jagers Co Ltd*¹.Eksteen AJP held as follows on page 3:

"On the question of a court's approach where it is faced with two mutually destructive versions, reference can also be made to the judgment of Eksteen AJP (as he then was) in National Employers General Insurance Co Ltd v Jagers 1984 (4) SA 437 (ECD) 440 to 441, where the following is stated:

'it seems to me, with respect, that in any civil case, as in any criminal case, the onus can ordinarily only be discharged by adducing credible evidence to support the case of the party on whom the onus rests. In a civil case the onus is obviously not as heavy as it is in a criminal case, but nevertheless where the onus rests on the plaintiff as in the present case, and where there are two mutually destructive stories, he can only succeed if he satisfies the Court on a preponderance of probabilities that his version is true and accurate and therefore acceptable, and that the other version advanced by the defendant is therefore false or

¹ 1984 (4) SA 432 ECD 440 to 441

See also *Kruger v Coetzee* 1966 (2) SA 428 (A) De Maayer; *Serobro v RAF* 2005 (5) SA 588 SCA, 597 7 D – F [19]

*mistaken and falls to be rejected. In deciding whether that evidence is true or not the Court will weigh up and test the plaintiff's allegations against the general probabilities. The estimate of the credibility of a witness will therefore be inextricably bound up with a consideration of the probabilities of the case and, if the balance of probabilities favours the plaintiff, then the Court will accept his version as being probably true. If, however, the probabilities are evenly balanced in the sense that they do not favour the plaintiff's case any more than they do the defendant's, the plaintiff can only succeed if the Court nevertheless believes him and is satisfied that his evidence is true and that the defendant's version is false. This view seems to me to be in general accordance with the views expressed by Coetzee J in *Koster Ko-operatiewe Landboumaatskappy Bpk v Suid-Afrikaanse spoorwee en Hawens* (supra) and *African Eagle Assurance Co Ltd v Cainer* (supra). I would merely stress, however, that when in such circumstances one talks about a plaintiff having discharged the onus which rested upon him on a balance of probabilities that he was telling the truth and that his version was therefore acceptable. It does not seem to me to be desirable for a Court first to consider the question of credibility of the witnesses as the trial Judge did in the present case, and then, having concluded that enquiry, to consider the probabilities of the case, as though the two aspects constitute separate fields of enquiry. In fact, as I have pointed out, it is only where a consideration of the probabilities fails to indicate where the truth probably lies, that recourse is had to an estimate of relative credibility apart from the probabilities."*

- g) The fact that they differed from each other did not mean that they were per se demonstrating bias for or against the party that had called them to testify but merely that their assessment of the facts was different.
- h) Accordingly:

- i) Both the plaintiffs witnesses and the defendants witnesses were equally credible;
- ii) The issue is the correctness of their findings; and
- iii) Which of their versions is more probable.

g) Doctor Murray had *inter alia*:

- (i) Stated that on the probabilities there usually are warnings according to Dr Murry. But she did not say when there would be warning. She conceded that it was an acute profound but stated that in many instances where the labours were mismanaged it resulted in an acute profound injury. Again no examples were given.
- (ii) She believes on the probabilities that the foetus would have shown signs that it was beginning not to tolerate labour.
- (iii) She accepted that there could be an acute profound event happening **without warning** but wanted to know what that unknown event would be that caused a sudden loss of oxygen supply.
- (iv) According to her it was probably preventable **depending** on when the injury occurred and because she does not think or believe there is evidence of a sentinel event, none of the typical obstetric sentinel events.
- (v) According to her there is nothing in the records to explain the event but what is clear is that there was an unmonitored labour and labour is hypoxic stress and this is a labour related injury.
- (vi) It was put to her that an acute profound incident is not caused by poor intrapartum care. Her response was that the warning signs were not detected because of poor intrapartum care. There was no attempt to try and deliver the baby **even if that acute profound**

happened without any warning the monitoring was so poor that it went unnoticed.

- (vii) According to her depending on when the injury occurred it was probably preventable.

h) Professor Smith

- (i) The low apgar score of 5 suggested that **there must have been detectable foetal heart rate** abnormalities before birth but that these were not detected because of substandard intrapartum foetal monitoring.
- (ii) According to him there is warning in cases of acute profound hypoxic injury and there are detectable foetal heart rate pattern abnormalities.
- (iii) Professor Andrinico, the radiologist described the injury as being associated with acute profound hypoxic ischemic event. According to him you do not need a sentinel event to have this pattern.
- (iv) Yamada quoted sub-optimal intrapartum obstetric management as the most likely probable cause **in cases where there is no sentinel event.**
- (v) According to him substandard care led to the outcome as no steps were taken.
- (vi) He conceded that **it was in the absence of known sentinel** events then stated that if **it is an unknown cause it is not a sentinel event.**
- (vii) In court he disagreed that Okumura considered them sentinel events rather than acute profound events in the 5 (five) cases where the causes were unknown and where the event occurred without a warning such as the one in this case. He however

conceded that in his report he had when referring to these articles referred to them as sentinel events and is now referring to them as acute profound.

- (viii) He was then referred to Murry's 3rd group where two had acute bradycardias the causes were not known and they were considered sentinel and there was no warning because the heart rate changed 22 minutes before delivery which he accepted.
- (ix) He disagreed that this was a catastrophic event saying that it was more likely that there was forewarning that was not detected because it was not monitored properly and that culminated in a final event that was catastrophic. He did not state the basis for this finding.
- (x) According to him you could not conclude from the MRI that it was an acute catastrophic event based on the probabilities, but he was not prepared to concede that similarly you **could not conclude** that it was not an acute profound event and said that he left that to the court.
- (xi) He however stated that you can have a so called acute profound MRI image in the absence of a perinatal sentinel event.
- (xii) He conceded that you can also have it in the **presence of a perinatal sentinel event**.
- (xiii) He however stated that there is more for the probabilities that there was forewarning without illustrating why he said so or what renders this version more probable when it was put to him that they were no probabilities either way.
- (xiv) He also disagreed with Professor Buchmann that even with optimum foetal monitoring in labour with a detection of a catastrophic event in the last 30 minutes before delivery of the baby one would probably not have been sufficiently rapid to prevent hypoxic ischemic brain injury.

- (xv) According to him in 30 minutes you could expedite delivery since she was fully dilated at 6'o clock and you would have a relatively good outcome.

He however conceded that after a catastrophic event brain injury can occur from 10 minutes upwards.

- (xvi) According to him a vacuum delivery could be performed within 15 minutes.

It was put to him that that would be after the doctor was called, came and made an assessment of the situation got the equipment and performs the procedure. He stated that he would defer to Dr Murray on that aspect.

- (xvii) He stated that the time period depends on a balance between foetal reserves, the uterine contraction, the duration, the severity and one never knows what the severity is.

This illustrates to me that either version is equally probable in this regard according to Professor Buchman's statement that there may have been insufficient time and that there probably was a catastrophic event in the last 30 minutes. According to Professor Buchmann injury occurs within 15-25 minutes after profound asphyxia.

- (xviii) He accepted the studies that showed that where there was no warning there was brain injury within 10 – 15 minutes and he agreed with these findings.

- (xix) He also accepted that with an acute profound after 40-50 minutes the baby would be dead according to the same studies.

- (xx) He accepted that children with longer insults tendered to have damage both to the grey matter and to sub-cortical white matter.

- (xxi) He accepted that in this case there **was no damage** to the subcortical **white matter**.

- (xxii) He persisted that there is forewarning and a change in the foetal heart rate pattern.
- (xxiii) He however accepted that Rennies article dealt with acute profound injury and not partial prolonged damage.
- (xxiv) He conceded that in some cases there are forewarnings and in other cases there are not, thereby confirming that either version is probable.
- (xxv) He accepted that there could be cord compression and because of the intermittent pressure it would not leave a footprint.

i) Professor Van Toorn.

- (i) According to him there was no sentinel event, here Rennies article states that probably we have a severe cord compression of an intermittent nature which is most likely what happened here because of the absence of a sentinel event. You have an acute total without a sentinel event which **could** be due to intermittent complete cord obstruction.
- (ii) According to him the presentation is the same because there is no blood going to the brain in the situation of an acute profound and partial prolonged.
- (iii) It is accordingly most likely that it is intermittent cord compression obstruction.
- (iv) Prolonged cannot be seen on the MRI that is why the MRI refers to acute profound as there is no shunting during this period and the brain cannot compensate and the centre core is damaged.
- (v) He agreed that acute profound is any unexpected serious event that is defined as a sentinel event.
- (vi) He agreed that a cord prolapse was a sentinel event.

- (vii) He accepted that a compressed cord was defined as a sentinel event in an article.
 - (viii) The defendant's case was put to him that it was an acute profound injury with probably not enough time to intervene. According to him it was a cord compression and not a classic sentinel event because the mechanism differs to the foetal heart rate changes during the period of insult and does not equate to damage. In the period where you have insult and not damage if you intervene then you **may** not have a child who is damaged.
- j) Professor Buchman conceded:
- (i) That the foetal heart rate was not monitored according to the norms.
 - (ii) That optimal foetal heart rate monitoring would have detected a catastrophic hypoxic ischemic event after 06h00.
 - (iii) He stated however that such a finding having been made it would have been difficult if not impossible to deliver by vacuum extraction which takes at least 20 minutes or caesarean section which takes 30 – 60 minutes to rescue from the acute profound hypoxic ischemic episode.
 - (iv) According to him the imaging findings of acute profound hypoxic ischemic brain injury suggest a short period of severe injury close to delivery, probably in the last 30 minutes, even with optimal foetal monitoring the detection of the catastrophic event in the last 30 minutes of delivery would probably not have been sufficient time to prevent a HI brain injury.
 - (v) The suboptimal monitoring cannot be considered causal or contributory because the acute profound event was **sudden, severe and without warning and it lasted a short time to cause damage** and intervention would have taken longer than the duration of the

injury. The event would have lasted 15 – 25 minutes and most likely happened in the last 30 minutes.

- (vi) According to him the event has the **signature of an acute profound nature as seen in the MRI**, is still timed to the end of labour and is of short duration and has **no warning** and is severe and sudden so it would even be hard to say that suboptimal care in leaving the Plaintiff alone for a period when she was told to push would have made a difference.
- (vii) According to him the most likely explanation would be a cord that gets into a small space and where there is pushing it is suddenly compressed and **remains** compressed until the baby is delivered.
- (viii) He disagreed that it was intermittent **complete** because that **would** have **given a partial prolonged** picture where the brain would be able to **shunt blood** and you **would get damage** to white matter or water shed injury.
- (ix) According to him the MRI **shows the signature** of an **acute profound, basal ganglia thalamus** also known as grey matter and there are **no other causes** known to him but conceded that he was going into radiological territory.
- (x) According to him the literature **does not support a finding** that there was **forewarning** with an **acute profound episode** and therefore he **disagrees with Professor** Smith who did not quote literature but has experience from other cases to support his findings that there were forewarning.
- (xi) He disagreed with Professor Van Toorn that there would have been **forewarning because acute profound is not preceded by warning** and that if there was forewarning then the baby would have suffered progressive hypoxia and been able to compensate and then it would result in a watershed injury which is the partial prolonged type.

- (xii) He stated that unlike in Yamada and his own article sub-standard monitoring **did not create the risk of a bad outcome because of the acute nature of the insult.**
 - (xiii) Professor Buchman conceded that the monitoring would have been able to detect **when** the change in the foetal heart rate occurred but stated that the **probabilities** that it occurred at least 10 minutes before birth are strong considering the fact that it was **only the grey matter** that was damaged.
 - (xiv) Accordingly no preventable action could be taken at that stage that would have changed the prognosis of the child.
 - (xv) He therefore disagrees that any insult arising from intrapartum hypoxia can therefore be seen to have been probably preventable on the contrary he **says that it would probably not have been preventable.**
- k) Dr Murray indicated that the monitoring was not adequate enough to detect the change and it cannot be said at what point the foetal condition changed from normal to abnormal because the monitoring was not adequate enough to make any inference about the foetal condition and ample time should have existed both to fully evaluate the foetal condition and optimise it should the condition have seemed to be any neurological insult from intrapartum hypoxia could therefore be seen to be probably preventable
- l) Dr Murray in fact conceded that you cannot always prevent the acute profound injury if it occurs as a sudden catastrophic event but according to her where the unexplained event happens and it is picked up an attempt can be made for a vacuum delivery, forceps, caesarean section and 5/10 min can make a difference. According to her it was probably preventable **depending** on when the injury occurred and because she does not think there is evidence of a typical obstetric sentinel event.

- m) Prof Buchmann disagreed and stated that the MRI findings are in keeping with the fact that it was a sentinel event **most likely cord compression** and because there was no shunting which would have given a picture of a partial prolonged where the white matter was also damaged that this indeed was **an acute profound** meaning it was of a **sudden onset** and **insufficient time** available for a **vacuum delivery** and he **ruled out forceps delivery** because of lack of **expertise** by the nurses and of **caesarean delivery** because the baby's head was already engaged in the pelvis. Professor Buchman accordingly was of the view that it **was probable** that the **injury was not preventable**. He was insistent that his views would not change even if one disregarded the record that the foetal heart rate was reassuring at 6am and demonstrated no decelerations. His evaluation of the situations was in keeping with the available authorities despite them being fairly old. There are no recent medical authorities available to gainsay these findings which fit into the picture of this case.
- n) It was argued that the cases that the Plaintiff's experts had dealt with in the SA context indicate something different and is in keeping with their views.
- o) Professor Van Toorn had stated in this regard:
- i) **There are cases where** you have **an acute total** without a **sentinel event** which could be due to intermittent complete cord obstruction.
 - ii) According to him you can have deep grey matter damage **without a sentinel event**.
 - iii) According to him the M.R.I suggests that there was a severe injury where there was no blood going to the brain, but it could have been of an intermittent nature.
 - iv) The presentation is the same because there is no blood going to the brain in the situation of an acute profound and partial prolonged.

- v) According to him the **cord compression** is **not sudden** and **sustained** it **occurs suddenly** but it **occurs intermittently, frequently**.
- vi) There are forewarning and intervention can be offered.
- vii) Both cause acute profound to the brain but the mechanism to the brain the injury is different, it is not a single isolated event, it occurs over a time span.
- viii) It is most likely that there was intermittent severe cord compression obstruction
- ix) According to him the Prolonged cannot be seen on the MRI and that is why the MRI refers to acute total as there is no shunting during this period and the brain cannot compensate and the centre core is damaged.
- x) The radiologist was not called to confirm that this is possible that indeed the MRI would not be able to pick up whether or not it was a prolonged and that is why he described it as acute total.
- xi) There were further no published authorities that he relied upon for his findings.
- p) Professor Buchman quite eloquently satisfied this court that he was sufficiently qualified to give expert opinion on areas that partially infringed upon the expertise of the paediatric neurosurgeon. As defendant's counsel in his heads stated that Stedman's medical dictionary defines **obstetrics** as *"the speciality of medicine concerned with the care of women during pregnancy, parturition and the puerperium. **Puerperium** is defined as the period from the termination of labour to complete involution of the uterus usually defined as 42 days."*
- q) Professor Buchmann's version is supported by:

- (i) The MRI depiction and in the radiologists report and description of the injury. No radiological expert testimony was presented to confirm that it is equally probable for an intermittent complete cord obstruction to present the same pictures as an acute profound, which cannot be picked up by a MRI, the available evidence on face value that the injury was acute profound and in keeping with the definition was by its very nature sudden and at a stage where intervention was not possible to change the outcome.
- (ii) Professor Buchman is also supported by inter alia Rennie and Pasternak where inter alia the following was said:

Jannet Rennie/Lewis Rosenbloom in “Review how long have we got to get the baby out? A review of the effects of acute and profound **Intrapartum Hypoxia and Ischemia:**

“Acute profound or acute near-total brain injury”, at page 170.

Evidence of the way that the mature human baby reacts to hypoxia combined with ischaemia has now accrued from relatively large numbers of MRIs from babies in the neonatal period and beyond.

There are two basic patterns of damage seen as a result of the intrapartum hypoxic ischaemia at term. The first pattern is usually termed acute profound damage at page 171 “brain damage was seen after 10 minutes. The areas of the brain that were that were damaged after this catastrophic asphyxia injury included the basal ganglia and thalamus together with the inferior colliculi.”

At 173 “children with longer insults tended to have damage both to the deep grey matter and to the subcortical white matter.

At 174 while there variability both in the foetal reserve and the duration and degree of the insult, we are not of the opinion that the concept that damage begins to accrue after 10 minutes of an acute profound hypoxic ischaemic insult. The second pattern involves damage to the white matter

in the borderzones between the vascular territories of the major cerebral arteries and is termed prolonged partial damage; we have not considered it further. Other patterns are rarely seen and are beyond the scope of our review”.

(iii) Joseph F Pasternak – The Syndrome of Acute Near – Total Intrauterine Asphyxia in the Term Infant.

“Eleven terms infants sustained an acute, near total intrauterine asphyxia at the end of labour.

Imaging studies documented a consistent pattern of injury in subcortical brain nuclei, including thalamus, basal ganglia, and brainstem, in contrast the cortex and white matter were completely or relatively spared. This pattern of injury correlated with the acute and long-term neurological syndromes in these patients.

The distribution of injury in these patients reflects the hierarchy of metabolic needs that are unmet after a severe, sudden disruption of substrate supply as occurs in an acute, severe asphyxia.

This clinical and imaging syndrom is in contrast with that seen in more prolonged but less severe intrauterine asphyxia, in which shunting of blood flow from non-brain organs to the brain and from cerebral hemisphere to the thalamus and brainstem renders non-brain organs the cerebral hemispheres most vulnerable.

In a patients, electronic foetal monitoring was performed as a routine method of assessing foetal well-being during labour and was felt to be reassuring until the onset of the persistent terminal bradycardia.

--- in 7 patients the foetal heart rate monitoring was completely unremarkable before bradycardia onset

At 395 In 9 of our 11 the patients foetal monitoring was thought to be reassuring until the onset of the terminal bradycardia, **supporting the premise** that the **hypoxic Ischemic Insult** occurred at the **end of labour** and was **acute and severe**.

At 396 “in our **experience**, however, **MRI lesions** in the **basal ganglia** and **thalamus** with **relative or complete sparing** of the **remainder of the cerebral hemispheres** have **only** occurred in infants whose **foetal heart rate pattern** or **clinical circumstances suggested an acute and severe insult**.

At 397 “we believe that the magnitude and tempo of the hypoxic – ischemic insult determine whether the **predominant brain damage occurs in cerebral hemisphere or subcortical nuclei**. Acute near – total asphyxia reduces **oxygenation abruptly to all brain regions**, in this situation thalamus, basal ganglia, and brainstem nuclei are preferentially damaged because of their high baseline metabolic rate and high content of glutamate receptors

“ subacute partial asphyxia causes shunting of blood flow to the heart and brain...

In contrast, acute near – total asphyxia produces a simultaneously and abrupt deprivation of oxygen and blood flow to all organs.

Near – total insults are usually relatively brief because if prolonged the probable outcome is foetal demise and unsuccessful neonatal resuscitation ...

Thus, in acute near total asphyxia, a severe neonatal hypoxic – ischemic encephalopathy can occur with no minimal evidence of insult to nonbrain organs.”

- (iv) It is evident from the foregoing that in keeping with the findings and the authorities that this is an acute profound injury and according to Pasternak arises from an **acute profound insult**.

- (v) Pasternak's findings are in keeping with Professor Buchman's opinion that the acute insult gives rise to damage to the grey matter and that partial prolonged would have given rise to watershed injury involving the white matter stating it very simply.
- (vi) The literature supports the defendant's expert's version in addition to the MRI.
- (vii) The Plaintiff's experts research on the subject, until published and authoritatively establishing that the findings in Pasternak et al was not a true reflection of the situation can best be said to be as probable as the defendant's version but the defendant's version appears to be more probable as it is fortified by the description given in the MRI and the authorities.
- (viii) I am accordingly disposed to accepting that this was indeed the type of insult and injury as described by Professor Buchman and was indeed caused a sentinel event of unknown origin most likely cord compression.
- (ix) I accept that in this case the nurses on night duty did an appalling job with monitoring the foetus properly and it was not only substandard but indeed negligent and must be condemned in the strongest possible terms as it is indeed outrageous that the standards set out in the maternity guidelines were disregarded to such a great extent and such poor care was rendered.

8. Findings

- a. The defendant failed to adduce the evidence of the nurse who made the recordings reflected from 3:30am and in particular that made at 6am that showed no decelerations.
- b. The Plaintiff's representative had made it clear at the outset that they were not accepting that the content of the partogram

or other records were correct and accordingly if the defendant intended relying upon it they would need to call the relevant expert.

- c. The fact that the other nurse said that she did not know where this nurse was, as was correctly argued by plaintiff's counsel, not enough to support an argument that she could not be found despite diligent search and exhausting all means to obtain her to give testimony
- d. There was further no obligation on the plaintiff to call this witness or find her.
- e. I accordingly cannot accept her recordings especially since it was specifically placed in issue and questioned by the plaintiffs expert as to whether or not the N noted no decelerations after monitoring the foetal heart rate before during and after the contractions.
- f. The Defendant accordingly cannot rely on this as confirmation that at 6am the foetal heart rate was normal and accordingly there was no cause for concern at that time and the N depicted no decelerations.
- g. Professor Buchmann however stated that although that is what he relied on, the exclusion of that would not change his opinion since **it was still an acute profound event that would have occurred in the last half an hour prior to delivery** according to the articles relied upon and therefore **even with no monitoring the outcome would have been the same.**

- h. The substandard care and failure to adequately monitor was not a causative factor in this case according to him.
- i. His opinion as to how the insult and resultant injury occurred and that it was an acute profound is as already indicated in keeping with the medical authorities cited and I find it the more probable explanation as these are the only available medical authorities at this time that have been peer reviewed and despite the criticism levelled that it was not of a big enough sample and old it is authoritative until contrary findings and outcomes are made in peer reviewed published articles.
- j. The Plaintiff's experts opinions in other litigated matters accordingly cannot be accepted as being authoritative without knowing the full history of each case and having that data checked by experts in the relevant fields and peer reviewed.
- k. I as already indicated accept that Professor Buchmann had the necessary expertise necessary to express an expert opinion even on those areas that appeared to infringe upon the Paediatric neurologists areas of expertise when he said there is an overlap.
- l. The available authoritative literature on the issue do not draw a distinction between the insult in the manner that Professor van Toorn did and his findings are not tested to determine their accuracy by his peers nor published. This does not make it untrue but it cannot be said to be as probable as the tested and published literatures. Plaintiff's experts version in the best case scenario would be as probable as that of the defendant

though the authorities make the defendants version more at probable thus ruling out a causal connection between the substandard care and the ensuing injury.

- m. A great deal was made about whether or not cord compression qualifies as a sentinel event with the plaintiff's experts stating that it was not one of the known events however is clear that cord compression or other events also fall under the definition of sentinel event in addition to the most common and usual forms that are easily and readily identifiable and Professor Smith had made reference to a sentinel event in his report and they accordingly eventually conceded that it could be a sentinel event.
- n. Professor Buchman's version that this was a sudden occurrence and there was no time to have acted to prevent the incident is more probable than the plaintiff's expert that there must have been forewarning and that prompt action could have resulted in the baby being delivered earlier reducing or eliminating the HIE. He indicated concurringly why their opinion in this regard was not acceptable in this particular case and scenario where the foetal head was already engaged in the pelvic head.
- o. The Plaintiff experts theory is at present unsubstantiated in any medical authority.

p. The plaintiff has accordingly failed to demonstrate a causal connection between the substandard care and the injury that ensued on a balance of probabilities.

q. The plight of this child is clearly pitiable and heart wrenching however there has to be some casual connection between the omission and the condition of the child to find the defendant liable to compensate the plaintiff Advocate De Bruyn SC aptly quoted the case of Medi-Clinic v Vermeulen 2015 (1) SA 241 SCA 252 [33] where the following was said.

“33. In conclusion, the plaintiff has suffered such terrible consequences that there is a natural feeling that he should be compensated. But, as Denning LJ correctly remarked in Roe v Ministry of Health and Others; Wooley v Same [1954] 2 ALL ER 131 (CA) at 139

“But we should be doing a disservice to the community at large if we were to impose liability on hospitals and doctors for everything that happens to go wrong.

...

We must insist on due care for the patient at every point, but we must not condemn as negligent that which is only a misadventure”.

r.I unfortunately despite my sympathies lying with this child and my strong condemnation for the failure to adequately monitor cannot find that there is a causal connection between the negligent conduct and the resultant insult and injury.

- s. Sub standard and negligent care in this case did not in the circumstances cause or causally contribute to the minor child's condition but an acute profound event, in all probability, caused the resultant incident which by its very nature was sudden and not preventable as there was insufficient time to deliver by any other means due to time constraints. Professor Buchman's evidence in this regard is preferred to that of Dr Murray in light of the practical difficulties he eluded to in the scenarios she considered.
- t. In *Lee v Minister of Correctional Services*² the test was what the authorities ought to have done to prevent potential TB infection and ask whether the conduct had a better chance of preventing infection than the condition that actually existed during Mr Lee's incarceration.

In Lee's case something could have been done as a preventative measures in this case unfortunately the probabilities are that nothing could have been done to prevent the HIE due to the acute profound nature of the insult and resultant injury. Lee's case accordingly is distinguishable from the present one as in this case the Defendant's expert was clear that better monitoring would not have prevented the catastrophic acute profound event.

The facts of the cases referred to by the Plaintiff's representative differ from the peculiar facts of this case as well as the defences raised and articles referred to. Each case has to be judged on its own merits and

² 2013 (2) SA 144 CC

demerits and the inherent probabilities and improbabilities contained therein.

- u. I am able to conclude that indeed on a balance of probabilities the nurses in the employ of the defendant were negligent, however I am unable to conclude in light of the facts and evidence led in this case that on a balance of probabilities that that negligence caused the injury to the minor child.
- v. The inference or scenarios that the plaintiff's experts advocate is not the most readily apparent and acceptable inference from a number of possible inferences, as the inference advanced by the defendant's expert is as probable if not more probable.

9. Conclusion

- w. The Plaintiff has failed to discharge the onus resting upon her to prove her case against the Defendant on a balance of probabilities.
- x. I am however not disposed to make a costs order against the plaintiff in light of the negligent substandard care that was clearly present despite it not causing or casually contributing to the insult and injury.

10. Order

9.1 in the circumstances I make the following order:

- a) The Plaintiff's claim is dismissed

b) No order at to costs

DAWOOD J

JUDGE OF THE HIGH COURT

DATE HEARD: 20 NOVEMBER 2018

JUDGMENT DELIVERED: 29 MARCH 2018

FOR THE PLAINTIFF: WESSELS SC

PLAINTIFF'S ATTORNEYS: NONXUBA INC.

345 RIVNIA BOULEVARD

GROUND FLOOR

BLOCK B, EDENBURG

RIVONIA, 2191, JHB

FOR THE DEFENDANT: MR DU BRUIN SC,
WITH MR RILI

DEFENDANT'S ATTORNEYS: STATE ATTORNEY

BROADCAST HOUSE

94 SISSON STREET

FORTGALE

MTHATHA