IN THE HIGH COURT OF SOUTH AFRICA

(GAUTENG DIVISION, PRETORIA)

Case Number: 43421A/2013

DATE: 9/9/2015

In the matter between:

M., R. R.

(on behalf of **B.**

M.) Plaintiff

and

MEMBER OF THE EXECUTIVE COUNCIL FOR

HEALTH Defendant

JUDGMENT

POTTERILL J

[1] The plaintiff is claiming damages in her representative capacity as mother and guardian of her child ["B."] who has cerebral palsy ["CP"]; a permanent brain impairment. In the pleadings it is alleged that the defendant negligently breached its duty of care towards her and B. during her labour, birth process and delivery at the Tambo Memorial Hospital ["the hospital"]. The defendant denied that its doctors and nursing staff acted negligently.

[2] The parties agreed that the quantum and merits be separated and I accordingly made an order in terms of Rule 33(4) of the Uniform Rules of Court.

[3] I find it convenient to firstly address the argument on behalf of the defendant that the pleadings in a civil matter are important and that the plaintiff's evidence did not correlate to the matter as pleaded. The defendant did not object to any of the evidence presented as

not having been pleaded. There certainly was no evidence presented by the plaintiff that was a surprise to the defendant or that the defendant's witnesses could not deal with from the outset. Pleading in this matter was problematic because the hospital records were so poor that all the experts, including the defendant's expert, had the chronology and actions ascribed wrongly to doctors who had not performed certain duties. I am satisfied that the plaintiff's pleadings covered the negligence as testified to. Furthermore with no objection to the evidence led by the plaintiff; the evidence amended the particulars of claim, if necessary; ***Shill v Milner*** **1937 AD 101** at 105.

[4] In essence the plaintiff relied thereon that the defendant was negligent in that:

[4.1] It failed to keep proper records as required in terms of sections 13 and 17 of the National Health Act 61 Of 2003['the Act"]. By not keeping proper records they negligently managed the plaintiff's labour and the wellbeing of the foetus.

[4.2] They failed to monitor and observe the plaintiff properly or at all during the labour.

[4.3] It failed to provide medical services at a standard that was expected form such a hospital.

[4.4] They allowed the foetus to become severally distressed or failed to act properly or at all when signs of distress where shown by the foetus.

[4.5] They allowed medical personnel who were not suitably experienced to attend to the plaintiff's labour when it was reasonably foreseeable that the plaintiff needed experienced medical personnel.

[4.6] They delayed the delivery of B. when the delivery should have been expedited.

[4.7] The laceration of the placenta led to a profuse blood loss which contributed to the asphyxiation of B..

All of the above led to B. to suffer from hypoxic ishemic encephalopathy causing cerebral palsy.

[5.1] The defendant denied that the lack of monitoring by the nursing staff or Doctor Rockson (previously Mwange) caused B. to suffer from hypoxic ischemic encephalopathy.

[5.2] The defendant also denied that during the caesarean procedure the defendant acted negligently.

[5.3] The defendant submitted that B. suffered from partial prolonged ischemic damage to the brain ante-natally due to meconium stained amniotic fluid. It is pleaded that this led to chorioamnionitis which is supported by the intra-uterine infection in B.'s blood after his birth. The meconium stained liquor was also as a result of the plaintiff taking Isihlambezo, a traditional medicine.

[6] The plaintiff testified that she attended the clinic in Boksburg before B. was born. She went to the clinic on the dates the clinic provided her. She had 5 children prior to B. and had told the clinic so and they wrongly recorded she had 4 children prior to B.. She was not at the clinic ever informed of any problems with her pregnancy. She did receive vitamins. She denied that she was told that she had an iron deficiency. She never during gestation had bright red bleeding. She could not recall whether the clinic did 3 ultra-sounds. She

knew that if she had pains or problems she must go to the hospital. On 10 June 2011 she was late for her clinic appointment and they did not want to attend to her. She however persisted and upon examination they called for an ambulance to take her to hospital. She was drowsy and had pains on that day, but later testified that she could not recall if she had pain. She denied that the antenatal card correctly reflected that she ate rice that morning.

[7] At her arrival at the hospital they did not attend to her for 3 hours. She admitted that her urine was taken and that she changed from her clothes to hospital clothes. She later recalled that a "*belt*" [CTG] was put on her. A doctor did examine her but they could not communicate because the plaintiff is Shangaan-speaking and they could not understand each other. She never spoke to the doctor and there was nobody else present when the doctor was with her. A nurse spoke to her and told her that she also came from Bushbuckridge. This nurse told her that the doctor told the nurse that the plaintiff had taken traditional medicine and she can't give natural birth, she must go to the theatre. This nurse never acted as an interpreter for the doctor. The plaintiff denied that she drank anything but water, but the nurse persisted that she must tell the truth. She did not know Isihlambezo because their tribe does not use it. She could not recall whether they put a drip on her,

gave her oxygen and made her lie on her left side. She could not recall whether the doctor later raptured her membranes. She denied that there was ever a foul smell. They then made her sign documents to take her to the theatre. She cannot read Afrikaans or English and the consent form to an operation was not explained to her. She retorted that if the documents were explained to her it would serve no purpose to deny it. The only reason they provided for the C-section to be performed was her averred drinking of the traditional medicine. They did not discuss sterilisation at all and she had not discussed sterilisation with her husband. They told her to sign the forms because the doctor had completed the forms.

[8] In the theatre they injected her in her back then made her lie down and draped a cloth around her. After a working on her for a while they just stopped and she asked if they were finished with her. She could not recall a screen between her and the doctors. They informed her that they had called for another doctor and he was already washing his hands. She did not know that the baby had turned and during her pregnancy she found it strange that she never felt this baby turning. The doctor took the child and worked with the child to the one side. She could not hear the child cry and the doctor was trying to get the child to cry. The

child only cried once softly. They hurt her while they were stitching her and she told them. Later they told her that she can see they removed the child because they injured the child and the child must go to the theatre.

[9] She went to see the child and she could see that the child was not breathing normally and the child did not show signs of being alive. She asked what was wrong with the baby and nobody told her. In fact the doctor kept asking her why is she asking about the baby. B. stayed in the hospital for a month after she was discharged. Only two weeks after she was discharged did the doctor inform her that the child was injured due to her and the baby losing a lot of blood. He asked whether she and the baby received blood and she said that she did not receive blood, only pills. He said that she and the baby should have received blood. Nobody told her that the hospital hurt the child. She denied that she consulted with any of the expert witnesses, but later said that doctors did see her and the child. She knew of a meeting that her husband attended with the doctor. She knew that a doctor shouted at her husband when he went to visit the hospital because he had a gun, but he was visiting the child and as a policeman he carried a gun.

[10] Doctor Pistorius testified and his expertise and experience was not challenged. He has a MBChB, qualified as specialist in obstetrics and gynaecology, obtained a diploma in Foetal medicine in London and in 2008 obtained a PhD (Foetal Brain Imaging) at the University of Utrecht in the Netherlands.

[11] He based his opinion on the records provided to him as well as the statement of the plaintiff. He noted the contradictions between the antenatal card and the admission notes. According to the antenatal card she had pains since the previous night whereas on the admission form it is noted that she had pains since 8:00 that morning. The doctor noted pains for a week prior to admission. The doctor found her to be dilated 2-3 cm whereas the clinic found her to be dilated 3-4 cm. The clinic recorded that a show was seen whereas the admission record records no show and the doctor recorded a show 2 days prior. On the records the meconium was referred to as "*clear*", as "*meconium grade II*" [Rockson] and also just as "*meconium passed*" [Potgieter]."

[12] He noted that there is no recording that the plaintiff was monitored from 10h50 till 12h00 and after 12h00 till 13h00. He did concede that if the chronological order of the admission process was as would be testified to by the staff of the defendant there was not

a long time span that the plaintiff was not attended to. However if the admission process by a senior nurse took 30-40 it was inordinately long. This was testified to by Sister Malapane on behalf of the defendant.

[13] It was his opinion that there was no adverse advent in the course of the plaintiff's pregnancy. The baby's weight, head circumference and length at birth were all within normal limits. Post-natally there were also no factors which could have given rise to cerebral palsy. His conclusion is thus that shortly before birth and at birth, hypoxia caused the excess of 160 beats per minute [bpm]. If there is a heart rate above 160 it is not associated with hypoxia in the presence of accelerations or with normal variability and no decelerations. There was no record that the foetal heart rate was monitored after tachycardia was established. There was thus no confirmation to exclude decelerations or to confirm variability. There should have been continuous monitoring yet the doctor's note only reads "*repeat CTG in 1 hour".* An IV line was set up but without notes as to why. Despite the tachycardia the doctor only instructed that the patient be reassessed in 4 hours by a doctor or midwife.

[14] The note of the meconium stained liquor [MSL] grade 11 was not surprising and was an indication of the foetus' distress. He could not think why there would be old blood, he would speculate that the old blood was the show. Old meconium is yellow and tan whereas new meconium is greenish blobs. Diffusion of the meconium would take place within hours whereas the colour change will take days. Meconium can lead to an obstruction in the umbilical cord which may lead to asphyxia which may result in brain damage. It was put to this witness that doctor Rockson will testify that the MSL II had a pea-like consistency whereupon he answered that it would then be grade III meconium and she should have used the terminology "*old meconium"* in her record. He accepted that old meconium might have contributed to the damage in the brain but with a probability of only 1 in a 1000. He agreed that the presence of negative prognostic factors, such as abnormal foetal heart rate tracing or low Apgar scores may reflect an insult that took place long before delivery (hours to days to even weeks or months) rather than of more immediate intrapartum difficulties, but that he did not think it probable in B.'s case. Meconium passage could be a factor in the pathogenesis of neurological disorders.

[15] This witness was cross-examined on an article in the American Academy of Paediatrics with the heading "*Neonatal Encephalopathy and Neurologic Outcome, Second Edition".* He agreed that according to this article there was a shift to determine from a MRI when intrapartum hypoxia took place and that it should be referred to not as hypoxic-ischemia, but as neonatal encephalopathy. He conceded that there could have been chorioamnionitis a week before the birth, but it would not have caused the brain damage because it would have triggered the labour and other clinical signs would present. His opinion was that it would be very unusual for it to be present a week before birth and not present itself. In this article the Apgar score is a sign consistent with an intrapartum event if the score is less than 5 at 5 and 10 minutes. After 1 minute the Apgar score was recorded as 4 and after 5 minutes it was 6. The doctor explained that the Apgar score is very subjective but that the Apgar score of 4 was wrong; it should have been 2 because for the muscle tone and colour the scores should have been 0 and not 1. The fact that the score was 6 after 5 minutes can either mean, in terms of the article, that this case did not fit the profile, or that the resuscitation was very effective. According to this article the second neonatal sign consistent with an intrapartum event is foetal umbilical artery academia. The

doctor testified that in this matter the problem was that the blood was not taken from the umbilical cord so no opinion can be made as to whether the PH requirement was met to lead to the conclusion that there was an intrapartum event. The third neonatal sign was the neuroimaging evidence of the acute brain injury as seen on the brain MRI. He agreed that to determine the timing of the acute profound injury it would be best to do an MRI between 24-96 hours. There was a presence of multisystem organ failure. It was his opinion that although the MRI was not as good as one that was taken 10 days after birth there was a very low likelihood that the acute or prolonged damage occurred prior to birth.

[16] The baby was compromised by the tachycardia and the meconium, i.e. chronic hypoxia and then there was a further insult at birth with the loss of blood which increased the hypoxia, i.e. acute hypoxia. The baby was further compromised by the spinal anaesthetic because the mother's blood pressure drops and that would further decrease the oxygen to the foetus and reduce the removal of carbon dioxide and acid buffers from the foetus.

[17] It was not correct that the foetal distress was appropriately managed. The C-section should have happened earlier. He agreed that the doctor was not negligent in not detecting

the placenta previa and there were no tell-tale signs to suggest the plaintiff had one. Generally a low lying placenta presents with bright red blood. If the position of the placenta is however not known because a sonar was not taken then the doctor undertaking the caesarean must be experienced and senior enough to handle the operation. This is so because the placenta would have to be cut through causing bleeding of the mother and foetus. Cutting through the placenta would expose the already compromised foetus to further blood and oxygen loss. B.'s blood loss was 1 000 ml, which is excessive.

[18] A C-reactive protein (CRP) test is a blood test that measures the amount of C-reactive protein in the blood. He is a specialist in maternal and foetal medicine and this falls within his expertise. Foetal distress in an emergency caesarean has been reported to cause elevated CPR levels. The increase in CPR levels reflects the intensity of stress on the baby during delivery in the immediate postnatal period and does not necessarily indicate an infected foetus. The CRP-level does not exclude chorioamnionitis, but it was his opinion that increased levels of CPR in the absence of any risks or clinical signs of chorioamnionitis were probably due to the stressful labour. The baby had a raised white blood count and could be as a result of chorioamnionitis or the asphyxia or anything else. The antibiotics

given were acceptable dosages to address a bacterial infection. He agreed that a neonate exposed to intrauterine infection and inflammation may show adverse effects at, or shortly after birth. It was never confirmed that the plaintiff had urinary tract infection. The sample could have been infected by vaginal secretions and therefore he could not conclude that urinary tract infection would have led to chorioamnionitis. It was not unreasonable to take note of the lower abdominal pains and the result of the urine monster and to conclude that there is infection, but there was only a 10% chance of urinary tract infection; it is indicative but not diagnostic. He agreed that in term and near-term infants there is a 4-fold increase in the frequency of cerebral palsy of clinical chorioamnionitis but he did not know the stats pertaining to sub-clinical chorioamnionitis.

[19] A sonar was taken of the brain 21 June 2011. According to the notes the interpretation thereof can be reconciled with chorioamnionitis. An ultra sound is however not as reliable as a MRI.

[20] There were no clinical signs and symptoms of chorioamnionitis. He accepted there could be sub-clinical chorioamnionitis but the MRI did not fit a clinical finding of chorioamnionitis. The MRI demonstrated findings in the basal ganglia and the cerebral

hemispheres in keeping with a mixed appearance of partial prolonged and profound acute injury with hypoxic ischemic encephalopathy and not of chorioamnionitis. It was thus most probable that chorioamnionitis was not present, alternatively not a contributing factor. The brain develops in different stages *in utero* and that would reflect on the brain images. The timing of an insult can thus reliably be determined from the images by comparing them to the normal images at the same gestational age. Although Dr Rockson and Dr Potgieter recorded old meconium he did not find it probable because if there was a lot of blood, which there was, the doctor would not be able to see old meconium. The sighting of old meconium was also not recoded in the caesarean report. Furthermore one report stated "*old meconium"* and another report just "*meconium".* He conceded that if there was chorioamnionitis then it could have contributed to the brain damage, but to a lesser degree.

[21] He was of the opinion that if the foetus was brain damaged before birth he would not have responded so well to the resuscitation after the birth. A baby can suffer brain damage and then later further brain damage. He denied that the baby's brain was damaged before birth due to intrauterine infection such as chorioamnionitis because it would not only affect

the brain but would also lead to hepatitis. The pattern of the brain does not suggest damage before birth.

[22] It was put to this witness that if there was sub-clinical chorioamnionitis and the plaintiff took toxic traditional medicine then it could have caused contractions of the uterus which could lead to the foetus passing meconium. This could have caused damage to the brain and then at birth the further damage arose. He said if that happened it would have caused strong contractions and she would have delivered quickly, especially in view thereof that she had 5 previous births. He conceded that the scenario put to him was a possible picture, but not probable.

[23] He did not know who was correct pertaining to the dilation, the clinic or the doctor, but if the doctor was correct then the plaintiff was in latent phase of labour and the doctor's plan was correct. He did however remark that plaintiff was admitted at 10h50 and if the doctor recorded her examination at 12h00 then she only started with the examination 10-15 minutes earlier, the doctor then only saw the patient an hour after admission. It was his opinion a CTG tracing only has to run for 10 minutes and not 20 minutes to make a diagnosis. The doctor can be criticized for not diagnosing where the 170 baseline came

from; i.e. was it a healthy baby or a compromised baby? She should have requested continuous monitoring and not have recorded that the CTG should be repeated in an hour. She was negligent in not getting a diagnosis. She must have been worried about the CTG finding otherwise why did she order the resuscitation. A foetal heart rate of 138 could be a normal heart rate but this heart rate may have reflected a deceleration. There is no documentation setting out when the heart rate was taken and if it was done before, during or after a contraction. Doing a Pinard listening of the heart rate of a foetus on an obese woman is not an exact science and the reading of the heart rate is not 100% accurate.

[24] It was his evidence that the penny already at 12:00 should have dropped not 13:00, because if the mecomium was the trigger for the penny to drop Dr Rockson must from 12:00 had an underlying fear of foetal distress. For him the most reasonable conclusion was that at 12:00 she should have diagnosed foetal distress. He thought it was not good practice to rupture the membranes because it would further compromise the baby. Rupturing the membranes could lead to quick normal birth of a foetus in good condition, but it would worsen the condition of the foetus if already compromised.

[25] In terms of the national strategy for maternity care the staff of the defendant did not record that they explained the problem to the patient. Dr Rockson also should have recorded a vaginal examination. She did not record what was in the IV drip or that the patient was instructed to lie on her left. In his opinion it was not the correct procedure to rapture the membranes if she did not know that the baby was in good health. If the baby was compromised this would increase uterine activity and further compromise the foetus.

[26] The doctor should also have palpated the abdomen before the C-section and then the transverse lie of the baby would have been discovered. This only takes a second and upon its discovery appropriate action would have shortened the delivery. Doctor Potgieter said it took 5 minutes to get the baby out; this timespan further complicated the birth.

[27] A senior doctor should have done this emergency caesarean from the start. He found it to be really inappropriate to send somebody with experience of 10 C-sections to do an emergency C-section with a compromised baby. As a grand multipara the uterus muscles are more lax and therefor the position of the baby can change. She was also obese rendering access to the baby difficult. As an obese patient she could also have complications like thrombosis etc. The cut used gave limited access and view of the baby,

instead of optimal access. There was also foetal distress. All these factors led thereto that the baby must be extracted quickly. In this matter they had to call and wait for the senior doctor. A senior doctor is somebody that can handle all caesarean complications and this was a difficult delivery. Rockson's experience of a 100 caesareans is a lot versus 10 caesareans but not a lot versus a 1 000. He thought she did her best with her experience, but she was not experienced enough. The delivery took too long and an experienced doctor could have delivered in a much shorter period by using a different approach. A compromised baby should be out within two and a half minutes to three minutes. The delivery time should be clocked. Rocksonn's evidence pertaining to the time the delivery took is subjective. The baby lost 60% of his blood that is indicative that the procedure did not go well.

[28] The 1 000 ml blood loss was well handled by Doctor Mwambe.

[29] The 1999 Consensus statement proposed a template for defining a causal link between acute interpartum events and CP which were tachycardia, low apgar scores and hypoxia.

[30] He is an expert when it comes to interpreting the MRI and he concurs with the findings of the radiologists. Although the MRI was done four years later it is still relevant. The pattern of cerebral destruction is in keeping with a mixed appearance of prolonged partial and profound acute injury with hypoxic ischaemic encephalopathy. The time frame from 10h50 -13h50 - 3 hours hypoxia, is sufficient time to cause the partial prolonged asphyxia and to have caused the damage as reflected on the MRI. It was unlikely that the brain damaged occurred before the plaintiff was admitted at the hospital. If there was to be a division of the damage between nature dealing the foetus a blow with chorioamnionitis and the asphyxia the chorioamnionitis would have played a minimal role.

[31] In summary, the hospital was negligent, *inter alia* for the following reasons:

1. Failing to properly and timeously monitor and treat the patient when tachycardia arose;

2. Failing to monitor the foetus continuously when tachycardia was present;

3. Failing to establish the reason for the tachycardia and to react accordingly;

4. Failing to react urgently when the tachycardia arose;

5. Proceeding with a C-section without being properly prepared in light of the reasonable foreseeability of having to cut through the placenta and/or placenta previa;

6. Not having suitably qualified staff present at the C-section;

7. Interrupting the C-section for an unreasonable time once the placenta had been lacerated.

[32] Professor Bolton testified as an expert witness and his expertise and experience as a specialist paediatrician was not in dispute. In December 2013 he retired from the post of Chief Paediatrician and Associate Professor of Paediatrics that he held for 15 years. Currently he is a part-time consultant paediatrician at Rahima Moosa Mother and Child Hospital. He based his opinion on the records and reports he received.

[33] He went through he reports and was of the opinion that chorioamnionitis was unlikely to have played a role in this matter. In terms of whether it was reasonable that it could have played a role he answered that he thought the defendant's expert, Prof Mawela was a reasonable person and he agreed with this witness that chorioamnionitis was unlikely to

have contributed to the poor outcome in this case. In terms of the joint minute they agreed as follows:

"*1. The appearance of the brain is consistent with that seen due to a severe partial prolonged ischemic insult to the brain of a full term infant in the perinatal period. The basal ganglla show signal disturbance consistent with an acute profound insult in the perinatal period.*

2. The microcephaly is as a result of brain parenchymal losses and poor brain growth due to the severe injuries to the brain.

3. The subdural collections are most likely due to the reduced brain volume giving rise to enlarged extra cerebral fluid spaces, predisposing towards the development of subdural haemorrhages.

4. The abnormalities of the inferior surfaces of the cerebellum are not usually noted in patients with HIE and might have an alternative explanation and may have occurred if there was severe cerebral oedema with tonsillar herniation, but is also reasonably likely due to HIE.

5. The appearance is not consistent with that seen due to chorioamnionitis. Chorioamnionitis might give rise to abnormalities of the brain, not dissimilar to a minimal degree of HIE, but not to the degree of gross destruction as is noted in B.'s brain."

[34] He reiterated over and over that old meconium has a terrible foul smell and if presented sub-clinically then the only give-away is the foul smell. He also testified that classifying meconium according to old and new is a visually arbitrary definition and a crude art. He did however agree that "*old meconium"* was generally referred to as brown or tan and "*new"* as greenish. He did not take issue with the opinion reflected in the article "*Association of meconium stained amniotic fluid with foetal and neonatal brain Injury"* that the presence of negative prognostic factors, such as abnormal heart tracing or low Apgar scores, may reflect an insult that took place long before delivery; however with emphasis on the "*may"*.

[35] When referred to the sonar he reiterated that he was an expert on sonars and a sonar and MRI are 2 completely different tools with MRI being more accurate than ultrasound sonars; MRI being more accurate despite being performed years later. He did not know who

made the finding on p148 pertaining to the sonar and could not dispute it. He also agreed that the report of Burger radiologists gave credence to the finding on p148 of the record, but the finding did not make sense to him. This is so because although meconium can cause infection which can lead to damage in myelinogenesis in periventricular white matter and can lead to periventricular leukomalacia the features of the MRI fit birth asphyxia rather than periventricular leukomalacia. Furthermore in Bara hospital where he works meconium is passed by 25% of women, very commonly, and if meconium was so potent then it was odd that there were not more brain damaged babies. It is always possible that meconium could lead to brain damage, but not probable. Meconium is however an indication of foetal distress before the delivery of the baby.

[36] He disagreed that the frequent findings of inflammatory lesions in the placenta, umbilical cord, foetal membranes and lungs, underscores the major role of inflammation in the pathogenesis of the foetal brain injury because inflammation must not be confused with infection. The CPR levels were in the upper limits to normal at 12mg/l and nowhere near the 100mg/l which could arise in cases where serious infection was present. Whatever the infection it did not cause brain damage, the most probable cause was interpartum asphyxia.

[37] Sister Hanrahan testified and her expertise was accepted. She found it to be poor practice to just copy from the antenatal card to the hospital records, because the clinic may have recorded something wrong or left something out. It was not within the standard practice to leave out the foetal heart rate and they must also record how they obtained the heart rate. Recording keeping must be such that if a page stands alone one must be able to see what transpired. If a midwife does not complete the section marked vaginal examination it is a missed opportunity and bad record keeping. The midwife also made no observations on the notes at the back of the TPH259. The fact that they did not record for instance that the patient was asked to lie on her left side is not only bad record keeping but in terms of the Nursing Council is viewed as an irregularity. The midwife must record what they did to resuscitate and how they helped the patient. When the midwife wrote foetal tachycardia she should have put a number to it and timed and signed it. The patient was according to the clinic 3-4 cm dilated, the staff of the defendant should then have completed a partogram because she was then in active labour.

[38] Professor Varga testified as a biomedical anthropologist and a registered nurse. The professor conducted research on the utilization patterns and potential health effects of

pregnancy related herbal medicines. Isihlambezo is a Zulu term for all pregnancy related traditional medicines which are prescribed by traditional healers. She does not agree with Dr Sevenster that "*the use of Isihlambezo would have led to chronic foetal hypoxia in utero due to the oxytotic on the uterus*".

[39] Unless the specific recipe of a decoction is known, it is erroneous to state that *Isihlambezo* would automatically lead to chronic foetal hypoxia in utero.

It is erroneous to imply that Isihlambezo is a standard specific herbal remedy or recipe containing a known recipe. Unless the specific recipe of an *Isihlambezo* decoction is known, it is erroneous to state that *Isihlambezo* is automatically an oxytotic. Correctly administered, recipes, both herbal and synthetic, can be used without material or foetal compromise even if they do contain oxytocic properties.

[40] She was adamant that all the studies were done in Kwa-Zulu Natal on Zulus and not on Mozambique women. In Mozambique the plants and therefor the ingredients would differ from the studies in Kwa-Zulu Natal. If the plaintiff took Isihlambezo there would only be a possibility that she would have contradictions. This possibility was as much as one being hit

by lightning. There just was not enough scientific evidence that the taking of Isihlambezo would lead to anything happening. When referred to a Table in her article reflecting therapeutic properties of the plants that can be in Isihlambezo and from that it could be deduced that six of the ingredients were toxic and would thus cause harm, she responded that it would depend on many variables. It would depend on the stage of the pregnant woman, it would depend on the mix, how the drug was taken and how much was taken.

[41] When referred to the article "*The effect of traditional herbal medicines on pregnancy outcome"* she classified the article as at most an interesting article. It was written by clinicians and not researchers with their article including overextensions. They for instance used as what they termed a "*control group"* but was in fact a "*comparison group"*. They did not indicate to what they defined as MSL. The research relied on is association which is a relationship whereas causation is scientific evidence.

[42] Her own article was a review of other work and not her own work. There were no clinical trials on human beings with Isihlambezo, only on rat tissue in a petri dish which could not be extrapolated to humans.

DEFENDANT'S EVIDENCE

[43] She was admitted to the hospital at 10h50. This was done by sister Nkosi. She is a nursing assistant with one year in house basic training. When a patient is admitted she interviews them and will complete p14 of the record. She completes the history from the antenatal card as well as talking to the patient. She takes the history, the patient's vital signs and takes and tests the urine sample. Under her watch the patient takes off her clothes and puts on a hospital gown. She does not record the heart rate of the baby as this falls outside her scope. This admission process would take 7-10 minutes. The urine sample showed both blood and leucocytes. She must always work under the supervision of a nurse.

[44] Sister Malapane is the operational manager of the labour ward. She obtained her B.Cur (AD et ED) at the University of Johannesburg. She also did a diploma in advanced midwifery. She did the physical examination and also took the foetal heart rate, but did not fill in the heart rate on p14. Her home language was Shangaan but she married a Sotho and can accordingly also speak Sotho. She did an abdomen palpation and found that the baby was lying cephalic and his head was into the pelvic bones 2 over 5. She took the foetal heart rate with the Pinard Scope. She did not write down any of her findings as

reflected on p16, the Matron did. She attached the Cardiotocograph ["CTG"] machine. Later she wrote "*foetal tachycardia"* on p14 of the record. She did not do a vaginal examination. Due to the high body mass index of the patient she did struggle with the abdominal palpation. She admitted that her record keeping was poor.

[45] Matron Mohlabane testified that she completed p16 of the record pursuant to her asking sister Malapane why she had not recorded her observations. She completed it at around 13:00 by sister Malapane reciting her observations from memory. She testified that the first recordal of the foetal heart rate is used as the baseline and then it must be recorded again a half hour later. This is in accordance with the guidelines and because the foetal heart rate can change in half an hour. She confirmed that an emergency C-section must be performed within an hour.

[46] Dr Rockson was the doctor on ward duty on 11 June 2011. She was in her third year community service at the hospital. She had done a 100 C-sections with 3 undiagnosed placenta previas. She examined the plaintiff at 11:45 and wrote her notes at 12:00. She recorded the vital stats of the plaintiff but did not record the foetal heart rate. She recorded the height of the uterus as 36 cm. She recorded that the plaintiff was having mild

contractions and she was 2 cm dilated, 2 cm long with show. The baby presented as cephalic. The BMI of the patient was high. Her assessment was recorded as that the patient was in early labour. She was to be transferred to ward 7A if the CTG was re-active. She then left the patient.

[47] When she later came back the CTG reflected a base line of 170. She then recorded that the patient must be given an IV line and "*IV antibiotics. Repeat CTG in 1 hr".* At 13:00 she recorded "*CTG-Repeated-Staff having foetal tachycardia, membranes raptured MSLII and old blood-suggestive of chorioamnionitis book emergency c/s".*

[48] She was later called from the theatre to assist with the C-section.

[49] Dr Sondiyaza was the doctor that started with the C-section. She had started her community service at Tambo at the end of April 2011. She had 10 C-sections under belt. She knew it was an emergency C-section and that there was foetal tachycardia because of the notes on the forms. She cut through the skin and the fat layer and then was confronted with a poorly formed lower segment and varicosities. She did not know what to do and called for help. Dr Rockson arrived, cut and then saw the placenta previa. Dr Rockson

swore when she saw the baby was lying transverse. She could not observe the colour of the amniotic fluid as everything was bloody.

[50] Dr Potgieter acted as the paediatrician although she was in her in second year of internship. She confirmed that Dr Sondiyaza did a mid-line incision, but could not see the lower segment and she was unsure where to cut and she then called for a senior doctor. Dr Rockson arrived and she confirmed that poorly formed lower segment. A soon as she cut there was a gush of abdominal fluid. The baby was lying transverse and she struggled to find the baby. Finally she found the presenting baby and took the baby out by its feet. It took about 5 minutes to deliver the baby after the incision. She conceded that the Apgar score at birth should not have been recorded as 4 but 2. The baby had lost 60% of its blood at birth and that renders it probable that a baby would suffer permanent neurological damage. She confirmed that Dr Sondiyaza was not experienced enough to do the operation and acted correctly to call for a senior doctor.

[51] Dr Mwambi testified that he was a qualified doctor and a medical officer at the hospital. He was more senior than Rockson. He was called to go to the theatre to attend to a problem. When he got there the baby was already delivered by Rockson because she

responded to the call for help from the theatre first. He did the sterilisation and the repair to the uterus and the abdomen. He circled the word "*clear"* relating to the meconium because he accepted that Rockson would have told him if it was not clear, but conceded that it was not good practice.

[52] Dr Mwinyoglee testified that he was the Head of the Obstetrics and Gynaecology Department at the hospital in June 2011. He was confident that Dr Sondiyaza could perform this caesarean because she had performed at least 10 caesareans to qualify as a doctor and had another 3 weeks of performing C-sections. She had never struggled with caesareans. There is no hierarchy of doctors at the hospital; it is all team work, but there is always somebody around to assist if there is a problem. You can even get help from a doctor at theatre 5 or 6 which is adjacent to this theatre, but there was no senior there that day. He did not think it wrong to ask for help and it was not indicative thereof that something was wrong.

[53] They did have a mobile sonar but they did not move it because tends to break when moved. As Head of a Level 2 hospital he always had staff and equipment shortages. The room where the machine is stationed is too far away from the labour wards to make it

practical for the labour patients to be wheeled there. Sonars are thus not as a rule done on labour patients.

[54] He was of the opinion that it was standard to ask a patient if they use traditional medicine because it is part and parcel of the history taking of a patient. It must thus be recorded.

[55] He did not think it practice to palpate before a C-section, but he would do it if he did not know the patient. He agreed that the more births, the more likely it is for the position of the baby to chance. He agreed that due to the high BMI of the patient they could have diagnosed the lie of the baby wrongly.

[56] With record to record keeping he conceded that the more detail the better. He also spontaneously referred to the phrase "*if not recorded, it was not done*". His evidence was that from the record there is "*evidence of intermittent monitoring*" of the patient.

[57] Mr Mvubu testified as the Assistant Director of Administration and Logistics at the Hospital. Records are stored in a room and locked after business hours. There is no system whereby he could inform the court when this file was where and who had access to

this file. Documents could be removed by personnel from the file content and they as administrative staff would not know. Attorneys are only given copies of the file. A patient is entitled to view the original file. He confirmed that CTG tracings must be kept in the file. They are bound or stapled to the file. He could give no reason why the CTG tracings were not on the file.

[58] Dr Sevenster testified that he was a practising gynaecologist and obstetrician and had 36 years' experience. He had done 6 000-6 500 deliveries of which more or less 2500 were caesareans.

[59] He, like the other experts, thought that the foetal tachycardia was noted with admission and not only later. From his reading of the records there was an initial instruction to repeat the evaluation in four hours, but it was changed to one hour after it was noted that there was foetal tachycardia present. He testified: "*With a repeat CTG at 13hoo there was still a foetal tachycardia present".* From the records he also thought that the membranes had ruptured spontaneously. He like the other experts from the records deduced that the first doctor had cut through the placenta.

[60] It was his opinion that a CTG had to at least run 20 minutes before a diagnosis can be made and a plan of action put into operation. The CTG did not show decelerations or low beat-to-beat abnormalities.

[61] The recordal of old meconium could, due to its colour, not have been produced in 2-3 hours, but was probably produced days before the birth. He based his opinion thereon that in the old days they had to do an amnioscopy with the purpose to evaluate the colour of the amniotic fluid. His evidence was that "*the afternoon of the following day already tan-yellow in all mothers beyond term*". He agreed that if the court did find that old meconium played a role then it only increased the risk of cerebral palsy by 0,1 %, but persisted that it was still a risk. This could have caused hypoxic events, the CPR level was elevated and that would lead to sub-clinical chorioamnionitis. The Cafsol that the patient received could have crossed into the placenta and reached the foetus and this could have suppressed the CPR levels of the foetus. He agreed that even if the court accepted that chorioamnionitis was present then the risk of celebral palsy only increased by 0,3 %, according to the article by Wu or by, 0,1 % according to Neumann. He confirmed that the resuscitation of the baby had excellent results.

[62] He agreed that the record-keeping was of an unacceptable standard. He did not see the patient as a high-risk obstetrics patient. The foetal heart rate had to be monitored continuously.

[63] He would also have ruptured the membrane to avoid doing a C-section. He did not think that Dr Sondiyaza was too inexperienced. She was a doctor and not a specialist and had the insight to call for help. It was his evidence that it is always difficult when presented with a low lying placenta. He would have done exactly as Rockson had done in theatre.

[64] He could not give expert evidence on Isihlambezo and could not assist the court. He was not an expert on brain imaging and could not assist the court on what would have caused the patterns on the brain as reflected by the MRI.

CREDIBILITY FINDINGS

[65] On behalf of the defendant it was argued that the plaintiff was a recalcitrant witness who did not help to resolve the issues at hand. The plaintiff was not a good witness in that her memory failed her and she could not recall much of the fateful day. What was however clear was that recalling that day was traumatic to her and she cried at one stage when

rendering her evidence. What was also clear to the court was that the plaintiff must have felt lost in the hospital due to the language barrier and it explained her feeling of abandonment for 3 hours after her admission. This, despite it being stressed in cross-examination of the plaintiff, that at all times Sister Malapane acted as interpreter for the plaintiff. It was put to her that while Sister Nkosi was filling in the forms the detail was obtained from the plaintiff with Sister Malepane interpreting. This was necessary because sister Nkosi testified that since the plaintiff was Shangaan speaking they could not communicate. Sister Malepane however denied that she interpreted for Sister Nkosi, she only interpreted for Dr Rockson. It was thus admitted that Sister Nkosi just rewrote the information from the antenatal card which Sister Hanrahan testified was poor practice which she supported with good reasons for this opinion. Sister Nkosi also did not work under supervision as required; this is not a ground of negligence though. Dr Rockson testified that Sister Malapane was not present at all times; she was busy in the busy ward. The version put to the plaintiff that at all times she was informed, communicated with and translated to, is rejected. The plaintiff was thus very much in the dark as to what was happening to her and the baby which reflects negatively on the defendant and is not in accordance with the

Guidelines. What is however true is that her evidence has very little bearing on the outcome of the trial as she cannot testify to any of the grounds of negligence excepting for the failure to monitor and observe. The record keeping however tell, and does tell the story of the monitoring and observation.

[66] The defendant's witnesses testified that the ward was very busy that day. This is rejected because the records prove that there was only one other admission at 8:50 before the plaintiff was admitted at 10:50. Sister Nkosi and Sister Malapane tried to mislead the court with this false evidence. The bad record keeping was thus not as a result of the very busy ward.

[67] On the totality of the evidence Dr Pistorius, Prof. Bolton and Prof. Varga made a very favourable impression on the court. They were experts in their fields pertinent to the issues at hand. They gave cogent reasons for their opinions and readily conceded if a proposition was possible. On the other hand Dr Sevenster for the defendant was not an expert on Foetal brain scanning and Isihlambezo but persisted with expressing opinions thereon. His opinion that chorioamnionitis and later sub-clinical chorioamnionitis caused the prolonged

partial damage to the brain is rejected due to the finding of the defendant's other expert, Prof Mawela, that chorioamnionitis did not cause the damage on the brain.

I have to agree with the submission made on behalf of the plaintiff that Dr Sevenster did not come across as an independent witness; he was strongly in favour of the defendant's version. Very few practising experts have the luxury to sit in court for the whole trial, as he did. Counsel for the defendant's remark that this was necessary because he is not a doctor, is stating the obvious, but is surprising because in most medical negligence matters counsel and the court are not doctors, yet the expert does not sit in court for 3 weeks! Not only was Dr Sevenster assisting defendant's counsel with questions to the witnesses he was running out of court to fetch witnesses and played a very active role in court on behalf of the defendant. Even if I accept that this was necessary because the state attorney was not in court, I cannot accept that his uncalled for remarks on non-medical issues from behind counsel reflected objectivity. He was defending Dr Rockson when questioned as to why she recalled this matter and I interjected that I found it strange that Dr Rockson just recalled the matter because the plaintiff's husband arrived at the hospital with a gun. He remarked form the back; also "*because of the bad outcome*". Dr Sevenster expressed his opinion on how

impressed he was with the evidence on behalf of the defendant and that for a state hospital he thought they were doing good work. Dr Sevenster was emotionally wedded to the defendant's version which impaired his objectivity. In ***Schneider NO and Others v Aspeling and Another*** **2010 (5) SA 203 (WCC)** on p211 J it was found as follows:

> "*In short, an expert comes to court to give the court the benefit of his or her expertise. Agreed, an expert is called by a particular party, presumably because the conclusion of the expert, using his or her expertise, is in favour of the line of argument of the particular party. But that does not absolve the expert from providing the court with as objective and unbiased an opinion, based on his or her expertise for the purposes of a particular case. An expert is not a hired gun who dispenses his or her expertise for the purposes of a particular case. An expert does not assume the role of an advocate …"*

As set out below, analysing the cogency of the underlying reasoning of his opinions, Dr Sevenster's opinions are rejected.

DID THE FAILURE TO KEEP PROPER RECORDS RESULT IN THE NEGLIGENT MANAGEMENT OF THE PLAINTIFF'S LABOUR AND THE WELLBEING OF THE FOETUS.

The period before the Caesarean was performed

[68] I need not make a finding as to whether there was bad record keeping because the bad record keeping was admitted and speaks for itself. Sister Malapane admitted that her record keeping was poor. Her record keeping was not poor, it was non-existent. If the matron had not at 13h00, nearly an hour and a half after the sister's examination, enquired as to why p16 was not completed it is doubtful whether it would have been completed. Sister Malapane's evidence that the matron was writing down her recordings as she was doing the examination is rejected as false. Sister Malapane added to p14 the words "*foetal tachycardia*". She did not write down what the heart rate was, nor did she record when this was detected. This record keeping fooled all the experts, including Dr Sevenster, into thinking that the foetal tachycardia was detected in the initial period of admission. The purpose of record keeping in a hospital was thus not fulfilled as it does not inform a reader

of the record, be it a medical practitioner or not, as to what had transpired. This purpose of record keeping was testified to by Sister Hanrahan and is accepted by this court.

[69] Sister Malapane's explanation as to how she took the heart rate with the Pinard scope was worrying to say the least. When asked to explain how the heart rate is taken through a Pinard scope she resorted to explaining all her other examinations on the patient, but for the process with the Pinard scope. When confronted with the fact that she had not answered the question she then told the court that it took her 10 minutes of listening to the heart rate through the scope and could not inform the court how the calculation to determine the heart rate was done. In contrast the evidence was that the heart rate is calculated by taking the heart rate for 15 seconds and then multiplying it by four. The evidence of Dr Pistorius was not disputed that when confronted with on obese body, listening through a Pinard scope to the foetal heart, is unreliable. In view of her deplorable explanation of how the foetal heart rate is calculated I cannot find that the heart rate recorded as 138 in the initial examination is correctly reflected. Once again there is no evidence if it was taken before, during or after a contraction. This is enunciated by the fact that it was recorded an hour and a half later from memory. Dr Rockson testified that she

would have controlled the recording of the heart rate of 138 with the CTG, but with no CTG tracing to confirm this I find this recording to be unreliable. She in her evidence tried to explain that she saw the foetal heart rate from Sister Malebane's note, which of course was an untruth because Sister Malebane had not written down any foetal heart between 11:45-12:00. On p14 the foetal heart rate was left blank by sister Nkosi because it fell outside her scope, but this blank was also never completed by Sister Malapane. Dr Rockson did not record the foetal heart rate in her first examination at 11:45.

[70] In Dr Rockson's evidence she tried to create the impression that the next recording of "*CTG-BL -170"* was made immediately after the first section on p15, but when confronted with the fact that defendant's counsel had put an imaginary line to demarcate the 2 sections as falling within different timeframes she conceded that the second section was written later. In the second part of Dr Rockson's recording she did not note whether there were decelerations or what the beat-to beat variations were. She did not note the duration or strength of the contractions. She did not note whether the base line of 170 was before, during or after a contraction. Without confirmation of the CTG tracings themselves I cannot accept this recording.

[71] In her evidence she testified that her plan was to do an interpartum resuscitation which would include letting the patient lie on her left side, giving the patient oxygen and putting the patient on a drip. It is common cause that in terms of the Guidelines for maternity Care in South Africa ["Guidelines"] management of foetal distress requires:

"*1. Explain the problem to the mother*

2. Lie the mother in a left lateral position

3. Give oxygen by face mask at 6L/minute

4. Start an intravenous infusion of Ringer-Lactate to run at 240ml/hour

5. Do a vaginal examination for cervical dilation and to exclude cord prolapse"

Dr Rockson only recorded 2 of the prescribed steps to manage foetal distress. Her retort thereto was that any medical person would have known that she had applied intrapartum resuscitation. I have to reject this because with only recording 2 of the 5 steps it did not reflect that she did intrapartum resuscitation as prescribed. If she recorded "*intrapartum*

resuscitation" one may then perhaps accept that any medical officer would have known what the five steps are but she failed to record "*intrapartum resuscitation"*.

[72] Dr Rockson did not record that she asked the plaintiff whether she used Isihlambezo and that the plaintiff said she did. This evidence was in contra-distinction to that put to the plaintiff by defendant's counsel that the Dr Rockson asked whether she used traditional medicine and the plaintiff answered that she used Isihlambezo, a word that the doctor did not know. Dr Mwinyoglee testified that the fact that traditional medicine was taken must be recorded as part of the history taking of a patient. I cannot accept the version of Dr Rockson with all the inconsistencies in her evidence that the plaintiff told her that she took traditional medicine.

[73] Dr Rockson, according to her evidence, wanted as part of her plan to monitor the foetal heart rate with a continuous CTG. Yet she not once, but twice, recorded "*Repeat CTG in 1hr"* and "*CTG- Repeated-staff".* I cannot put it better than what Dr Mwinyoglee in his evidence worded it "*that from the record there is evidence of intermittent monitoring of the patient".* With no CTG tracings to contradict her explicit recording of intermittent monitoring I am unconvinced that there was continuous monitoring of the foetal heart rate.

Dr Rockson spoke perfect English in court, and I cannot find that she twice made a mistake with using the word "*repeat*", but meaning "*review*". The "*repeat*" was even attached to a time frame; this does not make sense if it was to be continuous monitoring. With foetal tachycardia present this instruction was also negligent because the foetal heart rate should be recorded every half an hour. According to the Guidelines "*Foetal Monitoring*" must take place "*for low risk labour with a stethoscope or hand-held Doppler instrument every 30 minutes, before, during and after contractions.*" ... "*CTG is used for high risk labour only ...*" "*All CTG tracings must be kept safely in the mother's file. After CTG interpretation, write a note in the file with a comment on the CTG, so that a record is available even if the CTG tracing is lost*". Not only was the defendant negligent in not safe-guarding the CTG-tracings but Dr Rockson did not write a comment in the file relating to the tracings.

[74] On this evidence I am satisfied that the plaintiff proved that at the initial admission the foetal heart rate was not monitored or nor properly monitored. Even if I am incorrect in this finding on the evidence alone, then I am satisfied that any evidence about the CTG-tracings constitutes hear-say evidence, that an adverse inference must be drawn and that the evidence is inadmissible.

[75] The CTG machine is used to detect foetal distress. It monitors the foetal heart rate with the uterine contraction. The CTG tracings are the most important monitoring device to detect foetal distress. It is common cause that the CTG tracings in this matter are not in the patient's file and are lost. Not a single reading of the CTG tracings were recorded in the hospital records. No explanation was offered by Mr Mvubu as to where the tracings could be, or why it was not on the file. The defendant did accordingly not comply with the prescribed obligation to keep and protect records in terms of sections 13 and 17 of the Act, or the Guidelines, or just simple good practice. Any oral evidence pertaining to the tracings constitute hearsay evidence because the CTG tracings are the original documentary evidence produced by the CTG machine. Bar any satisfactory explanation as to the unavailability of the documents, the oral evidence is secondary evidence and should be treated with caution, or the court can find the evidence to be inadmissible. In this matter there is no satisfactory explanation as to where the tracings can be. In ***Singh v Govender Brothers Construction*** **1986 (3) 613 NPD** on 615J the court found:

> "*The general rule of law of evidence is that, when the purpose is to establish the terms of a writing, the writing itself must be produced but that secondary evidence*

may be given of the contents when the original has been destroyed or lost and proper search has been made for it. It is necessary to prove that proper search has been made for the original and that it could not be found. (R v Amod & Co (Pty) Ltd and Another 1947 (3) SA 32(A) at 40.)"

The importance of the search and its adequacy is emphasised in ***S v Tshabalala*** **1980 (3) SA 99 (A)**. In the ***Singh***-matter *supra*, the court found the correct position to be as summarised in **Hoffman and Zeffert** ***SA Law of Evidence*** at 306:

"*The contents of a document may be proved by secondary evidence it is shown to be destroyed, or there is evidence that after a proper search it could not be found- the search has to be thorough and it is not a good enough for a person to say that the document has gone altogether. "*

In ***Khoza v MEC Health and Social Development, Gauteng*** **2015 (3) SA 266 (GJ)** the court applied this principle and found the hearsay evidence pertaining to the CTG to be inadmissible. The Court went as far as to find that a failure to produce the original medical records which were under a hospital's control and where there was no acceptable

explanation for its disappearance may result in the application of the doctrine of *res ipsa loquitor* in appropriate cases. I am not relying on the *res ipsa loquitor* principle as I am in bound and in agreement with the finding in ***Buthelezi v Ndaba*** **2013 (5) SA 437 (SCA)** that *res ipsa loquitor* would rarely, if ever, find application in medical negligence cases.

[76] The defendant argued that the ***Khoza***-matter is distinguishable because the court could therein find that the nursing sister tampered with the partogram and that weighed heavily in the Court making the finding that the evidence relating to the CTG tracings was inadmissible. I disagree with this submission; the Court found the secondary evidence pertaining to the CTG tracings to be inadmissible and only if he "… *was wrong and have exercised my discretion incorrectly then I would have no hesitation in rejecting the testimony of Sister Songica and Dr Moagi regarding the CTG readings".* The court then deals with the tampering as one of the reasons for his credibility finding for rejecting the Sister and Doctor's evidence.

[77] The question then remains whether the lack of monitoring of the foetal heart rate compromised the baby prior to birth. Dr Pistorius testified that the defendant was negligent in not timeously monitoring and continuously monitoring the tachycardia when it arose. The

defendant failed to establish the reason for the tachycardia and to react to the tachycardia urgently. It was his opinion that the baby was compromised by the tachycardia in that B. suffered hypoxic ischemic encephalopathy.

[78] Dr Sevenster agreed that the foetal heart rate must be monitored continuously, but persisted that it was done. He could not provide this court with cogent reasons as to why continuous monitoring did take place. I cannot accept the opinion of Dr Sevenster that monitoring took place for the reasons set out above.

[79] The negligent monitoring of the foetal heart rate did lead to hypoxia ischemic encephalopathy and did compromise the foetus. I am satisfied that the conduct of the defendant's employees did not adhere to the skill and diligence prevailing in the medical profession standardly required by the Guidelines. These guidelines set out prudent practices with regard to the general level of skill and diligence exercised by the relevant profession and not the highest possible degree of professional skill;- ***Van Wyk v Lewis*** **1924 AD 438** at 444.

DID THE MECONIUM STAINED AMNIOTIC FLUID CAUSE THE NEONATAL ENCEPHAOLPATHY.

[80] The defendant pleaded that the meconium stained amniotic fluid may have caused the neonatal encephalopathy. In argument it was submitted that the Defendant proved its rebuttal burden with the meconium as cause for the partial prolonged ischemic insult to B.'s brain.

[81] All the experts explained that meconium is faeces excreted by the foetus into the amniotic fluid. Generally MSL 11 refers to a milky coloured fluid with deep green or light yellow blotches. The detection of MSL during labour is often considered as a sign of foetal distress. The passing of MSL may reflect foetal hypoxia.

[82] Dr Rockson testified that when she artificially raptured the membranes she observed "*MSL 11*". In her evidence she referred to it as "*old meconium*". The paediatric sister on p23 of the record recorded "*passed meconium*". On p25 of the record Dr Potgieter wrote "*old meconium*". In Dr Potgieter's evidence she testified that she wrote "*passed meconium*" because one writes down whether the baby can pass meconium to see if the anus is intact.

She was sure that it was meconium with a brownish-yellowish colour, but it was not old meconium because it was not sticky and would not cause vasoconstrictor of the umbilical cord. On the preoperative and the consent to operation forms it was noted that the caesarean section was booked for foetal distress, MSL grade 11 and sterilisation. On the TPH form relating to the caesarean itself it was circled that the liquor was "*clear".*

[83] Dr Pistorius commented that the recording of the meconium was again conflicting. This is so because Doctor Rockson noted MSL11 but did not denote it as old. Dr Potgieter recorded old meconium. There was also "*old blood"* noted and old blood can easily be confused with the colour of old meconium and then of course on the caesarean form "*clear liquor"* was recorded. From the record I cannot find that the meconium was old.

[84] A baby will pass meconium because of its maturity or due to a hypoxic event. When Dr Pistorius was confronted with the fact that Dr Rockson will testify that the MSL11 was brown and had a pea-like consistency he retorted then it was MSL111 and not as she recorded MSL11. He conceded that if there was a hypoxic event a week before the baby was born the foetus would pass meconium and the meconium could have contributed to the damage in the brain, but it was not probable; 1 in 1000 chance with only a 10% chance in

term infants like B.. The reason it was not probable was that B. would not have reacted so quickly to the resuscitation if he suffered brain damage long before the birth.

[85] Prof Bolton testified that he did not know what "*old"* meconium is because he did a study and there were 22 colours on the Plascon colour chart of different greens of meconium alone, but he accepted the general description of old meconium as having a pea-like consistency with a yellow-tan colour. It was not his opinion that meconium was so potent as to cause intraamniotic infection resulting in a release of foetal cytokines and eicosanoids which can damage myelinogenesis in periventricular white matter. He said if it was so toxic there would be many more brain damaged babies because at the Baragwaneth Hospital, where he works, meconium was commonly presented, 25 %. He also opined that inflammation causes white matter damage and not infection. He conceded that meconium could lead to brain damage, but it was in the matter at hand, possible but not probable. He also was of the opinion that because B. responded so well to the resuscitation it negated the defendant's defence that B.'s injury occurred over a long period antenatally. He once again conceded that it was possible, but not probable. He reiterated that hypoxia causes MSL and not the other way round. He thought that amnioscopy was a crude assessment

with unreliable results and that is why it is not practised any more. Both Dr Pistorius and Prof. Bolton testified that if the meconium was old it has a terrible foul smell. Partial prolonged damage can indicate damage days before the birth but it can also occur in the hours before birth.

[86] Dr Sevenster testified that the passing of meconium is a risk factor for the mother and foetus. As a young doctor he did many amnioscopies and he saw the change in the colour of the amniotic fluid from green to brown and then tan. If the fluid was thus tan it was old meconium. Much reliance was placed on an article with the title "*Association of Meconium Stained Amniotic Fluid with Foetal and Neonatal Brain Injury"* and specifically that the passage of meconium could be a major factor in the pathogenesis of neurological disorders. He conceded that in the article the changes of meconium in the fluid increased the risk for cerebral palsy by 0,1%.

[87] From the record keeping there is conflicting notes as to whether the meconium was old, or MSL 11. Dr Rockson's version that the meconium was old, with a pea-like consistency [MSL111] is contradictory to her recording of MSL11. Dr Sevenster testified that MSL11 was always old meconium. This was however never put to any of the plaintiff's

witnesses. Dr Potgieter recorded that it was old meconium, but was adamant that the consistency was not such that it could cause a vascoconstrictive effect on the umbilical cord. According to her it was thus not pea-like. Not one of the witnesses testified that there was a vile smell after the patient's membranes were raptured; indicative of old meconium. The foul smell of old meconium was not denied by Dr Sevenster.

[88] Dr Sevenster cannot testify as to whether the meconium was old or not due to the conflicting nature of the record. He can only base his opinion on his subjective acceptance of the evidence of Dr Rockson contrary to her express recordal. Dr Potgieter recorded that the meconium was old, but not sticky enough to cause vasoconstrictive blockage of the umbilical cord thus excluding the one pathogenetic pathway relied on by the defendant.

[89] The other pathway relied on as set out in the article supra is that meconium causes intraamniotic infection resulting in a release of foetal cytokines and eicosanoids which can damage myelinogenesis in periventricular white matter. Prof Bolton, an expert in this field, denied that this was a probable cause because then there would be many full term babies born with brain damage. He accepted that it was a possibility that meconium could result in brain damage, but in the matter at hand it was not probable. There were other obstetrical

complications, the compromise before birth and during birth reducing the ethiological factor of meconium as a cause of the cerebral palsy of B.. Dr Sevenster could give no reason why the fact that B. responded so well to the resuscitation was not indicative of the fact that there was no injury to the brain arising weeks or days before the birth. The defendant did accordingly not prove that there was old meconium present causing the prolonged brain damage to occur weeks or day before the admission to the hospital.

CHORIOAMNIONITIS

[90] Although much evidence was led pertaining to chorioamnionitis I am satisfied that chorioamnionitis, sub-clinical, or otherwise did not alone, or in conjunction with other conditions cause the prolonged partial damage to B.'s brain.

[91] It was common cause that there were no classical conditions associated with chorioamnionitis, maternal fever, significant maternal tachycardia, uterine tenderness or foul smelling liquor present. Although the defendant initially relied heavily on chorioamnionits they acknowledged that no clinical signs were present and then resorted to relying on sub-clinical chorioamnionitis. The joint minute between Prof Bolton and Prof Mawela of the

defendant concluded as follows: "*The diagnosis of chorioamnionitis was tenuous with little clinical evidence and is unlikely to have contributed to the poor neurological outcome of this case".* This recording speaks for itself and requires no finding by this court.

[92] In any event Prof Bolton when in cross-examination was confronted with the fact that he should reasonably concede that sub-clinical chorioamnionitis could have caused the prolonged brain damage he aptly replied that Dr Mawela, of the defendant, is a reasonable person and he did not come to that conclusion. Prof Bolton made a very favourable impression on the court providing sound reasons why the C-reactive protein [CPR] were in the upper limits of normal but nowhere near the 100mg/l which would be present with serious infection. The fact that the amniotic fluid did not smell foul excluded the onset of chorioamnionitis. He opined that sub-clinical chorioamnionitis could cause brain damage but that in this case it was highly unlikely and not the probable event causing the brain damage.

ISIHLAMBEZO

[93] Dr Rockson did not record that she was informed by the plaintiff that she took Isihlambezo. It is common cause that this should have been recorded as part of the history

taking of the patient. Although initially it was put that Sister Malebane would have heard the plaintiff informing Dr Rockson that she took traditional medicine due to her role as interpreter for Dr Rockson, Sister Malapane denied that it was asked or that she would ask it as a standard question. Without it being recorded the defendant has not proved its ethiology that the defendant took Isihlambezo contributing and/or causing the prolonged damage to the brain.

[94] Dr Sevenster is no expert on Isihlambezo and the defendant only relied on cross-examination of Prof Varga, the expert for the plaintiff, to support the contention that the plaintiff took some or other toxic herbal medicine which caused the foetus to pass meconium causing the prolonged damage to the brain.

[95] Even if I should be wrong in finding that the plaintiff did not take Isihlambezo then I accept that there is no scientific evidence that the taking of Isihlambezo would lead to contractions leading to meconium being passed. Dr Varga made a very good impression on the court and gave very cogent reasons for her opinions. Her criticism of the article by Mabina *et al*, relied on by the defendant, was because it was written by clinicians and not researchers with their article including overextensions. They for instance used as what they

termed a "*control group"* but what was in fact a "*comparison group"*. They did not indicate what they defined as "*MSL".* The research relied on was association which is a relationship, whereas causation is scientific evidence; she explained this by stating that by association if a lot of fat people went to gym one could associate that the gym made people fat, but that is not scientific proof. Her own article was a review of other work and not her own work. There were no clinical trials on human beings with Isihlambezo, only on rat tissue in a petri dish which could not be extrapolated to humans. I accept her evidence that the possibility of Isihlambezo causing a contraction is as much as being hit by lightning. I reject Dr Sevenster's non-expert opinion that the taking of Isihlambezo led to chronic foetal hypoxia of B..

[96] Dr Pistorius is a notable expert in the interpretation of MRI's pertaining to Foetal Brain Imaging. I accept his evidence that partial prolonged damage could have another ethiology, but that in B.'s case the partial prolonged damage was exacerbated by the sentinel event. If the damage had occurred long before the admission to the hospital B.'s resuscitation would not have been so effective. There was nothing untoward in the antenatal notes raising concern. The 3 hours from 10:50-13:50 is sufficient time to cause the partial

prolonged asphyxia as reflected on the MRI. The cerebral oedema showed that the event was acute and not chronic. It was his opinion that it was probable that the partial prolonged damage was as a result of the asphyxia at birth. He referred to the International CP Task Force consensus statement of 1999 wherein they proposed a template for defining a causal link between acute intrapartum events and cerebral palsy. In this matter all three the principle factors mentioned in the statement were present; the tachycardia, the low apgar score and hypoxia rendering it probable that the CP was caused by events during labour.

[97] He concurred with the findings of the radiologists which from the joints minute reflect as follows:

> "*1. The appearance of the brain is consistent with that seen due to a severe partial prolonged ischemic insult to the brain of a full term infant in the perinatal period. The basal ganglla show signal disturbance consistent with an acute profound insult in the perinatal period.*
>
> *2. The microcephaly is as a result of brain parenchymal losses and poor brain growth due to the severe injuries to the brain.*

3. The subdural collections are most likely due to the reduced brain volume giving rise to enlarged extra cerebral fluid spaces, predisposing towards the development of subdural haemorrhages.

4. The abnormalities of the inferior surfaces of the cerebellum are not usually noted in patients with HIE and might have an alternative explanation and may have occurred if there was severe cerebral oedema with tonsillar herniation, but is also reasonably likely due to HIE.

5. The appearance is not consistent with that seen due to chorioamnionitis. Chorioamnionitis might give rise to abnormalities of the brain, not dissimilar to a minimal degree of HIE, but not to the degree of gross destruction as is noted in B.'s brain."

[98] The defendant cross-examined Dr Pistorius extensively on an article "*Neonatal Encephalopathy and Neurologic Outcome*" – a report from the American College of Obstetricians and Gynaecologists wherein it was concluded that information regarding the likely timing of the damage by MRI is best obtained with early imaging, i.e. the first 24-96

hours of life. He agreed with this but qualified it in that the brain tries to fix the damage and in the first ten days after the injury a lot can happen in the brain. An MRI is unique and persisted that an MRI long after the event was still very reliable. MRI scanning despite being done years later is more accurate than ultrasound sonar. This was confirmed by Prof. Bolton.

[99] Prof Bolton also testified that injuries which occur over a long period of time display a different pattern of injury to that of spastic quadriplegia as suffered by B.. Prof Bolton expressed himself to be an expert on ultrasound sonars and he did not know who did the sonar, but the conclusions did not make sense to him. There was no expert evidence by the defendant to contradict this sound reasoning of the two experts on behalf of the plaintiff.

[100] None of the ethiologies pleaded by the defendant were proven and I accordingly accept Dr Pistorius' evidence that B. suffered intrapartum hypoxia and reject the contention by the defendant that the partial prolonged injury to the brain occurred days or weeks before the plaintiff's admission to the hospital.

NEGLIGENCE LEADING UP TO AND DURING THE CEASAREAN SECTION PROCEDURE.

[101] Dr Pistorius testified that the hour delay in performing the C-section was negligent; already at 12:00 the penny should have dropped that they must proceed with the C-section and not only at 13:00. No foetal heart rate was recorded by Dr Rockson at 12:00. When she returned to the patient between 12:00 and 13:00 she recorded a foetal heart rate with a baseline of 170. No other recordings of decelerations or other signs is made, yet Dr Rockson was worried enough to start with the resuscitation. No recording is made of why the baseline is 170; i.e. is the baby healthy or compromised. This baseline required a diagnosis, none was made or recorded. If it is common cause that foetal tachycardia was only the "*hooter"* that something may be wrong and not indicative of foetal distress why did they start with resuscitation? There must have been some worrying signs not recorded. There should then be continuous monitoring. Due to the fact that there was not continuous monitoring the foetal distress was negligently not reacted to and the caesarean was thus negligently delayed.

[102] Dr Pistorius was of the opinion that to rapture the membranes was not the appropriate procedure. You would only do that if you wanted to accelerate the labour with a healthy baby, not a compromised baby. The reason for this was that the rapture of the membranes would increase uterine activity compromising the foetus further. Dr Sevenster testified that he would also have raptured the membranes.

[103] The ceasearan was not performed as set out in the guidelines within an hour. This was conceded by Dr Sevenster. This constitutes a further compromise to the baby.

[104] A junior doctor should not have been allowed to perform an emergency C-section where the patient was obese, a grande multipara, with a foetus suffering from tachycardia. Dr Seventer could not challenge the opinion of Dr Pistorius that if it was not policy to have sonar done before a C-section then the doctor performing the C-section should at least be competent to deal with any unexpected emergencies. Dr Sondiyaza was not equipped to deal with what she was confronted with and had to call another doctor to take over form her. Dr Rockson answered to the call. Dr Mwambi was more senior but she arrived first and Dr Mwambi only arrived after B. was extracted and he then only took over. Dr Pistorius was of the opinion that it was really inappropriate to let Dr Sondiyasa do an emergency C-

section with a compromised baby. This was exasperated by the fact that the plaintiff was morbidly obese. This complicated the operation because access to the baby is then limited and difficult resulting in the doctor not having a clear view. One must also guard against an obese woman and thrombosis. Dr Sevenster was of the opinion that any doctor confronted with a placenta previa shudders. The point is that Dr Sonadiyaza was not confronted with a placenta previa, she was confronted with a poorly formed lower segment and varicosities, not even a low lying placenta. This time lapse, even if only 2-10 minutes further compromised the baby because it is common cause that a compromised foetus can only withstand 4 minutes of asphyxia.

[105] It is common cause that it was a difficult birth because Dr Rockson was then confronted with an unexpected transverse lie and a placenta previa. Dr Rockson had to clamp the umbilical cord. All the experts agreed that she acted reasonable in doing so, but Prof Bolton and Dr Pistorius reiterated that then the birth must be expedited even more because there is no exchange of gasses between the mother and the foetus, leaving the foetus even more compromised. It was common cause that a compromised baby must be out of the womb within 2-3 minutes. The doctors Rockson, Sondiyaza and Potgieter

testified that Dr Rockson really struggled to get the baby out. Dr Potgieter said it took 5 minutes. Dr Pistorius was adamant that on the diagnosed facts of this case an experienced doctor was necessary to handle caesarean complications. Dr Rockson should also have palpated the plaintiff before she cut because she would have realised the baby was lying transverse. The delay in the birth would have so-doing been shortcut. He conceded that he concentrated too much on the issue of the placenta previa in his report. He accepted that Dr Rockson did the best for her level of experience but the fact that she struggled to get the baby out and the baby lost 60% of his blood is indicative thereof that her experience was insufficient. Dr Sevenster testified that it was not standard practise to palpate before a C-section.

[106] The question to be answered is whether the difficult caesarean and the brain damage caused as a result thereof can be laid at the door of negligent conduct of the employees of the defendant.

[107] The plaintiff has proven on a preponderance of probabilities that the conduct just before and during the C-section of the employees of the defendant was not within the

standard expected of them, they were accordingly negligent. The reasons therefor are set out below.

[108] The Guidelines provide that it must be ensured that a caesarean section can be performed within one hour of the decision to operate. It was conceded that the operation only started 1 hour after the decision was taken, not performed. This is so because if the decision was taken at 12:45, the plaintiff arrived in the theatre at 13:50, then it took at least 10 minutes for the spinal anaesthetic to take effect and then only was the operation started. So the operation started more than an hour after the decision was taken let alone performed within the hour. This is negligent because the foetus was experiencing tachycardia and for this reason the decision was taken to perform an emergency C-section; time was of the essence. This lack of urgency caused further damage to the foetus. The defendant forwarded no reasons why this C-section could not be performed earlier.

[109] The defendant is negligent in not ensuring that emergency C-sections are dealt with by senior doctors. There is no doubt that Dr Sondiyaza was not equipped to deal with this C-section; she did not know what to do when confronted with a poorly formed lower segment and varicosities. It simply does not matter if she had performed 10 or 30

caesareans; she was not equipped to deal with an emergency C-section. She had only done caesareans on her own for three weeks before this operation. There was no system in place at the defendant that the most senior doctor takes over; the most senior doctor on duty did not take over, he arrived after the extraction. The result of Dr Sondiyaza's incapability to perform the operation resulted in the operation coming to a halt. With an emergency caesarean not been speedily attended to because a junior doctor could not perform the operation is not the standard of practice required from the defendant. The process had to be halted for another surgeon to arrive; time is of the essence with a compromised baby. This is simply so because a compromised baby can withstand asphyxia only half the time that of a normal foetus. Even if I accept the version of Dr Rockson that she came quickly, 2-3 minutes, this was a further 2-3 minutes that B. did not have and time that an experienced doctor could have saved without further compromising the foetus. Dr Potgieter confirmed that foetal distress is the highest on priority list to get a theatre and perform the C-section quickly.

[110] It was a struggle to get B. out due to the transverse lie and the placenta previa. Dr Rockson testified that it took her 2-3 minutes to get B. extracted. Dr Poigieter testified it

took Dr Rockson 5 minutes. I find the argument flawed that it was only Dr Potgieter's perception that it was 5 minutes; it was also only Dr Rockson's perception that it was only 2-3 minutes. The record does not reflect when the baby was extracted. Dr Sondiyaza testified that Rockson swore when she discovered the transverse lie. Her evidence was that Dr Rockson "*struggled with the delivery of the baby, but eventually the baby came out".* Dr Potgieter testified that Dr Rockson could not find the presenting baby's hands and "*finally after she found the presenting baby, she pulled the baby out with a leg".* From this evidence I on a preponderance of probabilities find that it took 5 minutes for the baby to be extracted. This is coupled with the fact that Dr Potgieter recorded on p26 that Dr Rockson "*struggled for about 5 minutes"* to extract the baby. She recorded this immediately after the operation and the extraordinary long time for an extraction was specifically recorded.

[111] The question then arises whether the conduct of Dr Rockson deviated from the standard required. Dr Pistorius testified that they should have palpated the plaintiff to ascertain B.'s lie. Dr Sevenster testified that he would only palpate to ascertain the lie if he did not know the patient, but he would rely on the records so he did not think that Dr Sondiyaza was negligent in not palpating the plaintiff. Dr Sondiyaza admitted that she

should have palpated the plaintiff but then later changed her evidence and testified that the plaintiff was "*too fat according to her experience to be palpated".* It is common cause that with a grande mutipara the lie of the foetus could change. It is also common cause that with an obese woman palpation to detect the lie of the baby is more difficult. However with it being common cause that B.'s lie could be unstable I find Dr Sevenster's opinion that he would not palpate and rely on the records not cogent; the records may then not reflect the correct position. Dr Pistorius was clear that knowing what you are confronted with already saves time because a plan of action can be made before cutting through the placenta. The mere fact that palpation is not a norm is not a reason to find that the defendant was not negligent. In *Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another* **2001 (3) SA 1188 (SCA)** at paragraph 30 it was found that "*even if certain tests are universally held as being proper a court will not find it to be reasonable if an obvious risk could have been guarded against by utilising another test."*

The fact that the baby lost 60% of its blood was an indicative thereof that the operation took too long.

[112] The plaintiff has thus proven that the defendant was negligent in not performing the C-section earlier. They were further negligent in not assigning a senior doctor to perform the C-section. This is not a case where the defendant is held liable simply because something went wrong; the defendant's personnel caused the acute brain damage.

[113] I accordingly make the following order:

113.1 The defendant is liable for 100% of the plaintiff's proven or agreed quantum.

113.2 Costs as taxed or agreed between party and party, which costs are to include:

113.2.1. the reservation and qualifying fees of the expert witnesses Dr Pistorius, Prof Andronikou, Sr Hanrahan, Prof Varga and Prof Bolton;

113.2.2. the travelling, flight and accommodation expenses of Dr Pistorius and Prof Varga;

113.2.3. That the costs of Mr Austin for 5 days trial preparation and for 12 days conducting the trial and preparing heads and for argument be

allowed by the taxing master on a scale similar to that which would have reasonably been allowed had an advocate of senior status been employed by the plaintiff.

_____

S. POTTERILL

JUDGE OF THE HIGH COURT

CASE NO: 43421A/2013

HEARD ON: 27-31 July 2015 and 3-12 August 2015

FOR THE PLAINTIFF: MR. G.W. AUSTIN

INSTRUCTED BY: Gary Austin Inc.

FOR THE DEFENDANT: ADV. A.C. FERREIRA SC

ADV. J. KANYANE

INSTRUCTED BY: State Attorney, Pretoria

DATE OF JUDGMENT: 9 September 2015