THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

JUDGMENT

Reportable

Case no: 1258/2018

In the matter between:

A M **FIRST APPELLANT**

S M **SECOND APPELLANT**

and

MEC FOR HEALTH, WESTERN CAPE **RESPONDENT**

Neutral citation: *M and another v MEC Health, Western Cape* (1258/2018) [2020] ZASCA 89 (31 July 2020)

Coram: Wallis, Swain, Molemela, Mokgohloa and Dlodlo JJA

Heard: 10 March 2020

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Summary: Medical negligence – plaintiff's case based on expert evidence – requirements for such evidence to be admitted – duties of expert witnesses – direct evidence preferable to reconstruction after the event – trial court's findings of fact - not lightly disregarded – diagnosis and treatment of child presenting with head injury – instructions on discharge.

ORDER

On appeal from: Western Cape Division of the High Court (Binns-Ward J sitting as court of first instance):

The appeal is dismissed.

JUDGMENT

Wallis JA (Swain, Mokgohloa and Dlodlo JJA concurring)

[1] Shortly after 6.00 pm on 23 August 2011 the first appellant, Mr M brought his six year old son, J, to the Trauma Unit at Red Cross Memorial Hospital. A trauma nurse determined that all his vital signs (blood pressure, heart and respiratory rate and temperature) were normal. He was walking, alert and responsive. Dr Horn, the duty registrar, examined him and concluded that he had suffered a minor injury, which she described as a bump on the head. After a brief discussion with his father, she discharged him. He was taken home, arriving shortly after 7.00 pm, and put to bed in the bed he shared with his parents. They came to bed at about 9.30 pm. In the ordinary course his father woke at around 3.30 am to prepare for work. He tried to rouse J to take him to the toilet, but found him to be in an unusually deep sleep. Concerned, Mr M telephoned the hospital and was told that, if J was still sleeping deeply at his normal waking time of 6.30 am, he should be brought back to the hospital. Shortly after this J wet the bed and vomited and his parents rushed him back to the hospital arriving at about 4.00 am. Tragically this was too late, because a CT scan disclosed that he had suffered an extradural haematoma, caused, in common parlance, by a bleed between the skull

and the brain.[1] An emergency craniotomy was performed, but it was too late to prevent the serious brain injury that has left J with cerebral palsy and spastic quadriplegia.

[2] Mr and Mrs M instituted action in both their personal capacities and on behalf of J against the Member of the Executive Committee, Health of the Western Cape (the MEC) to recover damages arising from J's injuries. The action came to trial before Binns-Ward J, who delivered a comprehensive judgment rejecting the allegations of negligence levelled against Dr Horn and dismissing the Ms' claims. The appeal is with his leave.

[3] The sole issue in the appeal is whether Dr Horn was negligent in her treatment of J. The nature of the allegations of negligence requires some explanation of J's injuries. A CT scan performed when J returned to hospital on 24 August 2011, established that the 'bump' on his head was caused by a subgaleal haemotoma,[2] and that he had sustained a linear fracture in the left temporo-parietal area of the scalp behind his left ear. This was accompanied by the rupture of the middle meningeal artery resulting in a left extradural haematoma between the skull and the dura surrounding the brain. The pressure exerted by this on the brain caused J's injury.

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[1] The haemorrhage occurs between the dura mata that surrounds the brain and the periosteum that covers the internal surface of the skull. An extradural (or epidural) haemorrhage is to be distinguished from a subdural haemorrhage (commonly referred to as a brain haemorrhage), which is the rupture of an artery causing bleeding in the brain, as opposed to a bleed between the dura surrounding the brain and the skull covering.

[2] A subgaleal haematoma occurs between the skull and the scalp. In technical language it occurs, between the periosteum that covers the skull and the galeal aponeurotica, which is a firm, thick fascial layer between the scalp and the periosteum of the skull, but is not firmly adherent to the skull.[2] Bleeding can take place between the galeal aponeurotica and the periosteum. Where this occurs it is called a subgaleal haematoma.

[4] Dr Horn could not have detected this fracture from her examination of J on 23 August 2011, because a linear fracture cannot be detected by a routine examination and palpation of a head injury such as that suffered by J. It would have been detected by a CT scan or a skull X-ray. At Red Cross Memorial Hospital any further investigation would have been by way of a CT scan. Accordingly, the first question the trial court needed to answer was whether Dr Horn should have ordered a CT scan.

[5] The scope of that issue was considerably narrowed because the experts agreed, subject to the one point mentioned below, that on Dr Horn's observations a CT scan was not indicated.[3] The qualification was that had the bump on J's head felt fluctuant or 'boggy' on palpation reference for a CT scan was indicated. Dr Horn agreed and said she would have ordered a CT scan if the bump had felt boggy on palpation. The only dispute was therefore the narrow factual one of whether on palpation the bump felt boggy. The judge held that it was not established on a balance of probabilities that it was boggy. The primary thrust of the appeal is against that factual finding.

[6] Two alternative arguments were addressed on behalf of the appellants. The first was that Dr Horn should not have discharged J, but kept him at the hospital for further observation and re-examination. It was claimed that this would have resulted in his condition being detected and treated earlier. The other was that the advice given to Mr M when J was discharged in regard to monitoring his condition was inadequate and he should have been told to wake him every two hours. Had this been done it

[3] Goosen, said so expressly. The judge understood Dr Edeling to have conceded that J would not have qualified for a CT scan and this was not challenged either by counsel or Dr Edeling.

was submitted that the deterioration in his condition would have been detected earlier and he would have been brought back to the hospital for the necessary treatment.

The issues and the approach to the appeal

[7] Whether the bump on J's head was fluctuant or boggy was a factual question. In determining it the judge assessed the evidence and credibility of Dr Horn. She said that in the course of her examination she had felt the bump. While at the time of the trial, nearly seven years later, she did not have a specific recollection of how it felt, she believed that it was firm and not boggy. Otherwise she would not have described it in her notes as a bump and her usual practice in dealing with a head injury that felt boggy was to order a CT scan. Against that was the evidence of Dr Edeling, who said that given the nature of the underlying subgaleal haematoma it must inevitably have felt boggy on palpation. Professor Taylor disagreed for reasons that will be examined later

[8] The judge found Dr Horn to be a careful and credible witness. He said that her evidence on this point could not be rejected. That involved both findings of credibility and fact. It is trite that an appeal court is reluctant to disturb findings of that character by a trial judge, who was steeped in the atmosphere of a lengthy trial and had the advantage of seeing and hearing the witnesses. Such findings are only overturned if there is a clear misdirection or the trial court's findings are clearly erroneous.[4] That has consistently been the approach of this court and the Constitutional Court as reflected recently in the following passage from *ST v CT*:[5]

[4] *R v Dhlumayo* 1948 (2) SA 677 9A) at 705-706; *S v Francis* 1991 (1) SACR 198 (A) at 204C-E.
[5] *ST v CT* [2018] ZASCA 73; 2018 (5) SA 479 (SCA) para 26.

'In *Makate v Vodacom (Pty) Ltd* the Constitutional Court, in reaffirming the trite principles outlined in *Dhlumayo,* quoted the following dictum of Lord Wright in *Powell & Wife v Streatham Nursing Home:*

"Not to have seen the witnesses puts appellate judges in a permanent position of disadvantage as against the trial judges, and unless it can be shown that he has failed to use or has palpably misused his advantage, the higher court ought not to take the responsibility of reversing conclusions so arrived at, merely on the result of their own comparisons and criticisms of the witnesses and of their own view of the probabilities of the case."' (Citations omitted.)

[9] The appellants did not point to any misdirection by the judge in regard to this issue. Their task therefore was to demonstrate that his conclusion that he could not reject Dr Horn's evidence was clearly erroneous and that he should have accepted Dr Edeling's evidence that the bump inevitably had to have been fluctuant (boggy). Both conclusions were necessary in order to discharge the onus of proving negligence. That was a formidable task. It was made more formidable by the fact that Dr Horn's evidence was direct evidence, whereas Dr Edeling's was a reconstruction based on Dr Horn's clinical notes and the information that became available the following day from the CT scan. It has frequently been pointed out that direct and credible evidence of events usually carries greater weight than the opinion of an expert seeking to reconstruct those events afterwards, especially where the material on which that is based is scant.[6]

[10] The alternative argument that Dr Horn should have kept J in the Trauma Unit for further observation falls in a different category. The first underlying premise was that, notwithstanding Dr Horn's conclusion after

[6] *Motor Vehicle Assurance Fund v Kenny* 1984 (4) SA 432 € at 436H-I; *Stacey v Kent* 1995 (3) SA 344 (E) at 348-349; *Biddlecombe v Road Accident Fund* [2011] ZASCA 225 para 10; *Roux v Hattingh* [2012] ZASCA 57; 2012 (4) SA 300 (SCA) paras 50-53.

her examination of J that his injury was minor, she should not have discharged him because good practice required her to keep him in the unit for further observation for a period of time, suggested to be one hour. The second premise was that had she done so J would, as he did in the car on his way home, have fallen asleep and this would have caused alarm bells to sound leading to further investigation, more particularly a CT scan.

[11] It was common cause that the decision to discharge J was a matter of clinical judgment. The only attack on the accuracy of her diagnosis was based on the contention that the bump must have been fluctuant or boggy. If that attack failed the further argument had to proceed on the basis that Dr Horn's diagnosis that J had suffered a minor head injury was correct given her clinical observations. The question then was whether a reasonable medical practitioner applying the degree of professional skill and diligence of a member of the medical profession in charge of a trauma unit at a hospital,[7] would not have discharged J but kept him at the unit for further observation. There was a dispute between the expert witnesses on that issue. It fell to be considered by the trial judge in terms of principles discussed in *Michael v Linksfield Clinic*[8] and *MediClinic v Vermeulen*.[9] Provided Dr Horn's decision to discharge J had the support of a reasonable and respectable body of medical opinion she was not negligent, even though other reasonable and respectable medical opinions might have held a different view.

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[7] The applicable principles were summarised with reference to the leading cases in *Goliath v MEC for Health, Eastern Cape* [2014] ZASCA 182; 2015 (2) SA 97 (SCA) para 8.
[8] *Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another* [2001] ZASCA 12; 2001 (3) SA 188 (SCA) paras 34-40. These principles were approved by the Constitutional Court in *Oppelt v Head, Department of Health Provincial Administration, Western Cape* [2015] ZACC 33; 2016 (1) SA 325 (CC) para 36.
[9] *Medi-Clinic Ltd v Vermeulen* [2014] ZASCA 150; 2015 (1) SA 241 (SCA) paras 4-8.

[12] If the decision to discharge J was not negligent, the second argument fell to be rejected. If she was negligent there was the further issue of whether, had she kept him for observation for an hour, the course of events would probably have been different. That involved a consideration of the observation and treatment that J would have received had he not been discharged. The trial judge did not reach that point because he concluded that there was no negligence in the decision to discharge J.

[13] The third argument raised a number of factual issues. The first was what Mr M was told when J was discharged into his care. It was common cause that he was handed a standard document prepared by the hospital and intended to be given to parents and guardians of children who had presented with head injuries and were being discharged. He conceded under cross-examination that Dr Horn had told him to monitor J's condition. Whether her explanation went beyond that was disputed. The judge held that it was not established that she had 'failed to say enough'. The appellants contended that he should have found that Dr Horn did not give adequate instructions to Mr M on how to monitor J during the night and in particular should have instructed him to wake J at least every two hours to check for unusual drowsiness. This raised issues of credibility and a challenge to the judge's factual findings similar to those that arose in relation to the first issue.

[14] As with the second issue, a finding in favour of the appellants would have raised the further question of whether Mr and Mrs M's actions would have resulted in a different course of events had such instructions been given. To determine that required findings of fact as to the probable steps they would have taken; if and when they would have

been alerted to the possibility that there was something seriously amiss; what they would then have done; and whether that would have resulted in the problem being surgically addressed and resolved before any harm was suffered. In view of the grounds on which he decided the case the judge did not reach, or make any findings in regard to, these factual matters.

The evidence

[15] The only witnesses who gave evidence in regard to the events of 23 August 2011 were Mr M and Dr Horn. Even that was attenuated in that Mr M was not present at most of the events in regard to which he testified. Most importantly, he was not present when the accident happened or during Dr Horn's examination of J as he had gone to fetch the hospital file. The correct approach to their evidence, especially where it was disputed, was to weigh it against the general probabilities in the light of any issues concerning their credibility or reliability.[10]

[16] Three doctors testified as expert witnesses. They were Dr Goosen, a general surgeon with experience of trauma surgery and the director of the Netcare Union Hospital Trauma Unit, Alberton. The second was Dr H J Edeling, a qualified neuro-surgeon, who retired from surgical practice in 2008 and has since then spent almost 95 percent of his time in medico-legal practice. He has consulted as a professional witness and provided over 3000 medico-legal reports; attended over 1000 pre-trial expert meetings and given evidence in over 200 cases. Both he and Dr Goosen gave evidence on behalf of the appellants. The third expert, called on behalf of the MEC, was Professor A Taylor, the clinical head of adult neurosurgery at Groote Schuur Hospital, an associate professor at

[10] *Stellenbosch Farmers' Winery Group Ltd and Another v Martell et Cie and Others* 2003 (1) SA 11 (SCA) para 5.

the University of Cape Town. He was also at the time the president of the Society for Neurological Surgeons of South Africa; the president of the Federation of South African Surgical Societies and the incoming president of the World Federation of Interventional and Therapeutic Neuroradiology. He was still in active surgical practice operating usually on four or more days a week.

[17] Something needs to be said about the role of expert witnesses and the expert evidence in this case. The functions of an expert witness are threefold.[11] First, where they have themselves observed relevant facts that evidence will be evidence of fact and admissible as such.[12] Second, they provide the court with abstract or general knowledge concerning their discipline that is necessary to enable the court to understand the issues arising in the litigation. This includes evidence of the current state of knowledge and generally accepted practice in the field in question. Although such evidence can only be given by an expert qualified in the relevant field, it remains, at the end of the day, essentially evidence of fact on which the court will have to make factual findings. It is necessary to enable the court to assess the validity of opinions that they express. Third, they give evidence concerning their own inferences and opinions on the issues in the case and the grounds for drawing those inferences and expressing those conclusions.

[18] Before an expert witness may be called it is necessary to deliver a summary of the witness's opinions and the reasons therefor in terms of

[11] This analysis is not novel. See the 1933 lecture delivered to the Medico-Legal Society of Melbourne by Justice Owen Dixon (as he then was), reprinted in *Jesting Pilate* 18.
[12] As was the evidence of an experienced pilot concerning the effect of wind and waves on a ship entering Cape Town harbour in *The Owners of the MV 'Banglar Mookh' v Transnet Ltd* [2012] ZASCA 57; 2012 (4) SA 300 (SCA) para 51.

Uniform Rule 36 (9)(*b*). This court held in *Coopers*[13] that the summary must at least include:

'… the facts or *data* on which the opinion is based. The facts or *data* would include those personally or directly known to or ascertained by the expert witness, e.g., from general scientific knowledge, experiments, or investigations conducted by him, or known to or ascertained by others of which he has been informed in order to formulate his opinions, e.g., experiments or investigations by others, or information from text-books, which are to be duly proved at the trial.'

[19] In the same case, Wessels JA said:[14]

'… an expert's opinion represents his reasoned conclusion based on certain facts or data, which are either common cause, or established by his own evidence or that of some other competent witness. Except possibly where it is not controverted, an expert's bald statement of his opinion is not of any real assistance. Proper evaluation of the opinion can only be undertaken if the process of reasoning which led to the conclusion, including the premises from which the reasoning proceeds, are disclosed by the expert.'

For those reasons the court said that 'the summary must at least state the sum and substance of the facts and data which lead to the reasoned conclusion (i.e., the opinion)'

[20] The need for clarity as to the facts on which an expert's opinion is based has been stressed in a number of cases. In *PriceWaterhouseCoopers v National Potato Co-operative Ltd*[15] the following passage from a Canadian judgment[16] was cited with approval:

'[326] "*Before any weight can be given to an expert's opinion, the facts upon which the opinion is based must be found to exist*"

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[13] *Coopers (South Africa) (Pty) Ltd v Deutsche Gesellschaft für Schädlingsbekämpfung MBH* 1976 (3) SA 352 (A) at 371 A-H.
[14] At 371F-H.
[15] *PriceWaterhouseCoopers Inc and Others v National Potato Co-operative Ltd and Another* [2015] ZASCA 2; [2015] 2 All SA 403 (SCA) para 99.
[16] *Widdrington (Estate of) c. Wightman*, 2011 QCCS 1788 (CanLII) paras 326-328.

[327] *"As long as there is some admissible evidence on which the expert's testimony is based it cannot be ignored; but it follows that the more an expert relies on facts not in evidence, the weight given to his opinion will diminish"*.

[328] An opinion based on facts not in evidence has no value for the Court.'

[21] The opinions of expert witnesses involve the drawing of inferences from facts. The inferences must be reasonably capable of being drawn from those facts. If they are tenuous, or far-fetched, they cannot form the foundation for the court to make any finding of fact.[17] Furthermore, in any process of reasoning the drawing of inferences from the facts must be based on admitted or proven facts and not matters of speculation. As Lord Wright said in his speech in *Caswell v Powell Duffryn Associated Collieries Ltd*:

'Inference must be carefully distinguished from conjecture or speculation. There can be no inference unless there are objective facts from which to infer the other facts which it is sought to establish … But if there are no positive proved facts from which the inference can be made, the method of inference fails and what is left is mere speculation or conjecture.'[18]

[22] In my view these requirements were disregarded in this case. The experts instructed on behalf of the Ms were in certain respects not instructed on the basis of facts that could be, or were, proved at the trial in regard to the mechanics of J's injury. There was no endeavour to clarify the facts known to Dr Horn, or the facts about her diagnosis and treatment of J. She was criticised in relation to matters that were known to be irrelevant, such as her failure to perform an otoscopy. Her notes and

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[17] *Filippo Lembo, MV; MV Pasquale della Gatta: Imperial Marine Co v Deiulemar Compagnia di Navigazione Spa* [2011] ZASCA 131; 2012 (1) SA 58 (SCA) para 24.

[18] [1939] 3 All ER 722 (HL) at 733E-F, cited in *Motor Vehicle Assurance Fund v Dubuzane* 1984 (1) SA 700 (A) at 706B-D. See also *Great River Shipping Inc v Sunnyface Marine Limited* 1994 (1) SA 65 (C) at 75I-76C and particularly the statement that 'evidence does not include contention, submission or conjecture.'

other documents were subjected to forensic scrutiny and criticism of a type one encounters with the most pedantic lawyers. Conclusions contrary to her diagnosis were expressed on the basis that her notes were not as complete as Dr Goosen and Dr Edeling thought desirable. The medical literature was used selectively to bolster arguments and not for the purpose of informing the court of the current approach to the clinical assessment of head injuries in children and the range of accepted medical views. Instead it was directed at justifying exceptions to the established consensus. Initial theories, advanced to justify claims that a skull X-ray or CT scan should have been performed, were shown under cross-examination to be untenable and abandoned.

[23] In the result, the eventual argument that Dr Horn negligently diagnosed J with a minor injury proceeded on a basis that was not pleaded; was not reflected in the expert's summaries; was not debated at the pre-trial meetings between the experts; was referred to in passing during counsel's opening address; and first emerged, fully formed, in Dr Edeling's evidence on the fourth day of the trial. All the other arguments directed at suggesting that Dr Horn was negligent in arriving at her diagnosis have been abandoned. This is an unsatisfactory state of affairs and resulted in a lengthy trial much of which was devoted to ploughing through the minutiae of academic articles.

[24] A proper use of the provisions of Uniform Rules 37 and 37A would have avoided many of these problems and enabled the trial to proceed and finish in the estimated three to four days instead of taking ten days spread over three months. The ten pre-trial meeting minutes, or progress certificates in relation to such meetings, show that the 'meetings' were conducted telephonically or by way of correspondence,

without any engagement on the nature of the disputes between the parties or any real endeavour to clarify and limit the issues. The impression is overwhelming that these were seen as nothing more than a necessary formality in order to secure a trial date. What should have happened in an endeavour to narrow the issues was that witness statements should have been delivered from both Mr M and Dr Horn. Broadly speaking that is what Rule 37A(10)(*e*) contemplates. It is what is customary in many jurisdictions.

[25] Turning to the experts the instructions given to them on the facts should have been disclosed. Where necessary, clarification should have been sought to enable proper instructions to be given. Instead opinions were expressed on the basis of conjecture and, in one instance, on a misreading of Dr Horn's notes. An agreed bundle of academic articles should have been prepared together with an executive summary of their contents. That would have largely obviated the need to trawl through them, reading sections into the record disguised as questions. The issues at the trial should have been clearly defined in terms of Rule 37A(11)(*c*). Instead of refusing the particulars for trial requested in relation to the expert summaries of Drs Goosen and Edeling they should have been furnished.

[26] Following that course, as is required in many jurisdictions, especially when dealing with expert witnesses, would have brought greater clarity to the proceedings. While Rule 36(9) was innovative when introduced in 1963, times have moved on and the preparation of expert summaries by lawyers, who often have only a tenuous grasp of the real issues in a case, frequently give rise to problems of this type. It would be desirable for the Rules Board to reconsider the rule. A useful change

would be to require the experts to prepare and deliver their reports in their own words and to include both a statement recognising that the report is furnished for the assistance of the court and a statement of truth.[19] Having said that I turn to consider the three issues described earlier.

Was the bump on J's head fluctuant?

[27] The fracture suffered by J was not detectable by a conventional examination involving palpation of the bump on his head. The rupture to the middle meningeal artery was likewise not detectable by those means. However, there is always a risk, albeit small,[20] of such a fracture in that position on the head. The presence of a subgaleal haemorrhage or haematoma is a recognised warning sign of the possible presence of a fracture. All this was common cause and known to Dr Horn. My colleague Molemela JA, whose dissent (the second judgment) I have read, refers to an article[21] that makes this very point. Two observations are necessary about this article. First, it considered a cohort of patients who had suffered blunt trauma to the head leading to loss of consciousness, definite amnesia, witnessed disorientation, persistent vomiting or persistent irritability. J presented with none of these features. Second, while it is correct that 51% of those children who had both a scalp haematoma and an inter-cranial injury had suffered a linear skull fracture, this represented only 10,3 percent of those children who presented with a scalp haematoma.

[28] It was also common cause that if the bump was fluctuant to the touch when being palpated that would have been a clear indication that J

[19] This is required in the United Kingdom and by Rule 26(2) of the Federal Rules of Civil Procedure.
[20] Dr Goosen put it at 4 percent.
[21] Burns and Others *'Scalp Hematoma Characteristics Associated with Intracranial Injury in Pediatric Minor Head Injury'* Society Academic Emergency Medicine (2016). See para 6 of the second judgment.

had suffered a subgaleal haemorrhage, calling for further investigation in the form of a CT scan. Hence, if the bump on J's head felt fluctuant when palpated, Dr Horn should have ordered a CT scan. Dr Goosen testified that it is something that is taught at undergraduate level and Dr Horn said she was aware of it. Therefore, if the bump was fluctuant the failure to refer J for a CT scan was negligent.

[29] Such negligence could only have arisen in one of three ways. The first was that Dr Horn did not palpate the bump at all. The second was that she did so, but in such an inept manner that she failed to detect that it was fluctuant. The third was that she did detect that it was fluctuant, but nonetheless did nothing about it. That last possibility can be discarded because it was not suggested to her in cross-examination and there is no reason to think that she would have behaved in a fashion that flew in the face of her own medical knowledge.

[30] In her evidence in chief Dr Horn was clear that she had palpated the lump on J's head. She said:

'He did have a noticeable bump behind the ear. Therefore I would look then at the bump, note its location – not necessarily in my notes – but I did, and then examine the bump itself in order to feel its consistency, and in the case of that being a possibility, the potential of an underlying skull fracture, which cannot always be palpated.'[22]

In regard to the consistency of the bump, she said:

'I unfortunately do not recall what it felt like, but I do believe that in order for me to have written 'bump' it may have been solid. I am very sure that at the time had it been a boggy fluctuant swelling I would have made a note of that at the very least, but I am afraid I do not specifically recall the consistency of the bump.'

[22] The passage was typed in the record without any punctuation so punctuation has been inserted to assist the reader. This highlights a further difficulty faced by an appellate court faced with the cold words of a record, namely that the punctuation is that of the typist who prepared the record and experience of reading the words aloud demonstrates that this is frequently inapt to convey the cadence or nuance of the spoken word. The trial judge is under no such disadvantage.

There is nothing implausible in this. The description of the swelling as a bump, without qualification conveyed that there was nothing untoward about it. It was unnecessary to add anything to that simple description. What difference would it have made to have added the adjective 'firm' before 'bump'? The description only required qualification if it was fluctuant or boggy. Dr Horn explained that in the case of a fluctuant or boggy swelling she would have noted it because of her awareness of the risk of an underlying skull fracture. In answer to a question from the judge she said that her examination of the bump 'was not at the time suspicious of an underlying skull fracture'. The absence of an adjective describing the bump provided no evidence to support a conclusion that it was fluctuant or boggy.

[31] The second judgment attaches some importance to the following passage in Dr Horn's cross-examination:

'You had fairly conceded yesterday, and I think this morning in your evidence, that you did not in fact or you cannot remember feeling the consistency of the bump? -- I cannot remember what the bump felt like, no.

. . .

I am suggesting to you, Dr Horn, that you probably missed it, you did not feel it. You did not feel for consistency and therefore did not note it. Do you accept that? -- I cannot refute it.

Court: Sorry your question was I put it to you that it is?

Mr van der Merwe: What I suggest is that it is likely that you in fact did not feel the bump for consistency and therefore did not record it. -- It is possible but that would not have been my normal practice.'

My colleague views that as a concession by Dr Horn. I do not, because in saying that she could not refute the proposition being put to her by counsel Dr Horn was not agreeing to it. Consistent with the careful approach that characterised the entirety of her evidence, adverted to in

paras 48 and 56, she said that she could not refute counsel's proposition, that is, prove that it was wrong or disprove it.[23] She did not accept it or agree with it as a matter of fact, because she added that it would have been contrary to her normal practice and indeed her knowledge of what she should be looking for in palpating the swelling on J's head.

[32] The second judgment criticises Dr Horn's notes and quotes Dr Goosen as saying that students are taught 'if it's not there it wasn't done'. That aphorism was inapplicable here, because Dr Horn recorded that there was a bump, so there was something there in the note. The question was what this meant and the criticism related to her failure to describe it in detail. This overlooked the fact that in her view there was nothing more to describe. The absence of a reference to it being boggy is not evidence that it was boggy. On the contrary it was evidence that it was not boggy, because, had it been otherwise, she would have recorded it. This is very different from the situation in *Topham*,[24] where the doctor had failed to detect a dislocation of the patient's femur. He claimed that, in addition to obtaining and examining an X-ray, he had examined her pelvis to check for such a dislocation, but no such examination was reflected in his notes. In those circumstances evidence of his usual practice was unhelpful as was his suggestion that the patient must have suffered the dislocation after his examination.

[33] The appellants' challenge to Dr Horn's evidence rested entirely on Dr Edeling's assertion in evidence in chief that: 'If a doctor had put a finger on that bump at that time, it would have felt boggy.' When asked why this was so, he answered: 'Because it was blood.' Under cross-

[23] Shorter Oxford English Dictionary (6 ed, 2007) sv 'refute' meanings 2 and 3.
[24] *Topham v MEC for the Department of Health, Mpumalanga* [2012] ZASCA 65, para 15.

examination he remained adamant that the scalp haematoma with which J presented on 23 August must at that time have felt boggy when palpated. He expanded on this in cross-examination, saying:

'[I] cannot say as an absolutely certainty that it was boggy. But [in all] probability, it can only have been boggy. If you look at the volume of blood that is visible on the CT scan, or if we imagine the volume of blood that would give rise to a lump that would be perceived by Dr Horn as having the dimensions of an egg in cross-section, I believe that a lump of that size contains sufficient fluid to be able to palpate the fluctuant nature of the bump. So, I cannot accept that the bump described by Dr Horn, or the volume of blood seen on the CT scan in this case, could have felt anything other than boggy.' (The insertions are the natural words in two places where the transcript reads 'indistinct'.)

[34] This was a remarkably dogmatic assertion given that nowhere in any of the documents filed in relation to Dr Edeling's evidence had he previously made such a statement. Its acceptance involves attributing to Dr Edeling an entirely inexplicable failure, at any stage prior to trial, to rely on something that he there testified was fundamental, elementary and obvious to anyone examining J. His first expert summary contained no reference to the consistency of the bump, or to the fact that it had been caused by a subgaleal haematoma. Nor was there any reference to the relevance of it being fluctuant or boggy. The summary said that the statement in Dr Horn's notes 'No other neurology' showed that she had identified a neurological deficit and this was a clear indication for admission to hospital, neurosurgical consultation and observation. Dr Edeling's opinion was that the presence of a skull fracture and the development of a subdural haematoma was foreseeable and should have been investigated by a skull X-ray.

[35] Dr Goosen did not refer in his expert summary to the significance of the bump being fluctuant, but complained that the notes did not record the size or other attributes of the swelling. Like Dr Edeling he construed Dr Horn's notes as meaning that she had detected a neurological deficit. He said that the documented history of J's injury and the clinical findings, that is, the perceived neurological defect, required further investigation including either an X-ray or a CT scan.

[36] Both summaries relied heavily on interpreting Dr Horn's notes as saying that she had identified a neurological defect in J. The notes read:

'Pt's foot caught and he fell bumping Ⓛ side of head. °LOC, °vomiting, °seizures.

Examination: Pt awake & alert. GCS 15/15.

Vitals: RR 22, HR 92, BP 104/68, T 36.1°

Bump Ⓛ temporal area above & behind ear.

PEARL. Congruent Ⓝ eye movements.

No other neurology.

Ⓟ - Reassurance

- HIF
- F/U PRN'

Save that the figures for J's vital signs have been transposed from the margin, this is an exact reproduction of the note. A layperson would require some explanation of the symbols and abbreviations, but not so a doctor. Transposed into plain language for the benefit of readers of this judgment it read:

'Patient's foot caught and he fell bumping Ⓛ side of head. No loss of consciousness. No vomiting. No seizures.

Examination: Patient awake & alert. Glasgow Coma Score 15/15.

Vitals: Respiratory rate 22, Heart rate 92, Blood pressure 104/68, Temperature 36.1°

Bump Ⓛ temporal area above & behind ear.

Pupils equal and reactive to light. Congruent normal eye movements.

No other neurology.

Parent - Reassurance

- Head Injury Form

- Follow up. As need arises (from the Latin *pro re nata*)'

[37] All of the metrics in the first four lines of the note were normal. The next two reflected the results of two standard focal tests when dealing with head injuries. The first involves shining a light into the patient's eyes and checking that the pupils reacted normally. The second involves asking the patient to follow a moving object, such as the doctor's finger or a pen, to see if the eyes follow the movement together. According to the note the results for both tests were normal. In that context the note 'No other neurology' meant that everything was normal and J displayed no indications of any neurological deficit. How then did Dr Goosen and Dr Edeling come to think that it meant precisely the opposite and found their expert opinions on the error?

[38] There was no satisfactory explanation for this. Both summaries suggested that the word 'congruent' was illegible, although it is not and should not have been to experienced medical practitioners. They would have known that Dr Horn performed the two basic tests described in the previous paragraph and 'congruent' would be the word used to describe the result as normal. Even if it were illegible to them, they should not have approved a fundamentally defective expert summary without ascertaining what the word was. The attorneys instructing them should have been asked to clarify the matter. As Dr Horn was a specialist orthopaedic surgeon employed at Red Cross Memorial Hospital a simple

request to the defendant's attorneys would have provided the desired clarification.

[39] Once the error was discovered it was essential that the summaries be withdrawn and fresh ones filed, but this did not happen. Two months after these two expert summaries were filed, the respondent filed a summary by Professor Peter, which contained the following statement:

'In the two expert witness reports it is alleged that it is implied in the notes that there was a focal neurological abnormality. I can see nothing to suggest that. It is clear that Dr Horn thought her neurological examination was normal. I have been instructed that Dr Horn confirms that she found no neurological abnormalities when she examined J on 23 August 2011.'

Thereafter in July 2016 the experts had a meeting at which they agreed that, when Dr Horn discharged J, he had no physical neurological deficits, that is, his physical neurological function was probably normal. Notwithstanding that the whole basis for, or at least a significant portion of the substratum of, the expert summaries had now disappeared, revised summaries were not delivered. When a supplementary summary was delivered in respect of Dr Edeling in November 2016, he made no mention of the recantation. Dr Goosen glossed over it in his evidence without explanation beyond a complaint that the examination was brief. Dr Edeling tried to explain it away by saying that at the time it wasn't clear to him at what point the skull fracture was diagnosed and that it was possible that the skull fracture was known about before the decision to discharge. This was palpable nonsense as further cross-examination showed.

[40] As pointed out in para 22 there was no endeavour to provide proper expert summaries as required by the Rules of Court in relation to

the evidence given by Drs Goosen and Edeling. In the result the trial commenced on a basis that was fundamentally flawed based on opinions of negligence on the part of Dr Horn that were abandoned during the hearing in favour of a new theory. The suggestion in the heads of argument in this court that:

'The expert witness summaries and joint minutes, and subsequently the evidence at the trial focussed the enquiry relating to culpability on … the size, location and consistency of the subgaleal haematoma on the side of J's head, *with particular emphasis on whether the swelling was boggy or fluctuant, or firm*' (Emphasis added)

was not borne out by the record.

[41] The original summaries were silent on bogginess, as had been the particulars of claim and the further particulars for trial. Dr Edeling's supplementary summary had a paragraph reading:

'A significant swelling of the scalp, especially if it is fluctuant or "*boggy*", can be a marker for an underlying skull fracture.'

Professor Taylor agreed that this was so. They also agreed that the Royal College of Surgeons had published new guidelines for skull X-rays and CT scans that included 'presence of a boggy swelling particularly in the parieto-temporal region'. Dr Edeling said that in accordance with these guidelines J should have been investigated by a skull X-ray, but Professor Taylor disagreed because 'J was not recorded to have a boggy scalp swelling'. Had Dr Edeling's clear view been that the swelling had to be boggy, one would have expected him to say so.

[42] Only when the case was being opened was the issue raised, and, even then, only indirectly, when counsel said:

'What we say, is that the doctor had not seemingly at least felt the swelling and felt for a … (intervention)

COURT: Bogginess of …

MR VAN DER MERWE: Bogginess, and, having not done that, the doctor was also therefore not alerted to the fact that this was a particular type of swelling that needed to be – where J needed to be kept for observation because of the danger of the haematoma developing.'

It seems that counsel was suggesting that Dr Horn did not palpate the swelling, a contention not pursued.

[43] It is not as if the point was difficult to explain. All it required was a statement that, given the amount of blood shown on the CT scan and the description of the bump by Dr Horn, as well as its situation on the left tempero-parietal area of the scalp behind the left ear, it was probable that when J was examined on 23 August at 6.15 pm the swelling would on palpation have been fluctuant or boggy and a reasonably competent member of the medical profession would have ordered the taking of a CT. A failure to detect what must have been present would have been negligent.

[44] No explanation was given for the absence of any such clear statement of opinion. The judge correctly said that Dr Edeling came to this view very late in the day. Accordingly, this evidence needed to be approached with a measure of caution. It bears all the hallmarks of an attempt to justify his opinions when the initial basis for them proved untenable.

[45] The medical literature furnished to the trial court identified a boggy swelling as an indication for further investigation by way of a CT scan. However, none of it gave support to Dr Edeling's contention that the bump on J's head must have felt boggy when palpated by Dr Horn. The reason for this emerged from the evidence of Professor Taylor. He

explained that, when there is trauma to the skull, bleeding most frequently occurs where there is damage to the loose connective tissue between the galea and the periosteum that adheres to the outer surface of the skull. The galea itself is firm and connected to the epidermis and dermis by dense connective tissue where there is little scope for blood to accumulate. Accordingly, most bleeding occurs where the loose connective tissue is disrupted, providing space for blood to accumulate. The bleeding emanates from little blood vessels in that area of the head, not from the fracture. Where there is considerable disruption of the loose tissue – the technical term for which is degloving – there is a much bigger space into which bleeding can occur and this results in the swelling being fluctuant or boggy. The swelling is, in his words, very floppy and easy to distinguish clinically. It is most usually encountered with children under the age of two years.

[46] Professor Taylor rejected the suggestion that where there is a subgaleal haematoma the swelling cannot feel firm when palpated. He did so on the basis of his direct experience when operating of encountering swellings that were firm, but with bleeding into the subgaleal space. He explained that whether a swelling feels fluctuant depends on whether and to what extent the loose connective tissue is disrupted. In J's case it was not possible to assess this from the clinical notes or the CT scan.

[47] The judge found this evidence persuasive. So do I. First, it was based on practical clinical experience from someone who is in an operating theatre on a regular basis, as opposed to a witness who gave up surgical practice a number of years before the trial. That clinical experience was not challenged in cross-examination. Second, his evidence that fluctuant swellings are most commonly encountered in

children under the age of two was not challenged. Third, he gave a reasoned explanation for it, namely that it depended on the extent to which the loose tissue was damaged. A significant deformation separating the layers between the galea and the periosteum would provide a space into which bleeding would occur without filling it, so that blood would accumulate, without filling the space. In that event that palpation would have the distinctive boggy feeling. If there was no significant disruption of the loose tissue bleeding would only occur in confined spaces and would feel firm. Fourth, Professor Taylor was not dogmatic in his evidence and said that it was not possible on the available information to say whether the swelling would have been fluctuant when Dr Horn examined J. Finally, Professor Taylor received some support from Dr Goosen, who said that it is difficult to assess from a scan taken the day after Dr Horn's examination its consistency at the time of examination, because it would have changed in the interim.

[48] Dr Edeling did not deal with the issue of disruption of the loose tissues or any of the other issues raised by Professor Taylor. He based much of his conclusions on the description of the lump as being about the size of an egg, or the estimation that it was about four to five centimetres across and raised by about one centimetre. These were necessarily approximations. When the CT scan was taken the swelling was about 7 centimetres across and raised by 700 millimetres. It is not possible to determine how much bleeding had occurred when Dr Horn examined J, or how much more bleeding occurred in the sub-galeal space after J was discharged.

[49] As noted earlier, Dr Horn said that if the swelling had been fluctuant, she would have noted that fact and ordered a CT scan as she

did with another patient shortly afterwards that evening. Counsel sought to rely on certain concessions extracted in cross-examination to show that this evidence could not be accepted. Like the judge I do not find these criticisms justified. From the outset of her evidence Dr Horn was very careful to distinguish between those matters she could clearly recall of the events nearly seven years before and those she could not. Each of the alleged concessions arose because she said that she could not specifically recall the particular matter on which she was being examined. However, her concessions that she had no specific recollection of particular things, or that she was not in a position to 'refute', that is, disprove a proposition, cannot be taken as her agreeing to matters inconsistent with the overall thrust of her evidence. In general, they were nothing more than an acceptance by a careful witness that she could not, of her own clear recollection, dispute certain propositions. But that is a far cry from saying that those propositions were established on a balance of probabilities.

[50] Dr Horn's evidence was that she conducted a proper examination of J's injury. She palpated the swelling on his head and noted it as being simply 'a bump'. No doubt, if she had been aware at the time that in 2018 she would have to give evidence about these events, her note would have been fuller and included the dimensions of the bump, its consistency and details of how she took J's history and the grounds upon which she concluded that there had been no loss of consciousness, no amnesia and no seizures. But that is a counsel of perfection and the note was entirely consistent with her view that on a proper examination this was a harmless bump on the head of a child showing no signs of neurological deficit. The medical notes prepared by a duty doctor in a trauma unit are not to be parsed as, or equated to, a detailed commercial contract or statute.

[51] Dr Horn said that she did not remember what the bump on J's head felt like. That redounds to her credit not her detriment. After nearly seven years a precise recollection would have been unlikely. She consistently said that she was aware of the implications of a fluctuant swelling and would both have noted it and referred J for a CT scan. She explained that her use of the word 'bump' was consistent with it feeling solid and not boggy.

[52] In the course of cross-examination an issue arose as to the nature of the bump at the time of Dr Horn's examination. It started with the proposition that a haematoma would have blood in it and that this is what causes a swelling to feel fluctuant. It continued as follows:

'And we know in fact that this was a scalp haematoma. With the benefit of hindsight we know that that was in fact the case. We do know that --- Yes, we …(intervention)

It is noted on the record ---- Yes, we know that at the time of the CT scan hours later – in fact ten hours later – there was a haematoma.

The scalp haematoma, yes. --- Yes. And the extradural …

And so the scalp – so the bump was a scalp haematoma? We can accept that? --- I am not sure that I am willing to concede that point.

Well up to now that was the – certainly not suggested to any of the plaintiff's witnesses who testified, that that bump wasn't the scalp haematoma that was detected in the CT scan --- If I may, as I said, the CT scan was performed 10 hours after his presentation.

We are well aware of that …. --- Yes.

… and in fact the CT scan was used in cross-examination by counsel to suggest that the very same scalp haematoma had a different appearance the following morning. --- And it very well may have. So even – I do admit that I cannot remember the consistency. I do believe that, if there was a fluctuant swelling, I would have noted it and I would have responded accordingly. I think – well it will just be conjecture but that would be my evidence.

COURT: Sorry. Could you just expand on your reasons for not being willing to – you said I am not sure that I am willing to concede that the bump was a scalp haematoma.

Why did you say that? --- The reason in my reasoning is that if you have a force that is sufficient to fracture a skull then that same force is imparted to the scalp is it not, and in the same way as you would have a bump where there is no underlying fracture, but swelling of the scalp and the structures therein, that could also cause a swelling. And I know that – I was here yesterday and heard the experts refute that point. But if you are asking me whether I will concede the fact that there must have been a subgaleal haematoma at that time, according to my notes there was not.'[25]

[53] It is apparent from this passage that counsel and the judge were at cross purposes with the witness. Counsel was asking her questions about the bump and her perceptions from her examination. He then put to her that 'with the benefit of hindsight' the bump was a scalp haematoma. Dr Horn's response was to point out that this only became apparent ten hours later when the CT scan was performed. Plainly she was contrasting what was known to her when examining J and what became known with the benefit of hindsight. She was not willing to concede that at the earlier time she was aware that the bump was a scalp haematoma. Seen in the context of a cross-examination directed at what she observed in her examination of J, it was entirely natural for her to refuse to concede that *at the time of the examination* she thought the bump was a subgaleal haematoma. Her answer to the judge explained that a swelling could arise from an injury without a fracture. The last line of her answer made it clear that she was directing her answer at what she knew at the time of

[25] This last answer is typed in the record entirely without punctuation other than a solitary dash. One merely has to try reading it aloud to conclude that it cannot properly represent the witness's speech. The punctuation in the text is consistent with the spoken word. The passage could also be punctuated in the following way without altering the meaning.
'The reason, in my reasoning, is that if you have a force that is sufficient to fracture a skull, then that same force is imparted to the scalp is it not? And in the same way as you would have a bump where there is no underlying fracture, but swelling of the scalp and the structures therein, that could also cause a swelling. And I know that – I was here yesterday and heard the experts refute that point. But, if you are asking me whether I will concede the fact that there must have been a subgaleal haematoma, at that time, according to my notes there was not.'

her examination and saying that according to her notes there was no subgaleal haematoma at that time.

[54] That understanding of Dr Horn's evidence is consistent with her subsequent answers:

'When you say according to your notes you are now talking about according to page 1 of the trauma unit records? --- Yes.

The note is what you are referring to? --- Yes.

You know that there was a bump? --- Yes.

But you don't describe in that note the consistency? --- No, I don't.

That is why you don't want to make the concession? --- Yes, because I do believe that if it had been a boggy or fluctuant swelling, I would have noted it.

We have heard that. I am exploring something slightly different. If the bump was something else than a scalp haematoma would that not have been detectable in any event on a CT scan, albeit sometime later? --- Possibly, if there was swelling of layers of the scalp.

So, we don't have on the record any other explanation of the bump other than that it was a scalp haematoma at this stage. Will you concede that? --- I will concede that.

So, the likelihood is that the bump was the scalp haematoma? --- This is true.

And if you concede that then it is likely, given that it was a collection of blood, that it would have felt boggy? It is likely? --- It is likely.'

[55] Until counsel said that he was trying to 'explore something slightly different' Dr Horn was plainly talking about her conclusions after examining J. The next question posed to her was whether the scalp haematoma would have been detectable on a CT scan 'albeit sometime later'. In other words, the question was not directed at what she could have determined at the time she examined J, but at what could have been determined by a CT scan at a later time. Quite rightly, knowing as she did that the CT scan the following day had detected the scalp haematoma, she agreed that this was possible and that it was likely that it would have felt

boggy. But that cannot be read as saying that she thought it would have felt boggy the previous evening. A concession to that effect would have been wholly inconsistent with the entire body of her evidence. The submission that the context involved an unequivocal acknowledgement that the swelling felt boggy *when she examined J* cannot be accepted.

[56] The distinction Dr Horn was at pains to draw between those matters of which she had a specific recollection and those where she was reliant upon her notes, her usual practice and her knowledge of the clinical signs for the presence of a possible skull fracture is evidenced by her evidence under re-examination, when she said:

'Well due to the fact that my memory is imperfect and the only thing I can rely on really is my written notes and the occasional brief memory of that evening, I do not have a recollection of what the bump felt like and I would therefore be untruthful if I said I can definitely object – I can't remember the word he used[26] – to what the plaintiffs' advocate stated. So, even though I am very sure within myself that I would have examined the bump and that I would have noted a fluctuant swelling, due to the fact that I cannot remember I cannot state it and I did not document it.'

[57] This passage reflects the evidence of a painfully honest witness trying to be as helpful as possible to the court and unwilling to reject as untrue propositions in regard to matters of which she had no direct recollection. Mr Duminy SC correctly said in the course of argument that she projected 'as someone who had great empathy'. Had she been seeking to conceal an error on her part it would have been easy for her to assert a specific recollection of the consistency of the bump, but she did not do so. One other factor is relevant. She was still on duty when J was admitted at the trauma unit on the morning of 24 August 2011. At the outset of her evidence she told the court that, after J's re-admission and

[26] In context this can only be the word 'refute'.

the emergency procedures he underwent: 'I did reflect quite a bit and think and mull over the initial examination and findings'. That was less than twelve hours after she had examined him. I find it difficult to believe that if she had made the elementary error of not palpating the bump, or ignoring the fact that it was fluctuant, that she would not have recognised this at the time. The submission that she had made such an error suggests that she engaged in a protracted course of dissembling and concealment that would be inconsistent with the judge's assessment of her as an honest witness and her evidence as a whole. Counsel did not contend otherwise.

[58] My colleague is critical of Dr Horn's reliance in certain passages of her evidence on her normal or usual practice and the judge's reliance on this evidence.[27] With respect I cannot agree. None of Dr Horn's statements in regard to her usual or normal practice were challenged in cross-examination and they clearly conformed to sound clinical practice. It is therefore incorrect to say that her normal practice is unknown. The fact that she had no precise recollection of the facts is irrelevant. I may have no recollection or record of my preparation for an appeal heard some years ago, but that does not mean that a statement of my usual practice in regard to the preparation of appeals is to be disregarded as of no value. An invariable practice, if accepted, is strong evidence that, on the particular occasion under consideration, that practice was followed. I agree with my colleague that the issue of negligence can only be determined in the light of all the evidence.[28] That includes Dr Horn's evidence in its entirety, which must be weighed against the manifest difficulties with the plaintiffs' expert evidence. There was no direct

[27] Second judgment paras 127 and 128.
[28] *Meyers v MEC, Department of Health, Eastern Cape* [2020] ZASCA 3; 2020 (3) SA 337 (SCA) para 69.

evidence contradicting Dr Horn. Finally, it must be borne in mind throughout that the onus of proving negligence rested on the plaintiffs.[29]

[59] Dr Horn's evidence was direct evidence of the examination and diagnosis of J's condition on 23 August 2011. By contrast, Dr Edeling's evidence was a reconstruction of what he thought might have happened, based on elements of speculation and conjecture. In those circumstances, the trial judge's finding that he could not reject Dr Horn's evidence and that the onus of proof was not discharged cannot be faulted. The main ground of appeal must therefore fail.

Should J have been kept for further observation?

[60] The appellants' heads of argument contended that, even if the evidence as to whether the swelling was boggy or firm was evenly balanced, Dr Horn ought on various grounds to have foreseen the possibility that J's skull was fractured. I understand the second judgment to accept this contention. The submission was that on the grounds set out in this section Dr Horn should at the least have suspected that J might have suffered a skull fracture and accordingly not discharged him when she did. The suspicion on which this contention was based was something more than the inherent risk in any head injury of an underlying skull fracture. The heads of argument identified seven factors that it was submitted should have led Dr Horn to foresee that notwithstanding her clinical observations J might have suffered a skull fracture. I will deal with each in turn.

[61] The first factor was that in consequence of her failure to record the time of the incident on the trauma unit treatment record form, Dr Horn

[29] *Meyers, ibid* para 67.

'had no idea' of how much time had passed since J suffered his injury.[30] That is not correct. Dr Horn said that she assumed that approximately two hours had passed since the accident and the basis of this assumption was not explored in any detail with her. While she did not note the time on the treatment form, the assumption was in fact correct. The incident had occurred at about 4.00 pm that afternoon and she examined J at 6.15 pm that evening. The cross-examination on this point was directed at suggesting that the injury might have been suffered recently and therefore it was inappropriate to discharge him without further observation. It was not suggested that, given her clinical observations, after a delay of over two hours since the injury it was inappropriate to discharge J. As that is what occurred, any fault on her part cannot be related to what subsequently happened.

[62] The next point was that, in her notes, Dr Horn recorded that J had fallen inside the house after tripping on a step or stair. The contention was that she did not note the type of surface, hard and unrelenting, on which J had fallen. However, there is no reason to disbelieve her explanation that she assumed it was a hard and unrelenting surface because he would not have suffered an injury of the type in question form falling on a soft surface such as a carpeted floor.

[63] The third contention is that the notes did not record J's level of pain. In the absence of any evidence that J was suffering from any unusual level of pain apart from the natural soreness that would follow from having fallen and hit his head, this point is entirely abstract. In agreement with Professor Taylor, Dr Goosen said that had J suffered from any severe pain his pulse rate would have been elevated, but it was not.

[30] This submission is adopted in para 10 of the second judgment.

On four occasions Mr M said that J told him his head was sore, not that he complained of a headache. He did not suggest that J complained of any unusual pain not to be expected from his hitting his head. Soreness and a headache are both conceptually and practically different, soreness being external and arising from external physical injury, while a headache is internal.

[64] Mr M's evidence was that when he returned from work J was sitting on a bed with his sister. That he then burst into tears is hardly a surprising response by a child that has hurt itself. Thereafter he was able to tell his father what had happened. He stopped crying in the car and was recorded as being alert and responsive in the clinical notes. Mr M said he was capable of telling the doctor what had happened. There was no evidence that he was suffering from or complaining of pain beyond having a sore head as was to be expected from his having hit his head. There was no mention of a headache. Nor did Mr M say that he informed Dr Horn that J was complaining of pain or a headache. Dr Horn's evidence was that he was not crying or holding his head or otherwise indicating that he was in pain.

[65] The fourth contention was a repetition of the previous one, this time expressed as a failure to determine J's 'headache severity'. As there was no evidence that J then, or at any stage suffered from a headache there is no merit in it. The word 'headache' does not appear in Mr M's evidence. He spoke only of J's head being sore. While a worsening headache would, as the second judgment says, have been a sign of something possibly more serious in J's condition, there is no basis for construing the evidence that J said his head was sore as showing that he had or complained of a headache.

[66] The fifth contention was that Dr Horn did not determine if J had amnesia and did not test for orientation as to time, person and place. As to the former she explained that she does not pursue this with young children because of their possible unreliability. As to the latter she explained that when assessing the verbal component of the Glasgow Coma Score (the GCS) there was no indication of disorientation and therefore no need to perform any further tests. In any event there was no evidence that J was either amnesiac or disorientated. On the contrary his father said that J had told him what happened and was able to tell the doctor what happened. There is nothing to indicate that had Dr Horn made any more enquiries in relation to these items she would have been given information or discovered anything that would have altered her diagnosis.

[67] The sixth point was that Dr Horn did not perform an otoscopic test to exclude basal skull fracture. She explained why she did not think that necessary and it was common cause that J did not suffer a basal skull fracture. This was a non-issue.

[68] The final point was a submission that Dr Horn's observation that J was 'mopey' or 'miserable' or downcast' was a pointer to the fact that he was probably in pain. It is not surprising, as she pointed out, for a child to be miserable when it has bumped its head, which is sore, and has been rushed to hospital near bedtime. A little misery in those circumstances is perfectly normal. There was no evidence that because he felt slightly miserable J was in any unusual pain apart from a sore head.

[69] Nothing in any of these points justified the contention that Dr Horn's treatment of J was in any way deficient. Nothing supported the contention that further exploration of any of these matters would have altered Dr Horn's diagnosis or her decision that this was a minor injury and J could safely be discharged. The impression one gains from the way in which these matters were raised in the course of the trial and in the submissions in the heads, was of counsel casting around for grounds to criticise Dr Horn's conduct in the hope that Micawber-like 'something would turn up'.[31]

Further observation – the experts' view

[70] The joint minute of experts of Dr Goosen, Dr Edeling and Professor Peter said that, when Dr Horn discharged J he probably had no neurological deficits. In other words, his neurological function was probably normal. That accorded with Dr Horn's diagnosis, after clinical examination, that he had suffered a minor injury and could be safely discharged into his parents' care. Lastly, contrary to the views in their expert summaries both Dr Goosen and Dr Edeling conceded that on the basis of those clinical observations and the existing guidelines at Red Cross Memorial Hospital, neither a CT scan nor a skull X-ray was indicated.[32] That those guidelines reflected the views of a respectable and responsible body of medical opinion had to be accepted in the light of a study referred to during the trial called the PECARN study[33] and the

[31] Charles Dickens *David Copperfield*.

[32] Dr Goosen said that he would probably have scanned J, but that under the guidelines CT scanning was not indicated. Dr Edeling said that he would not have called for a CT scan. He also said that a failure to call for an X-ray would not have been a failure of reasonable practice. In both instances this was an abandonment of the opinions expressed in their expert summaries.

[33] PECARN is an acronym for the Pediatric Emergency Care Applied Research Network. The relevant article was published in 2009.

NICE guidelines for head injury assessment and early management.[34] These two studies were directed at assessing in what circumstances CT scanning, which itself carries risks of radiological damage, should be ordered in respect, inter alia, of children of J's age. The guidelines in place at Red Cross Memorial Hospital were based on these guidelines, which have been widely accepted around the world.

[71] Dr Goosen's evidence was that even if J was a low risk patient the potentially catastrophic consequences if he was discharged needed to be borne in mind before discharging him. The problem with this is that it is true of every case of minor head injury in a child. The possibility of a catastrophic event is inherent in such injuries, albeit extremely unlikely. The adoption of this extremely cautious approach would be that large numbers of perfectly healthy children would have to be kept in hospital trauma units for extended periods of time without any need to do so.

[72] Largely for the same reason Dr Edeling said that several separate observations of the patient needed to be undertaken. Professor Taylor disagreed, as had Professor Peter before him, and said that in circumstances where no further investigation was indicated in accordance with internationally accepted guidelines, as adopted in the Western Cape Head Injury Guideline Handbook, the proper course of action was to discharge the patient into the care of a parent or other responsible person. They could be relied upon to monitor the patient and return to hospital if adverse symptoms became apparent.

[34] NICE is an acronym for the National Institute for Health and Care Excellence in the United Kingdom. The guidelines in the record were the 2014 version, but it was accepted that nothing material turned on this.

[73] In the summaries and the evidence, much time was spent over the proper interpretation of the guidelines. As this was a question of the meaning to be attached to a document involving no technical issues that evidence was just as inadmissible as evidence of contracting parties' understanding of their contract. As it happened Dr Horn had been unaware of those guidelines and had regard to the guidelines issued by the Red Cross Memorial Hospital for the management of head injuries. These informed hospital staff that the majority of patients are those with minor head injuries who are brought in by concerned family members or friends and that the first task was to identify which minor head injuries required investigation or admission.

[74] The appellants' reliance on the Western Province Guidelines as founding the contention that J should not have been discharged, but kept at the Trauma Unit for further observation, implicitly recognised that the guidelines embodied a recognised standard of care accepted by reasonable and respected medical opinion. Only on that basis would any departure from the guidelines provide a foundation for a contention of negligence. However, even if there was a departure from the guidelines, that would not necessarily establish negligence. It would still be necessary to establish that what actually occurred departed from the standard of care that a reasonable and respected body of medical opinion would regard as acceptable treatment by a trauma doctor situated as was Dr Horn. I mention this because Professor Taylor who played a substantial role in drafting the guidelines explained how they are implemented in practice and made reference to general practice in South African hospitals in dealing with cases of this type. To the extent that this may have involved a departure from the guidelines the question remained whether that amounted to negligence.

[75] The guidelines commence with a section on the initial assessment of the patient. This is to be performed within 15 minutes of initial contact. Its purpose is to determine whether the patient is at high or low risk for brain injury. This requires the assessment of the patient's GCS; measurement and recording of vital signs; and a check on what happened. The guidelines then provide that if the patient is assessed as low risk they should be re-examined within an hour and the need for imaging established. The appellants' contention was that Dr Horn's examination of J was the initial assessment in the guidelines and that no further assessment was thereafter taken before he was discharged.

[76] Professor Taylor disagreed. He said that the initial assessment was that undertaken by the Trauma Unit nurse when J arrived at the unit. While Mr M only referred to Dr Horn and did not mention a nurse as playing any part in examining J, one of the documents in the Trauma Unit records was a triage form completed on J's admission. Dr Horn's unchallenged evidence was that this was completed by a nurse in the unit. She obtained the details of J's vital signs that were incorporated in her notes from this form. This was not disputed. What was challenged was whether this was the initial assessment referred to in the guidelines, so that Dr Horn's examination was the re-examination contemplated by the guidelines.

[77] There is undoubtedly a measure of ambiguity about the wording of the guidelines, which Professor Taylor, as one of its authors, acknowledged. On the one hand the description of the initial assessment includes a number of things undertaken by the Trauma Unit nurses, such as the taking of the patient's vital signs and determining whether the

patient is high or low risk. On the other the diagrammatic representation includes a number of elements that formed part of Dr Horn's examination, such as excluding any focal neurological deficit and examining the swelling. In practice it appears that the triage assessment is treated as the initial assessment and the registrar's examination as the re-examination within an hour. It emerges clearly from Professor Taylor's evidence that what occurred on 23 August 2011 was consistent with the way in which the guidelines were implemented in practice.

[78] It seems to me to be a sterile debate to try and impose a particular interpretation on the guidelines and then to use that to determine whether J's treatment accorded with sound clinical practice. A more profitable approach is to examine the evidence as a whole to determine whether what happened was in accordance with the standards of acceptable treatment of a reasonable and respected body of medical opinion. We know from the evidence of Professor Taylor that it was and is the approach adopted at Red Cross Memorial Hospital and there is nothing to suggest that it has had any adverse consequences. It is also, according to him, consistent with the practice adopted at emergency units throughout South Africa. This evidence was not challenged. It was consistent with the Red Cross Memorial Hospital protocol which dealt with the discharge of patients who are fit for discharge immediately after the section on determining whether a CT scan was necessary.

[79] On a wider front the guidelines were adapted from the NICE guidelines referred to in para 65. They require an initial assessment within 15 minutes of arrival at an emergency department to determine whether the patient is high or low risk for clinically important brain injury. Thereafter they require re-examination within one hour by an

emergency department clinician. The latter assessment is particularly directed at determining the need for imaging using a CT scan. A scan is indicated in any situation where certain identified risk factors, largely common to those identified in the PECARN study, are present. It is unnecessary to detail these as J displayed none of these signs. Nor did he display any of the signs for admission and observation.

[80] The most relevant provision of the NICE guidelines is the one dealing with discharge and follow-up of patients. It reads:

> 'If CT not indicated on the basis of history and examination the clinician may conclude that the risk of clinically important brain injury to the patient is low enough to warrant transfer to the community, as long as no other factors that would warrant a hospital admission are present … and there are appropriate support structures for safe transfer to the community and for subsequent care (for example, competent supervision at home).

In other words, if the doctor thinks the injury is minor and does not warrant a CT scan or admission for observation, the patient can be discharged and sent home, in the case of a child to be cared for by its parent, or parents, or other caregiver.

[81] The standing of the NICE guidelines as a standard of acceptable clinical care was not disputed. They were consistent with the PECARN study. They were also consistent with the approach to the management of minor brain injuries in the Advanced Trauma Life Support for Doctors (ATLS®) manual relied on by Dr Goosen.[35] It described the process of management for patients with a GCS of 13-15 as follows. First there should be a general examination to exclude systemic injuries followed by a limited neurological examination. If no CT scan was indicated and the

[35] This is a manual issued by the American College of Surgeons Committee on Trauma and its procedures are taught to doctors, nurses and emergency services personnel internationally.

patient did not meet any of the criteria for admission discharge from hospital should follow.

[82] The process of assessment and examination followed generally at Red Cross Memorial Hospital and followed in this case by Dr Horn complied with accepted clinical practice here and internationally. She cannot be faulted for doing so. There is no merit in this argument. It is accordingly unnecessary to deal with the separate question whether, if he had been kept at the Trauma Unit for another hour as suggested, J's condition would have deteriorated and given rise to concern resulting in further investigation. We cannot tell whether he would then have remained awake, or whether his falling asleep would have sounded any alarm bells. It is equally possible that it would have been regarded as normal. His father said that he was sleeping normally in the car and when they returned home.

The adequacy of the discharge instructions

[83] It was accepted that a reasonable medical practitioner ought to have made sure that the patient's carer understood the discharge instruction sheet before departing from the hospital. It was submitted that Mr M ought to have been informed to look out for drowsiness. There was a dispute of fact whether he was. There was no dispute that he was not advised to wake J at regular two hourly intervals during the night in order to check for drowsiness. It was disputed that this represented sound clinical advice or that a failure to do so was negligent.

Was Mr M warned about drowsiness?

[84] Mr M was handed the hospital's standard head injury discharge form. This said:

‘Bring your child back to hospital immediately at any time of the day or night if he/she should complain of:

- a severe headache
- become increasingly difficult to wake
- loose (sic) consciousness
- start vomiting excessively
- have fits or develop paralysis
- or in any way behave peculiar (sic).’

He said that he took the form home and read it around 8.00 pm that evening after dinner. He did not suggest that he found it obscure or difficult to understand.

[85] Mr M could not remember what Dr Horn said to him other than that, if he had any concerns, he should phone the hospital. Under cross-examination he accepted, because those were the instructions recorded by Dr Goosen in his expert summary, that Dr Horn said that he should ‘monitor’ J ‘or something like that’. He explained that he understood that to mean that he and his wife should keep an eye on him as a parent normally does when a child is sick.

[86] Dr Horn’s evidence was that she could not recall what she said to Mr M. She remembered a discussion with him and said that her usual practice was to explain her decision not to send a child for a scan and reassure the parent. She would as a matter of practice briefly mention the salient risk factors and tell parents to look out for drowsiness, sleepiness, vomiting and seizures or fitting, as those could be signs of a developing brain injury. The factual dispute arose because Mr M did not accept this. He claimed that if he had been warned about drowsiness as a risk he would have returned to the hospital much earlier when J fell asleep in the car on the way home.

[87] Dr Horn was cross-examined about her advice. The relevant passage reads as follows:

'… [W]ell J's father says you asked him to monitor him, to monitor J, to watch him. That is how – he remembers the word 'monitor' but he interpreted that to mean watch. --- That could be the correct interpretation.

And he specifically said when he was asked in cross-examination that you did not say to him that he must bring J back in the event that he got drowsy or – specifically with reference to drowsy, let me leave the or part. So J's father is adamant in his evidence that you did not say that to him. Can you contest that as you stand here now? --- Because I do not have word by word recollection of the conversation we had, I cannot contest it no.

I understand. You cannot contest it. That is – can we just proceed on the assumption that you did say that to him? --- Yes please.

If you did say that you didn't give any further explanation as to how to look out for drowsiness did you? --- No I think it is self-explanatory.'

[88] Even if one assumes in favour of counsel that the penultimate question is mistyped and should read '… you did *not* say that to him', one cannot ignore the careful qualification Dr Horn gave to the previous answer, namely that because she did not have a word by word recollection of the conversation she could not contest what Mr M said. That was of a piece with the entire body of her evidence that, if she did not specifically recall something, she was not prepared to deny unequivocally whatever counsel was putting to her. That was a mark of her fairness and honesty as a witness. It is a far cry from that to contend, as was done in the heads of argument, that she conceded that she did not warn Mr M about drowsiness.

[89] The judge accepted that both Mr M and Dr Horn were doing their best nearly seven years after the event to describe what occurred. There

was nothing in the inherent probabilities that pointed in favour of one version rather than the other. That is no doubt why counsel sought to contend that it was disposed of by a concession.

[90] The Afrikaans version of the discharge form was the same as the English, save that it added in the second item 'becomes drowsy' ('meet lomerig word'). Considerable play was made of this to argue that because of the omission the Ms were not alerted to the problem of drowsiness. The form may have been deficient, but it could not affect whether Dr Horn told Mr M to be on the alert for drowsiness.

[91] On this limited evidence it was not reasonably open to the trial court to make a definitive finding that Dr Horn did not highlight drowsiness as a risk that the Ms should have been alert to in keeping an eye on J. Nor could it be found that she did not explain the very simple hospital form adequately. The form was not elegantly phrased, but it said clearly that they should bring him back to the hospital immediately if they observed anything peculiar about J's behaviour. The obvious reason for the form was to make it clear to the parent that although no significant problem had been detected by the doctor, there was a risk that something might have been missed and so they should be alert to any peculiarities in their child's behaviour.

Should Mr M have been advised to wake J during the night?

[92] On another tack, because the form referred to difficulty in waking the patient, it was contended that it required that J be woken at regular intervals. Dr Horn did not advise this and Mr M was not asked how he understood this item. It does not appear that he gave it that construction. That would not, however, dispose of the issue of whether sound clinical

practice required that J be woken at regular intervals to check on his state of drowsiness and alertness.

[93] Dr Horn was cross-examined on the suggestion that she should have warned Mr M to wake J regularly to check for drowsiness. Her response was that, if she thought such a step necessary, she would have admitted J. It was submitted that this was the incorrect approach and that Mr M should have been told to wake J at least every two hours during the night to check on his condition and see that there was no difficulty waking him. Both Dr Goosen and Dr Edeling advocated this.[36] Professor Taylor said that at most waking a child once in the night was sufficient.

[94] The medical literature did not support Drs Goosen and Edeling. Their evidence was based on the 2008 edition of the ATLS manual, which recommended waking the patient every two hours. However, the persuasive authority of that recommendation as an indication of proper clinical practice was removed by its withdrawal in the 2014 edition. The NICE guidelines did not suggest that this was a requirement when a child was discharged after a head injury. The most direct reference to this issue was an article by Schutzman and others.[37] The second judgment is critical of reliance on this article because it does not include details of the evaluation preceding a decision to discharge. But that is beside the point, because it is not cited in support of the decision to discharge J, but in regard to the approach to be adopted to waking a child after discharge. It said that a child should be discharged if there was no suspicion of inflicted injury; they had a GCS of 15/15; had returned to a baseline level of function, that is, his vital signs and physical functioning were normal;

[36] Goosen, Vol 3, p 490, line 13- 491, line 23; Edeling p 946, lines 14-20.
[37] Sara Schutzman MD, Richard G Bachur MD, James F Willey II MD, MPH '*Minor head trauma in infants and children: management*' (2017).

and there were no extracranial injuries warranting admission, provided there were capable caretakers who could reliably observe the child and return it for care if indicated. In regard to discharge instructions the authors said:

'It is not necessary to awaken most children. Whether it is important to awaken some children to identify the very few who may be experiencing a change in neurological condition is uncertain, since no evidence addresses this question. …

Those patients who had a concerning mechanism or prolonged symptoms who do not undergo neuroimaging may be awakened from sleep every four or more hours, particularly if being discharged during evening or night time hours.'

J did not fall in the latter category. On balance therefore it was not shown that waking a child at regular intervals constituted general clinical practice, much less that a failure to instruct parents and other carers that they should do so involved a departure from proper practice. The medical literature placed before the court did not suggest that Dr Horn's approach that, if a child needed to be woken at intervals during the night, they should be admitted to hospital for that to be done by medical professionals was inconsistent with a body of reasonable and respected medical opinion. Interestingly no evidence was led to show that in the case of patients kept in hospital for observation the practice was to wake them at regular intervals during the night.

[95] Those conclusions mean that the third ground of appeal cannot succeed. It is appropriate, however, to go further, because even if it could be said that Dr Horn failed to warn Mr M in regard to drowsiness, or if sound clinical practice indicated that J should have been woken during the night, in my view the appellants failed to establish on a balance of probabilities that the outcome would have been any different.

Would the outcome have been any different?

[96] In order for the tragic outcome of this case to have been different J would have had to return to the hospital displaying symptoms that would lead to further and timeous investigation by way of a CT scan and surgery to relieve the extradural haematoma. The first difficulty in the path of reaching that conclusion is that it cannot be concluded on a balance of probabilities on the evidence that J's condition was at any stage, until the early hours of 24 August, such that his parents would have decided to return to hospital with him. The second, which is related to it, is that it is not possible to determine at what stage on the evening of 23 August his condition would have deteriorated to an extent that it would have triggered an alarm. This meant that it could not be said on a balance of probabilities that it would have been apparent in sufficient time for him to have been taken back to hospital, the problem diagnosed and emergency surgery performed.

[97] During Dr Horn's examination J was alert and responsive. There was no suggestion that he was drowsy at any earlier stage before arriving at the hospital. Mr M said that he was awake sitting on the bed when he got home and he then burst into tears. However, he was sufficiently alert to be able to convey to his father what had happened. He stopped crying before they reached the hospital. There was no hint of drowsiness during his examination by the triage nurse and Dr Horn. The conclusion is that when he left to return home he was not drowsy, although he was slightly miserable.

[98] While they were driving to collect his mother from work after leaving the hospital, J lay down and fell asleep in the car. It is not clear how soon that happened, but it was sometime between leaving the hospital shortly after 6.30 pm and reaching Mrs M's place of work at

about 7.00 pm to collect her. We don't know whether she was already aware that J had hurt himself, but she got in the back seat of the car and cradled his head in her lap. That afforded an opportunity to soothe him and examine the swelling on his head. There is no indication that this caused anything other than natural maternal concern. When they arrived home Mr M carried J in from the car and put him to bed in the bed he shared with his parents. According to Mr M, he was sleeping normally and not in a deep sleep. He could not recall whether, as would usually be the case, he took J to the toilet before putting him to bed. Like Dr Horn, after the elapse of nearly seven years he could not recall what he did, although that would have been what he would ordinarily have done.

[99] It should be borne in mind that J had bathed earlier in the afternoon at his aunt's house before being dropped off at his parents' home into the care of his older brother. He was already in his pyjamas and Dr Horn recalled that he was wearing pyjamas at the hospital. Ordinarily he had supper at about 7.00 pm and went to bed at about 8.00 pm. It was therefore a little earlier than usual for him to go to sleep, but his sleep was normal. He had been given Panado, a mild analgesic, at the hospital and his parents thought, from past experience with their two older children, that this helped children to sleep. They joined him in the family bed at about 9.30 pm. One infers from the fact that nothing untoward was reported that they too slept, until Mr M woke in his customary fashion at about 3.30 am and had difficulty waking J to take him to the toilet.

[100] Clearly neither Mr nor Mrs M saw anything untoward in J that evening. Even without the administration of Panado, it was hardly surprising that he fell asleep in the car on the way home. His experience

that afternoon had been unpleasant and he was upset. His head was sore and he had been rushed to the unfamiliar environment of a hospital trauma unit. That is a worrying experience for any six year old, and his anxiety would have been aggravated by his father's anxiety. He would have sensed something might be seriously wrong. This was all reflected in Dr Horn's assessment that he was a little bit 'mopey'. He was already dressed for bed and bedtime was approaching. Few parents would have been surprised at his falling asleep in the car and clearly his parents were not surprised. Mrs M manifestly did not think that there was anything peculiar about his behaviour when she was sitting with his head on her lap in the car. She did not give evidence so we can accept that this was so. Indeed, had it been otherwise I have little doubt that she would have told her husband to take J back to the hospital immediately.

[101] Apart from not knowing whether J was taken to the toilet, we have no evidence of any discussion about providing supper for him in accordance with the family's usual practice. Nothing was said about his parents' observations when they put him to bed; or how frequently they went to check on him; what they saw when they did; any change in the condition of the swelling on his head; and what they observed when they themselves went to bed. They had been told to keep an eye on him and I am sure that they did. The only reason nothing was said about these matters can be because there was nothing to say. Anything untoward would have led them to contact the hospital, as Mr M did at 3.30 am the following morning. While they were in bed with him they experienced nothing to indicate that J's sleep was disturbed or in any way unusual.

[102] In other words, there was no evidence of anything about J being asleep that would have raised a concern or indicated to them that they

should return to the hospital. It was not suggested that they should not have permitted J to go to sleep in the ordinary way. They did not need to guard against ordinary tiredness, but to look for signs of something unusual or abnormal. There was no evidence that there was anything unusual or abnormal in J sleeping. In those circumstances the absence of a specific mention of drowsiness as potentially a sign that something was wrong cannot justify a conclusion, on a balance of probabilities, that mentioning it would have meant that J would have returned to the hospital that evening and been successfully diagnosed and treated.

[103] The problem is compounded by the fact that it is not possible on the evidence – and no-one tried to do so – to identify at what stage there would have been a change in J's condition that would have provoked alarm. This is also a major difficulty with the contention that waking J at regular intervals would have made a difference. It flows from the development mechanism of an extradural haematoma from which it is impossible to tell at what stage prior to 3.30 am J started to display symptoms that would have caused alarm to his parents and resulted in them taking him back to the hospital. Dr Goosen explained that the haemorrhage progresses slowly over time. Because the durable hard membrane protecting the brain does not give way easily the haematoma develops slowly. But there comes a stage where the pressure on the brain shoots up and what has been a slow progression becomes a disaster. Dr Goosen said it is known as 'talk and die'.

[104] This phenomenon is known as the Monroe-Kellie doctrine. It is described in the ATLS® manual in the following terms:

'The doctrine states that the total volume of the intracranial contents must remain constant, because the cranium is a rigid nonexpansible container. Venous blood and

cerebrospinal fluid [CSF] may be compressed out of the container providing a degree of pressure buffering… Thus very early after injury a mass such as a clot may enlarge while the ICP [intercranial pressure] remains normal. However, once the limit of displacement of CSF and intravascular blood has been reached, ICP rapidly increases.'

The effect appears from the graph accompanying that description reproduced below. It illustrates the period of compensation for the effect of the haemorrhage followed by a rapid increase in pressure at the point of decompensation, rapidly reaching herniation. Dr Edeling suggested that the point of decompensation occurred at about midnight in J's case, but it could have been earlier or later.

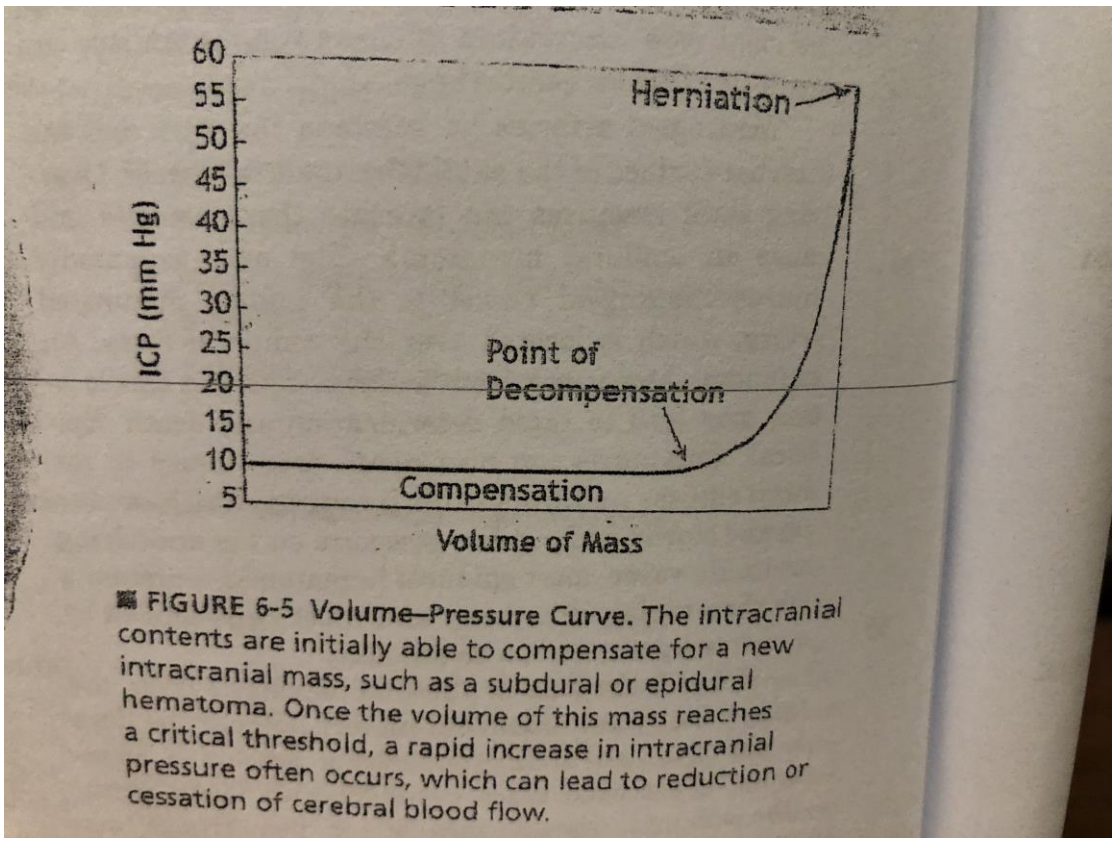

FIGURE 6-5 Volume–Pressure Curve. The intracranial contents are initially able to compensate for a new intracranial mass, such as a subdural or epidural hematoma. Once the volume of this mass reaches a critical threshold, a rapid increase in intracranial pressure often occurs, which can lead to reduction or cessation of cerebral blood flow.

[105] The suddenness of a patient's decline means that it is difficult to tell at any stage that they are suffering from an extradural haematoma. Even had he been awakened once or twice during the night there was no

basis to determine when J would have manifested symptoms causing alarm and resulting in his urgent return to hospital.

[106] For those reasons, the appellants failed to prove that a warning about drowsiness or an instruction to wake him at intervals would on a balance of probabilities have meant that J would have been taken back to hospital, diagnosed with an extradural haematoma and undergone remedial surgery before suffering the injuries that he did. The factual position is that his parents did not detect anything untoward in him during the evening, when they went to bed or during the night. Had they been instructed to wake him there is nothing to indicate when this would have been done or what it would have disclosed given the way in which the haematoma developed.

Result

[107] In the result the appeal must fail. What happened to J was a tragedy and his parents deserve every sympathy for what they have suffered as a result. However, medical science has not advanced to the stage of diagnostic infallibility and there will be cases where, notwithstanding the best efforts of the medical profession, a tragedy like this occurs. Sympathy is not a ground for imposing legal liability in this or any case.[38]

[108] The MEC did not seek a costs order. There was no separate appeal in relation to the costs order in the High Court, but given the concession in regard to the cost of the appeal, we trust that a similar approach will be taken to those costs. In the result the order is simply that the appeal is dismissed.

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[38] *Buthelezi v Ndaba* [2013] ZASCA 72; 2013 (5) SA 437 (SCA) para 15.

M J D WALLIS

JUDGE OF APPEAL

Molemela JA (Dissenting judgment)

[109] I have read the judgment penned by my colleague, Wallis JA (the first judgment). I disagree with its reasoning and conclusion. I am of the view that Dr Horn's negligence is plain from her own evidence, viewed against the backdrop of the provisions of the applicable guidelines. Extracts of her evidence will be liberally quoted in the succeeding paragraphs of this judgment. In my opinion, the evaluation of evidence and the reasoning of the court a quo are flawed and its judgment ought not to be supported. For the reasons set out hereunder, I would uphold the appeal with costs.

[110] The elements of a delictual claim[39] and the approach to expert evidence have already been canvassed in the first judgment and in the judgment of the court a quo. In the interests of not burdening this part of the judgment, I will not re-state the applicable legal principles.

[111] As a point of departure, it is necessary to allude to what Dr Edeling referred to as the cornerstone of head injury management. He said:

'The whole purpose of neurological management of head injured patients is to prevent, detect and manage secondary complications. So whatever condition you get the patient, you assess the patient. Then there is always, in all patients with a head injury, a certain risk, and the risk differs in different contexts. There's always a risk that the patient will deteriorate. And it is because of that risk that a cornerstone of the management is a period of several observations, which is necessary to determine if the patient [is] remaining stable, or getting better, or getting worse.'

[39] See *Oppelt v Head, Department of Health Provincial Administration, Western Cape* [2015] ZACC 33; 2016 (1) SA 325 (CC).

[112] It is common cause that J had, as a result of his fall, sustained a large swelling above and behind his left ear. The location of the swelling was described as temporo-parietal. Mr M estimated the diameter and height of the swelling to be half the size of a tennis ball. He stated that it was the enormity of that swelling that made him to take J directly to Red Cross Children's hospital, instead of his family general practitioner. It is common cause that J had sustained a linear fracture in the left temporo-parietal area.

[113] Dr Horn testified that the 'closed tissue' injury she had recorded in her notes referred to a bruise where there was no damage to the skin. In their article, Greenes and Schutzman[40] observed that most linear fractures have an overlying haematoma or soft-tissue swelling. According to them, larger haematomas in the temporal or parietal regions are more likely to indicate a fracture. They also mentioned that treating physicians rated scalp hematomas as small (barely noticeable), moderate or large ('obvious swelling and/or boggy consistency'). Dr Goosen testified that it was generally agreed that scalp haematomas in the temporal/parietal or occipital regions confer the greatest risk for intracranial injury. He emphasised that even a low risk of complications relating to a head injury had to be weighed against the catastrophic consequences that could eventuate, hence the need for the attending doctor to be 'very, very cautious'.

[40] S A Schutzman and D S. Greenes, 'Pediatric Minor Head Trauma' (2001) *Annals of Emergency Medicine*.

[114] It bears emphasis that one of the studies relied upon by Dr Goosen, was the one mentioned in the article authored by Burns.[41] The study's primary objective was to investigate whether scalp haematoma presence, location and size were associated with intracranial injury in children presenting to the emergency department of a hospital following minor head trauma and to determine whether this relationship differed with patient age. The Burns article observed that 51% of children with a scalp haematoma and intracranial injury had an underlying linear skull fracture on CT. The conclusion was couched as follows:

'In this large cohort of children aged 0 through 16 years presenting to the [Emergency Department] following mild head injury, we found that the presence of a scalp hematoma, particularly in non-frontal regions and of large and boggy size, was associated with an increased odds of intracranial injury. Our findings also indicate that clinical concern is not only warranted in children younger than 24 months, but also in older children and adolescents . . . Although children 0 to 6 months of age were at highest odds, *the presence of a scalp hematoma also independently increased the odds of [intracranial injury] in older children and adolescents*. An underlying linear skull fracture may contribute to the increased odds of intracranial injury in children with a scalp haematoma following minor head injury but cannot solely be relied upon when determining the need for additional neuroimaging . . . .' (Own emphasis.)

[115] It is common cause that Dr Horn did not record the consistency of J's bump in her notes. It bears mentioning that the definition of the word 'bump' in the Oxford dictionary is 'a swelling on the body, often caused by a blow'. There is no suggestion that it bears any relation to the consistency of that swelling or lump. Dr Horn's explanation that her recordal of the swelling as a 'bump', must have been because it was firm

[41] E. C.M. Burns and Others *'Scalp Hematoma Characteristics Associated with Intracranial Injury in Pediatric Minor Head Injury'* Society Academic Emergency Medicine (2016).

and not boggy,[42] is implausible, in my view. Although Prof Taylor sought to rely on Dr Horn's description of the swelling as a 'bump' as an indication of its consistency, he did not refer to any literature that supported that view. Prof Taylor conceded that without the swelling's consistency as to firmness or bogginess having been recorded by Dr Horn, he could not say 'with certainty' that it was or was not fluctuant. The court a quo's conclusion that J would have been excluded from the findings of the Burns articles on account of his age was clearly incorrect. For reasons I will mention presently, its finding that J would have been excluded from the findings mentioned in the Burns article on account of not having shown the symptoms mentioned in the cohort study is misplaced.

[116] It is axiomatic that good medical records are a vital component of providing good quality health care. The obligation to record in the clinical notes every action taken by the attending doctor in respect of a patient, is a basic requirement that is generally known in the medical field.[43] As correctly stated in the first judgment, Dr Goosen testified that it is something that is taught at undergraduate level and Dr Horn said she was aware of it.[44] According to Dr Goosen, the undergraduates are taught that 'if it is not there it was not done' – in other words, what was not mentioned in the attending doctor's notes was not done by the doctor during the medical examination. The exchange between the counsel for the appellant (Mr van der Merwe) and Dr Horn on this aspect was as follows:

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[42] See para 30 of the first judgment. She said: 'I do believe that in order for me to have written "bump" it may have been solid.'
[43] Compare *K v MEC for the Department of Health, Eastern Cape* [2018] ZAECGHC 21 para 54.
[44] This puts paid to the speculation expressed in para 50 of the first judgment, that if Dr Horn had been aware at the time that in 2018 she would have to give evidence about these events, her note would have been fuller and included the dimensions of the bump, its consistency and details.

'. . . In the light of what we have examined and the absence of some significant findings in the notes would you not agree that the notes are scanty and in fact less than scanty, that they are deficient in some respects? -- I cannot contest that fact.

Court: I beg your pardon, what was the answer?

Mr van der Merwe: Cannot contest.

Dr Horn: I said yes I agree that they are deficient in some aspects.'

[117] What is of crucial importance, is that it is the duty of the attending doctor to elicit information from the patient. What Dr Horn did and did not do, remains of crucial importance. In *Topham v MEC for the Department of Health, Mpumalanga (Topham)*,[45] this Court held that a patient is entitled to a thorough and careful medical examination, such as his or her conditions and attending circumstances permit, with such diligence and methods as are usually practiced under similar circumstances, by members of the branch of the profession to which the attending doctor belongs.[46] This Court did not accept the evidence of the attending doctor relating to his 'usual practice' as proof of how he examined the patient where important clinical observations made during the examination were not recorded. A reliance on a medical practitioner's 'usual practice' should not come to the aid of a medical practitioner who has failed to record important observations. 'Usual practice' should not be regarded as a substitute for what was not recorded, or a supplement to an inadequate medical record.

[118] On Dr Horn's own account of events, the recording of J's history was inadequate. The short duration of the examination of J by Dr Horn and the scanty notes she made speak volumes. Her note taking fell short

[45] *Topham v MEC for the Department of Health, Mpumalanga* [2013] ZASCA 65 para 23.
[46] *Topham v MEC for the Department of Health, Mpumalanga* [2013] ZASCA 65 para 20; *Oppelt v Head, Department of Health Provincial Administration, Western Cape* [2015] ZACC 33; 2016 (1) SA 325 (CC).

in various respects. She failed to record the time of the incident despite the fact that the pro-forma trauma unit record form has a block in which the time that has elapsed since the fall must be recorded. The Guidelines for Integrated Management of Head Injury at Red Cross Children's Hospital, which Dr Horn was familiar with, also identified the 'time elapsed since injury' as a factor to be considered during the examination of the child patient.[47] Because Dr Horn did not record this important factor, she had no idea how much time had elapsed between the time of the incident and her examination of J. She admitted that she made an assumption on that aspect. The court a quo's remark that this omission was unsatisfactory is justified by the following exchange between the counsel for the appellant and Dr Horn:

'Let me explore that, if I may. You didn't note the time of the incident? -- No I did not.

And you didn't know how long prior to you observing J the incident had occurred? -- I did not note it.

But you didn't know it either?

Court: Sorry. So you did not note it? -- I did not note it but I made an assumption.

Mr van der Merwe: What was that assumption? -- The assumption was that approximately two hours have passed since the incident, and that would be based on the fact that the incident occurred, then a period of time elapsed until the parent got back. In that time J was bathed and then brought to hospital. So . . .

Where do you get those facts?

Well I know that there was some time – ja so that is a little bit difficult because it does get . . . (intervention)

Dr Horn, you didn't note any of that on your record? -- I did not.

Where do you get . . . (intervention)

Court: No but you haven't given the witness the opportunity to say – to answer your earlier question was how did you know that? -- No I did answer it . . .

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[47] Page 3 of the Guidelines for Integrated Management of Head Injury at Red Cross Children's Hospital.

Court: Well just – Mr van der Merwe might have heard something I did not hear. On what basis did you make this assumption about two hours? -- It is definitely rough – a rough assumption but it was based on the fact that the incident occurred, some time elapsed before the parent brought the child to the hospital and – but no it is a very rough assumption and I cannot scientifically found it but there was an assumption that this was not an incident, immediately get into the care, come to the hospital then minutes later case. But I did not document that.

Mr van der Merwe: No. Dr Horn, I know sometimes it is difficult that when you stand – and you have obviously consulted for purpose of this trial – when you stand here to try and distil what you gathered along the way from what you knew then is a difficult process and I accept that but there is nothing in your notes indicating that you had any idea of the time of the incident. --- I agree

And there is nothing in your notes that you had any idea of a delay even between the time of the incident and J arriving at the hospital. --- I agree.

For all intents and purposes the incident could have happened 15 minutes earlier or prior to the time that you saw him. According to the notes. -- Yes'

[120] As regards J's bump, it is clear that the nature, location and characteristics thereof were important signs and symptoms that ought to have been assessed and recorded. The following exchange between counsel for the appellant and Dr Horn pertaining to the consistency of J's bump is of importance:

'You had fairly conceded yesterday, and I think this morning in your evidence, that you did not in fact or you cannot remember feeling the consistency of the bump? -- I cannot remember what the bump felt like, no.

. . .

I am suggesting to you, Dr Horn, that you probably missed it, you did not feel it. You did not feel for consistency and therefore did not note it. Do you accept that? -- I cannot refute it.

Court: Sorry your question was I put it to you that it is?

Mr van der Merwe: What I suggest is that it is likely that you in fact did not feel the bump for consistency and therefore did not record it. -- It is possible but that would not have been my normal practice.'

[121] Considering the foregoing concessions and the evidence of Dr Goosen and Dr Edeling pertaining to the purpose of a full clinical examination and a comprehensive medical history, I am inclined to agree that, on probabilities, the reason why Dr Horn did not record the consistency of J's bump is because she did not palpate it, which amounted to negligence.

[122] With regard to Dr Horn's history taking during J's examination, it is common cause that she failed to record the nature of the consistency of the large bump, which according to her notes was 'above and behind [J's] ear'. Dr Horn used three words to describe J's mood during the medical examination: 'tearful', followed by 'mopey' and then 'miserable'. It can hardly be denied that any of these words is compatible with a description of someone who was in pain. Mr M's evidence that J complained of a headache just before he took him to the hospital and that he informed Dr Horn about it was not disputed.[48] Here, I accept that a reference to a "sore head" by a six year old child who had fallen and sustained a large swelling above and behind the ear area could only have meant a headache (pain in the head). It was for Dr Horn to establish the exact nature and extent of the soreness and to investigate the extent of the trauma. The fact remains that Dr Horn neither recorded a headache nor a sore head in her notes. On probabilities, it can safely be accepted that Dr Horn was indeed informed about this symptom, otherwise there would have been no reason for her to prescribe or administer Panado syrup to J and to book him off

[48] Under cross-examination, Mr McGregor was asked whether he had told Dr Horn about any symptoms that J had complained about. His response was as follows: 'No, I told – all I told her was, I took him in because his head was sore, I took him in, and told her that – what happened, what had happened, and he knocked his head against the ground with the fall. And, ja, that was about it.' In her evidence Dr Horn stated that pain was not mentioned as a complaint but said she 'could be wrong in her memory'.

for two days. Moreover, Dr Horn stated that the presence of any injury to the head, which causes a swelling, involves pain. She conceded that, where there was a skull fracture as well as a swelling, the pain would be more compounded. In the light of that concession, the attempt to distinguish a sore head from a headache appears to be a distinction without a difference, in my respectful view.

[123] Despite the fact that a worsening headache is one of the symptoms to watch out for, in the context of the management of paediatric patients who present at hospital with head trauma, Dr Horn failed to record the headache as one of the symptoms. She also failed to assess whether the headache was abating or deteriorating. Although Dr Horn conceded that this is a feature that needs to be explored, she did not do so. The exchange between the appellant's counsel and Dr Horn relating to the importance of observing and recording a change in a patient's condition was as follows:

'Mr van der Merwe: Now, Doctor, tragically we know the outcome in this case and it stands to reason that if an extradural haematoma develops the outcome can be catastrophic. Again, I say there is a risk, it doesn't have to be but it can? ---- Yes it can.

And in this case the steps that might have prevented it are actually simple. Would you agree with that? ---- I do agree with that.

Now I know it is complex in a situation where you are confronted with a presentation as you were, but the steps that – there are essentially in plaintiff's estimation three steps that could have been taken or ought to have been taken that would have prevented the outcome - and the first of course is [to] send [the patient] for some kind of examination, albeit it X-ray or CAT scan, but some kind of examination if you are unsure whether there is an underlying facture or not. --- Yes.

And you probably will concede that in the interest of patients' safety if you are unsure then good practice or reasonable practice would be to rather get the scan or get the X-ray and exclude. --- If you are unsure, yes.

Are you suggesting then that in the circumstances you were not unsure? --- That is what I am suggesting, yes.

Now the second aspect even if you do not send the patient for an X-ray or CAT scan is to wait for a while to re-examine. --- Yes.

Now I have heard your evidence this morning that that is not the practice at Red Cross but I am going to test whether that practice is frankly reasonable or not. When you are dealing with a head-injured patient the big problem leading to potentially catastrophic outcomes is the development of a condition that would affect the neurological functioning of the individual. --- That is correct.

And so it is the change that is important isn't it? --- That is correct.

And we see in the literature, and I am not going to take you to any of it in any detail. I think it is common cause, that change in neurological status is one of the things that the clinician should look out for. --- Yes.

To decide on management. On further management of the patient. Now there seems to be a dispute between the plaintiffs and defendant in this case of precisely what that means and how that should be evaluated. I want to put it to you in these terms. Dr Edeling says, and so does Dr Goosen for that matter, that if you – you can only detect a change in neurological condition – you the clinician, the doctor – if you do at least two examinations, not one. --- Yes I agree.

You agree with that. And there must at least be the passing of a little bit of time for you to be able to detect that. --- That is true.

Precisely how much time is open to debate but without doing a re-examination you cannot detect whether there is a change in condition. --- No.

. . .

Now again my instructions are that it is not only the pain and degree or level of pain but also whether the pain is getting any worse is a feature that needs to be explored? --- Yes I agree with you.'

[124] Prof Taylor's testimony that 'there's no evidence that any particular frequency of observation is of benefit' is at variance with Dr Horn's own evidence, as set out in the last paragraph of the passage above. That assertion is also not borne out by various provisions of the

Western Cape Head Injury Guidelines Handbook,[49] as they stipulate that a re-examination should be performed within one hour of the first assessment, an aspect I will revert to presently. At a logical level, it is mindboggling how else one can possibly observe a change or deterioration in a patient's condition without doing a re-examination. This brings to mind the warning sounded by the court in *Bolitho v City and Hackney Health Authority*.[50] Lord Browne-Wilkinson aptly stated that a court is not bound to absolve a defendant from liability for allegedly negligent medical treatment or diagnosis just because evidence of expert opinion is that the treatment or diagnosis in issue accorded with sound medical practice. He emphasised that the court must be satisfied that such opinion has a logical basis, in other words, that the expert has considered comparative risks and benefits and has reached a defensible conclusion. He cautioned that if a body of professional opinion overlooks an obvious risk which could have been guarded against it will not be reasonable, even if almost universally held. I am in full agreement with those remarks.

[125] In an article authored by Osmond and Others,[51] the authors refer to a cohort study (referred to as the CATCH study) of 3866 patients with a mean age of 9.2 years. They identified four high risk factors which were pointers for a CT scan in children. The finding was that a CT scan of the head was 'required' for children falling in the 'high risk' category. Children falling in the 'high risk' category included those who had a history of a 'worsening headache'. There is much to be made of the undisputed evidence that J complained of a headache before being taken

[49] Western Cape Head Injury Guidelines Handbook Tab 9 at 26.
[50] *Bolitho v City and Hackney Health Authority* [1997] UKHL 46; [1998] AC 232 at 241-242H.
[51] M H. Osmond and Others 'CATCH: a clinical decision rule for the use of computed tomography in children with minor head injury' (2010) *Canadian Medical Association Journal.*

to the hospital, an aspect Dr Horn was informed about. Despite having taken an analgesic, he was still complaining about the headache soon after leaving the hospital, which was slightly more than two and a half hours after the fall. Clearly, the headache was persistent. It is evident that Dr Horn failed to assess the extent and severity of the headache. She also inexplicably failed to allow herself an opportunity to assess whether there would be any deterioration in J's condition.

[126] Both Dr Goosen and Dr Edeling are specialists in their own right and were entitled to base their professional opinion on medical literature. Their evidence regarding the current state of knowledge and generally accepted practice in the medical field in relation to head injuries in children was relevant and helpful. I disagree with the view that 'medical literature was used selectively to bolster arguments and not for the purpose of informing the court of the current approach to the clinical assessment of head injuries in children and the accepted medical views'. On the basis of Dr Goosen and Dr Edeling's evidence, as well as the medical views expressed in the Burns article, I am inclined to agree with the contention that on Prof Taylor's theory, there is no reason in logic why the bogginess of the swelling containing less blood would be a significant marker for an underlying skull fracture, but a swelling containing more blood would not be a significant marker.

[127] I am unable to agree with the court a quo's finding that Dr Horn's evidence was cogent. The difficulty for Dr Horn was that she could not remember what she did not note down, but expected the court to accept what she would have done 'in her normal practice', which is unknown. That she could not remember what she knew back then, or came to know in the course of her preparation of the trial, is clear from her own

admission, under cross-examination; she remarkably described her difficulty as follows: 'I might be mixing up current thoughts with thoughts back then'.

[128] This Court in *Meyers v MEC, Department of Health, Eastern Cape*,[52] made the following observation:

'A court is not called upon to decide the issue of negligence until all of the evidence is concluded. When an inference of negligence would be justified, and to what extent expert evidence is necessary, no doubt depends on the facts of the particular case. Any explanation as may be advanced by or on behalf of a defendant forms part of the evidential material to be considered in deciding whether a plaintiff has proved the allegation that the damage was caused by the negligence of the defendant. . . .'[53]

[129] The paragraphs that follow will show that the court a quo's evaluation of evidence was at odds with the approach set out in the preceding paragraph. In my view, the court a quo failed to pay due regard to the fact that Dr Horn had conceded that, when she testified about her 'usual practice', she had no recollection of the events that she was testifying about.

[130] The provisions of the Western Cape Head Injury Guidelines Handbook, which applied to all hospitals in the Western Cape, including the Red Cross Children's Hospital at the time, warrant consideration.[54] Although Dr Horn testified that she had not seen them before, she later confirmed that, having read them subsequently (in preparation for the

[52] *Meyers v MEC, Department of Health, Eastern Cape* [2020] ZASCA 3; 2020 (3) SA 337 (SCA) para 69.
[53] *Meyers v MEC, Department of Health, Eastern Cape* [2020] ZASCA 3; 2020 (3) SA 337 (SCA) at para 69.
[54] Dr Goosen's uncontested evidence was that the Western Cape Guidelines Handbook took precedence over the Red Cross Children's Hospital Guidelines and that in the event of a contradiction, the Western Cape Guidelines Handbook applied.

trial), she realised that they were not dissimilar to the guidelines applicable at the Red Cross Children's Hospital.

[131] It is prudent to first consider a few provisions of the NICE guidelines, as Prof Taylor stated that the Western Cape Guidelines are based thereon. At the outset, the NICE Guidelines, which are undoubtedly based on best practices in the medical field, stipulate that all emergency department clinicians involved in the assessment of patients with a head injury should be capable of assessing the presence or absence of the risk factors for CT imaging listed in the recommendations, which include the determination of a GCS score. In this matter, the GCS score was determined by Dr Horn. This means that Dr Horn's examination fell within the stipulations of clause 1.3.6. Accordingly, a further examination had to be done within an hour of the first assessment, as contemplated in clause 1.3.8. That this is indeed what was intended is evident from the Guidelines Summary, which stipulates that 'patients who, on initial assessment, are considered to be at low risk . . . should be re-examined within *a further* hour by an emergency department clinician.'[55]

[132] Even if it were to be accepted that J's interaction with the triage nurse constituted the first examination contemplated in the guidelines, the fact remains that the examination performed by Dr Horn did not meet the requirements of clause 1.3.8 which stipulates that 'part of this assessment should *fully* establish the need to request CT imaging of the head . . .'. In terms of those guidelines, the presence of amnesia alone would have necessitated that J be observed for a minimum of 4 hours. Insofar as Dr Horn did not assess amnesia, she cannot be regarded as having fully

[55] Para 29 of the Guideline Summary – Head Injury – NCBI Bookshelf.

established the need to request CT imaging as contemplated in clause 1.3.8. Her standard clearly fell below the NICE guidelines.

[133] The Western Cape Guidelines Handbook stipulates that all patients presenting themselves at a secondary/tertiary level facility (Red Cross Children's Hospital fell under this category) had to be assessed within 15 minutes of their arrival at that facility. The next step was to 'assess and stabilise ABC's before attending to other injuries' and to establish the GCS'. Those with a GCS score of 15/15 (like J) were to be assessed within 15 minutes and an assessment of the risk of brain injury had to be done. If the patient was considered a high risk, a full clinical examination had to be done with a view of establishing the need for imaging. If the patient was considered a low risk (Dr Horn said she considered J to be one), the patient had to be re-examined within an hour and a need for imaging had to be established. It is common cause that Dr Horn examined J only once.

[134] The court a quo disregarded[56] the plain stipulations of the Western Cape Head Injury Guidelines Handbook despite the fact that the requirement to assess and re-assess is stipulated twice in the guidelines.[57]

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[56] The court a quo stated as follows:
'The Western Cape Head Injury Guidelines Handbook indicates that "low risk" patients presenting in the emergency centre with a GCS score of 15/15 should be re-examined within an hour to establish the need for imaging. Professor Taylor, as one of the authors of the handbook, explained that this provision, which he conceded might perhaps have been better worded, was intended to replicate the content of paras 1.4.1.6 – 8 of the 2003 NICE Head Injury guidelines. Those paragraphs provided that head injury patients found on initial triage to be at low risk for clinically important brain injury should be re-assessed "within a further hour by an A&E clinician". At the Red Cross Children's Hospital patients arriving in the trauma unit are assessed for triage purposes by experienced nursing staff. It follows, as Prof Taylor confirmed, that J's subsequent assessment by the duty registrar would have been the reassessment by an A&E clinician within a further hour contemplated in terms of para 1.4.1.8 of the NICE guidelines. In any event, on a purely linguistic construction, the mention of the period "within a further hour" does not imply that a further examination should take place after an interval of an hour, it connotes that an examination by a clinician should happen within no more than one hour after the triage assessment. . . .'
[57] Tab 9 p 21 and Tab 9 p 32.

The court a quo's interpretation, which was based on Prof Taylor's evidence, is not in line with the plain meaning of the provisions of the Western Cape Guidelines, nor is it consonant with the NICE guidelines on which reliance was purportedly placed. Clearly, the recommended treatment in the Western Cape Injury Guidelines Handbook does not say what Prof Taylor intended it to mean.

[135] It is clear from the discussion in the foregoing paragraphs that Dr Horn's assessment of J was glaringly not in conformity with the provisions of the Western Cape and NICE guidelines. I am therefore unable to agree with the first judgment's conclusion that the process of assessment and examination followed by Dr Horn complied with accepted clinical practice here and internationally.[58] Notably, the court a quo accepted that Dr Horn 'had extensive exposure to head injury cases in earlier stages of her career while working in Mthatha and at Victoria hospital in Wynberg. Dr Goosen's uncontested evidence was that a Registrar (Dr Horn held the position of a Registrar) was 'a doctor in training to be a specialist, it is usually a minimum of four years postgraduate training, usually after completing an entrance exam called a primary examination'. Dr Horn was aware that the presence of a subgaleal haemorrhage or haematoma is a recognised warning sign of the possible presence of a fracture.[59] These are relevant factors in the consideration of how a reasonable medical practitioner in the position of Dr Horn would have acted in the particular circumstances.

[136] It is abundantly clear from the applicable guidelines and the evidence of Dr Edeling and Dr Goosen that Dr Horn's assessment of J

[58] Para 82 of the first judgment.
[59] See para 27 of the first judgment.

departed from the standard of care that a reasonable and respected body of medical opinion would regard as acceptable treatment by a Registrar in her position. The entire medical examination relating to J lasted 15 minutes, which is clearly an insufficient time to detect neurological changes in a head injured patient who was still in the compensation phase of the injury. It is difficult to conceive of a Children's Hospital anywhere in the world discharging a six year old patient presenting with a large temporo-parietal swelling and a headache pursuant to a fall, within 15 minutes of his or her arrival at a trauma unit.

[137] The first judgment alluded to the fact that Mr M did not mention the triage nurse in his evidence. This, in my view, is of no consequence. It must be borne in mind that Mr M's uncontested evidence was that upon arrival at the trauma unit, he carried J directly to a bed as there were no other patients in the trauma unit at that stage. Dr Horn immediately started attending to him. At that very stage, a nurse who was in the company of Dr Horn told him to fetch J's file from the records department. On his return, 15 minutes later, Dr Horn had already finished examining J and decided to discharge J. Mr M would therefore not have known that a triage nurse attended to J at some stage.

[138] It is clear from Table 9 of the Western Cape Head Injury Guidelines Handbook that the first examination includes the assessment of the GCS score. The undisputed evidence is that Dr Horn is the one that assessed J's GCS score. Undoubtedly, there ought to have been another examination after the noting of the GCS score. This did not happen. Instead, what transpired is that J was discharged, apparently on the basis of the 15/15 GCS score, despite the fact that some of the vital symptoms had not been investigated or recorded. A proper examination would

probably have alerted Dr Horn to the possibility of a linear skull fracture and this in turn would have prompted her to do further investigations.

[139] The court a quo criticised Mr M's evidence and stated that he had a hazy recollection of his exchanges with Dr Horn, particularly whether she had asked him questions about loss of consciousness, vomiting, seizures or amnesia. It failed to take into account that Mr M explained that the reason why he did not try to establish the symptoms exhibited by J after the fall from those who had witnessed it, was that his priority was to get J to the hospital expeditiously. That evidence was not disputed.

[140] On Dr Horn's own version, she did not assess J for the presence of amnesia despite the fact that the presence thereof would, in terms of the Western Cape Guidelines, have been one of the indicators for a CT scan. Dr Horn conceded that because Mr M did not witness the fall, he would not have had any first-hand knowledge of the circumstances and would have been unreliable as a source of information pertaining to J's symptoms. It is in any event clear from Mr M's account of what J told him that he did not gain much information from him regarding the symptoms he had experienced, save for the complaint about the headache. Since Mr M bore no first-hand knowledge about the symptoms exhibited by J after the fall, it would have served no purpose to ask him about loss of consciousness, seizures, amnesia or vomiting. This, too, was conceded by Dr Horn. The following exchange is apposite:

'. . . When you receive a history from the parent it may be unreliable? -- It can be, yes. You might not know whether the parent or the person bringing the child observed everything that would make you satisfied about the child's condition? -- This is true. Well I am putting it to you as a proposition in this case – that is in fact what the problem was in this case too insofar as Mr M did not observe the incident himself. Are you aware of that? -- Yes I am aware of that.

Did you only become aware of that during the course of this trial or . . .? -- Yes I only became aware of that during the course of this trial.
So you didn't elicit that information from Mr M either in your questioning did you? -- No I did not.
And is that not an important part of the information that you should elicit from – to as part of your history-taking? -- I was satisfied with the information that was given to me.'

[141] It is common cause that Dr Horn did not assess J for amnesia, which is one of the variables that form part of the equation when it comes to predictors that can point to an intracranial injury. Since amnesia was not assessed, it is not open to the respondent to contend that there was no complaint of amnesia. By Dr Horn's own admission, her usual practice did not include exploring[60] amnesia, despite the fact that (1) the Western Cape Head Injury Guidelines Handbook specifically stipulated that the attending doctor should 'ask about and record' amnesia for events as part of the initial assessment and (2) that she had admitted that J's age was not a bar to a reliable assessment of amnesia. Dr Horn also admitted that she did not assess for a deterioration in J's headache because it was not her usual practice to do so. Dr Horn's evidence under cross-examination is quite telling. I can do no better than to quote her verbatim:

'Another aspect that I understand is relevant in the examination of a head – a potential head-injured patient because J was a head-injured patient, is the question of amnesia. – Yes.
You did not enquire about amnesia? -- I did not enquire about amnesia.
And if I can just test this proposition the Glasgow Coma Scale test is done to evaluate the patient's condition at the time you examine him? -- That is correct.
But the history taking of course is also important because you [are] meant to know whether there was any prior loss of consciousness or aspects of amnesia relating to the incident? -- Yes. I did establish the presence of loss of consciousness. However, I did

[60] See para 61 of the first judgment.

not – and usually don't – pursue the possibility of amnesia. Reasons for that are potentially the lack of reliability of such a young child's recollection and then also – and this is going to probably just add fuel to your fire but generally when patients present with loss of consciousness or something that is the first thing they tell you. So if this is not elicited in the history I do admit that . . .
You don't ask. -- . . . particularly seeking out amnesia is not something I ask for.
. . .
But amnesia is relatively simple to establish, I understand, by a few simple questions? It could be yes.
And J – the suggestion isn't that J was not a child who could at least give an account of himself. -- No.'

[142] In my view, it seems incongruous to suggest that what was not assessed did not exist. It seems obvious that one can only conclusively decide that the criteria have been met or not if a comprehensive medical history of the patient has been taken and a full clinical examination has been performed. It is for that reason that I am unable to agree with the first judgment's conclusion that J displayed none of the signs identified as risk factors in the PECARN study.[61] The court a quo's conclusion that J's traumatic brain injury was not defined by a history of amnesia, despite this not having been assessed, was clearly wrong.

[143] I consider next the circumstances relating to J's discharge. The court a quo erred in approaching the question regarding the evidence concerning the instructions that were given to Mr M upon discharge as constituting two mutually destructive factual versions.[62] It failed to take into account that Mr M put up a positive version that Dr Horn did not warn him to regard drowsiness as a concerning factor. Dr Horn, on the other hand, was unable to recall the instructions that she gave. There was

[61] See para 74 of the first judgment.
[62] *Meyers v MEC, Department of Health, Eastern Cape* footnote 52 above.

therefore only one positive factual version of what was said before the court a quo. Moreover, Dr Horn admitted that reading the whole head injury form to the parents was not in her usual practice and that she would, instead, 'highlight the things that are most common and most concerning and then ask them to read the form'. There is therefore no room for assuming that Dr Horn read out the contents of the form to Mr M.

[144] Prof Taylor stated that emergency units in South Africa do not consider it good practice to keep a child patient with symptoms similar to those of J for observation at a hospital. This assertion sounds inherently improbable. If that were the case, observation and re-examination of patients presenting with a head injury would not have been included in the Western Cape Guidelines. It seems to me that Prof Taylor conflated keeping a patient for observation at a trauma unit with admission.

[145] A factor which bears consideration is that there were beds available in the trauma unit and Dr Horn admitted that keeping J at the unit for another hour for re-examination purposes would not have inconvenienced any other patient. Resources were therefore not a concern.[63] The court a quo, however, chose to prefer Prof Taylor's evidence that 'practical considerations militate against keeping patients with a low risk of complications in for observation' over Dr Goosen's unchallenged evidence that keeping J for observations would not have had an adverse impact on resources. Despite the clear provisions of the Western Cape Guidelines on re-examination, Dr Horn stated that keeping a patient for re-examination was not the practice.

[63] The trauma unit was not at full capacity and J could be kept there for observation.

[146] Dr Horn conceded that it would have been reasonable for her to give more detailed and specific instructions to Mr M of what to look out for. This concession was properly made, given that the Red Cross Children's Hospital Guidelines stipulate that 'parents of children who are fit for discharge home should understand the contents and importance of the head injury form'. In any event, on any of the experts' versions of reasonable practice, Dr Horn's instructions to Mr M fell short of that standard. Despite this, the court a quo found that Dr Horn was not negligent when she decided that it was not necessary to keep J in the emergency ward for further observations.

[147] There is also much to be said about the inadequacies of the Red Cross Children's Hospital Head Injury form especially relating to the English version, which differed from the Afrikaans version, insofar as it did not specifically mention drowsiness as one of the alarm symptoms to look out for. This inconsistency with the Afrikaans version is a disconcerting aspect that was unfortunately not sufficiently taken into account by the court a quo.[64]

[148] Mr M testified that although he was bilingual, English was his home language. Upon arrival at home, he read the English version of the form. It is common cause that the English version of the head injury form does not include drowsiness among the symptoms that should cause alarm and instead only alerts the reader to the patient becoming 'increasingly difficult to wake'. Considering all these circumstances, I am of the view that there was no basis for the court a quo's conclusion that J's drowsiness in the car should have alerted his parents to return him to

[64] Para 54 of the judgment of the court a quo concludes as follows:
'. . . These were signs that in my view should have concerned the plaintiffs had they been advised to look out for drowsiness, *or when they read the head injury form*.' (Own emphasis.)

hospital without delay. That finding evidences a failure to pay regard to Mr Mc Gregor's testimony that if Dr Horn had warned him about drowsiness, he would have returned to the hospital as soon as J fell asleep in the car, which happened within 10 minutes of his departure from the hospital.

[149] Mr M explained that the reason why he was not alarmed by J's drowsiness is because he attributed it to the fact that Dr Horn had given him Panado syrup.[65] The experts in this case agreed that Panado can have a sedative effect in a small percentage of users.[66] In this regard, it is worth mentioning that the NICE guidelines stipulate that patients with a head injury 'should not receive systemic analgesia until fully assessed so that an accurate measure of consciousness and other neurological signs can be made'. On this same aspect, the Guidelines of the Red Cross Children's Hospital warn that 'sedation can contribute to secondary injury and should be avoided if at all possible'.

[150] I am of the view that a reliance on Schutzman's article[67] in relation to the conclusion that J's discharge was not negligent, is misplaced, as the evaluation that precedes a discharge, and on which the decision to discharge depends, was not included in the article.[68] Moreover, given the size and location of J's closed head injury, his mood two hours after his fall (described as 'tearful' 'mopey' and 'miserable') and the headache

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[65] Under the heading 'treatment' the trauma register reflects an entry confirming that Panado was prescribed for J. Dr Horn's signature appears at the end of that entry.
[66] Para 23 of the judgment of the court a quo.
[67] Footnote 37 above.
[68] In the Schutzman article, under the heading 'Low risk', reference is made to children with minor head trauma 'who have undergone a complete evaluation and are found to be low risk'. At the end of the paragraph the reader is referred to the 'Evaluation' section before being referred to 'Discharge' criteria. On the next page, under the heading 'Evaluation', it is stated that 'the evaluation of patients and children with minor head trauma and an approach to neuroimaging in these patients is provided separately and the reader is referred to the 'Evaluation Section'. However, the evaluation section was not attached to the article.

that he complained about, a reasonable medical practitioner in Dr Horn's position would have referred J for a CT scan so as to exclude the possibility of a skull fracture. Furthermore, to my mind, a 'return to baseline functioning' implicitly entails a comparison of analyses, in other words, the functioning 'before and after'[69] Dr Horn could not have done any comparison because she had insufficient history pertaining to J and had assessed him only once. A reasonable medical practitioner in Dr Horn's position would not have discharged J before a further observation of his condition and a re-assessment.

[151] The court a quo downplayed a number of significant concessions made by Dr Horn, and therefore failed to consider the totality of evidence. This is evident from the following findings:

'Nothing that [Dr Horn] said by way of apparent concessions under cross-examination detracted from the essence of her evidence, which was "I am unable to remember what I said, but I believe that it would have been along the lines of what I habitually say in circumstances, which is to tell the caregiver to watch out for the tell-tale warning signs: drowsiness, loss of consciousness, vomiting or fitting . . . ."'[70]

[152] Despite Dr Horn's concession that she did not remember the consistency of the swelling, the court a quo accepted that it was firm and stated as follows in the judgment:

'I accept, however – and [Dr Horn] professed to have been astute to this at the time – that the consistency and location of a swelling were something to which a treating doctor should have had regard at the relevant time in the making of the required clinical judgment in respect of the diagnosis and treatment of a head injury patient because it could be indicative of an underlying skull fracture. In [Dr Horn's] judgment nothing about the size or consistency of the lump on J's head gave her cause for

[69] The head injury glossary defines 'baseline' as 'the initial set of measurements at the beginning . . . with which subsequent results are compared'.
[70] Para 49 of the judgment of the court a quo.

concern. On the documented learning, she cannot be held negligent in those circumstances for not having regarded the presence of a firm feeling haematoma as sufficient reason – in the absence of other symptoms such as loss of consciousness, amnesia, vomiting or fitting, and subject to what I shall deal with presently in respect of "mechanism of injury" – to have referred J for a CT scan.'[71]

[153] Although the court a quo accepted, correctly in my view, that location and consistency were important indicators of a skull fracture,[72] it glossed over Dr Horn's failure to record the consistency of J's large bump and his complaint about a headache. Similarly, her admitted departure from the standard practice of eliciting information pertaining to possible amnesia was downplayed. Despite Dr Horn's speculative reconstruction of what she would have done, her evidence was described as cogent.

[154] The court a quo regarded Dr Goosen's responses as concessions in favour of Dr Horn. It failed to take into account that under cross-examination, Dr Goosen was asked to assume that the records were an accurate reflection of what had transpired during J's medical examination.[73] Furthermore, the court a quo failed to pay sufficient regard to the fact that vital symptoms were not recorded in Dr Horn's notes, namely the consistency of the large bump, his headache and that J was

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[71] Para 88 of the judgment of the court a quo.
[72] See para 78 of the judgment of the court a quo.
[73] The cross-examination of Dr Goosen by counsel for the respondent on this aspect went like this:
'Ms Gassner: If we accept that he did not have amnesia, just make that assumption at the moment, I would like you to make that assumption that he did not have amnesia . . . (intervention) . . .
Dr Goosen: Yes, for the sake of argument.
Ms Gassner: For the sake of argument, then in terms of the ATLS he would not have been observed for several hours, is that correct?
Dr Goosen: Exactly, but we have to assume, we have to assume that he did not but we have to assume, we may assume that he did. I don't know, it is not documented.
. . .
Ms Gassner: And J would not have fallen in the [PECARN] sample, is that correct, if we accept that – if we accept that – assume that he did not have amnesia, he did [not] have a loss of consciousness, he did not have disorientation. If we assume that – and I would like you to make that assumption – it's for the court to find whether that was so or not – then he would have not fallen within that sample?
Dr Goosen: M'Lord, if we assume – and I previously stated that I differ from that.'

mopey during the examination. Furthermore, it failed to take into account Dr Horn's concession that as a matter of practice, she did not test patients to rule out amnesia.

[155] The court a quo hypothetically asked what would have happened if J had been kept at the hospital longer. The answer lies in the provisions of the guidelines alluded to, above, which specifically stipulate that patients who are considered to be a 'low risk' should be assessed within 15 minutes of attaining a GSC score of 15 and be re-examined within one hour. Furthermore, the Western Cape Head Injury Guidelines Handbook stipulate that a patient be admitted under the care of a specialist if they have a severe headache.

[156] As stated before, the undisputed evidence is that J still had a headache when he left the hospital and fell asleep soon thereafter. Based on the conspectus of all the evidence, the ineluctable conclusion is that if J had been re-assessed within an hour of Dr Horn's examination, his drowsiness or his persistent headache would have set off alarm bells and this, in turn, would have triggered a referral for a CT scan.

[157] It is thus evident from the Red Cross Children's Hospital Guidelines and the Western Cape Guidelines that the course of events that would have followed would have been different from the one followed by Dr Horn. Had Dr Horn followed the guidelines, she would have referred J for a CT scan much earlier. The CT scan would undoubtedly have revealed the extent of the injury at a time when there was still a scope for successful intervention, as correctly pointed out by

Dr Goosen.[74] That J's prognosis would have been substantially different had the scan been performed earlier, is an aspect that was confirmed by all the experts.

[158] Mr M's uncontested evidence and Dr Horn's concessions, viewed against the backdrop of expert evidence, the guidelines for the Red Cross War Memorial Children's Hospital and the Western Cape Head Injury Guidelines Handbook, were sufficient to support the appellant's delictual claim. In conclusion, the evidence adduced by the appellant showed on a balance of probabilities that Dr Horn failed to apply the degree of professional skill and diligence expected of members of her profession when examining a child patient presenting at the emergency unit of a Children's Hospital with a head injury. As stated in *Van Wyk v Lewis*[75] many decades ago, 'the failure of a professional person to adhere to the general level of skill and diligence possessed and exercised at the time by the members of the branch of the profession to which he or she belongs constitutes negligence'. Had Dr Horn properly assessed J and elicited and recorded the symptoms, she would probably have changed the management of J.

[159] A reasonable medical practitioner in Dr Horn's position would have been alerted to the risk. It is clear from the entire discussion in this part of the judgment, that the factual findings made by the court a quo against the appellant are not supported by an objective analysis of all the evidence. In *Minister of Safety and Security and others v Craig and others NNO,*[76] this Court held that even though courts of appeal are slow

[74] See para 92 of the judgment of the court a quo.
[75] *Van Wyk v Lewis* 1924 AD 438 at 444.
[76] *Minister of Safety and Security and others v Craig and others NNO* [2009] ZASCA 97; 2011 (1) SACR 469 (SCA).

to disturb findings of credibility made by trial courts, courts of appeal generally have greater liberty to do so where a finding of fact does not essentially depend on the personal impression made by a witness' demeanour, but predominantly upon inferences and other facts and upon probabilities. Insofar as the factual findings made by the court a quo depended predominantly on inferences and probabilities, this Court, on appeal, has the benefit of the full record and is in as good a position to draw inferences.[77] This court is therefore at large to interfere on appeal.[78]

[160] As an aside, I agree that during the trial, Dr Horn showed empathy for J's situation and therefore commend her for her honesty. While she obviously did not intend for this unfortunate eventuality to materialise, it was her negligence in the treatment of J that led to the harm that ultimately befell him. But for that negligence[79], the linear skull fracture would have been detected by a CT scan and timeous intervention would most probably have prevented the harm that eventuated, namely cerebral palsy and quadriplegia. I am therefore satisfied that the evidence adduced by and on behalf of the appellant satisfied all the elements of a delictual claim.

[161] As I conclude, I echo the sentiments expressed previously expressed by this court in *Topham*: 'it could hardly be contended that considerations of reasonableness, justice and fairness dictate that the

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[77] *Minister of Safety and Security and others v Craig and others NNO* [2009] ZASCA 97; 2011 (1) SACR 469 (SCA).
[78] *R v Dhlumayo* 1948 (2) SA 677 (A); *Union Spinning Mills (Pty) Ltd v Paltex Dye House (Pty) Ltd & another* 2002 (4) SA 408 (SCA) para 24; *Louwrens v Oldwage* 2006 (2) SA 161 (SCA); [2006] 1 All SA 197 (SCA) para 14; *Minister of Safety and Security and others v Craig and others NNO* [2009] ZASCA 97; 2011 (1) SACR 469 (SCA) para 58. Compare *Topham v MEC for the Department of Health, Mpumalanga* [2013] ZASCA 65 para 23.
[79] See *Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another* [2001] ZASCA 12; 2001 (3) SA 188 (SCA); *Premier of the Western Cape and Another v Loots NO* [2011] ZASCA 32; 2011 (2) SA (SCA) para 16-17; *Minister of Finance and Others v Gore NO* [2006] ZASCA 98; 2007 (1) SA 111 (SCA) at para 33.

respondent should not be held liable' for the harm suffered by J. The respondent, as Dr Horn's employer, must be held vicariously liable for the harm suffered by J because of Dr Horn's negligence. I would therefore uphold the appeal with costs.

for M B MOLEMELA
JUDGE OF APPEAL

Appearances

For appellant:	W Duminy SC (with him J A van der Merwe SC)
Instructed by:	Malcolm Lyons & Brivik, Cape Town, Matsepes, Bloemfontein
For respondent:	B D J Gassner SC
Instructed by:	State Attorney, Cape Town and Bloemfontein.