

REPUBLIC OF SOUTH AFRICA



**IN THE HIGH COURT OF SOUTH AFRICA
GAUTENG DIVISION, JOHANNESBURG**

CASE NO: 44101/2015

- (1) REPORTABLE: NO
(2) OF INTEREST TO OTHER JUDGES: NO
(3) REVISED. NO

PLAINTIFF

.....
SIGNATURE

DATE: 13 April 2022

DR C.R. OOSTHUIZEN

DEFENDANT

JUDGMENT

MANOIM J

[1] On 3rd February 2012, Brent Peterson, the plaintiff, bent down to tie his takkies. He could not straighten his back afterwards due to the excruciating pain. This was not the first time he had back pain nor was it to be the last. He was rushed by one of his employees to the Wilgeheuwel Hospital, where he was taken to the defendant's rooms. Two years of medical treatment were to follow; including surgery performed on him by Dr Oosthuizen, the defendant, an orthopaedic surgeon, in 2012.

[2] He has subsequently been diagnosed with a rare condition of the nervous system ominously termed 'arachnoiditis'. The present state of medical knowledge is that this

condition is incurable. The plaintiff struggles to walk, is largely bed ridden, and no longer works in his chosen occupation as a vehicle mechanic. He had to close down his business repairing high performance vehicle engines. But his personal life has also been destroyed. He and his wife are separated and his relationship with his daughter has become strained. He has frequently had thoughts of suicide. The one expert who saw him in 2020 described him as a “*destroyed personality*”.¹

Background

- [3] The defendant is an orthopaedic surgeon who specialises in spinal surgery. He and the plaintiff were not previously acquainted. The plaintiff said he decided to see the defendant on that day because of his reputation in the area as a ‘*back man*’.
- [4] He was not operated on immediately. The defendant first got him to undertake a magnetic resonance imaging scan (MRI). Thereafter, he spent the weekend in hospital and the operation was performed on the Monday (6th February).
- [5] The MRI showed that the plaintiff was suffering from early spinal stenosis. Spinal stenosis comes about because of a narrowing of the spaces within the spine which can cause pressure on the nerves that travel through the spine.
- [6] Versions differ on what was said at the initial consultation. According to the plaintiff he was told by the defendant he would need to be given a spinal fusion. According to the defendant, he recommended more conservative treatment, but the plaintiff, who had had a previous history of back problems, was insistent that he wanted an operation.²
- [7] Notwithstanding whose version on this aspect is correct, the plaintiff was operated on, but he was not given a spinal fusion. Instead, the defendant performed a procedure known as a laminectomy. A laminectomy is a surgery in which part, or all,

¹ Report of Dr Miller record page 064-202.

² As I explain later this dispute of fact no longer matters. The defendant’s legal team on his behalf admit liability for performing this surgery when more conservative treatment was indicated.

of the bone called the lamina is removed from the spinal column. This enlarges the spinal canal and can relieve pressure on the spinal cord or nerves.³

[8] Following the operation, the plaintiff experienced acute pain. Such pain might be expected post operatively, but when it persisted for the next two days the defendant sent him to have another MRI. The scan showed a haematoma had formed. The plaintiff was sent to surgery again on 8 February to have the haematoma drained by the defendant. This was approximately two and a half days after the laminectomy had been conducted. As part of the haematoma procedure blood was drained from above the dura, a membrane that covers the spine, where it had been present since the laminectomy.

[9] On 13th February (thus a week after the laminectomy) having had daily physiotherapy, the plaintiff was discharged from the hospital. The hospital records from the physiotherapists' practice, show that he had experienced a great degree of pain in this period but by the 13th February he is described, at least in one entry, as not experiencing pain.

[10] Thereafter he attended physiotherapy at this practice, on a regular basis as an outpatient. Entries sometimes suggest he was experiencing pain, but there is also a record in April 2012, of him wanting to go back to gym. In April 2012, he experienced shoulder problems and was sent to a Dr Strobos for attention who prescribed him certain drugs, one of which called Lyrica, is relevant to this case and I will return to later.

[11] On 11 May 2012, as he was still experiencing pain, he went to see Dr Avenant, an anaesthetist to relieve his pain by two interventions; an epidural and what is known as a facet block infiltration. This procedure did not involve the defendant. He was discharged on the same day.

[12] On the 2nd July he saw a neurologist, Dr Zorio, because he was still experiencing pain. Dr Zorio had an MRI performed on him and a nerve conduction test but does

³ Expert summary of Dr Marus. Case Lines 043-4

not seem to have diagnosed what the cause of the plaintiff's pain was. He describes the pain as 'radicular pain'. The significance of the use of this term, I discuss later.

[13] The next significant event occurred in December 2013 when he saw the physiotherapist Micaela Poulter (who he had seen on and off since the operation at their practice). He complained of bladder problems and Poulter booked an appointment for him to see the defendant in the following year (2014) in January.

[14] On 6th January 2014 he duly saw the defendant who examined him; amongst the steps he took was to refer him again for an MRI. He was also referred by the defendant to a urologist Dr Van Graan, and to an anaesthetist, again Dr Avenant, for another epidural and facet block.

[15] This took place on 7th January 2014 and was the second time within a period of eight months that he was undergoing an epidural and facet block procedure. Immediately after this procedure had been performed, he experienced severe pain. He is variously described in the records as feeling lame and paralysed. This alarmed Dr Avenant who alerted the defendant.

[16] The defendant did an MRI and had him taken to theatre that same day (7 January 2014) where the defendant performed a decompression to drain the haematoma. He was then discharged on 11th January 2014.

[17] Many more interactions with the medical profession and as many doctors were to follow, but not all are relevant. What is relevant is that on two occasions in 2014, after the second epidural and facet block, had been performed on 7 January 2014 (from now on I will refer to this as the '2014 procedure') two separate doctors, one of whom is the defendant, speculated on the possibility that the plaintiff might have arachnoiditis. However, it was only in March 2016 that an MRI confirmed this diagnosis conclusively. According to the salient portion in the report of the radiologist at that time:

"There is subjective clumping of the cauda equina. This could be from previous arachnoiditis." ⁴

⁴ Record page 065-490. I explain the term *cauda equina* further below.

[18] A further MRI was done in 2018 which states:

“The L4/L5 level also shows posterior clumping together of the cauda equina roots suggestive of an arachnoiditis”⁵

[19] That he has this condition is now common cause.

What the case is about

[20] It is now also common cause that the 2012 laminectomy (from now on I will refer to this laminectomy as the ‘2012 procedure’) was an unnecessary procedure for the plaintiff to have undergone – more conservative non-surgical treatment would have sufficed - and hence it was negligent.

[21] Ordinarily such an admission by the defendant would end the matter. But this case is more complicated because the arachnoiditis only manifested itself years later (2016). Indeed, at the time the summons in this case was issued in 2015 its presence had not yet been identified, and hence it had not yet been pleaded in the particulars of claim.

[22] But the particulars were since amended. The plaintiff’s case now is that the 2012 procedure was the direct cause of certain sequelae, including his arachnoiditis.

[23] On the defendant’s version it was not the 2012 procedure but the 2014 procedure, which caused the plaintiff’s current condition. The defendant did not have anything to do with the 2014 procedure although he was called in later that same day to drain the haematoma caused by the epidural. But there is no suggestion of any negligence on his part in performing the drainage. Thus, if the 2014 procedure is the cause of the arachnoiditis, the defendant would not be liable.

[24] However, there is a caveat to this. -

⁵ Record page 065-648

[25] On the plaintiff's alternative version, even if the 2012 procedure had not directly caused the arachnoiditis, on his expert's theory of the 'second hit', the 2012 operation had created the conditions for the 2014 epidural, and subsequent haematoma to cause a weakening of his body so that the second event was causally linked to the first. The defendant for his part denies any causal link between the 2012 procedure and that of 2014.

[26] When the case came before me on 8 November 2021, both parties had agreed to a separation of issues. At the request of both parties, I gave an order that day for a separation of issues in terms of Rule 33(4) of the Uniform Rules. In terms of the separation of issues I was asked to make a finding on the following:

*“What are the sequelae (including signs and symptoms);
(a) directly and indirectly, and
(b) fully or partially (and if partially to what extent)
caused (with reference to factual and legal causation) by the 2012 event?
(Particulars of Claim, paragraph 15).⁶*

[27] The trial before me and these reasons concern only the separated issue.

History of the pleadings

[28] The matter commenced with service of the plaintiff's particulars of claim on 17 December 2015.

[29] The defendant filed its initial plea in May 2016. Here the defendant's version, which as we shall see changed later, was a complete denial of liability in relation to the so-called initial procedure (defined as the 2012 laminectomy). In brief, the defendant's case then was that the plaintiff was advised on more conservative treatment but had insisted on surgery despite being advised on the associated risks. The surgery was then performed on 6 February 2012 and intra-operatively it became

⁶ The plaintiff has set out the sequelae which he alleges he suffers from in this paragraph 15, in the amended particulars of claim hence the reference.

apparent that a spinal fusion was “... *not required and the defendant instead performed a decompression with full laminectomy of L4/5*”

[30] In May 2018, the defendant’s attorneys made an offer of settlement in which the defendant undertook to pay the plaintiff his proven or agreed damages (if any) arising from the performance of the laminectomy on 6 February 2012 and the proven and agreed sequelae arising from it. The plaintiff accepted the offer.

[31] In February 2020 the defendant filed an amended plea. Of significance is the introduction of a new defence. The defendant pleaded that “a medical practitioner” (later to be identified as Dr Avenant) had performed a facet block and epidural on the plaintiff. But the significance now was the defendant’s conclusion that:

*“The procedure performed on 7 January 2014, and the extradural haematoma which developed subsequent upon it, was the cause, alternatively was the dominant cause, of the pleaded sequelae, the existence and presence of which remained denied.”*⁷

[32] The plaintiff amended his particulars of claim on 16 July 2020. Of significance to my decision is an allegation contained in paragraph 15.10 of the particulars of claim, which states that as a direct consequence of the initial procedure (i.e., 2012) the plaintiff, inter alia:

a. *Suffers from arachnoiditis and all symptoms and/ or consequences relating thereto.*

[33] To summarise. The pleadings show how each party’s position had shifted from their initial positions. In the plaintiff’s case the diagnosis of arachnoiditis which was not something his legal team was aware of at the time of the original summons, had now become the most consequential of all the sequelae given the seriousness of this condition and its impact on the quantum of damages claimed. In the defendant’s case an original plea confined to an absence of negligence in respect of the 2012 laminectomy, had now evolved in two ways: First, a suggestion that the 2014

⁷ In a note for his opening address Mr. Kruger for the plaintiff acknowledged that the plaintiff had not objected to the plea being amended but suggested that perhaps he ought to have.

epidural procedure was a *novus actus interveniens*; and second, the defendant's legal team accepted that the 2012 laminectomy had been an unnecessary procedure and accepted liability for these sequelae but did not accept that these sequelae were a cause of the arachnoiditis.

[34] Both parties indicated points of deficiency about the others' pleadings. I do not consider that either had any merit. Nor were these points pursued with any vigour during the course of the hearing.⁸

[35] The plaintiff argued at the outset that since the defendant had accepted liability for 2012, he was precluded from saying the 2014 procedure was the cause or dominant cause of the sequelae.⁹ I do not consider that the defendant ever made anything but a qualified concession – put in medical terms it was a concession in respect of sequelae owing to some mechanical pain, not as the plaintiff's case now is– neuropathic pain leading to arachnoiditis. This feature distinguishes this case from those relied on.

[36] The defendant argued at the end of the case that the plaintiffs' alternative theory, that the 2014 procedure constituted a second hit, was not made out in the pleadings. Even if this is correct, which I do not need to decide, the defendant was aware of this evidence being led from the outset and never objected to it, during the course of the hearing. In any event it has not mattered given the findings I have made.

History of the medical reports

[37] The two primary experts in this matter were the neurosurgeons, Dr Percy Miller for the plaintiff and Dr Gian Marus for the defendant. Both are senior members of their profession with many years of experience in their field of expertise.

[38] The difficulty that both faced in this case is that information was drip fed to them over time, leading both to change their initial opinions. This is not stated as a point of criticism but is a product of the slow factual evolution in the case as more medical

⁸ To their credit both counsel got on with the business of the evidence and the trial proceeded without any challenges brought by one side against the other.

⁹ Relying on *Tolstrup NO v Kwapa NO* 2002(5) SA 73 (WLD) and *Gusha v RAF* 2012 (2) SA 371 (SCA).

records became available, the change in pleadings, and the deterioration of the plaintiff's medical condition.

[39] This movement is reflected in the number of reports that were issued. Dr Miller wrote nine reports, Dr Marus was more sparing, he wrote three, but there were five expert reports, ranging in time from 6 May 2018 to 5 November 2021.

[40] Joining them on the earlier reports was a Dr Edeling, also an expert instructed by the plaintiff, but he dropped out, and the last few joint reports were limited to Drs Miller and Marus.

[41] The shifting position evident in the pleadings is also evident in the joint expert reports. The first reported dated 6 May 2018 makes no mention of arachnoiditis. It is confined to the issue of whether the laminectomy was indicated. The three experts concluded that it was not. What they do state is that with reasonable conservative treatment which may have included facet blocks and epidural infiltrations he may have in time required spinal fusion surgery. But they state:

"The decompression operation of 6/2/2012, and associated extradural haematoma and subsequent operation, on 8/2/2012, have resulted in permanent harm. Subsequent factors have also contributed to his permanent harm."

[42] But two weeks later in a further expert minute there is the first reference to the 2014 procedure. Here the experts are still in agreement. They engage in an equivocal exercise in which they identify three possible sources of physical damage; that occurring prior to 2012, the 2012 procedure, and the 2014 epidural procedure.

[43] On the 30 March 2020 the experts (this time just Drs Miller and Marus) filed a further expert report. This followed a further history that Miller had obtained after consulting with the plaintiff and his wife together. Miller had stated that consulting with Ms Peterson had helped the plaintiff to better organise his chronology of events. As the minute suggests both experts were hedging their bets on the connection (or lack of connection) between the 2012 procedure and that of 2014.

[44] The minute notes that Dr Miller had “revised his opinion” on the possibility or probability of a connection between the two.

[45] But the uncertainty both felt is clear from the paragraph that follows:

“... the recent history obtained by Dr Miller, in terms of the deterioration of the patient after 2012, and before 2014, could be considered to be related to cognitive bias by the patient and his wife, but on the other hand, the history of deterioration, in terms of the loss of income, the subcontracting out of projects, and the lack of ability to work adequately immediately after 2012, could be confirmed and verified by collateral information and investigation.”

[46] On 2 June 2020 the experts have a minute again. This time prompted by the attorneys who wished to have some percentage expressed about the contribution the 2012 procedure may have had to the plaintiff’s present condition. The experts agree that they are not in a position to do so. But they agree that the major problem *“... at this stage is neuropathic pain.”*

[47] In this minute we see the clearest divergences for the first time between the two experts, one that continued throughout the trial.

[48] Briefly the position of Dr Miller was that the 2012 event was the cause of the arachnoiditis but because the disease manifests itself with late onset this was only observable later. He considers that the mechanical back pain in 2012 never settled and it *“... rolled on on a cumulative basis”* over the two years, shortening the period for which the 2014 procedure was required and making the plaintiff more vulnerable to the adverse effects of the 2014 event, had 2012 not happened.

[49] What Dr Miller is foreshadowing here, and it becomes more apparent in his oral testimony, is his theory of the ‘second hit’. The second hit theory attempts to explain the 2014 event as connected to the 2012 one, but rapidly advancing the onset of the observable arachnoiditis. What he argued was that 2012 procedure made the plaintiff more vulnerable to injury in 2014. Put in different terms; but for the 2012 procedure, the 2014 event would not have had the adverse effects it did.

[50] Dr Marus disagreed. His view was that the relationship between the two was independent – if they were related then the effects at best were no more than a ‘possibility’ not a ‘probability’. He acknowledged that while it was theoretically possible that the 2012 operation made his spinal nerves more vulnerable to the effects of the 2014 event, its contribution to that “... *is not quantifiable on a scientific basis.*”

[51] He gave four reasons why he did not consider it probable:

- a. No diagnostic symptoms or signs of arachnoiditis were documented in the intervening period, (here he means between the operation in 2012 and just prior to the 2014 procedure);
- b. No radiological feature observed in the intervening period;
- c. His clinical presentation when he was examined on 6 January 2014 was that of spinal stenosis not arachnoiditis;¹⁰ and
- d. He was clinically diagnosed with arachnoiditis for the first time only after the 2014 procedure. Here he relies on a note by the defendant on 20 March 2014 and later an observation by a Dr Landman in November 2014 when he says a major increase in his medications was noted.

[52] The final joint minute is dated 5 November 2021. This joint minute first repeats that the experts retain their earlier positions. But since the minute was composed after the plaintiff had given his evidence on Commission to Griessel J at that stage the following agreed conclusion is recorded:

[53] *“We agree that if it is determined in accordance with the subsequent history as obtained by Dr Miller on 13/3/2020 and that given to the commission on the 17/9/2020 that the plaintiff had neuropathic pain after the 2012 but prior to the 2014 event, then the 2012 event will be considered to be the onset and contributing to his neuropathic pain. If however his subsequent history is found not to be correct then the neuropathic pain would not be considered as relating to the 2012 events.”*

¹⁰ Spinal stenosis is a narrowing of spaces within the spine which can put pressure on the nerves that travel through the spine.

[54] This concluding paragraph and the lawyerly manner in which it is framed by the two doctors is very significant. In particular, it is important to emphasise the choice of the term 'neuropathic pain'.

[55] One of the major themes of disagreement was the fact that Dr Miller had obtained two different histories from the plaintiff. It is common cause that the plaintiff's recollection of all the events including his descriptions of pain he experienced, has proved unreliable. As noted, earlier Dr Miller relied on assistance from the plaintiff's wife to improve his chronology. But this is one of the central points of contention in this case. Did the plaintiff re-consider his history of pain to fit the amended pleadings. More specifically, did he transpose a history of pain he experienced after the epidural in early 2014, to fit the period between 2012 laminectomy and prior to the 2014 epidural, so it coincided with the period for which Dr Oosthuizen's laminectomy would be the sole, or the material cause when combined with the 2014 event, of his current sequelae?¹¹

[56] But what Dr Marus has emphasised throughout is the distinction between neuropathic pain and mechanical pain.¹² In his evidence the pain the plaintiff experienced after 2012, was mechanical pain. Only after the 2014 event does the description of the pain he experienced fit the definition of neuropathic pain.

[57] (Neuropathic pain is defined in rather technical terms as pain caused by a lesion (or disease) of the somatosensory nervous system.)

[58] But equally there was a new theory of harm advanced on behalf of the defendant. I say this was on behalf of the defendant advisedly. Dr Oosthuizen still maintains that his decision to perform the laminectomy was not negligent; a view not supported by either his legal team in this litigation or his expert witness Dr Marus.

[59] The new theory advanced by Dr Marus, focused on the epidural and facet block injections administered to the plaintiff in 2014. These were the same injections given

¹¹ This was the suggestion made in cross examination of Ms Peterson by defendant's counsel. Record page 092-98.

¹² In a letter to the plaintiff's instructing attorneys in 2018 Dr Miller explained mechanical pain in this way: "...mechanical back pain, in this context, is related to pain in the vertebral column which is separate from and different from pain related to compression of nerve roots and/or the spinal cord in general." Record 064-189.

to the plaintiff in May 2012. The same anaesthetist – Dr Avenant - performed them on both occasions. But the reaction of the plaintiff to these procedures showed a marked difference between 2012 and 2014.

[60] Following the injections in 2014, the plaintiff experienced sudden, immediate pain. The defendant was called on to perform a haematoma that same day approximately 6 hours later. This was not his experience after the May 2012 epidural where there is no reported adverse reaction.

[61] It is common cause amongst the experts that the draining of the haematoma in 2014 by the defendant was performed correctly, and so no adverse inference is drawn from this treatment which had to be administered under emergency conditions by the defendant. What is of relevance is whether the epidural given in 2014, might be the cause of the nerve injury that led to the arachnoiditis. At that stage, a condition still not diagnosed or suspected by anyone.

[62] The theory advanced by Dr Marus was that in the course of the 2014 epidural, chemicals used for the cleaning may have leaked into the dura. There were some suggestions made in cross-examination of Dr Miller that the epidural had been performed in haste (relying on operation room notes of entry and exit). This theory was put to Dr Miller, who agrees it is possible, as opposed to Dr Marus' probable. But it does form part of Dr Miller's 'second hit' theory.

[63] In final argument the defendant's legal team placed less emphasis on the second epidural event theory arguing that they did not need to establish that it was a probable cause. For the most part they relied on the contrast between the speed of events post the second epidural (2014) and the changed nature of the pain history to distinguish this event from the nature of the pain caused by the laminectomy and haematoma in 2012.

[64] A further theory of causation the defendant relied on is the plaintiff's pre-existing condition prior to the 2012 occurrences. According to his medical history both narrative, and some recorded, he had had a history of back injuries going back several years prior to the 2012 procedure.

[65] To one specialist he had related a back injury when he had caught a falling gear box at the age of 22; this would have been in 1996 or 1997. (Note he was about 37 when he had the 2012 procedure.) Then in 2006, he had consulted with a Dr Wasserman who had injected him with cortisone facet block. He had been referred to him by a physiotherapist Karen Saunders, who records the plaintiff telling her that he had incurred a back injury picking up a heavy tyre. Then according to the defendant's notes, the plaintiff had told him he had fallen off a motor bike about 3 years prior to seeing him in 2012.

[66] There is no evidence that any of these incidents plausibly are the cause of the arachnoiditis. But it is possible that even if the laminectomy had not occurred in 2012 that the plaintiff had an existing condition that would still require an epidural to be performed at some stage.

The anatomy primer

[67] Three layers of membrane cover the spine. The outermost is the *dura mater*, then comes the *arachnoid mater*, known as such because of its spider like web and then the inner most, the *pia mater*. Arachnoiditis is caused by an injury to nerves in the arachnoid layer, hence its name. But arachnoiditis is hard to diagnose. It may exist in a patient for some time without detection as was the case with the plaintiff. There are several reasons for this.

[68] The photographic proof of the existence of the disease is typically obtained through MRI scans. The condition can also be diagnosed clinically based on a patient's symptoms and signs. Recall in the separation order there is a specific reference in relation to the sequelae to have regard to "... *signs and symptoms*"

[69] Both these terms despite seemingly meaning the same thing to the layperson are distinct in medical terminology and require further explanation. Symptoms are what the patient describes to the doctor. For this reason, they are subjective. Different patients have a different tolerance for pain as well as different skills in communicating that pain to the practitioner examining them. This is why the

plaintiff's chronology and description of his pain is central in this matter as well as the evidence of his wife.

[70] Signs are the observations of the patient made by the practitioner. These may be obtained by observations of the patient performing certain functions. For instance, in the case of physiotherapists, the manner and distance walked by a patient and his progress over time. There are also tests performed. Later in this decision I discuss what is termed the straight leg test' which the doctor performs to test for nerve damage.

[71] Central to this case is the plaintiff's experience of pain and its nature. The defendant's case places great store on the distinctions between what is called mechanical pain, and neuropathic pain.

[72] But this is not the only point of dispute. The defendant also makes a distinction between neuropathic pain and radicular pain.

[73] In their heads the defendant's counsel suggest that Dr Miller conflates these terms.

[74] Dr Miller does not concede that. He questions whether practitioners, especially those without the requisite specialisation, can always be relied on to accurately read and diagnose signs and symptoms.

[75] Nevertheless, there is at least agreement on one point. Both experts agree that for there to be neuropathic pain there has to be damage to a nerve.¹³ This distinguishes neuropathic pain from radicular pain which is caused by nerve irritation. What further distinguishes the two types of pain is that radicular pain is reversible and occurs without an event that gives rise to injury. Part of the debate between the experts in this case is what significance to attribute to the plaintiff's description of his pain at particular time.

[76] Since this description is susceptible to the patient's subjectivity, forensic medical experts, like Drs Miller and Marus, look for descriptions that are indicative of probability rather than possibility. Hence the term *pathognomonic* is often used in

¹³ See for instance the transcript of evidence of Dr Miller, Case lines 092-341.

medicine. It means a "characteristic for a particular disease" whose presence signifies that a particular disease is present beyond any doubt. Put in lawyers' terms, observation of what is pathognomonic, aids in separating the possible from the probable.

[77] Dr Miller's cross examination was characterised by a challenge that the symptoms he relied on for the significance of the 2012 event were not pathognomonic of neuropathic pain. He was quoted and asked to comment on extracts from an academic article in a journal called PAIN, whose point was that a number of the symptoms that the plaintiff described or were described in the medical history of the 'interregnum period' (I use this term to describe the period after the 2012 procedure and before the 2014 procedure) were not pathognomonic of neuropathic pain.

[78] According to this article:

"Recognizing the challenges of determining the presence of neuropathic pain according to this new definition, NeuPSIG also proposed a grading system" to guide decisions on the level of certainty with which neuropathic pain can be determined in an individual patient. Three levels of certainty — possible, probable, and definite neuropathic pain.¹⁴ (My emphasis)

[79] The fact that this leading article suggests the existence of three levels of varying certainty, demonstrates the problem with evaluating the evidence in this case. It is only the two latter levels (probable and definite) which would be sufficient to meet the legal standard of proof.

[80] But more fundamental was the different in approach between the two experts. Dr Marus is the more cautious man; he takes a more orthodox approach based on the academic literature. Dr Miller is a more intuitive diagnostician; more inclined to rely on his own experience than what may have been published in a journal. Of the two

¹⁴ *Neuropathic pain: an updated grading system for research and clinical practice* Nanna B. Finnerup*, Simon Haroutounian, Peter Kamerman', Ralf Baron", David L.H. Bennett', Didier Bouhassira', Giorgio Cruccu", Roy Freeman, Per Hansson", Turo Nurmiikko', Srinivasa N. Raja"', Andrew S.C. Rice", Jordi Serra, Blair H. Smith, Rolf-Detlef Treede', Troels S. Jensen". August 2016 Volume 157 Number 8 www.painjournalonline.com 1599

Dr Miller is more likely, because of his personality, to get more out of a more detailed narrative history from a patient subsequent to an event than Dr Marus. Dr Marus is likely to be more sceptical of a narrative history and places more reliance on a contemporary record.

[81] Thus, it is not surprising that Dr Marus' approach has been to place less reliance on the narrative that the plaintiff has given in the course of the litigation (i.e.; his subsequent recount of his symptoms) and more on his contemporaneous description of his symptoms, as contained in the records of the various medical professionals he saw in the pre-litigation period. Mostly this has been from the notes of the physiotherapists, since his most regular visits during and after the interregnum period was to these professionals.

[82] What Dr Marus derives from his examination of the consultation notes during the interregnum period, and then comparing them with those taken after the 2014 procedure, is a marked change in signs and symptoms. For instance, he considers the phenomenon of hypersensitivity a crucial factor.

[83] He states in one of his reports that:

*"Hypersensitivity is a classical feature of nerve damage and neuropathic pain, the harbinger of arachnoiditis. This was never documented before the 7 January 2014 event."*¹⁵

[84] He also states that in 2012, there was no evidence of neurological deficit. He says the time period the plaintiff reports as having experienced compression from the haematoma was brief, (the notes suggest that he could walk for a period post the laminectomy and only complained that he could not walk at the time he had the scan taken on 8th February, shortly before he was taken into theatre to have the haematoma drained) and thus, in his opinion, too short to have caused neurological deficit. He contrasts this with the descriptions of the 2014 procedure, where the plaintiff complained of experiencing paralysis for six hours – this more prolonged period, say Dr Marus, made the neurological deficit more profound.

¹⁵ Dr Marus report. Record 064-881.

Approach to the evidence on pain

[85] The defendant's case is that the pain the plaintiff experienced after his 2012 procedures is mechanical pain. His legal team accepts liability for this. But it denies he experienced neuropathic pain causally connected to the 2012 event. The defendant accepts he now suffers from neuropathic pain but denies that 2012 was its onset.

[86] Here the distinction between signs and symptoms is important. The defendant alleges that when the plaintiff first described his symptoms during the 2012-2014 interregnum, the description was consistent with mechanical not neuropathic pain. The defendant's case was that it was only when the plaintiff revised his history in 2020, that he began to insert descriptions of neuropathic pain into this history.

[87] But before I consider the evidence of the plaintiff's signs it is important to consider his narrative evidence of his pain or his symptoms. For as the final expert summary in the paragraph I quoted earlier, on this may hinge whether he suffered mechanical or neuropathic pain after the 2012 event.

The plaintiff's narrative evidence.

[88] Before considering his narrative evidence more critically it is worth noting that the plaintiff has been required to give a narrative to several people over the years including both experts in this matter, and in the case of Dr Miller, on two occasions. Any assessment of inconsistency has to respect the fact that a man considerably ill has had to repeat in detail descriptions of pain and impairment that he had endured three years earlier at least in some narrations and eight years later in terms of his testimony in this trial.

[89] There is further context to be noted. By agreement between the parties the plaintiff gave his evidence on commission before retired Judge Griesel formerly of the Western Cape bench on 17 September 2020.¹⁶ This means I have not as the trial

¹⁶ By agreement between the parties this evidence was admitted into evidence by Lamont J in November 2020. The reason the evidence was given on Commission is that the plaintiff now lives in Cape Town, is an invalid and has mobility problems.

judge had an opportunity to assess his demeanour as witness. All I have is the transcript.

[90] Surprisingly in their heads of argument neither parties legal team placed much reliance on this testimony.

[91] Dr Miller's narrative history taken in 2019 contains far more colour and gives a psychographic profile of the plaintiff, where he emerges as a strong, lively, personality with an enjoyment of physical sport and working with cars including a willingness to the heavy duty work himself. His wife who did testify before me gave me the same impression of the plaintiff as did Dr Miller's reports.

[92] Dr Marus' narrative is more matter of fact and taken later. I for this reason prefer to rely on the history give to Dr Miller. Notably in the last minute the two experts regard the reliability of Dr Miller's history as the turning point.

[93] Dr Miller however was concerned about the plaintiff's chronology. Indeed, in his first report in 2015 he stated the following:

"This review does not follow medicolegal principles, and is not set out in the same way, because the history taking process here is very difficult, because the patient is, so to speak, such a poor historian. The patient forgets a great deal, presents his facts with difficulty, notwithstanding that they are better marshalled, to a certain extent, in his documentation (which will be reviewed below) but the information comes out in drips and drabs, with certain memory difficulties on the part of the patient, and hence it is difficult to get an organizational view of the problem, for the most part."¹⁷

[94] For this reason, he later chose to take a new narrative, this time with the plaintiff's wife Nicole present to assist. The new narrative was obtained in 2020. This Dr Miller felt was necessary as the plaintiff's chronology had been given in a confusing manner, possibly as a result of his illness.

¹⁷ Record page 064-127.

[95] Nicole Peterson was called as witness by the plaintiff. The main purpose of her evidence was to revisit the chronology given by the plaintiff originally to Dr Miller, and to relocate it during the interregnum period.

[96] There is no criticism of Ms Peterson as a witness. She was understandably emotional at times during her testimony. She has after all, also experienced a loss as a result of the plaintiff's illness. She was however being asked to recount in 2021 the experience of her husband in 2012 and then in 2014. This means that her evidence suffers from two obvious difficulties. The attempt to recollect after some time what happened when- more importantly did what happen in the interregnum period or after it'? Recall that the significance of the onset of arachnoiditis only became apparent years later so there is no reason at the time as to why she would have been alert to specific changes in the intervening years and when they occurred.

[97] But equally, and the more obvious point, as was put to her in cross examination, she was not the person experiencing the pain – her husband was. She could at best attempt to describe as an external observer what he was able or not able to do at various times.¹⁸

[98] But one of the difficulties with the plaintiff's narrative is that as an active man both in his leisure and working life, he was prone to exposing himself to back injuries and appeared reluctant to remain cautious about engaging in challenging physical activity that others in his position might have refrained from.¹⁹ Thus, shortly after the 2012 procedure and his discharge, he is described by the physiotherapists as wanting to go back to gym. In 2012 his shoulder injury for which he saw Dr Stroibos,

¹⁸ She was however able to describe an experience where the plaintiff had experienced a serious bowel disfunction that morning and when they went out later to visit an ex-colleague his morning's discomfort triggered a joke made about the street name which she could still recall. Challenged as to when this occurred, she said she knew this was in 2013 (thus in the interregnum period) because that is when she had been transferred from one bank branch to another. Record pages 092-67 to 092-68 and 902-97. However other medical records were put to her suggesting that the complaints about incontinence are only recorded in the medical records after the interregnum period. A Dr Landman and Dr Volkowitz on separate occasions in 2015 and no record of incontinence being described to the defendant in 2014. Record pages 092-97 -092-98.

¹⁹ Dr Miller describes how he was told in a consultation with the plaintiff and his wife in 2020 how "...he would actually bench press the back of heavier vehicles before 2010, to the delight of his mechanics." Record 064-205.

is documented as being caused by carrying heavy objects as part of his work. In November 2013 he climbed up Skeleton Gorge to Table mountain with his wife. Whilst he experienced severe pain after this exertion, Dr Marus makes something of the fact that he was able to do so at the time because he would not be able to do so if he was experiencing weakness in his legs.²⁰

[99] The first histories obtained by Drs Miller and Marus from the plaintiff contain reasonably consistent descriptions. The defendant concedes this point. However, the factual basis and recounts that emerge from the second history obtained by Dr Miller on the basis of a consultation jointly with the plaintiff and his wife Nicole is when the recounts diverge. Dr Miller obtained this history on 13 March 2020 nearly five years after his first (11 May 2015).

[100] On Dr Miller's version two facts emerge which suggest this history must be approached with caution. First, he situates the plaintiff's state of mind:

*"It was obvious it was going to be difficult to discuss things with the patient himself. The patient, at this stage, can be described as no less than a "destroyed personality". He is destroyed on a psychological basis, is grossly depressed, and his mind wanders and rambles, and from time to time he cries, particularly when talking about how he was before the first operation and before the second complication, and in general how he was before any problems in his life began."*²¹

[101] He then makes the following observation of the role Ms Peterson played in the consultation:

"She has a very good grasp of chronology, of the history of when things started to happen to a patient, and she was able to bring the patient around, by prompting him, in terms of chronology, in terms of the difficulties which happened, and without her, there probably would not have been anything like a coherent history. She did not supply the history herself but managed to guide and direct the patient in terms of concentrating on a particular time period or epoch of his life, which supplied a reasonable history thereafter, because the patient, working in tandem with her, was

²⁰ Ms Peterson evidence is record page 092-51, Dr Marus comments record page 092-1018

²¹ Record 064-202

then able to provide a reasonable story. To repeat, up until that time, one could not get much out of the patient, which is reminiscent of the first time that I saw the patient, in 2015.”²²

[102] This means that the plaintiff’s narrative history has to be treated with caution even on the assessment of his own expert. The defendant suggested in argument that the plaintiff’s new history now uses descriptors not previously used by him and which are typical of neuropathic pain.

[103] Given all these features I must treat the new narrative history with caution and instead place more reliance on the record of his signs and symptoms as they appear in the contemporaneous records of third-party medical professionals with whom he consulted in the relevant period with a particular focus on the interregnum period and that which followed shortly after the 2014 procedure.

[104] Medical records are typically brief, written in telegram style often making use of symbols instead of words. Brevity can lead to ambiguity. Sometimes handwriting is unintelligible. For this reason, although both sides found extracts from the written record that they claimed were consistent with their theory of the case, I have approached reliance on these cautiously, unless an entry appears unambiguous. I have also placed greater reliance on records where the witness who wrote them came and testified and subjected themselves to cross examination. I have also ascribed greater probative value to witnesses who could be expected to be sensitive to the differences in pain category.

[105] The defendant called four witnesses who testified about treating or consulting with the plaintiff during this period and provided the court with their contemporaneous notes; two were physiotherapists, one was a urologist and one neurosurgeon. The plaintiff did not call any witness in this category.²³

[106] I turn to the evidence of these witnesses now.

²² Record 064-202 to 064-203.

²³ Besides his two experts, Drs Miler and Coetzee, the plaintiff only called his wife as a witness.

The physiotherapists

- [107] In the interregnum period the plaintiff was treated by several physiotherapists from a particular practice to whom he was referred by the defendant. This meant different physiotherapists saw him over this period in no particular sequence. However, they all recorded their notes in the same record which runs chronologically. The defendant called two of them as his witness; Gemma Schultz and Michaela Poulter.
- [108] The physiotherapists followed the same technique. The plaintiff was required to perform some functions which they then recorded in their notes; observing what, when, how long and how successfully he performed.
- [109] Whilst he was in hospital there would be several entries for each day from morning to evening. Relevant to this case are their notes observing whether, and when he felt pain, and how he described it. In their shorthand, a description of pain by the patient is noted by a plus sign. The degrees of pain from low to high are signified by the number of plus signs, ranging from one to three.
- [110] Since the physiotherapists interacted with the patient more frequently than any other medical professional who saw him, their notes serve as the best ongoing record of his symptoms; assuming of course they have been accurately described and that they appreciated the nuances of signs they needed to identify.
- [111] On both these latter issues I consider their evidence is less reliable as a source of either party's case. First, there is the curious question of Ms Poulter's typed notes.
- [112] In 2016 Ms Poulter received a request to transcribe the physiotherapists manuscript notes into a typed document. She cannot recall who made this request of her. She transcribed the notes, and a typed transcript was supplied to both legal teams. Her typed notes formed the basis of the cross-examination of the plaintiff during his evidence on Commission and it was relied upon by Dr Miller for forming some of his opinions in his reports.

[113] It later emerged that these typed notes were an inaccurate transposition of the manuscript notes in several places. An apologetic Ms Poulter said she had done this late at night hence the errors. But the errors are more material than careless omissions. They include attendances that do not appear in the manuscript and which in typed form leaned in favour of a description of neuropathic pain. Why this is so Poulter could not explain. Nor does any motive to distort appear. Whilst both plaintiff and his wife remember her fondly, she is also a regular colleague of the defendant and was called by him as a witness.

[114] I cannot take this aspect further except to state that the manuscript version must be accepted as the authentic source of his medical record with Poulter, since it was made contemporaneously and forms part of a continuous record which includes the notes of the other physiotherapists. Thus, the typed transcript cannot be relied on to the extent that it is inconsistent with this record.

[115] However unfortunately for the plaintiff Dr Miller had relied on the typed notes because unlike the manuscript notes they contained, as Mr Kruger for the plaintiff put to her in cross examination, reference to neuropathic pain and symptoms, whilst they did not appear in the manuscript notes.²⁴

[116] Where this leaves the evidence from the physiotherapy notes, is that they are at best for the plaintiff, equivocal on the kind of pain he experienced and at times from the defendant's perspective, evidence that he did not suffer from the ongoing pain of a neuropathic nature. I do not consider they tip the balance in favour of the defendant, however. This is because, as I noted earlier, the physiotherapists were not equipped to make the distinction between the types of pain required to make a diagnosis of neuropathic pain. Rather their training was to identify the area and degree of pain and how it affected movement. Ms Poulter admitted that she had not heard the term arachnoiditis before this case. This is not a criticism of these professionals. Simply put this would require a rare facility for diagnosis, beyond their experience or skill set.

²⁴ See record page 092-783.

Dr Van Graan

[117] Dr Van Graan is a urologist who saw the plaintiff on 6 January 2014. The history of how the plaintiff came to consult him is relevant.

[118] The plaintiff had testified that he had seen Ms Poulter in December 2013 and complained that he had not urinated in 24 hours and that she had advised him to seek immediate help if he did not urinate soon. Poulter's note is written in the cryptic shorthand of medical people. The note as translated by her is dated 17 December 2013 and says he was advised to visit casualty if his bladder function deteriorated. Poulter does not give a satisfactory explanation for this note. Her evidence was that he must have said something about his bladder, but she denies that he would have told her he had not voided for 24 hours; that, she testified, would have been enough of an emergency, given that specialists were on leave at that time of the year, to cause her to have escorted him to casualty herself.

[119] As it happened, she did not. Nor did the plaintiff take himself to the casualty ward. His next treatment for this complaint was when he saw Dr Van Graan, to whom he had been referred by the defendant, but only on 6 January 2014.

[120] However according to the typescript notes of Poulter (recall that these have since been discredited by her) she had seen the plaintiff on 4 September 2013 and although noting that he should seek help if his bladder function cease (sic), thus consistent with the December manuscript note, she also notes that he was experiencing pain down the legs and in the saddle area (a medical euphemism for the genital area). It was this reference that Dr Miller considered was consistent with neuropathic pain, coupled with notes from Van Graan. But since this reference to saddle pain does not appear in the manuscript record, it is not clear where Poulter got this from – she cannot explain it – and for this reason no reliance can be placed on it, although one cannot criticise Dr Miller for fairly assuming that the typed notes were accurate at the time, he read them.

[121] But whatever can be said of the Poulter notes at the time, it must be borne in mind that Dr Van Graan is an expert urologist and had he been given such a history

of the pain he would have noted this. Instead, Van Graan has a brief note of the consultation which just says “*testicular pain*” but no more. Dr Miller relied on this in his oral evidence to say that the testicular pain might have indeed been neurological because there was no other reason given by the urologist for why this was occurring. He noted that because of the drugs he had prescribed ‘he does not seem sure of what he is treating.’²⁵

[122] Van Graan agreed under cross examination that testicular pain can be caused by arachnoiditis. But his own view of the treatment was that the plaintiff was suffering from prostatitis which he linked to possible bacteria or was something whose cause was not easily diagnosed. He did not however find any clinical evidence for incontinence and said if it had been complained of by the plaintiff, he would have made a note of it which he had not.

[123] Dr Marus entered into the debate over testicular pain with his view that if it had been caused by neurological damage, the pain would have been irreversible.

[124] But perhaps the final word on the subject came from a Dr Zwonnikoff who saw the plaintiff on 18 June 2015. Dr Zwonnikoff is a neurosurgeon to whom the plaintiff had been referred by a Dr Landman. Although he was not called as a witness, Dr Zwonnikoff notes are unambiguous. His note on the plaintiff’s bladder function, states that the plaintiff “... *does not appear to have any impairment of bladder*

Dr Zorio

[125] The next factual witness called by the defendant was Dr Zorio. Zorio is a neurosurgeon. He consulted with the plaintiff in July 2012. This date is significant as

²⁵ Transcript pages 092-276 to 7. DR MILLER: Yes, M’ord. Obviously, testicles can ache for many reasons. One can get infection in the testicles, one can get different pathology in the testicles, but if we are dealing with the testicles being painful or aching on a spinal cord type basis or as a sequel to the operation, then we are now into the realm of neuropathic pain. In other words, people with mechanical back pain very, very rarely are going to complain of testicular pain or of pain around the anus or perennial pain, but if you, and this is assuming there is no- cause for testicular pain like an infection or orchitis we call it, if we are dealing with spinal cord testicular pain and ache without infections and other things wrong with the testes, we are not into the realm of neuropathic pain, because mechanical pain does not really get to the testicles. It can, but it is very, very rare. (092-243)

it occurs in the interregnum period. The consultation is important given that Dr Zorio as a neurosurgeon, has expertise in the very symptom at issue in this matter.

[126] Dr Zorio testified that the patient had come to see him suffering from meralgia paresthetica. This, he pointed out, is a pain caused by compression on a nerve but that is unrelated to the present case. He ordered an MRI. The MRI of the lumbar spine came back as normal. He then ordered a nerve conduction test. This too came back normal. What is important here is that Dr Miller on the basis of reading the notes, had come to the conclusion that Dr Zorio had made findings of neuropathic pain. This was put to Dr Zorio in evidence in chief and his answer was an emphatic no. What he says here is of enormous significance since Dr Zorio is a neutral witness and an expert in this field who gave oral evidence. I for this reason set out his answer in detail:

“MR ZORIO: Ja, I disagree completely with the statement of neuropathic pain. At the I saw him, he had what we call radicular pain occurs if there is an irritation of the nerve root and usually does not have at that point in time any evidence of damage to the nerve root, whereas neuropathic pain will definitely show evidence of damage to the nerve root, whether it is an axonal degeneration or demyelination of the nerve root that will be evidence on the nerve conduction study, if there were neuropathic pain at the time I saw the patient. So, I think this patient had radicular pain at the time and there was no evidence of damage to the nerve root when saw him.”²⁶

[127] Thus, Dr Zorio is explaining the distinction between these types of pain that I described earlier. In this respect his evidence is consistent with that of Dr Marus.

Dr Oosthuizen

[128] Whilst he might have been the key witness in this case not much turns on his testimony and neither side have made much of it in their final argument. He did not

²⁶ Record page 092-872-092-873

concede that he had been negligent in undertaking the 2012 operation, but this does not affect the legal outcome of the case, given that his legal team has admitted liability in this respect.

[129] Most of his testimony was to remark on his notes for the period he was the plaintiff's doctor. For the most part these notes are brief even by the concise standards of the medical profession.

[130] Except for one observation, there is nothing in the notes that is descriptive of neuropathic as opposed to mechanical or radicular pain during the interregnum period. It is clear as well that the defendant was at a loss to understand the recurrent pain the plaintiff experienced and hence, he was responsible for referring him to others with different expertise to intervene.

[131] Two features from his notes are of interest. He is the first to postulate the possibility of the plaintiff having arachnoiditis. This appears in a note dated 20 March 2014, where his consultation notes state in brackets (*? Arachnoiditis*)²⁷. Significantly, this entry is made only after the 2014 procedure, (which was just over a month earlier), and is thus outside of the interregnum period.

[132] But he had also seen the plaintiff on 6 January 2014, the day before the 2014 epidural procedure on conducted by Dr Avenant. The plaintiff's legal team place great emphasis on this entry because this occurs within the interregnum period. The defendant records having conducted what is known as a 'straight leg test' on the plaintiff.

[133] The notes state that the plaintiff was positive for the straight leg test. Translated into layman's language a positive outcome of this test is consistent with the presence of arachnoiditis.²⁸

²⁷ Record 065-372

²⁸ Dr Miller explains the straight leg test in this way: *DR MILLER: M'ord, that is just, I explained about the straight leg raising test when you manipulate and inflamed nerve root, inflamed for whatever reason, you get pain on the straight leg raise test. You can push the leg into further stress by doing another manoeuvre called the lasegue test, it is meaning another manoeuvre on top of the straight leg raising test and it gives the knee even more pain.* (Record page 092-268)

[134] This outcome in the straight leg test was in contrast to the one performed by Dr Zorio in July 2012, when according to the report he performed a straight leg test on the plaintiff which was negative. This might well be evidence that there had been an evolution of pain over the six-month period between the outcomes of the two tests, and thus consistent with the theory of Dr Miller.

[135] When this was put to Dr Marus his response was that a positive straight leg test was “*usually not invariably*” present in arachnoiditis. However, he was not pressed further on this aspect.

Lyrice

[136] For Dr Miller a key piece of evidence was that the plaintiff had been prescribed a drug known as Lyrice. This fact emerged from his medical aid records. Lyrice is a strong pain killer that Dr Miller testified, is used specifically for neuropathic pain. The medical aid records show the plaintiff purchased Lyrice in July and September of 2013. This would mean that someone had prescribed Lyrice for the plaintiff during the interregnum period. He concluded that this was evidence of the plaintiff experiencing neuropathic pain at that time, otherwise this drug would not have been prescribed. However, it was not clear from the medical aid record who had prescribed the Lyrice.

[137] As it turned out, and this fact is now no longer in dispute, the Lyrice was prescribed by a Dr Strobos for a shoulder injury. Thus, there could be no reliance on this prescription as evidence that the plaintiff was taking Lyrice at that time for possible neuropathic pain associated with the 2012 procedure. It had been prescribed for an unrelated symptom.

Dr Marus and Dr Miller

[138] I deal with the evidence of these witnesses last since they were the key witnesses for each party in the litigation. Admittedly Dr Miller features less extensively in the plaintiff’s final argument at the end of the case than he did in the defendant’s heads, where his testimony was used to illustrate how his reliance on

certain evidence was misplaced and hence his theory of causation had not been established.

[139] In the plaintiff's heads of argument there was more reliance on the testimony of Dr Coetzee.

[140] I do not consider that Dr Coetzee added much to the case of the plaintiff. He was called at the last minute, it appears to rebut the expected evidence of another witness, Dr James, also an anaesthetist, whom the defendant was intending to call. It appears from the expert summary filed on his behalf that Dr James was postulating the 2014 epidural and even possibly the 2012 epidural as the trigger events for the arachnoiditis.²⁹ As it happened, he was never called.

[141] Dr Coetzee was open with the court that he had not been given access to the full record, nor is he a specialist in the field of speciality in contention. To the extent that he offered an opinion on causation this was heavily dependent on the reports of Dr Miller. I thus consider the evidence of Dr Miller more significant and will concentrate on that.

[142] Dr Marus was the key witness for the defendant's case. Like Dr Miller he is a neurosurgeon with many years of experience. Dr Marus' evidence served two aspects of the defendant's case. First, to rebut the case that the plaintiff experienced neuropathic pain during the interregnum period. Put differently to make the plaintiff's version that the 2012 procedure led to the arachnoiditis, something only possible but on the evidence of the medical records not probable. Second, to posit the defendant's own theory of the cause of the arachnoiditis - namely that it was caused by the 2014 epidural procedure.

a. Dr Miller's blood theory

[143] Dr Miller needed to explain how the 2012 procedure, a laminectomy could be linked to the onset of arachnoiditis. It is true that in the literature relied on by Dr Marus there is a table headed "*Probable causative events in Patients with*

²⁹ According to his expert summary: "*In Professor James opinion, it is indisputably possible that the epidural procedures of May 2012 and of January 2014, together with the epidural hematoma associated with the second procedure, could have been a cause of the arachnoiditis.*" Record page 064-923.

Arachnoiditis” which lists a laminectomy as one of the probable causes (7,8%) in a study of 489 patients diagnosed with laminectomy.³⁰

[144] But since not everyone who has a laminectomy gets arachnoiditis there needs to be a scientific explanation for what causes it in the patients who do. It must be recalled that although there has been a concession on behalf of the defendant of liability in relation to the 2012 procedure, this was not a concession as to the manner in which the operation was conducted. Rather, it was conceded because at that time the operation was not indicated. Put in simpler terms there was no concession that this was a botched operation, rather, that it was an unnecessary one.

[145] This then requires an explanation of causality to link the operation to the current sequelae. Dr Miller offers an explanation.

[146] He says that in 2012 in the period of 2 ½ days between the performance of the laminectomy and the subsequent draining of the haematoma, blood came into contact with the dura that caused the nerve damage that led eventually to the arachnoiditis. Dr Coetzee it should be noted also supported this theory.

[147] However, there is no radiological evidence from that time that shows this damage.³¹

[148] It was put to Dr Miller in cross examination that the dura (i.e., the membrane covering the spine) is impermeable to blood because it is a tough sheet of membrane. Dr Miller conceded the point but then further explained his thesis. It was not the blood itself that permeated the dura but its component chemicals; he explained that the dura is not “...*impermeable to the chemicals and blood breakdown products which occur.*”³²

[149] He then explained which these blood products were. He was challenged in cross examination to produce any support in the literature for the existence of this theory.

³⁰ *Suspecting and diagnosing arachnoiditis: Practical Pain Management, Volume 6, Issue 1. Record 093-1.*

³¹ Whilst testifying, Dr Miller was under the impression that a record existed of an MRI taken after the surgery in 2012 but it was put to him that it did not exist. (Record pages 092-394 to 092-395.)

³² Record page 092-381.

Responding to the challenges he then produced an article from the journal *Pain Management* which stated the following:

*“Another mechanism for the production of ARC (arachnoiditis) is the accumulation that may occur outside of the dural sack after surgical operation, though it is recognised that the blood itself does not usually cross the dural barrier. Substances such as leukotrienes and cytokines resulting from the degradation of blood cells may do so.”*³³

[150] However, at this point, which seem to be a victory for Dr Miller over his critics, it was put to him that the defendant’s team had checked on the reference that the author of Miller’s source article, a Dr Aldrete, had relied on for his blood component theory, and it emerged that the allegedly supporting reference had been incorrectly relied on by Aldrete.³⁴

[151] It was shown to Dr Miller that the source for Aldrete’s blood component permeability theory, was an article by Cassim and others. Dr Miller had not read this source article. The defendants demonstrated that the article whilst dealing with blood components did not do so in relation to the dura. Rather their theory was:

*“based on an assessment based on synovial tissue, and not on the dura. It is therefore without substance.”*³⁵

[152] Dr Miller who was not previously aware of the Cassim article, conceded, once he had time to consider it, that the reference did not support Aldrete and thus him on this point. Nevertheless, he still insisted that the phenomenon still existed even if “... we cannot not explain it”.³⁶

³³ See record at 092-609 for this discussion. The article is “*Suspecting and Diagnosing Arachnoiditis A review of the symptoms noted in a group of patients with arachnoiditis presents an analysis of clinical observations of this disease.* By J. Antonio Aldrete, MD, MS. *Practical Pain Management*. Record page 093-18. The passage cited above appears at 093-28.

³⁴ The Aldrete article had not yet been produced in accordance with an agreement for both experts to make their literature to the other before the trial, so its appearance caught the defendant’s team by surprise, but they were able to respond quickly.

³⁵ 092—612. The Casim et al, article which was Aldrete’s misplaced source is headed: “*Immunolocalization of bradykinin receptors on human synovial tissue.*” Record page 093-36.

³⁶ 092-613.

[153] Dr Marus testified that blood is always present extradurally after this type of operation. It is the 'pressure' that may be the cause of damage to the nerves not the 'presence' of blood. But this type of outcome is rare, he testified, citing literature that suggests it only occurs in 1-2 % of cases. Dr Marus thus rejects the blood causation thesis on the basis that it is speculative and not supported by any evidence that it occurred in this case.

b. Temporal aspect

[154] A further important source of disagreement related to the time between the 2012 procedure and the evidence of the onset of arachnoiditis. As noted from the earlier history, the arachnoiditis was only confirmed radiologically in 2016.

[155] Dr Marus' contention was that there should have been a closer onset in time of the disease to the 2012 procedure. Instead, there was evidence that the plaintiff's lifestyle in the interregnum period had fluctuated between pain and normal activity. Dr Marus contends that one would not have expected this level of activity if there had already been an onset of arachnoiditis; therefore, the condition must have come about due to a later event

[156] It was put to Dr Miller that neuropathic pain is expected to follow shortly after the causative event - the period suggested was days or weeks.

[157] Dr Miller testified that this proposition was not always correct because a nerve never gets injured in its entirety and the true pain might take months to years to develop.

[158] But the journal article by Dr Aldrete, the one Dr Miller had used to make his point about the blood components, does not support him on this aspect. The paragraph put to him for comment states as follows:

"A recently identified source of discomfort, previously ignored, is the presence in post lumbar spine laminectomy patients in whom fibrosis and scar tissue proliferates

at the site of the operation, constricting the dural sack and dilating it distally. This complication appears three to six months following surgery " ³⁷

[159] Dr Aldrete's suggestion is thus midway between the positions of the two doctors in terms of time. However, even if one takes his six-month window period as a reliable marker, there is no evidence of the onset of arachnoiditis in the plaintiff's medical records by then. This would have been more or less when the plaintiff consulted with Dr Zorio (about 5 months after the laminectomy) and he did not as a specialist, diagnose it then, despite having procured both an MRI scan and a nerve conduction test. Nor was it present in the MRI obtained by the defendant on the day prior to the 2014 procedure.

c. Nature of the pain

[160] Dr Marus also argued, based on the medical records, that the history of pain in the interregnum period was a history of mechanical and radicular pain, not neuropathic pain and thus unconnected to the sequelae associated with arachnoiditis.

[161] Dr Miller acknowledged that in none of the earlier joint minutes had any mention been made of the fact that the 2012 procedure led to neuropathic pain. But he says that at that point in time the experts did not yet have the requisite information.³⁸

[162] Notably even Dr Miller when he wrote one of his reports in July 2015 at a time when he had access to the defendant's notes and his March 2014 entry raising the possibility of arachnoiditis was not certain yet that this condition was present. As he put it then in the report to the plaintiff's attorneys"

"(Comment — he [Dr Oosthuizen] mentions the question of arachnoiditis. There are ways to tell if there is arachnoiditis, and one of the ways is on MRI examination, with later MRI examinations have been noted as consistently showing no significant evidence of arachnoiditis. But one can miss arachnoiditis on a MRI examination, and one of the other tests for arachnoiditis relates to myelography. It might be quite

³⁷ Aldrete, *ibid*, record page 093-28 See also record page 092-608.

³⁸ Record 092-367.

*important to do myelography, even though this is invasive, in order to achieve a diagnosis as to whether there is or is not arachnoiditis, because if there is arachnoiditis, then one of the treatments is Lyrica, which he seems to be using, but there are a lot of other treatments as well, for arachnoiditis, from steroids to certain types of spinal block, to a lot of different types of medication, rather than just Lyrica)*³⁹.

[163] Dr Marus contends that pain from arachnoiditis has specific features. One of these features is a continuous burning sensation that in medical jargon is 'poorly localised'.

[164] According to the article by Dr Aldrete the pain is described as:

*"Severe, unrelenting pain was the predominant symptom in patients with confirmed arachnoiditis. Although presentation had various characteristics, the common denominator was consistently burning pain that was present in 478 patients (97.7%)."*⁴⁰

[165] Dr Marus' analysis of the medical records in the interregnum is that no such description of this type of pain is evident. He does not deny that there are descriptions of pain throughout this period but testified that these are descriptions of mechanical and radicular pain.

[166] In contrast after the 2014 procedure there is documentation that the plaintiff experienced hypersensitivity. He is not recorded having hypersensitivity after the 2012 procedure. As Dr Marus put it *"Hypersensitivity is a classic feature of nerve damage and neuropathic pain, the harbinger of arachnoiditis. This was never documented before the 2014 event."*⁴¹

d. 2014 procedure

³⁹ Record page 064-167.

⁴⁰ Aldrete, *ibid*, record page 093-5.

⁴¹ Marus supplementary report, record 089-20

[167] The 2014 procedure has great but different significance to the two experts. For, Dr Marus it is the likely cause of the arachnoiditis. For Dr Miller it is his theory of the 'second shot'.

i. Dr Marus theory of the epidural chemicals (2014)

[168] I deal with Dr Marus theory first. To him the 2014 is the original cause and its causal connection to 2012 is at best possible but not probable.

[169] He testified that an examination of the hospital records of the 2014 procedure suggested it had been done in haste. He speculated that it was possible that chemicals used as part of the anaesthetic (he mentions Marcaine and Celestone) had come into contact with the nerves. Although this might only cause temporary damage until the chemicals wear off, he explained that in rare cases it could be permanent.

DR MARUS: Once it occurs, once you start having neuropathic pain, then it would be irreversible, in other words, I am not saying that all cases happen that way, but if it does happen, it then would not be reversible, because the scar is there forever and sometimes you do get scar and the patient totally asymptomatic and we have seen that when we do, specifically when you puncture the cerebral spine and instill (sic) contrast media.⁴²

[170] Dr Marus suspicions that something had gone wrong with this procedure arose from a description the plaintiff had given him that he felt totally paralysed after this procedure. Dr Marus surmised that this was not attributable to the haematoma because that would not have caused this type of extreme reaction hence his theory of the chemical substances. It is accepted in the literature that the presence of chemical substances after an epidural and facet block procedure can in some cases lead to arachnoiditis.

[171] This of course is only a possible not a probable theory. Dr Avenant who conducted the procedure was never called as a witness by either party. Nor did the defendant call the expert anaesthetist Dr James, despite taking a witness statement

⁴² Record page 092-1093.

from him. Dr James' in his witness summary comments on the inadequacy of medical information about this procedure. Presumably he would have been in the best position to comment on any irregularity in that procedure had he been called to testify.

[172] But the defendant was under no onus in this matter. As was argued correctly by Mr Van Vuuren for the defendant, it is not necessary for me to decide whether the 2014 event was the cause of the plaintiff's arachnoiditis.

i. Dr Millers' theory of the second shot (2014)

[173] The back-up theory, advanced by both Drs Miller and Coetzee (the anaesthetist called by the plaintiff) is the theory of the second shot. That theory is that the 2012 procedure rendered the plaintiff more susceptible to harm as a result of the 2014 procedure, than he would have been had 2012 not happened. In the same vein it was contended that the need for the 2014 procedure was speeded up as a result of the 2012 procedure. Both Drs Miller and Marus were agreed that at some stage given his pre-2012 event condition, the plaintiff would probably have had to undergo some form of conservative treatment, including epidural/ facet block procedures. On this argument by Dr Miller, the 2014 procedure came about earlier than might need be because of what happened with the 2012 procedure.

[174] The theory of the second shot is closely linked to the legal argument advanced by the plaintiff's legal team both at the outset of the trial and then in final argument. Here two arguments were advanced to situate the 2014 event as causally linked to the earlier, and common cause negligent, 2012 procedure; the but-for test and the material contribution test.

[175] The '*but-for*' test as succinctly set out in the case of *ZA v Smith* states:

'What [the but-for test] essentially lays down is the enquiry – in the case of an omission – as to whether, but for the defendant's wrongful and negligent failure to take reasonable steps, the plaintiff's loss would not have ensued'.⁴³

⁴³ *ZA v Smith & another* [2015] ZASCA 75; 2015 (4) SA 574 (SCA) para 30. See also *Chapeikin v Mini* 2016 JDR 1324 (SCA) at paragraph 49.

[176] Normally the but-for test is applied in cases of omission. Since this case is not one of omission but commission is reliance on this test misplaced?

[177] In *Lee v Minister of Correctional Services*, the Constitutional Court acknowledged that the *but-for* test: “...is not without problems, especially when determining whether a specific omission caused a certain consequence.”⁴⁴

[178] But the Court went on to state that: “*In the case of 'positive' conduct or commission on the part of the defendant, the conduct is mentally removed to determine whether the relevant consequence would still have resulted.*”

[179] But the Court cautioned that: “*Indeed there is no magic formula by which one can generally establish a causal nexus. The existence of the nexus will be dependent on the facts of a particular case.*”⁴⁵

[180] But, even if, following *Lee*, the but-for test can, in limited circumstances, be applied to an act of commission, there is insufficient evidence of a factual nexus between the events.

[181] The plaintiff’s second hit theory is better suited to the application of the *material contribution test*. This fits best with the theory of the Dr Miller that the 2014 event was a second hit, because it came about because the 2012 procedure had already made the plaintiff more vulnerable than he would have been had 2012 not happened.

[182] This test is explained by Schreiner JA in *Kakamas Bestuursraad v Louw*. After referring to an English case where an employer was held liable for a workman who had inhaled noxious gas from a machine for which the employer was only partially responsible, he stated:

⁴⁴ 2013 (1) SACR p231 paragraph 40

⁴⁵ *Lee* paragraph 41

“That decision illustrates the principle that a plaintiff can hold a defendant liable whose negligence has materially contributed to a totality of loss resulting partly also from the acts of other persons or from the forces of nature, even though no precise allocation of portions of the loss to the contributing factors can be made.”⁴⁶

[183] The defendant’s legal team have not placed these principles in issue. They considered they were not contentious. Hence despite spending as many as 90 pages in their heads of argument on the medical facts, the defendants were brief – no more than a paragraph- on the question of the legal test for causation.

[184] But their brevity was well founded; premised on the simple proposition that whatever the test for causation is adopted; the but-for test, or the material contribution test, the plaintiff still had the onus to prove, on a balance of probabilities that the sequelae at issue in the present case were caused by the 2012 incident. That they argued is a factual question and the plaintiff was not able to do so. Without evidence that the 2012 procedure constituted a material contribution the adverse event of 2014, there could be no causation. I go to discuss this in the next section dealing with the diagnosis of arachnoiditis.

Diagnosis of arachnoiditis

[185] The plaintiff’s arachnoiditis is located in damage to the cauda equina characterised by clumping of the nerves.

[186] The cauda equina is *“...the sack of nerve roots (nerves that leave the spinal cord between spaces in the bones of the spine to connect to other parts of the body) at the lower end of the spinal cord. These nerve roots provide the ability to move and feel sensation in the legs and the bladder”*.⁴⁷

⁴⁶ 1960 (2) SA 202 (A) at 222 B-C.

⁴⁷ <https://www.cedars-sinai.org/health-library/diseases-and-conditions>. Dr Marus describes it as *“... the horses tail that is what the end of a spinal cord looks like where it stops and then nerve roots come off”*.
Record page 092-1044

[187] In July 2012 an MRI was performed at the instance of Dr Zorio, and the note states there was no evidence of clumping in the cauda equina. But significantly on 6 January 2014, just before the plaintiff underwent the 2014 procedure, an MRI was performed. The remark made by the radiologist is that the “*cauda equina normal*”.⁴⁸ Dr Marus explains that this means that the nerves appeared normal and that there was thus no evidence of arachnoiditis at that stage. This is almost a year after the 2012 incident.

[188] The MRI scan constitutes conclusive proof of the existence of the damage to the *cauda equina* and hence the onset of the disease. Whilst other proxies for its existence may be there, as we have seen from the expert evidence, they still may be equivocal – descriptions of pain may be unreliable or confused, practitioners, might misdiagnose in the consultation room, and signs and symptoms might have other causes. Making this case more difficult was that no one disagreed that there had been an operation that was not indicated that caused the plaintiff unnecessary harm. But was this case analogous to those where the first act of damage contributes to the weakening of the body making it more susceptible to the next trauma imposed on it?

[189] Here the MRI proves decisive. At no time did the MRI's conducted in the interim period show this damage to the cauda equina. It only appeared visible for the first time in a scan in 2016. That has made the plaintiff's task of invoking the 2012 procedure as the original cause that much more difficult. Of course, as Dr Miller has argued the arachnoiditis may have had a slow and late onset, operating metaphorically below the radar screen of the MRI, until much later. But even if this is possible, this does not help the plaintiff make a case that it was probable. The longer the time lapse between the alleged cause of the injury and the manifestation of the disease, the weaker any becomes any inference drawn about the chain of causation.

[190] But this time lapse is not the only problem for the plaintiff. The secondary evidence that Dr Miller sought to rely on collapsed on closer scrutiny. The urologist, and Dr Zorio testified to give a contrary reading of their notes, inconsistent with a

⁴⁸ Report by Dr Pera, record 065- 399.

diagnosis of neuropathic pain. The Lyrica was administered for another injury unlinked to the laminectomy.

[191] The saga of Ms Poulter's typed notes was unfortunate but once repudiated another source of potential evidence vanished. Finally, his theory of the contamination of the dura by components of the blood was not supported by academic literature on closer scrutiny. The Aldrete article appeared to support his position on the presence of blood components leaking into the dura. However, Aldrete relied on this proposition on another academic article, which when the source was checked was dealing with something else.

[192] There were other aspects of his cross-examination for which he was criticised. For instance, whether he was sufficiently attuned to the distinction between radicular and neuropathic pain. A long debate over some of these issues ensued with defendant's counsel, and in this respect Dr Miller, whilst not being decisive in refuting the criticism, at least held his own. His contention that his clinical practice led him to different conclusions to what might appear in an academic article, was I considered a reasonable response.

[193] However, even if I were to place less store than do the defendants on this argument, it serves only to explain why a lack of certain evidence may not prove decisive in refuting the plaintiffs' case. But it does not work the other way – it does not prove the existence of arachnoiditis at the time. It just means that one of the many criticisms of his theory may be less convincing than the others. But the others I have discussed above remain and they are enough to suggest that Dr Miller's theory is at best possible bit not probable. The problem for Dr Miller and ultimately the plaintiff, is that the strongest evidence that he sought to rely on in the medical records proved incorrect, while the academic literature he relied on to bolster a key component of his theory proved unsupported.

[194] In summary, Dr Miller had not originally, and he accepts this, attributed the onset of arachnoiditis to the 2012 procedure. It was only when the later records emerged, and after he took the new narrative, that he concluded that the 2012 procedure must have caused the arachnoiditis. But that documentary evidence once properly

scrutinised did not support his theory. It showed the presence of arachnoiditis conclusively but did not provide evidence of its occurrence after the 2012 procedure and before that of 2014. What he relied on for his evidence during the interregnum period was based on inferences drawn from the records which were conclusively proved to be mistaken.

[195] Then the other cornerstone of his evidence; his reliance on the narrative subsequently given to him by the plaintiff together with his wife (the new narrative) is, as I explained earlier, too much open to criticism to make a possible case of causation into a probable one.

Conclusion

[196] Arachnoiditis is not an easy condition to diagnose. In the *Pain* article I quoted from earlier, the authors noted that one of the reasons they embarked on a sixteen-year project of assembling data was “... *due to the scarcity of objective data regarding the correct diagnosis of arachnoiditis.*”⁴⁹

[197] But in a concluding remark in their article, they also offer some salient advice that may well have been prudent if given to the defendant before he embarked on the laminectomy in 2012.

*“Invasive interventions in the spine should only be performed when absolutely necessary and only when such procedures have been shown to offer a definite benefit to the patient.”*⁵⁰

[198] Notwithstanding that observation, I do not think there is sufficient credible evidence on a balance of probabilities to link the events of 2012 to the occurrence of arachnoiditis, nor is there sufficient evidence to suggest that the ‘second hit theory’ is well founded on a balance of probabilities.

⁴⁹ See *Aldrete et al*, op cit. Record page 093-18.

⁵⁰ See *Aldrete et al*, op cit. Record page 093-30.

[199] Thus, on a balance of probabilities, the case for the plaintiff on the remainder of the sequelae, as set out in the separated issue, which I was asked to decide, must fail. (Paragraph 8 of the order)

[200] However, the case of the sequela, which do not form part of the separated issue, and which have been admitted on behalf of the defendant stands, and the defendant is liable accordingly (Paragraphs 1-7 of the order below)

[201] At the end of the hearing, I requested both parties to formulate a proposed order. Given my findings I have followed the format of the defendant's order. In respect of the admissions in relation to the 2012 procedure, these appear in paragraphs 2 – 6 of the order below. I have assumed in relation to that admitted issue, this formulation is not controversial, and since I was not asked to consider it further, I have followed it.

[202] As for costs, both parties agreed that the award of costs should be postponed and again, I have followed this suggestion.

ORDER

It is ordered that:

1. The defendant, in accordance with the parties' settlement of the issue of liability in terms whereof he undertook to pay the plaintiff's:

- 1.1. *"... proven ... damages ... arising from the performance of the laminectomy on 6 February 2012"; and*
- 1.2. *"... proven ... sequelae of the performance of the laminectomy on 6 February 2012",*

is liable to the plaintiff in respect of those sequelae pleaded in paragraph 15 of his Particulars of Claim described in paragraphs 2 to 6 below.

2. The plaintiff's post-operative pain between 6 and 8 January 2012, which further increased on 8 January 2012 when the pressure of an increasing post-surgical haematoma in the spinal column caused additional surgical back pain.
3. Gradual lower body paralysis for less than an hour on 8 January 2012.
4. The plaintiff had the haematoma evacuated on 8 January 2012 at 18:38 which resolved the extent of the paralysis and such pain as was caused by the haematoma.
5. The plaintiff suffered from post-operative back pain for six weeks after 6 February 2012.
6. The plaintiff has since 6 February 2012 suffered from and will suffer increased mechanical back pain.
7. The 2014 operation caused some of the plaintiff's mechanical back pain.
8. The defendant is not liable for the remainder of the alleged sequelae pleaded in paragraph 15 of his Particulars of Claim, as amended, or for the increase in mechanical back pain caused by the 2014 operation.
9. The question of costs on the separated issue of causation shall be postponed for determination by the Court determining the quantum of the plaintiff's claim.

ORDER

It is ordered that:

1. The defendant, in accordance with the parties' settlement of the issue of liability in terms whereof he undertook to pay the plaintiff's:

9.1. *"... proven ... damages ... arising from the performance of the laminectomy on 6 February 2012"; and*

9.2. *"... proven ... sequelae of the performance of the laminectomy on 6 February 2012",*

is liable to the plaintiff in respect of those sequelae pleaded in paragraph 15 of his Particulars of Claim described in paragraphs 2 to 6 below.

10. The plaintiff's post-operative pain between 6 and 8 January 2012, which further increased on 8 January 2012 when the pressure of an increasing post-surgical haematoma in the spinal column caused additional surgical back pain.

11. Gradual lower body paralysis for less than an hour on 8 January 2012.

12. The plaintiff had the haematoma evacuated on 8 January 2012 at 18:38 which resolved the extent of the paralysis and such pain as was caused by the haematoma.

13. The plaintiff suffered from post-operative back pain for six weeks after 6 February 2012.

14. The plaintiff has since 6 February 2012 suffered from and will suffer increased mechanical back pain.
15. The 2014 operation caused some of the plaintiff's mechanical back pain.
16. The defendant is not liable for the remainder of the alleged sequelae pleaded in paragraph 15 of his Particulars of Claim, as amended, or for the increase in mechanical back pain caused by the 2014 operation.
17. The question of costs on the separated issue of causation shall be postponed for determination by the Court determining the quantum of the plaintiff's claim.

MANOIM J
Judge of the High Court
Gauteng Division Johannesburg

This judgment was handed down electronically by circulation to the parties' and/or parties' representatives by email and by being uploaded to CaseLines. The date and time for hand-down is deemed to be 10h00 on 13 April 2022.

Scheduled Dates	: 8 November 2021 – 3 December 2021
Preliminary meeting	: 21 October 2021
Dates of Hearing	: 8 November – 14 December 2021
Date of Closing Arguments	: 14 December 2021

Date of Judgment: : 13 April 2022

Appearances:

Counsel for the Plaintiff: Adv T.P. Kruger SC
krugertp@law.co.za
tobie@gkchambers.co.za
Adv C.D'Alton
calyn@law.co.za

Attorney for Plaintiff: Cilliers and Associates
Mr Johan Cilliers
johan@c-law.co.za
Mr Gerbrand Gildenhuys
gerband@c-law.co.za

Correspondent: Boshoff Incorporated
Mrs Natasha Nortje-Smalman
nathasha@boshoffinc.co.za

Counsel for the Defendant: Adv Emiel van Vuuren SC
Vanvuuren@group621.co.za
Adv K. Iles
kiles@counsel.co.za

Attorney for Defendant: MacRoberts Attorneys
Mr Tiaan Booyse

tbooyse@macrobert.co.za