THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

JUDGMENT

Not reportable

Case No: 103/2015

In the matter between:

DR S CHAPEIKIN **FIRST APPELLANT**
DR J SHER **SECOND APPELLANT**

and

LORETTA CHARMAINE MINI **RESPONDENT**

Neutral citation: *Chapeikin v Mini* (103/2015) [2016] ZASCA 105 (14 July 2016)

Coram: Mpati P, Cachalia and Wallis JJA and Tsoka and Kathree-Setiloane AJJA

Heard: 19 May 2016

Delivered: 14 July 2016

Summary: Delict – medical malpractice – general practitioners – whether failure to refer patient with unusual stroke to hospital for specialised treatment constitutes negligence – causation – whether patient's sequelae could have been prevented by referral to hospital – no causal link between the alleged negligence and sequelae.
Practice and procedure – Rule 33(4) of the Uniform rules – trials – order separating merits from quantum not desirable where issues are inextricably linked.

ORDER

On appeal from Western Cape Division of the High Court, Cape Town (Schippers J sitting as court of first instance):

1 The appeal is upheld with costs.

2 The order of the high court is set aside and replaced with the following order:

'The plaintiff's claim is dismissed with costs.'

JUDGMENT

Kathree-Setiloane AJA (Mpati P, Cachalia and Wallis JJA and Tsoka AJA concurring):

[1] It is estimated that in South Africa about 360 people per day have a stroke. Of those about 110 die and about 90 are left with a life-changing disability. Strokes are thus the leading cause of disability and the fourth most common cause of death.[1] On 17 April 2007 at about 16h00, while she was at work Ms Loretta Charmaine Mini (Ms Mini), the respondent, exhibited symptoms possibly attributable to a stroke. She consulted the first appellant, Dr Chapeikin on the same day at approximately 19h15. He diagnosed her as having hypertension and anxiety. At approximately 12h15 the next afternoon (18 April 2007), she consulted the second appellant, Dr Sher, who diagnosed her as having suffered a mild stroke, which had completed. Both appellants are general practitioners. The essence of Ms Mini's complaint against each of them is that they misdiagnosed her condition and failed to refer her to hospital for appropriate treatment. As a result, she contends that by the following day her condition had deteriorated rapidly, until she was admitted to hospital on 20 April 2007 with complete hemiplegia (right side paralysis). Despite receiving

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[1] *http://www.mystroke.co.za/About* (accessed on 25 May 2016).

intensive rehabilitative therapy for almost two months thereafter, she remained permanently disabled and was eventually found to be unfit to continue her career as a legal secretary.

[2] Ms Mini instituted action against Drs Chapeikin and Sher in the Western Cape Division of the High Court, Cape Town (the high court) for damages in the sum of R922 638 basing her claim in contract, alternatively delict, in respect of the sequelae which she had suffered as a result of the stroke. The pleaded sequelae are that she experienced deteriorating symptoms of weakness on the right side of her body; that she is unable to walk without assistance and confined to a wheelchair; that she suffers from hemiplegia (right side paralysis); that she suffers from attention and concentration difficulties; and that she suffers from limitations in abstract and complex reasoning, problem solving and information processing.

[3] At the commencement of the trial, the parties agreed to separate the issues of liability (negligence, wrongfulness and causation) from those relating to quantum and the trial proceeded on that basis. At the end of the trial, the high court found that both appellants had been negligent. The finding of negligence against Dr Chapeikin was that he should not have excluded the diagnosis of a stroke which had resolved either partially (because of undetected subtle signs) or totally. Instead he ought to have appreciated that he was dealing with the possibility of a stroke developing and to have foreseen the possibility of further deterioration of Ms Mini's condition. He should therefore have referred her to hospital and not sent her home. The finding of negligence against Dr Sher was that he should have been alive to the fact that Ms Mini's condition had deteriorated since the previous day; that it could deteriorate further; and that her blood pressure readings were alarmingly high requiring urgent specialised management, treatment and control, and he should therefore also have referred her to hospital.

[4] The high court found the appellants liable as joint wrongdoers 'for such damages which Ms Mini can prove'. In relation to Dr Chapeikin, the high court found that his failure to refer her to hospital for specialised assessment and treatment materially contributed to her deterioration and ultimate sequelae. In addition, it found that in as much as timely admission and treatment would have made the effects of her stroke less severe, the evidence established a causal connection between Dr Chapeikin's failure to refer her to hospital and her sequelae.

[5] In relation to Dr Sher, the high court found that the evidence established that had he referred Ms Mini to hospital, it was likely that she would have received hypertensive emergency treatment and blood pressure control including stabilisation and reduction in a controlled clinical environment. It found that these measures would have prevented a further elevation of her blood pressure and prevented further deterioration of her condition. And it, accordingly, held that Dr Sher's failure to refer Ms Mini to hospital probably materially contributed to her deterioration. The appellants appeal to this court against the high court's order. They do so with the leave of this court.

Factual background

[6] Ms Mini testified in the high court and relied on four witnesses in support of her case. They were Ms Colleen Bathurst (Ms Bathurst), Dr APJ Botha (Dr Botha), a specialist physician, Professor DA Hellenberg (Professor Hellenberg), a general practitioner and Dr FG Hemp (Dr Hemp), a clinical psychologist. Both Drs Chapeikin and Sher also testified in the high court and relied on Dr SM Kesler (Dr Kesler), a neurologist, in support of their case.

[7] Ms Mini's testimony was broadly this. She was 53 years old when she suffered the stroke. She was a legal secretary at a firm of attorneys in Cape Town at the time. She had suffered from hypertension since 2004 for which she took Adco-Retic tablet, an over the counter tablet with diuretic and

antihypertensive effect. In 2005 she was treated for hypertension at Goodcare Medical Centre, Claremont (Goodcare) where her son, Darren Mini (Darren), worked as a practice manager. Both her parents had suffered from hypertension. Her mother had died in 2004 as a result of a stroke. Her father, who was 84 years old at the time of the trial, had also suffered a stroke in 2006. He was fortunate to have survived and had fully recovered.

[8] On the morning of 17 April 2007, Ms Mini travelled to work by train from Plumstead to Cape Town. She had not taken her Adco-Retic tablet that morning and nor had she eaten breakfast. At about 10h00 she experienced a feeling of light-headedness. She ate breakfast and took an Adco-Retic tablet. A few minutes later she felt better and returned to her desk where she continued with her typing for the day. At about 11h00 she tripped twice while fetching documents from a printer. She continued typing until about 16h00, when she realised that she was typing 'a whole lot of nonsense'. She became concerned and decided to alert her friend, Ms Bathurst, the receptionist to her condition. As she stood up at her desk she felt dizzy. She experienced difficulty walking to the reception area and held onto the furniture. She described her walk as 'lopsided to my right; it felt as though I wanted to fall to my right'. On reaching the reception area, she informed Ms Bathurst that she was unable to travel home by train as she was unwell.

[9] Ms Bathurst testified that on seeing Ms Mini she noticed that something was 'seriously wrong' as she seemed disorientated, walked in a lopsided manner, slouched while standing and spoke unusually slowly. Since Ms Bathurst's mother had suffered two strokes, she was able to recognise Ms Mini's symptoms and informed her that she was having a stroke. She suggested to Ms Mini that she see a doctor. She then helped Ms Mini walk back to her desk. Ms Mini supported herself by holding onto the wall as she walked. A short while later they returned to the reception area and Ms Mini called her friend (Errol) to fetch her from work. Errol arrived at about 18h00. Although Ms Bathurst assisted Ms Mini by guiding her down the stairs to the

car and into the car, Ms Mini was able to walk on her own. Errol drove Ms Mini to her son Darren's home in Wynberg to tell him about her condition. Darren was concerned and suggested that she see a doctor in Landsdowne. Errol then drove Ms Mini to Dr Chapeikin's surgery in Landsdowne. At that point Ms Mini's speech was slightly slurred. They arrived just before 19h00. Ms Mini completed the details on the medical file, paid a fee of R150 and waited to see Dr Chapeikin. The consultation with Dr Chapeikin took place at approximately 19h15. He came into the reception area before walking back into his consulting room. On Ms Mini's version, she followed him into his consulting room by holding onto the wall for support as she felt unsteady. The consultation lasted about half an hour.

[10] Ms Mini's version of the consultation with Dr Chapeikin was this. Dr Chapeikin took her blood pressure and asked her to provide a urine sample which she did. He asked her what her symptoms were and she told him about her dizziness at 10h00 that morning, as well as how she felt at 16h00 that afternoon when she realized that she was typing 'nonsense'. She told him that she felt dizzy when she stood up at her desk and that she had experienced difficulty walking to the reception area at work. Dr Chapeikin tested her eye reflexes using his finger. She complained of a slight earache. He examined her ears and indicated that she seemed to have an imbalance. She described the right side of her body as feeling lopsided and asked him if she was experiencing a stroke. Dr Chapeikin dismissed that suggestion with a hand motion, as if to suggest that it was not a stroke. On Ms Mini's version, he did not ask and she did not tell him about previous strokes in her family. He prescribed Prexum for her high blood pressure and Mitil for her imbalance. Dr Chapeikin booked her off work until 23 April 2007. He told her to go home for the evening, but that if her condition deteriorated she should return on Monday the following week.

[11] When Ms Mini left the consultation she walked at a slower pace than before. On the way home, Errol stopped at a pharmacy where she bought

only the Mitil, because she did not have sufficient money to buy the Prexum. Darren brought the Prexum to her the next morning. She felt very ill when she arrived home and felt worse the next morning (18 April 2007). The entire right side of her body from shoulder to foot felt heavier. She could not write properly and there was a slight drag on her foot. At approximately 08h30, she telephoned her employer, Ms Nicola Caine (Ms Caine), who arranged for her to see Dr Sher. She consulted Dr Sher at about 12h30. She said she supported her right arm with her left arm, as it felt heavy. Her walking was slightly worse than the day before. She felt unsteady and held onto the wall for support, as she followed Dr Sher into his consultation room. She related the events of the previous day to him, including that she had consulted Dr Chapeikin who prescribed Prexum and Mitil. She also informed Dr Sher that her hand felt lame; that her leg did not feel quite right; that she struggled to walk; and that the right side of her body felt heavy.

[12] Ms Mini's version of the consultation with Dr Sher was that he took her blood pressure and examined her legs. He asked her to bend her right knee, and examined both her foot and ankle. He advised her that she had suffered a 'slight stroke'. He instructed her to continue taking the Prexum and to take half a Disprin as well. He did not refer her to a hospital and there was no discussion about hospitals. Instead, he asked her to return on Monday, 23 April 2007. He did not ask her about previous strokes in her family. After the consultation Dr Sher called Ms Caine with Ms Mini's consent and, in her presence, reported to Ms Caine that Ms Mini had suffered a slight stroke and would be put off work for two to three weeks. Before leaving, she made an appointment to see Dr Sher again on 23 April 2007, as instructed.

[13] Ms Mini's condition deteriorated sharply after she was sent home by Dr Sher. According to Ms Mini, the right side of her body became totally lame by the morning of 19 April 2007. She telephoned Ms Bathurst at work and asked her to contact Dr Sher. On Ms Mini's version, she was told by Ms Bathurst that Dr Sher had advised that she continue taking the Prexum tablets, and

that she would feel better after four days. She was dissatisfied with Dr Sher's advice as she was 'totally lame' by that stage. Ms Mini, thereafter, phoned Darren at Goodcare. He put Ms Mini in touch with Dr Noor, who advised her that she should have been referred to a hospital on account of the stroke that she had suffered. Dr Noor informed Ms Mini that she would hand Darren a note referring her to Victoria Hospital in Wynberg. She only went to Victoria Hospital on the evening of 20 April 2007 as she had to first wait for Darren to bring her the referral note and, thereafter, wait for Errol to finish work before driving her to the hospital. Both Darren and Errol carried her to the car as she was unable to walk. She was admitted to Victoria Hospital at about 20h30 that evening and remained there until 26 April 2007. The relevant clinical notes record that she was referred to a physician as a result of a cerebral vascular accident (CVA) and right-sided hemiplegia (paralysis).

[14] On 14 May 2007, Ms Mini was admitted to the Western Cape Rehabilitation Centre (the rehabilitation centre) where she received physiotherapy, occupational therapy and counselling to treat her right sided hemiplegia. The medical notes from the rehabilitation centre indicate that upon admission Ms Mini had difficulty washing and dressing herself and was unable to cook. She was able to walk but had to hold onto furniture for support. She eventually had to use a walking frame. She was fully continent and had good movement in her right arm. The plan on admission was to improve her mobility (gait rehabilitation) and to monitor her blood pressure. By 22 June 2007, she showed some improvement in the functioning of her upper limbs and, although wheelchair bound, was in the process of gait-regaining. She was discharged on 5 July 2007. Ms Mini returned to work on 9 July 2007. However, on her return she worked on the switchboard and not as a legal secretary. Following an examination by Dr Hemp (the clinical psychologist) to assess her progress, Ms Mini was boarded, in October 2012, because she could no longer cope at work or meet the requirements of her position.

[15] When Ms Mini consulted Dr Chapeikin, on 17 April 2007, he had been practising as a general practitioner for more than 40 years, and had treated numerous stroke patients. Dr Chapeikin's version of the consultation with Ms Mini was as follows. Ms Mini informed him about the history of her symptoms and what happened at work that day. She was anxious that she might be having a stroke and informed him that both her parents suffered from hypertension; that her mother had passed away as a result of a stroke and that her father had suffered a stroke as well. When Ms Mini complained about a lame feeling on her right side and slight dizziness, the first thing that came to his mind was a stroke. He observed her as she stepped onto the two step ladder to get onto the examining bed, which she managed 'quite simply'. He also observed her as she walked to the toilet to produce a urine sample. Her gait was normal. Although initially denying this, under cross-examination Ms Mini stated that she could not recall whether she had to hold onto anything for support while walking to the toilet.

[16] Dr Chaipeikin tested for nystagmus (dancing eyes), the presence of which would have explained the dizziness and ear imbalance, but there was none. There were no signs of muscle weakness or neurological abnormality, and her reflexes and sensations were normal. Her pulse was regular and there was no atrial fibrillation. Ms Mini's blood pressure (160/100) was not alarmingly high. There were no bruits[2] and her cardio-vascular system was normal. Her chest and abdomen, and haemoglobin were normal. He diagnosed her as having hypertension, an ear imbalance and anxiety. He prescribed Prexum for her blood pressure and Mitil for her dizziness and anxiety. He advised her that should the symptoms persist or get worse, she should contact him immediately. He put her off work for hypertension. He was satisfied that there were no signs of stroke. He said that had she come to see him earlier that day when the signs of stroke were evident, he would have immediately referred her to hospital, but in the absence of clear signs of a stroke, Ms Mini's condition did not warrant referral to a specialist physician or a hospital. He made his clinical notes after she had left his consultation room.

[2] A sound, especially an abnormal one, heard through a stethoscope.

[17] When Ms Mini consulted with Dr Sher, on 18 April 2007, he had been practising as a general practitioner for almost 40 years. He first practised in Oudtshoorn for about 20 years and, since 1992, had been practising in Claremont. He had experience treating stroke patients. Ms Mini was referred to him by Ms Caine, a patient of his and a senior attorney at the firm at which Ms Mini had been employed. He had treated Ms Caine's children as well as her parents who were good friends of his. According to Dr Sher, Ms Mini had walked unaided into his consultation room. He disputed that she had held onto the wall and explained that the paintings on the wall, and the chairs alongside it, would have prevented her from doing so. He described Ms Mini's complaint, in his clinical notes, as 'a residual weakness of her right hand during the day which spread to her right leg', because she told him that her right hand had improved dramatically from the previous day. He observed Ms Mini getting onto the examination bed by stepping on a two-step ladder, unaided. He was able to recognise that he was dealing with a stroke from her history of weakness in the right hand that spread to the right leg, and from her neurological symptoms.

[18] Dr Sher examined Ms Mini's upper limbs. The reflexes in her arms appeared to be identical. He found no definite sign of weakness in the right hand and there was no difference between the strength in her right and left hands. Having regard to power, tone and reflexes, he was able to detect neurological damage to the right leg. Her left leg was stronger than the right, and the knee reflex in her right leg was weaker than the left. He found a residual weakness in Ms Mini's right leg, which indicated to him that it had been worse the previous day. He found signs of long-standing hypertension by examining her eyes. He measured Ms Mini's blood pressure with a baumanometer − the well-known blood pressure machine with a bulb, cuff and a column of mercury. He took six readings with this instrument and recorded a blood pressure reading of 185/120, which he underlined in his clinical notes as being the average of the six readings taken. Next, he measured Ms Mini's blood pressure using a digital blood pressure machine, in order to demonstrate to Ms Mini that her blood pressure was very high and that

uncontrolled blood pressure was the underlying cause of her stroke. He obtained readings of 199/130 and 181/127, respectively.

[19] Dr Sher concluded that Ms Mini had suffered a mild stroke that had reached its zenith. He reached this conclusion because she was able to walk; sit down; provide a full history of her symptoms without any speech defect; undress herself; get onto the examination bed; and her condition had improved to the point where there were only signs of residual weakness. Dr Sher prescribed Prexum in conjunction with a diuretic and half a Disprin. He could not remember whether Ms Mini had told him that she was already taking Prexum. He booked Ms Mini off work for two to three weeks and asked her to see him again, for a follow-up consultation, on Monday, 23 April 2007.

[20] Dr Botha and Professor Hellenberg, on whose testimony Ms Mini relied, were of the opinion that the assessment of Ms Mini as recorded in the clinical notes of Dr Chapeikin was inadequate as he recorded no diagnoses, and his failure to refer her to hospital for further assessment and thrombolytic therapy deviated from the standard of care expected from a general practitioner. Dr Botha explained the difference between a transcient ischaemic attack (TIA) and an ischaemic or thrombotic stroke. He explained that a TIA is technically not a stroke but may be viewed as ‘a threatening stroke’ where there is an insufficient supply of blood to the brain and the symptoms last for a short period of time (no longer than 24 hours). He said that an ischaemic or thrombotic stroke occurs from impaired circulation in one or more blood vessels of the brain due to thrombosis or embolism causing a cerebral infarct (stroke). He said that in some cases, the blood vessel ruptures and the blood flows into the brain causing the blood to clot (haemorrhagic infarct). He said that intravenous thrombolytic treatment was indicated for ischaemic or thrombotic strokes as it helped dissolve the clot quickly. Administering thrombolytic therapy within three to four and a half hours of the onset of stroke could help limit stroke damage and disability. Dr Botha, however, conceded that although he had treated hundreds of stroke patients, he had relatively

little experience in administering thrombolytic therapy to them. He also conceded that the stroke which Ms Mini had suffered was not a 'regular' ischaemic stroke but rather a 'stroke in evolution', which has a 'stuttering' progression. He said that a 'stroke in evolution' is 'a less well-defined concept' because there are no clear statistics. He acknowledged that thrombolytic treatment in the context of a 'stroke in evolution' was questionable, because of the difficulty in defining the 'time window'. In addition, he accepted that although physicians were involved in the treatment and management of stroke, this fell within the area of specialty of neurologists.

[21] Dr Kesler, on whose testimony the appellants relied, was of the opinion that Dr Chapeikin's failure to diagnose the stroke was reasonable on the basis that Ms Mini had suffered a 'stroke in evolution' as opposed to a 'regular' stroke and, in the circumstances, had taken the best possible action. He said that even if Ms Mini had been referred to hospital by Dr Chapeikin on the night of 17 April 2007, she would have not qualified for thrombolytic therapy because the onset of her stroke occurred outside of the three hour window period. He said that since thrombolytic therapy had to be preceded by a computerised tomography (a CT scan), it was unlikely that Ms Mini would have made the cut-off time of three hours to qualify for it, and would likely have been turned away and not admitted to hospital.

[22] In relation to Dr Sher, Dr Botha maintained that although he had diagnosed Ms Mini as having suffered a stroke, he was negligent in: (a) overlooking Ms Mini's elevated high blood pressure readings coupled with her neurological symptoms, and (b) failing to refer her to hospital where she would have, in all probability, received hypertensive emergency treatment and blood pressure control, stabilisation and reduction in a controlled clinical environment. Dr Kesler, on the other hand, was of the opinion that because Ms Mini had suffered a 'stroke in evolution' and not a 'regular' stroke, it was not unreasonable for Dr Sher to have misdiagnosed her condition as a stroke that had reached its zenith and completed. He said that in view of the history

that Ms Mini had given to Dr Sher relating to her condition, on the day, it was not unreasonable for Dr Sher to have concluded that the stroke had completed. He was of the opinion that it is impossible for a doctor to detect that a stroke has not completed and would proceed to become worse because there are no indicators to that effect. He maintained that even if Dr Sher had referred Ms Mini to hospital, her blood pressure would not have been reduced aggressively because, in the case of an acute stroke, this is contraindicated as it could cause renal or heart failure or increase the size of a stroke (infarct). While Dr Kesler was prepared to defer to a physician on the question of reducing a patient's high blood pressure aggressively where it was not accompanied by a stroke, he was not prepared to do so in relation to an acute stroke. He said that one of the consequences of an acute stroke is that elevated levels of blood pressure eventually come down to treatable levels.

Issues in the appeal

[23] As stated, the claim was brought in both contract and delict, however in argument before us, it was only pursued in delict. Thus, the issues that arise for determination are whether the failure of the appellants to correctly diagnose, treat and refer Ms Mini to hospital for further specialised assessment and treatment deviated from the standard of care expected of a general practitioner and, if so, whether this failure caused or contributed to the sequelae that she ultimately suffered. Whether the appellants are delictually liable requires a consideration of whether the elements of wrongfulness, negligence and causation have been established.

Wrongfulness

[24] Although the appellants deny wrongfulness in their plea, wrongfulness was not in issue before the high court or in this court. This, in my view, was a judicious concession because assuming the appellants could have prevented further deterioration (in the form of the pleaded sequelae setting in) of Ms Mini's condition by referring her to hospital but negligently failed to do so, then

as matter of public or legal policy, the appellants should be held liable for the damages arising from their omission.[3]

Negligence

[25] In *Kruger v Coetzee*[4] this court articulated the proper approach for establishing the existence of negligence as follows:

'For the purposes of liability *culpa* arises if -

(a) a *diligens paterfamilias* in the position of the defendant -

(i) would foresee the reasonable possibility of his conduct injuring another in his person or property and causing him patrimonial loss; and

(ii) would take reasonable steps to guard against such occurrence; and

(b) the defendant failed to take such steps.'

[26] In a recent re-statement of the test in *Oppelt v Department of Health*[5] Cameron J explained what it involves:

'In our law *Kruger* embodies the classic test. There are two steps. The first is foreseeability ─ would a reasonable person in the position of the defendant foresee the reasonable possibility of injuring another and causing loss? The second is preventability ─ would that person take reasonable steps to guard against the injury happening?

The key point is that negligence must be evaluated in light of all the circumstances. And, because the test is defendant - specific ("in the position of the defendant"), the standard is upgraded for medical professionals. The question, for them, is whether a reasonable medical professional would have foreseen the damage and taken steps

[3] *Hawekwa Youth Camp & another v Byrne* [2009] ZASCA 156; 2010 (6) SA 83 (SCA) para 22; *Country Cloud Trading CC v MEC, Department of Infrastructure Development* [2014] ZACC 28; 2015 (1) SA 1 (CC) paras 20-22; *ZA v Smith & another* [2015] ZASCA 75; 2015 (4) SA 574 (SCA) paras 14-20.

[4] *Kruger v Coetzee* 1966 (2) SA 428 (A) at 430E-H.

[5] *Oppelt v Department of Health, Western Cape* [2015] ZACC 33; 2016 (1) SA 325 (CC) paras 106-108. Dissenting judgment of Cameron J and Jappie AJ. The test for negligence was not in issue in the dissent. At paragraph 60 of the majority judgment, the Constitutional Courts endorsed the test formulated in *Kruger* as '[t]he proper approach for establishing the existence or otherwise of negligence'.

to avoid it. In *Mitchell v Dixon* the then Appellate Division noted that this standard does not expect the impossible of medical personnel:

"A medical practitioner is not expected to bring to bear upon the case entrusted to him the highest possible degree of professional skill, but he is bound to employ reasonable skill and care; and he is liable for the consequences if he does not."

This means that we must not ask: what would exceptionally competent and exceptionally knowledgeable doctors have done? We must ask: "what can be expected of the ordinary or average doctor in view of the general level of knowledge, ability, experience, skill and diligence possessed and exercised by the profession, bearing in mind that a doctor is a human being and not a machine and that no human being is infallible". Practically, we must also ask: was the medical professional's approach consonant with a reasonable and responsible body of medical opinion? This test always depends on the facts. With a medical specialist, the standard is that of the reasonable specialist.' (Footnotes omitted.)

[27] A medical practitioner diagnosing and treating a patient is expected to adhere to the level of skill, care and diligence possessed and exercised at the time by the members of the branch of the profession to which he or she belongs.[6] Since the appellants were both general practitioners when they treated Ms Mini in April 2007, their conduct must be assessed against the standard of the reasonable general practitioner.

[28] As alluded to above, the nub of the dispute concerning the appellants' liability relates to their failure to make a correct diagnosis and to refer Ms Mini to hospital for specialised observation, assessment and treatment. In *Mitchell v Dixon*,[7] Innes ACJ said as follows in relation to the liability of a practitioner for making a wrong diagnosis:

'A practitioner can only be held liable . . . if his diagnosis is so palpably wrong as to prove negligence, that is to say, if his mistake is of such a nature as to imply absence of reasonable skill and care on his part, regard being had to the ordinary level of skill in the profession . . . . '

[6] *Topham v Member of the Executive Committee for the Department of Health, Mpumalanga* [2013] ZASCA 65; 2013 JDR 1059 (SCA) para 6.
[7] *Mitchell v Dixon* 1914 AD 519 at 526.

Similarly, a practitioner's error in making the wrong choice or following the wrong course is not necessarily negligent. The test is always whether the practitioner exercised reasonable skill and care or, put differently, whether or not his or her conduct fell below the standard of a reasonably competent practitioner in the field. If the 'error' is one that a reasonably competent practitioner might have made, it will not constitute negligence.[8]

[29] Central to the determination of whether the appellants met the required standard of care in failing to correctly diagnose, treat and refer Ms Mini to a hospital, is the nature of the stroke which she suffered. Although little attention was given to this question by the high court, the evidence reveals that the condition that Ms Mini suffered was not a 'regular' or 'normal' stroke, but rather a 'stroke in evolution' which started on 17 April 2007 (sometime prior to her having seen Dr Chapeikin) and took several days to complete. Dr Kesler dealt comprehensively, in his testimony, with the manifestation of a stroke in general and, in particular, a 'stroke in evolution' which he also described as 'stroke in progress', 'evolving stroke' or 'stuttering stroke'. He provided a logical basis for concluding that Ms Mini had suffered the latter type of stroke. In differentiating 'a stroke in evolution' from a 'normal' stroke, he explained that a stroke in evolution:

(a) is a rare and unusual phenomenon which is difficult to evaluate whilst happening and can only be diagnosed with hindsight;

(b) differs from other forms of strokes (such as embolic or ischaemic), where a rapid onset of stroke is found, and a patient is expected to reach maximum disability literally within a minute or two or an hour or two at the most;

(c) normally demonstrates maximum disability (retrospectively evaluated) within a day or two at most – many patients will show a fluctuating clinical course within the first hours of the onset of the event, present with a mild deficit, thereafter improve slightly and then, despite standard basic treatment, demonstrate much more severe stroke syndrome within a day or two.

[8] *Mitchell v Dixon* at 526; *Castell v De Greef* 1993 (3) SA 501 (C) at 512A.

[30] Dr Kesler furthermore explained that in Ms Mini's case, the 'stroke in evolution' presented in an atypical fashion since it appeared to have a stuttering course over a period of at least three days. He described the stroke that afflicted Ms Mini as 'one long unusual stroke in evolution'. Dr Botha, on whose testimony Ms Mini relied, struggled to offer a different explanation for the manner in which her stroke presented itself. After some vacillation, he provided the following explanation for Ms Mini's clinical course, which was consistent with the opinion expressed by Dr Kesler:

'The only rational explanation that I have, [is] that there must have been a step-wise stroke progression, or a stuttering stroke. I know that we wanted to move away from the terminology, and Dr Kesler, we took it up with him as well, he was not happy with it, because its concept is very vaguely described in the literature, and most people want to move away from it. So that is our problem with that . . .. But that would make perfect sense for me, because I don't have any other explanation why she progressed in that way.'

[31] The high court assessed the conduct of each of the appellants and, in particular, their failure to refer Ms Mini to hospital against the South African National Guidelines on Stroke and Transient Ischaemic Attack (TIA) Management (the National Guidelines),[9] which applied to the management of strokes by medical practitioners in South Africa at the time of Ms Mini's stroke. Its primary purpose was to facilitate optimum care of patients suffering from stroke by early diagnosis and appropriate therapy with the aim of preventing any secondary complications. The National Guidelines emphasised that:[10]

(a) Any cerebrovascular event lasting less than 24 hours with full recovery should be treated as a minor stroke (TIA).

(b) The objectives of TIA treatment are to treat the condition as an emergency (since TIA is the occurrence of an impending stroke) and to prevent progression of the condition to an established cerebro-ischaemic event by way of initiating early therapy.

[9] The National Guidelines were published by the National Department of Health in 2001. They were prepared in collaboration with the Provincial Departments of Health, universities, other tertiary institutions and the Stroke Foundation of South Africa.
[10] The National Guidelines at 6-8.

(c) All health professionals including general practitioners should be capable of identifying signs and symptoms of strokes including minor strokes.

(d) A minor stroke is a powerful predictor of a more serious stroke.

(e) A minor (TIA) should not be ignored. Patients with TIA must not be sent home.

(f) A minor or major stroke is a medical emergency. If possible, initial contact with the patient should be in hospital. Home management should be avoided as the first port of entry.

(g) Every stroke patient (irrespective of where first seen) requires basic urgent emergency treatment to improve cerebral performance.

(h) It is essential to treat TIA or minor stroke in order to prevent a second stroke or consequent permanent disability.

[32] The standard of treatment advocated by the National Guidelines was that patients be referred to hospital for specialised treatment and preventative treatment with a view to preventing a secondary stroke or consequent permanent disability. Dr Botha and Professor Hellenberg endorsed the National Guidelines as representing the standard of practice expected of a general practitioner. Although Dr Kesler was critical of the National Guidelines in certain respects, he acknowledged that they were operative and constituted a clinical protocol and standardised care regime.

[33] Having found that Ms Mini suffered a further or consecutive stroke, the high court concluded that the appellants were remiss in not administering treatment aimed at preventing a further or secondary stroke. This finding was premised on the central purpose of the National Guidelines, which was the prevention of further or secondary strokes. In respect to Dr Chapeikin in particular, the high court found:

'Chapeikin's conduct is inconsistent with the standards set out in the National Guidelines on Stroke – a reasonable competent general practitioner would have

regarded the plaintiff's symptoms as a medical emergency and referred her to hospital, to prevent further deterioration or a secondary stroke'.

However, on the basis of the evidence of Drs Kesler and Botha that Ms Mini suffered a 'stroke in evolution', there was simply no basis for a finding by the high court that further or consecutive strokes were involved. In my view, the conduct of treating medical practitioners cannot be critically examined for negligence without reference to the causal sequence or aetiology of the disease or medical condition from which a patient actually suffered at the time of presentation and treatment. For that reason, it was essential for the high court to make a firm finding in relation to the precise nature of Ms Mini's condition.

[34] However, it appears that in spite of what the evidence established, the high court steered away from making a finding on whether Ms Mini suffered various separate strokes with the passage of time (with the onset of the first one being prior to her visit to Dr Chapeikin and the others sometime thereafter), or whether she suffered a 'stroke in evolution' which started at approximately 16h00 on 17 April 2007 and ran its course over the next three days. Rather ambivalently, it made allowance for the eventuality that Ms Mini suffered a secondary stroke after consulting with the appellants, or a further stroke that was in the process of developing by the time she consulted with Dr Chapeikin. In so doing, it indicated that Dr Chapeikin appreciated that he was dealing with the possibility of 'a stroke developing' and conceded that the problem with sending a patient with stroke home, was that the practitioner might not be able to take steps to prevent a secondary event such as a subsequent stroke. In addition, it emphasised the need for the administration of treatment designed to prevent a second stroke or secondary event and criticised Dr Sher for saying that Ms Mini did not suffer 'another stroke' and, for ascribing her deteriorating condition to the pattern of her stroke. The high court concluded that had Dr Chapeikin referred Ms Mini to hospital (for monitoring) her further deterioration 'or the onset of a further stroke' would have been detected early. This aspect was again touched upon in the judgment in the application for leave to appeal. There, the high court not only

appeared to favour the onset of a 'later serious stroke', but it also declared that there was 'nothing unusual' about the stroke which Ms Mini had suffered. Moreover, it found that the deterioration of her condition 'in the form of a more serious stroke ─ was an entirely predictable event'.

[35] These findings are, to my mind, inconsistent with the expert evidence. Except for a minor difference of opinion concerning the exact label that should be given to the nature of the stroke in question, the two experts were in agreement that Ms Mini suffered a single stroke that evolved or progressed over time in a 'stuttering' fashion. The finding that there was nothing unusual about the stroke that Ms Mini suffered is also inconsistent with their evidence. It seems to me that what the high court failed to acknowledge, is that both appellants were at different junctures confronted with a patient suffering from a highly abnormal condition and that liability, especially liability based merely on a wrong diagnosis, could not ensue unless it was clear that the diagnoses were palpably wrong.[11] Its' failure to appreciate that the appellants were confronted with a 'stroke in evolution' led the high court to express views and make findings premised on measures designed to prevent a secondary or subsequent stroke − which plainly did not eventuate.

[36] Furthermore, the high court's failure to recognise that Ms Mini was all along in the throes of one continuing stroke in progress, led it to disregard the testimony of Dr Kesler that in respect of a 'stroke in evolution' the prevention of a secondary stroke does not come into play (at least not during the acute stage, which was when the appellants were involved). Essentially, what the high court was required to determine was not what steps the appellants ought to have taken in order to prevent a secondary event, but rather what steps they reasonably should or could have taken in an effort to arrest or reverse the progress of the evolving stroke. On this aspect, the high court ignored the testimony of Dr Kesler that Ms Mini was out of time for thrombolytic treatment,

[11] *Mitchell v Dixon* at 526, referred to in *Louwrens v Oldwage* [2005] ZASCA 81; 2006 (2) SA 161 (SCA) at 171A-B. A diagnosis is 'palpably wrong' if it is one that could not be arrived at by a reasonably competent general practitioner.

the administration of which (on Dr Botha's version) is in any event questionable in a patient who is in the throes of a 'stroke in evolution'. As Dr Kesler explained, even if Dr Chapeikin had referred Ms Mini to hospital it would have made no difference to her outcome as nothing special could be done for her ─ other than to give her Prexum (and angiotensin-converting-enzyme inhibitor (ACE inhibitor)) which was in any event also what Dr Chapeikin had prescribed.

[37] In relation to the use of aspirin (one of the 'other management therapies' generally prescribed to address the progression of stroke) which was purportedly withheld from Ms Mini due to Dr Chapeikin's failure to refer her to a hospital, Dr Kesler explained that although it is standard treatment for secondary prevention of stroke, its administration in the context of an acute stroke is controversial. Dr Kesler's opinion on this aspect was consistent with the American Heart Association's Guidelines for the Early Management of Adults with Ischaemic Stroke (the AHA Guidelines) which state that (a) the primary effect of aspirin seems to be the prevention of recurrent events and (b) it is not clear whether that agent limited the neurological consequences of the acute ischaemic stroke itself.[12] Notably, the American Academy of Neurology affirmed the value of the AHA Guidelines as an education tool for neurologists. The AHA Guidelines were canvassed in the evidence of Dr Kessler, but not challenged.

[38] Dr Kesler testified that even in the case of a 'normal' stroke there is little that can be done to halt its progression other than thrombolytic therapy which must be administered within three hours of the onset of a stroke. Principally for this reason, he maintained that the National Guidelines were overly generous in suggesting that patients with stroke should be urgently

[12] H Adams MD et al 'Guidelines for the Early Management of Adults with Ischemic Stroke: A Guideline From the American Heart Association/American Stroke Association Stroke Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups: The American Academy of Neurology affirms the value of this guideline as an education tool for neurologists' (2007) at 1681.

sent to hospital after TIA or minor stroke (in the absence of other complications such as, for instance, an inability to swallow, incontinence, immobility or the danger of aspiration). Significantly, in this regard, Dr Kesler explained:

'I might say that I've had patients in hospital who presented with a stroke and despite being in hospital under let's say near optimum circumstances have continued to deteriorate in front of one's eyes and although many of the recommendations [in the National Guidelines] are part fact and generalist in recommending that patients . . . go to hospital if they show signs, there's not terribly much that can be done even in hospital where the patient is lying there before your eyes.'

[39] The high court's finding that Dr Chapeikin's conduct was inconsistent with the standards set out in the National Guidelines as a basis for concluding that a reasonably competent general practitioner would have regarded her condition as a medical emergency and referred her to hospital is, therefore, not supported by the evidence. Crucially, the high court failed to consider the evidence of Drs Kesler and Botha who agreed that the diagnosis of the 'stroke in evolution' can only be made ex post facto, with the wisdom of hindsight once the stuttering stroke has come to an end. The high court also failed to have due regard to Dr Kesler's testimony that because Ms Mini was alert, able to walk and communicate with no demonstrable signs of weakness at the time she saw Dr Chapeikin, she would probably not have been admitted had he referred her to Groote Schuur or Victoria hospitals.

[40] The high court found that Dr Chapeikin's testimony that he was satisfied that there were no signs of stroke even if subtle, was unsupportable because he knew that Ms Mini's symptoms were indicators of a developing stroke and he foresaw a deterioration of her condition. There is no basis for this finding on the evidence as Dr Chapeikin was alive to the serious risk that Ms Mini's symptoms might be indicative of a stroke. Not only was this his own assessment of the possibility, but Ms Mini had directly raised this with him and referred him to her family history. The high court acknowledged as much when it found:

‘In the circumstances, and despite the fact that Chapeikin’s clinical notes are deficient, I do not think it can be said that his (or Dr Sher’s) failure to follow the three-stage assessment constitutes non-compliance with the required standard of care, or negligence.

For these reasons, it is unnecessary to decide the question whether Chapeikin failed to elicit a proper history from [Ms Mini]. Moreover, nothing turns on this as Chapeikin’s evidence is that he was aware of the fact that both [Ms Mini’s] parents had suffered a stroke. It is also not disputed that [Ms Mini] was anxious because she thought that she was having a stroke and that she conveyed this to Chapeikin.’

Dr Chapekin testified that after Ms Mini had expressed anxiety about having had a stroke and related her family history to him, he tested for all the relevant signs of a stroke and found none present. He was concerned about the level of Ms Mini’s blood pressure and in light of her complaint of dizziness, concluded that medication for high blood pressure and anxiety should be prescribed. That is what he did, and he rightly and properly indicated to her that if her condition worsened she should call him immediately. However, when her condition did deteriorate, she failed to call him. He said that if she had done so, he would have immediately referred her to hospital. He likewise said that had she come to see him three hours earlier when the signs of stroke were evident, he would have referred her to hospital.

[41] The high court rejected the evidence of Dr Chapeikin on the further basis that to accept that he had not found signs of stroke on examination of Ms Mini, would suggest that she was either mistaken or was lying about the symptoms she was experiencing or that they must have resolved. In arriving at these conclusions, the high court disregarded the evidence of Dr Botha that, at the time when Ms Mini was seen by Dr Chapeikin, the neurological deficit might have been such that it was too early for the physical weakness to have developed. Notably, it was common cause that at the time of her consultation with Dr Chapeikin, Ms Mini was very anxious and that Dr Chapeikin was of the view that her presenting symptoms could have been caused by anxiety, which is a common explanation for symptoms such as dizziness and lameness of which she complained. He, therefore, prescribed

Mitil (an agent used to alleviate dizziness, especially if there is anxiety) and advised her that if this reduced her anxiety, then her symptomology would improve. The high court furthermore disregarded the evidence of Dr Kesler that the symptoms which Ms Mini complained of, namely dizziness and a focal lameness or a feeling of numbness affecting only one side ─ the arm, are known to be common symptoms of anxiety which mimic stroke symptoms.

[42] Turning then to Dr Sher's conduct, he diagnosed Ms Mini as suffering from hypertension with a mild stroke. He testified that he was aware that he was dealing with a stroke because of Ms Mini's history (which she related to him) of weakness in her right hand which had spread to her right leg. He said that on examining Ms Mini, he focussed on her neurological symptoms but it was difficult to find any definite sign of weakness in her right hand; the strength in her right hand was no different from her left. He, however, went on to say that having tested the strength, tone and reflexes in her legs, he found neurological damage to the right leg. Although Ms Mini had described her right leg as being worse the previous day, on examination Dr Sher found that the weakness had improved and that only a residual weakness remained. Hence, in his clinical note he wrote:

'C/o weakness (R) hand yest am –> (R) leg. O/E Residual weakness (R) leg ± R hand'.

Dr Sher explained the note to mean that Mini told him:

'(T)hat since the previous morning she had experienced a weakness in the right hand and during the day and I haven't put a timeframe on this in my notes this spread to her right leg.' He also explained that on examination (O/E) it was difficult to find any sign of weakness in the right hand 'and hence in my notes you will see a plus or minus right hand'.

From a description of Ms Mini's history coupled with the results of his extensive examination of her, Dr Sher concluded that she had suffered a stroke the previous morning which had gone through various phases and had improved to the point where there were only residual signs, thus indicating

that it had reached its zenith. He did not consider that it would worsen because the signs indicated improvement.

[43] The high court found that Ms Mini was subjected to a detailed cross-examination on her version of her consultation with Dr Sher but did not deviate from her account. It accordingly rejected the history of Ms Mini's medical course, as recorded in Dr Sher's clinical notes, in favour of Ms Mini's version. It found that Dr Sher was remiss in the management of Ms Mini as he had no reason to consider that her condition had stabilised and that her stroke had reached its zenith when he examined her. I consider these findings to be clearly wrong as there was no evidentiary basis for the high court to disbelieve Dr Sher on this aspect. What the high court failed to take into account were the decisive concessions made by Dr Botha that at the time of consulting with Ms Mini: (a) Dr Sher could not have foreseen that her stroke would progress into a serious one and; (b) clinically, there was no way for him to establish the further progression of her stroke (into the future); and (c) Dr Sher was, factually, in a position to diagnose the stroke as having completed. The high court also failed to have regard to Dr Kesler's testimony that it is clinically impossible for a medical practitioner to detect that a stroke has not completed as there are no indicators to that effect.

[44] Moreover, the high court failed to take into account that Ms Mini's version of the events was contradicted by her response to the appellants' request for further particulars, where she unequivocally stated that the manner in which her symptoms had manifested were as 'noted by Dr Sher in his consultation and examination note' − the very document which the high court rejected as containing an untruth. The high court made no mention of this pivotal concession in its judgment. It, furthermore, failed to take into account the note written by Dr A Khan (Dr Khan), an independent practitioner who had treated Ms Mini at the rehabilitation centre and had no relationship with Dr Sher. Dr Khan wrote in the note, which he drafted a few months after Ms Mini's stroke, that although Ms Mini felt some weakness in her right hand

on the day in question (17 April 2007) she nevertheless continued to work. The contents of the note undermine Ms Mini's denial that her symptoms manifested as a feeling of weakness in her right hand on the morning of 17 April 2007. Ms Mini conceded in cross-examination that Dr Khan wrote the note at her request and that she proofread it, and corrected certain typing errors, before obtaining the final version from him. This, the high court simply ignored.

[45] It must be borne in mind that Dr Sher was called upon by Ms Caine (Ms Mini's employer at the time) to give a second opinion. She was a longstanding patient of his and an attorney who specialised in medical negligence matters. As such, the probabilities dictate that he would have been thorough in his examination of Ms Mini, and would have taken detailed clinical notes in order to be able to give Ms Caine proper feedback, which he duly did. Aside from Dr Sher's own testimony of his telephonic discussion with Ms Caine on 18 April 2007 concerning Ms Mini's condition, there is no evidence on record in relation to what Ms Caine had said to him in this regard. Accordingly, the high court's finding that it is improbable that Ms Caine would not have told Dr Sher what had happened to Ms Mini at work the previous day is, in my view, based on mere conjecture as Ms Caine did not testify at the trial. In any event, Ms Caine could never have told Dr Sher what Ms Mini's symptoms were the previous day, as it is clear from Ms Bathurst's testimony that she did not tell Ms Caine what Ms Mini's symptoms were on 17 April 2007 or at what time, on that day, she first experienced them.

[46] The high court also erred in rejecting Dr Sher's explanation: (a) for why the two blood pressure readings recorded in his clinical notes ('199/130' and '181/127' respectively) were not to be trusted, and (b) that he based his decision, in relation to the management of Ms Mini's high blood pressure, on the first recorded reading (185/120) he obtained by using a baumanometer and not on the last two readings, from the digital instrument. The latter finding was inconsistent with Dr Sher's unchallenged evidence that he took about six

readings using a baumanometer and recorded a blood pressure of 185/120, which he underlined in his notes as being the average of the six readings that he took. And it was on this reading that he based the management of Ms Mini's blood pressure. The former finding was also inconsistent with Dr Sher's unchallenged evidence of the reason for taking the last two readings with the cheap and unreliable digital device which had been given to him by a pharmaceutical company. He explained that he used the digital device because, unlike the baumanometer, it had a screen that displayed the blood pressure readings which he could show to Ms Mini in order for her to see the readings for herself. He said that when he took these readings he was not concerned with their accuracy, but:

'My main and only purpose was to show Ms Mini the nature of her underlying cause of her stroke which was her uncontrolled blood pressure.'

He said that the inaccuracy of the readings was illustrated by the difference in the two systolic readings where one was 199 and the other 181. He explained further that:

'There is a difference between the two [readings] and I think that 18 millimetres is not an accurate result and this is an example of why I say the [digital] machine is not very reliable.'

When asked which of the readings he would use in the future management of Ms Mini's condition, he responded:

'I would totally ignore the digital readings, I would use my own mean (average) reading that I took great trouble in establishing.'

In cross-examination he said:

'The readings confirmed she had high blood pressure, in fact the readings were higher than the readings that I had obtained taking them correctly [with a baumanometer] but it's a way of me cross-checking myself that I'm not making a mistake in my assumption. So it's just a bit of backup on my part, it's not something that I would solely use to treat hypertension. I do not give it enough weight to be that reliable.'

It is clear from this that Dr Sher did not use the readings taken with the digital device in the management of Ms Mini's high blood pressure. I, therefore, see

nothing implausible in his explanation for taking the additional readings with the digital device. His explanation is consistent with the expert testimony of Dr Kessler that the inexpensive digital device used by Dr Sher (for the last two readings) was at times not very accurate and should not be relied upon. Thus, having regard to Dr Sher's unchallenged evidence on this aspect, I consider the high court to have erred in characterising Dr Sher's explanation for taking the last two readings as an afterthought to justify his failure to send Ms Mini to the hospital on the basis of the high blood pressure readings.

[47] For these reasons, I consider the high court to have erred in finding that the appellants were negligent for failing to correctly diagnose Ms Mini's condition and for failing to refer her to hospital for specialised observation, assessment and treatment.

Causation

[48] In the ordinary course a finding that the appellants are not negligent would conclude the enquiry into their delictual liability, but here I find it necessary to consider the element of causation simply to illustrate that even if it were found that the appellants were negligent, Ms Mini would still not have succeeded in proving that they were liable, as she had failed to establish a causal link between their failure to refer her to hospital and her pleaded sequelae. That said, it is common cause that Ms Mini's stroke was not caused by any act or omission on the part of the appellants, but that it was the result of long-standing hypertensive disease or poorly controlled hypertension.

[49] The test to be applied to the question of causation is the well-known 'but-for test' as formulated in *International Shipping Co (Pty) v Bentley*.[13] In *ZA v Smith*[14] this court reiterated what the enquiry entails by stating as follows:

[13] *International Shipping Co v Bentley (Pty) Ltd* [1989] ZASCA 138; 1990 (1) SA 680 (A) at 700E-J.
[14] *ZA v Smith & another* [2015] ZASCA 75; 2015 (4) SA 574 (SCA) para 30.

'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. In this regard this court has said on more than one occasion that the application of the "but-for test" is not based on mathematics, pure science or philosophy. It is a matter of common sense, based on the practical way in which the minds of ordinary people work, against the background of everyday-life experiences. In applying this common sense, practical test, a plaintiff therefore has to establish that it is more likely than not that, but for the defendant's wrongful and negligent conduct, his or her harm would not have ensued. The plaintiff is not required to establish the causal link with certainty (see eg *Minister of Safety and Security v Van Duivenboden* 2002 (6) SA 431 (SCA) ([2002] 3 All SA 741; [2002] ZASCA 79) para 25; *Minister of Finance & others v Gore NO* 2007 (1) SA 111 (SCA) ([2007] 1 All SA 309; [2006] ZASCA 98) para 33. See also *Lee v Minister of Correctional Services* 2013 (2) SA 144 (CC) (2013 (2) BCLR 129; [2012] ZACC 30) para 41.)'

The Constitutional Court has recently reaffirmed the continued relevance of this approach to causation.[15] In accordance with the 'but-for test', the high court prefaced it's enquiry into causation by asking whether it could be said that it was more probable than not, that but for the negligence of the appellants, Ms Mini's sequelae would have been reduced had she been referred to hospital for specialised assessment, observation and treatment. Then on the basis of certain concessions made by Dr Chapeikin, it found that it was likely on the evidence, and a sensible retrospective analysis of the situation, that early intervention in Ms Mini's condition by referral to hospital would materially have affected the outcome of her stroke, as it was likely that she would have received care and management, including the immediate administration of anticoagulant agents such as aspirin, prevention of dehydration and her blood pressure would have been controlled and monitored.

[50] With respect to Dr Sher, the high court found that the evidence established that had he referred Ms Mini to hospital, it was likely that she

[15] *Mashongwa v Passenger Rail Agency of South Africa* [2015] ZACC 36; 2016 (3) SA 528 (CC) para 65.

would have received hypertensive emergency treatment and blood pressure control; stabilisation and reduction in a controlled clinical environment, and thus further elevation of her blood pressure would have been prevented. These findings, in my view, are not borne out by the evidence. The finding concerning the need to have Ms Mini submitted to hypertensive emergency treatment (which only impacts on the liability of Dr Sher) fails to take into account the evidence of Dr Kesler that the administration of aggressive hypertension therapy on a stroke patient (in the absence of other life-threatening complications such as aortic dissection, pulmonary oedema, acute heart failure or renal failure) is highly contentious. The high court also failed to have regard to the caution sounded in the National Guidelines[16] which state:

'Do not lower blood pressure

…

Only lower blood pressure in situations of emergency hypertensive complications e.g. aortic dissection or pulmonary oedema. A blood pressure drop of **more than 15%** in 24 hours is likely to extend the infarct'.

Similarly, the South African Hypertension Guideline, 2006,[17] which were also relied on by Ms Mini and canvassed with Dr Kesler, in cross-examination, state that:

'Severe hypertension is common in the setting of acute stroke. There is a debate about whether or not this should be treated, and if so, to what immediate goal BP. . . .

Do not lower BP in acute stroke or use antihypertensive medication unless the BP is SBP>220mmHg or DBP>120mm Hg, as a rapid fall may aggravate cerebral ischemia and worsen the stroke.'

[51] Dr Kesler emphasised, in his testimony, the dangers inherent in lowering the blood pressure of a patient with acute stroke as it might extend the stroke (infarct) and worsen the outcome. He gave compelling reasons why it is acceptable practice that blood pressure of patients in acute stroke should

[16] The National Guidelines at 8.
[17] Y K Seedat et al 'South African Hypertension Guideline 2006' (2006) 96 No 4 (Part 2) *South African Medical Journal* 335 at 353-354.

only be lowered in situations of life threatening emergency, which was not the case with Ms Mini. He furthermore explained that he would in general not treat stroke patients' blood pressure before expiry of a week following acute stroke. Dr Sher, who subscribed to this view, explained how he had, with the passage of time through personal experience and on the basis of trial and error, found that stroke patients deteriorated when their blood pressures were lowered. He had come to the conclusion that rapid lowering of blood pressure was deleterious to the patient. It follows from this that the high court's finding that had Ms Mini been referred to hospital she would have been managed as a case of 'hypertensive emergency' is not supported by the evidence.

[52] In *Medi-Clinic Ltd v Vermeulen*[18] this court, citing its earlier decision in *Michael & another v Linksfield Park Clinic (Pty) Ltd & another*,[19] stated that:

'…[W]hat is required in the evaluation of the experts' evidence is to determine whether and to what extent their opinions are founded on logical reasoning. It is only on that basis that a court is able to determine whether one or two conflicting opinions should be preferred. An opinion expressed without logical foundation can be rejected. But it must be borne in mind that in the medical field it may not be possible to be definitive. Experts may legitimately hold diametrically opposed views and be able to support them by logical reasoning. In that event it is not open to a court simply to express a preference for one rather than the other and on that basis to hold the medical practitioner to have been negligent. Provided a medical practitioner acts in accordance with a reasonable and respectable body of medical opinion, his conduct cannot be condemned as negligent merely because another equally reasonable and respectable body of medical opinion would have acted differently.'

The evidence established that Dr Kesler had practised as a neurologist since 1988. His expertise was in general aspects of neurology, which included management and treatment of stroke patients. As conceded by Dr Botha, the management and treatment of strokes is the specialist field of practice of neurologists and not physicians like himself. The testimony of Dr Botha concerning the aggressive lowering of blood pressure, through the

[18] *Medi-Clinic Ltd v Vermeulen* [2014] ZASCA 150; 2015 (1) SA 241 (SCA) para 5.
[19] *Michael & another v Linksfield Park Clinic (Pty) Ltd & another* [2001] ZASCA 12; 2001 (3) SA 1188 (SCA) paras 37-39.

administration of intravenous anti-hypertension agents, in a patient with an acute stroke was contradictory and at odds with protocols presented to the high court. Dr Botha approached the matter on the basis that Ms Mini was a hypertensive patient as opposed to one who was in the throes of a stuttering or evolving stroke. Dr Botha furthermore paid no attention to the risks involved in aggressively lowering the blood pressure of a patient in the throes of a stroke. Dr Kesler, on the other hand, in accordance with hypertension protocols and best practice, stated that it was extremely dangerous and negligent to administer intravenous hypertensive therapy to a patient in the throes of a stroke.

[53] Dr Kesler, in my view, provided a credible and logical basis for concluding why aggressively reducing the high blood pressure in a stroke setting is contraindicated. Not only had the high court erred in preferring the evidence of Dr Botha over Dr Kesler on this aspect, but it also erred in failing to take into account the evidence of Dr Kesler that he, in any event, agreed with the acute pharmacological/drug management that had been prescribed by the two appellants − in the case of Dr Chapeikin, an ACE inhibitor Prexum and, in the case of Dr Sher, the addition of half a Disprin in view of the level of the blood pressure which Ms Mini presented with at the time. More importantly, the high court simply disregarded Dr Kesler's testimony that this was the line of treatment that Ms Mini would have received had she been referred to hospital as in fact occurred after she was admitted to hospital on 20 April 2007. Accordingly, the high court ought to have rejected the evidence of Dr Botha on this aspect as not being a credible and logical basis for the administration of hypertensive therapy to Ms Mini.

[54] The high court's finding on causality is also contradicted by the evidence concerning the effect of available and acceptable treatment options for acute stroke. It bears repetition that Ms Mini's primary cause of complaint against Dr Chapeikin was that he ought to have referred her to hospital for thrombolytic treatment. The question as to whether Ms Mini was a candidate

for such therapy was the main focus of the evidence presented by Dr Botha, to the extent that Dr Chapeikin was concerned. It became abundantly clear from the established evidence that Ms Mini was not a candidate for such therapy, firstly, due to the mildness of her condition and secondly, due to the fact that she arrived at Dr Chapeikin's practice at a time when the window of opportunity had already expired. The high court, however, dismissed this issue by recording that in the light of its other findings it was not necessary to determine whether or not Ms Mini would have been a candidate for thrombolytic therapy.

[55] The high court, in my view, erred in so doing as the question of the role that thrombolytic therapy plays in the treatment and cure of acute stroke (in the sense of arresting or reversing the effects of stroke as opposed to prophylactic treatment which is aimed at reducing the risk of a secondary event), is central to the issue of causation. The evidence clearly shows that even if Ms Mini had received thrombolytic treatment, which according to the expert testimony was the only remedy of note available to address the consequences of stroke, it would not have made any measurable difference since on Ms Mini's own version, she had only arrived at Dr Chapeikin's practice some three hours and a quarter after the onset of the stroke. It must be borne in mind, in this regard, that thrombolytic treatment can only be administered by specialists in the environment of an intensive care unit after radiological studies have been performed, which would have logically taken time to procure and arrange. In the scenario most favourable to Ms Mini, taking into account factors such as travelling time, and assuming that she would have been attended to and accepted as a patient by a hospital facility forthwith and that scanning facilities would have been readily available, the intravenous administration of thrombolytic agents would probably only have been commenced with in the region of four and a half hours after the onset of her stroke. That means that Ms Mini would, at a stretch, have fallen into what was described in the evidence as the three to four and a half hour window of opportunity.

[56] Dr Kessler testified that thrombolytic therapy is:

'a very, very useful treatment and it's incredibly gratifying to see patients who were, you know, a few minutes ago lying there with a severe complete paralysis of an arm, unable to speak and come back half an hour later and see them enormously better. So it's really the first thing that we've ever had in the treatment of stroke that has been useful. However, in fact, the gains are overall fairly modest. Although statistically significant, they are not – it's not as if everybody who receives it will do well and return to normal function.'

Dr Botha, who endeavoured to convince the trial court that Dr Chapeikin was remiss in not referring Ms Mini for thrombolytic treatment was forced to concede that the results of published clinical trials proved that thrombolytic therapy, although being the only effective cure for stroke available in medical science, is anything but a 'miracle cure'. That the results are extremely modest, is borne out by his evidence, where he confirmed the results of a well-known and comprehensive trial (ECASS 3 – where 821 patients were randomised to thrombolytic treatment or placebo) which had been performed to test the benefit of intravenous thrombolytic therapy in the three to four and a half hour window:

'The number needed to treat for one more patient to have a normal or near normal outcome was 14 and the number needed to treat 1 more patient to have an improved outcome was 8. Overall for every 100 patients treated within the 3 to 4.5 hour window, 16 had a better outcome as a result and 3 had a worse outcome.'[20]

Dr Botha was driven to concede that the results of the ECASS 3 trial showed that the proportion of patients with minimal or no disability increased from 45 per cent with placebo to 52 per cent with thrombolytic therapy − a mere 7 per cent absolute improvement.[21]The finding that specialised assessment and supervised care in itself would have made a material difference to the outcome of Ms Mini, to the extent that she, in all likelihood, would not have suffered the sequelae as pleaded (or even, on the test that the high court applied, that she would have been materially better off) is thus untenable.

[20] J L Saver MD, FAHA, FAAN et al 'Thrombolytic Therapy in Stroke, Ischemic Stroke and Neurologic Deficits' (2012) *Medscape*.
[21] Above at 2.

[57] It is a matter of common sense that if the best available treatment would have rendered the low success rate as illustrated above, the chances are overwhelmingly stacked against the assumption that assessment and supervised care (and even controlled lowering of blood pressure) would have made any appreciable difference (taking into account that 45 per cent of the patients on placebo ended up with minimal or no disability in any event).

[58] In concluding that upon referral to hospital by Dr Sher, hypertensive emergency treatment and blood pressure control would probably have prevented further deterioration of Ms Mini's condition, the high court failed to have due regard to the evidence of Dr Botha regarding the probable outcome of hypertensive treatment on patients with acute stroke. Even though Dr Botha's opinion was premised on the assumption that, after seeing Dr Sher, there was a 'further deterioration' because of Ms Mini's blood pressure, his evidence failed to demonstrate that there was a likelihood of a better outcome. In this regard, he was pertinently asked by the court how the outcome for Ms Mini would have been affected if Dr Sher had referred her to a hospital with high care or an intensive care unit. He replied by saying that he had no simple response other than to say it was desirable that blood pressures at that level should be treated in a regulated environment. When the court asked: 'What is that better outcome?' He responded:

'Also difficult. It's a dilemma . . . because I think . . . if we assume that there was a further deterioration because of the blood pressure, some of the literature says that strokes can extend or further progress with about 20 to 40%. So it's a wide range. So my understanding would be, there would be about a 20 to 40% better outcome, if we can tie up or link up the secondary deterioration to the very high blood pressure. That would have been the outcome according to my interpretation.'

That there was no evidence linking Ms Mini's secondary deterioration to her high blood pressure and that Dr Botha was 'basically speculating' is plain from the following concession which he made, when again asked to clarify whether her deterioration would have been avoided had she been referred to hospital:

'… I cannot say it in a guaranteed manner, because I don't think there are studies in a similar population of patients ever done. All I was saying from the beginning, is that

it is standard practice for a doctor . . . when faced with blood pressure readings of that magnitude, not to send the patient home, to get that patient in an environment where they can be monitored and safely treated by whichever means. But I cannot give you a figure, or a guarantee that nothing could have happened. She may have been lucky, and she was to a certain extent lucky, in the sense that nothing much was done, virtually nothing was done and her blood pressure did come down.'

The testimony of Dr Botha, on which Ms Mini's case rested, cannot serve as a basis for finding that there was a likelihood of a perfect (or even a better) outcome. Accordingly, even had there been evidence justifying a finding that either Dr Chapeikin or Dr Sher had been negligent, there was no evidence that this had any causative effect on Ms Mini's condition. On that ground also the appeal had to succeed.

Separation of Issues

[59] Ms Mini was required to show on a balance of probabilities that the outcome for her would have been different had either of the two appellants referred her to hospital. That she had not done so, is due in part to the separation of the quantum from the merits that was agreed between the parties and made an order of court. Since the record of the proceedings in the high court does not contain an order, it remains unclear on what terms the separation of issues was ordered. All we have is the pre-trial minute which records that the trial would proceed in respect of issues relating to the liability of the appellants for damages allegedly suffered by Ms Mini 'ie on issues relating to wrongfulness, negligence and causation' and that issues relating to calculation of damages must stand over.

[60] This type of separation has been criticised by this court in *Denel (Edms) Bpk v Vorster*[22] where it stated as follows:

'. . . . Rule 33(4) of the Uniform Rules − which entitles a Court to try issues separately in appropriate circumstances − is aimed at facilitating the convenient and expeditious disposal of litigation. It should not be assumed that that result is always achieved by

[22] *Denel (Edms) Bpk v Vorster* [2004] ZASCA 4; 2004 (4) SA 481 (SCA) para 3.

separating the issues. In many cases, once properly considered, the issues will be found to be inextricably linked, even though, at first sight, they might appear to be discrete. And even where the issues are discrete, the expeditious disposal of the litigation is often best served by ventilating all the issues at one hearing, particularly where there is more than one issue that might be readily dispositive of the matter. It is only after careful thought has been given to the anticipated course of the litigation as a whole that it will be possible properly to determine whether it is convenient to try an issue separately. But, where the trial Court is satisfied that it is proper to make such an order - and, in all cases, it must be so satisfied before it does so - it is the duty of that Court to ensure that the issues to be tried are clearly circumscribed in its order so as to avoid confusion. The ambit of terms like the "merits" and the "*quantum*" is often thought by all the parties to be self-evident at the outset of a trial, but, in my experience, it is only in the simplest of cases that the initial *consensus* survives. Both when making rulings in terms of Rule 33(4) and when issuing its orders, a trial Court should ensure that the issues are circumscribed with clarity and precision . . . .'

[61] This criticism is well founded and applies equally to the approach adopted by the high court in this matter. This is illustrated by the terms of the order made by the high court where it finds the appellants liable, but fails to identify the consequences for which they are each liable. Differently put, the court failed to deal with the extent to which the alleged negligent conduct of each of the appellants contributed to Ms Mini's pleaded sequelae or deterioration. As indicated, Ms Mini's complaint is not that the appellants caused her stroke, but rather that they failed to diagnose and treat her condition correctly and refer her to hospital for specialist observation, assessment and treatment. In view of the complaint, it was not sufficient for Ms Mini to merely prove that her condition deteriorated as a result of their failure on the grounds alleged, but it was incumbent upon her to demonstrate that diagnosing and treating the disease differently would have prevented the pleaded sequelae from setting in. Ms Mini alleges in her particulars of claim that had she been referred to hospital, the treatment that would have been administered would have included providing support and care; contacting a specialist; diagnosing the nature of her stroke; performing an angiogram;

embolising the blood vessel if a leak is identified and administering appropriate medication. The sequelae resulting from the purported negligence of the appellants is listed in paragraph 15 of her particulars of claim. To reiterate, the critical allegations are that she suffered from deteriorating symptoms of weakness on the right side of her body; that she is unable to walk without assistance and confined to a wheelchair; that she suffers from hemiplegia; that she suffers from attention and concentration difficulties; and that she suffers from limitations in abstract and complex reasoning, problem solving and information processing. Whilst most of these sequelae appear to be substantiated by the evidence of Dr Hemp, the clinical psychologist who testified in support of Ms Mini's case, no attempt was made to link those sequelae to any absence of treatment that she suffered. Ms Mini, furthermore, failed to lead evidence to prove that the consequences of the appellants' alleged negligence were the pleaded sequelae. Nor was there any evidence concerning the extent to which, if any, her sequelae would have improved if she was given the appropriate treatment.

[62] Ms Mini has led no evidence which vaguely suggests that because of the appellants' failure to refer her to hospital she was denied treatment, which if made available to her, would have prevented those sequelae. Ms Mini furthermore led no evidence to demonstrate that but for the negligence of the appellants, she would have suffered no impairment at all. Although touched upon by Dr Botha in his expert summary, none of this was substantiated in his expert testimony. There was accordingly no evidential basis for the high court to hold the appellants liable for Ms Mini's impairment.

[63] However, in the application for leave to appeal, the high court maintained that that question relates to quantum and falls to be determined in that phase of the proceedings. The effect of that finding is that the damages recoverable would be proportional to the cogency of proof of causation. This approach is wrong. Supposing the appellants are unsuccessful on appeal and that the matter proceeds on the question of quantum, then Ms Mini would

have to present evidence establishing the extent to which she would have been less impaired had the appellants not acted negligently. Quite apart from the fact that that evidence will not relate to calculation of damages but rather go to the root of causation, this would mean that the parties would have to revisit the very matters on which they have already led evidence, despite the fact that Ms Mini presented no evidence, in the first place, to discharge the onus relating to how different her outcome would have been had she been referred to hospital by one or both of the appellants. This is precisely the kind of 'confusion' on separation that this court sought to caution against in *Denel*.[23]

[64] In a last attempt at overcoming this evidential impediment, Ms Mini sought support in the finding of the Constitutional Court in *Lee v Minister of Correctional Services,*[24] that even if the substitution approach was found to be suited to the enquiry into factual causation in a particular case, a plaintiff would not be required to provide evidence to prove what the non-negligent lawful conduct of the defendant should have been, but rather 'what is required is postulating hypothetical lawful, non-negligent conduct, not actual proof of that conduct'.[25]

[65] Ms Mini's reliance on *Lee* is misplaced, since as recently stated by the Constitutional Court in *Mashongwa v Passenger Rail Agency of South Africa*:[26]

'*Lee* never sought to replace the pre-existing approach to factual causation. It adopted an approach to causation premised on the flexibility that has always been recognised in the traditional approach. It is particularly apt where the harm ensued is closely connected to an omission of a defendant that carries the duty to prevent the harm. Regard being had to all the facts, the question is whether the harm would nevertheless have ensued, even if the omission had not occurred. However, where

[23] *Denel*, para 3.
[24] *Lee v Minister of Correctional Services* [2012] ZASCA 30; 2013 (2) SA 144 (CC).
[25] *Lee*, para 56.
[26] *Mashongwa v Passenger Rail Agency of South Africa* [2015] ZACC 36; 2016 (3) SA 528 (CC) para 65.

the traditional but-for test is adequate to establish a causal link it may not be necessary, as in the present, to resort to the *Lee* test.'

This is precisely the difficulty which Ms Mini faces in this appeal, because even if the omission (the appellants' failure to refer her to hospital) had not occurred, there is simply no way of saying that she would have been admitted to hospital, that she would have received treatment that was any different from what Drs Sher and Chapeikin administered, and that she would have been administered with emergency hypertensive therapy or thrombolytic therapy. Even, on the most benevolent reading of *Lee* this is an intractable case in insofar as causation is concerned because there is a complete absence of evidence which demonstrates that referring Ms Mini to hospital would in fact have had any beneficial effects whatsoever. For these reasons the appeal must succeed.

[66] I make the following order:

1 The appeal is upheld with costs.

2 The order of the high court is set aside and replaced with the following order:

'The plaintiff's claim is dismissed with costs.'

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F Kathree-Setiloane
Acting Judge of Appeal

APPEARANCES:

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