THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

JUDGMENT

Reportable

Case no: 1010/2018

In the matter between

FELICIA MEYERS **APPELLANT**

and

MEMBER OF THE EXECUTIVE COUNCIL, DEPARTMENT OF HEALTH, EASTERN CAPE **RESPONDENT**

Neutral citation: *Meyers v MEC, Department of Health, Eastern Cape* (1010/2018) [2020] ZASCA 3 (4 March 2020)

Coram: Ponnan, Plasket and Mbatha JJA and Koen and Dolamo AJJA

Heard: 8 November 2019

Delivered: 4 March 2020

Summary: Law of delict – negligence – whether plaintiff discharged onus of establishing negligence on part of surgeon who caused two small injuries to plaintiff's bile duct during surgery to remove gall bladder.

ORDER

On appeal from: Eastern Cape Division of the High Court, Grahamstown (Makaula, Bloem and Brooks JJ sitting as court of appeal):

(1) The appeal is upheld with costs.

(2) The order of the full court is set aside and substituted with the following:

'(a) The appeal succeeds with costs.

(b) The order of the court below is set aside and substituted with the following:

"(i) The defendant is held liable for the damages, if any, that the plaintiff has suffered in consequence of the injury inflicted by Dr Vogel, namely two perforations to her common bile duct, whilst performing a laparoscopic cholecystectomy at the Livingstone Hospital on 2 March 2010;

(ii) The defendant is ordered to pay the plaintiff's costs occasioned by this hearing, such costs to include the qualifying fees of Dr BH Pienaar;

(iii) The matter is postponed sine die."'

JUDGMENT

Plasket JA (Koen AJA concurring):

[1] More than 100 years ago, in *Mitchell v Dixon*,[1] this court held in relation to the standard of care expected of medical practitioners that a 'medical practitioner is not expected to bring to bear upon the case entrusted to him the highest possible degree

[1] *Mitchell v Dixon* 1914 AD 519 at 525.

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 appeal concerns whether a surgeon, when performing an operation, fell short of that standard.

[2] On 2 March 2010, the appellant, Ms Felicia Meyers, was operated on in the Livingstone Hospital, Port Elizabeth by Dr Richard Vogel, a surgeon employed by the Department of Health in the Eastern Cape provincial government. Her gall bladder was removed by means of a minimal access surgical procedure known as a laparoscopic cholecystectomy. It was common cause that during this procedure two small injuries, each about two millimetres in diameter, were caused to the common bile duct, with the result that bile leaked into her stomach after the operation, causing infection. This required surgery, also performed by Dr Vogel, in order to remedy the situation.

[3] Ms Meyers instituted a claim for damages in the Eastern Cape Division of the High Court, Port Elizabeth, against the MEC for Health as nominal defendant. In her particulars of claim she alleged that the injuries to her bile duct that occurred during the first operation were caused by the negligence of Dr Vogel or members of his team in one of four ways, namely, by Dr Vogel failing to convert the procedure from a laparoscopic cholecystectomy to an open cholecystectomy; by him failing to perform the procedure with the care, diligence and skill required of a reasonable surgeon; by him failing to ensure that Ms Meyers' bile duct was not cut during the procedure; and by his failure to ensure that the electro-cautery device used in the procedure was properly insulated and therefore fit for use during the procedure. In the plea, the MEC denied these allegations of negligence.

[4] Revelas J dismissed the action with costs, on the basis that Ms Meyers had not discharged the onus on her to establish that the injuries were the result of negligence on the part of Dr Vogel or one of his team. With the leave of Revelas J, Ms Meyers appealed to a full court of the Eastern Cape Division of the High Court, Grahamstown. Brooks J, with the concurrence of Makaula and Bloem JJ, dismissed the appeal with costs. Special leave to appeal was, however, granted by this court.

The trial and the full court appeal

[5] On the central issue involved, namely whether Dr Vogel or any member of his team[2] had been negligent in causing the injuries, one expert witness testified on behalf of Ms Meyers. He was Dr B H Pienaar. Professor P C Bornman was called as an expert witness on behalf of the MEC. In addition, Dr Vogel was qualified as an expert, although he obviously had an interest in the matter.

[6] Dr Pienaar and Prof Bornman compiled a joint minute in which they recorded their agreements and disagreements in respect of the injuries. It read:

'1. We agree that the injury to the bile duct occurred during the laparoscopic cholecystectomy.

2. We agree that the injury was most likely caused by Dr Vogel and/or other employees at the time of the laparoscopic cholecystectomy on 2 March 2010.

3. We agree that there were two defects in the common bile duct/common hepatic duct. (See second operation note dated 11 March 2010.)

4. We agree that the injury occurred during the performance of the procedure either due to a mechanical laceration (instrument) or electrothermal injury.

5. With respect to whether the nature of this injury in this matter can be construed as the operation being performed negligently we disagree in the following:

5.1 Pienaar is of the opinion that the injury in this matter was caused in a negligent manner.

5.2 Bornman disagrees that the operation was performed negligently.'

[7] In essence, Dr Pienaar was of the view that the mere fact that the injuries were caused, irrespective of whether they were caused by the surgeon or a defective instrument, raised an inference of negligence. Prof Bornman took a different view. He said that if a major injury had been caused, such as the severing of the bile duct rather than the cystic duct, negligence could be inferred because the surgeon would have failed to properly identify the anatomical structures prior to dissecting. The same inference could not, however, be drawn when a minor injury, such as those suffered by Ms Meyers, had been inflicted. In the first scenario, the surgeon would not have acted in compliance with what both expert witnesses referred to as the ten commandments of gallbladder surgery.

---

[2] The evidence never mentioned any member of Dr Vogel's team or implicated any of them in any conduct that could have caused the injuries.

[8] Revelas J found that the evidence of Dr Bornman was to be preferred over that of Dr Pienaar. She reasoned that Prof Bornman's opinions were 'more in keeping with the test for negligence in matters where medical negligence is considered' and that he 'appeared to be a very objective expert'.[3] She concluded that he 'adopted a logical and balanced approach to the matter and had directed his mind to the question of comparative "risks and benefits and reached a defensible conclusion"'.[4] Dr Pienaar's approach, on the other hand, left 'no room for human error', set an 'unreasonably high standard for surgeons' and was 'dogmatic and unrealistic'.[5]

[9] Revelas J found that the error that had caused the injuries 'seems to be one that any reasonably competent practitioner in Dr Vogel's field could also have made'.[6] She concluded that no negligent conduct had been established and she consequently dismissed the claim with costs.

[10] The full court found that Revelas J had correctly evaluated the evidence of Dr Vogel against the backdrop of the expert evidence of Dr Pienaar and Prof Bornman, and that her conclusion that no negligence had been established was also correct.[7] Its reasoning, in arriving at this conclusion, was the following:[8]

'Significantly, there is no direct evidence which demonstrated that the surgeon offended one of the "ten commandments" by not identifying the anatomy. Nor is there any direct evidence to demonstrate that he offended the "ten commandments" by dissecting in the Calot's triangle with hook diathermy or, indeed with any other form of sharp instrument. Any attempt to draw an inference from the evidence that he offended either or both "commandments" is fundamentally flawed by the speculative nature of the postulations as to what might have caused the perforations and by the direct, unchallenged evidence given by the surgeon of the methodology he employed during the surgical procedure. That evidence reveals no factual basis for a finding that the surgeon offended one or more of the "ten commandments". Accordingly, no logical basis or reasoning is identifiable to support the view expressed by the appellant's expert that the fact that the surgeon must have made contact with the common

[3] Trial court's judgment para 41.
[4] Trial court's judgment para 42.
[5] Trial court's judgment paras 39-40.
[6] Trial court's judgment para 40.
[7] Full court judgment para 27.
[8] Full court judgment para 26.

bile duct in order to cause the perforations unequivocally demonstrates negligence on his part.'

The evidence

[11] While the evidence of Dr Pienaar and Prof Bornman was extremely useful, and interesting, for purposes of detailing how laparoscopic cholecystectomies are performed, the physiology involved and the risks attached, Dr Vogel's evidence is of prime importance as he conducted the operation in question. Prior to turning to his evidence, it is necessary first to say something of the operation concerned.

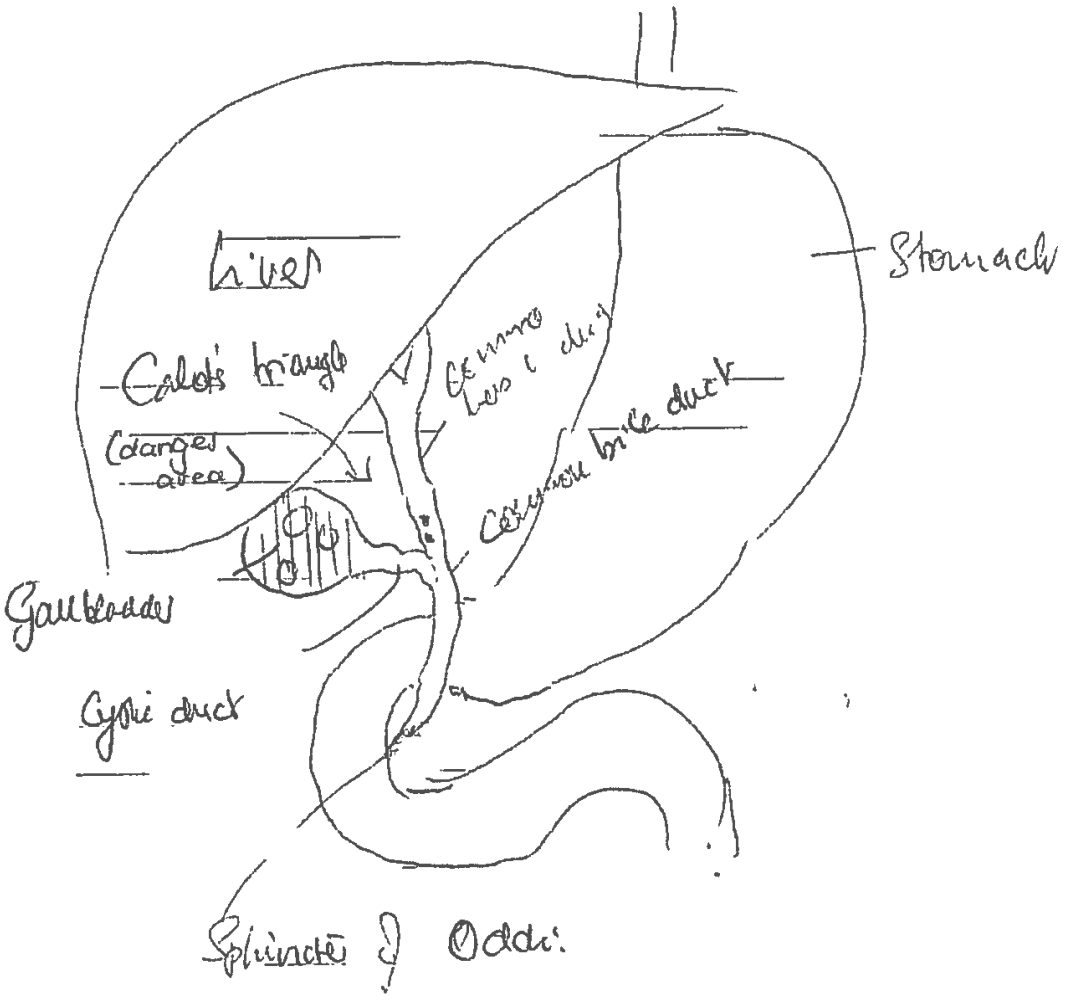
[12] A surgeon may either operate to remove a gallbladder laparoscopically or by means of an open procedure. The laparoscopic procedure is arguably less invasive than the open procedure. In some cases, however, surgeons have little choice but to perform the open procedure, or to convert to it if they experience difficulties during the laparoscopic procedure. Indeed, in the second operation, Dr Vogel converted to an open procedure because of the inflamed and infected area in which he had to work.

[13] In the laparoscopic procedure, surgeons insert four ports, or tubes, into the patient's abdomen through which the video camera that provides visualisation and the instruments are inserted and utilised. The images from the camera are magnified 16 to 18 times when they are displayed on a screen. This enables the surgeon to identify anatomical structures and to see what he or she is doing. One drawback of the system is that the surgeon has to work from two-dimensional images in a three-dimensional environment.

[14] In order to remove the gallbladder, the surgeon is required to 'open up' the area around it by teasing away adhesions or fatty tissue that may be present. This is to enable him or her to identify the anatomical structures of relevance. He or she must sever the cystic duct and the cystic artery and then seal them with clips. The gallbladder is then free to be removed, but it must first be freed from the liverbed. This is done by means of electro-diathermy. It is then extracted from the patient's abdomen through one of the ports.

[15] The area in which the surgeon works is a small confined area. The gallbladder lies against the liver. It is connected to the bile duct by the cystic duct. The area between the gallbladder and cystic duct, the liver and the bile duct form, roughly, a triangular area known as Calot's triangle. The cystic artery which, like the cystic duct, must be severed in order to remove the gallbladder, runs in Calot's triangle. During the trial, Prof Bornman drew a sketch of the area and marked Calot's triangle. In brackets he added the words 'danger area'. His sketch is reproduced below.

SCA CASE NR: 1010/18 [ECG CASE NR: CA144/17]
EXHIBIT C: HAND DRAWING OF THE LIVER (best available copy)



[16] Dr Pienaar was asked about the dimensions of the anatomical structures concerned. He said that the diameter of the bile duct varies between four and eight millimetres and that the cystic duct 'can be very short, 3, 4 or 5 mms but it can be as

long as two or three centimetres'. He added that '[o]ne works in a very confined space'. As far as the distance between the bile duct and the gallbladder is concerned, he said: 'Oh that would be two, three centimetres; anything between one and three centimetres. Tissue at that point is covered by the peritoneal layer. And once that is opened up, the whole area or space will open up. If however there is inflammation and one cannot identify the structures, that's where the difficulty comes in.'

[17] Calot's triangle was described as a danger area because it is in this zone that matters can go wrong, particularly if a surgeon does not stick to the ten commandments of gallbladder surgery. For instance, if a surgeon does not identify the structures properly, he or she may dissect the bile duct instead of the cystic duct. Damage to the bile duct was described by Dr Pienaar as the 'bane of laparoscopic cholecystectomy'. Such injuries occur 'with some regularity' but their extent and nature vary from the minor to the extremely serious. They are part and parcel of the risks inherent in the procedure, whether laparoscopic or open. Prof Bornman testified that the chance of bile duct injuries that occur during the procedure varies between 0.5 percent and 2 percent. This evidence was not disputed.

[18] While Dr Pienaar described Calot's triangle as a no-go area, it is more accurate to call it a danger area, as Prof Bornman did. The reason for this is that the dissection of both the cystic duct and cystic artery take place here and, apart from that, it is often necessary for surgeons to work in this area in order to tease off adhesions before proceeding further. Prof Bornman pointed out that there are times when a surgeon has to clear the area fairly close to the bile duct before he or she finds a suitable place on the cystic duct to divide and clip it.

[19] Because of the ever-present risk of damage to the bile duct – and the severe results that ensue if any damage is done – the ten commandments direct that no sharp instruments or electro-diathermy should be used in Calot's triangle. Instead, as has been noted, surgeons use blunt instruments in this area to tease off adhesions. The purpose of this is to clear the area to ensure that the surgeon is able to properly identify the cystic duct and the cystic artery, before dividing and clipping them.

[20] With this explanation of the procedure, which I have drawn from the evidence of Dr Pienaar, Prof Bornman and Dr Vogel, I now turn to the evidence of Dr Vogel concerning the procedures he performed on Ms Meyers.

[21] Dr Vogel was, at the time that he removed Ms Meyers' gallbladder, an experienced surgeon. He testified that he performed about 40 to 50 laparoscopic cholecystectomies a year and that he had done so for ten years prior to Ms Meyers' surgery. He had, he estimated, performed between 400 and 500 such procedures.

[22] Given the number of operations he performed, he was not able to remember the operation on Ms Meyers specifically. He was, however, guided in his evidence by the operation notes that were made at the time. He proceeded to testify as best he could as to how the operation was performed.

[23] The notes indicate that he had first had to remove adhesions from the gallbladder. He explained:

'My note states that I've removed adhesions from the gallbladder. Now I think Prof. Bornman explained what adhesions were. When you get inflammation of the gallbladder due to acute cholecystitis the mentum, a fatty layer in the abdomen often is stuck to the gallbladder and we often have to remove that and other structures like the colon can be pulled up, the duodenum can be close to the gallbladder. And that all has to be divided with a blunt grasper. It sometimes can be a simple procedure where the tissue comes off very easily; and on occasions it can be quite a difficult dissection. I haven't made any note here that it was a difficult dissection.'

[24] He proceeded to state that the adhesions were 'divided from the fundus downwards' and then, 'once you have exposure of the lower aspect which is called Hartman's Pouch', it is moved away from the bile duct before 'one starts dissection in Calot's triangle' using a blunt instrument to 'tease the tissue off that area to expose the cystic duct and artery'.

[25] He stressed that electro-diathermy is not used in Calot's triangle and stated:

'The importance of dissection in Calot's triangle is that you dissect the cystic duct on the gallbladder side of the cystic duct and keep away from the common hepatic duct, the common bile duct area. But you don't clearly see . . . there's often a lot of fatty tissue, fibrosis, so you

don't clearly see but you always make a point of knowing where the common bile duct is. And that is one of the vital things that you dissect those two structures, the cystic duct and the cystic artery, and you clearly see them entering the gallbladder.'

[26] Having dissected the cystic duct and the cystic artery, he proceeded to place clips on them. When he had done so, he proceeded with hook diathermy to remove the gallbladder from the liverbed or fossa. The gallbladder was then extracted. He inspected it, opened it and removed three large stones, which he later presented to Ms Meyers.

[27] When he was asked whether anything out of the ordinary occurred during the operation, he said that the only noteworthy aspect that was mentioned in the operation notes was that adhesions to the gallbladder were divided. He explained that adhesions arose as a result of inflammation. Once the inflammation had settled, scar tissue formed around Calot's triangle. Dealing with adhesions could have the effect of prolonging the operation and making it more difficult.

[28] In this case, once he had completed the operation, he had not observed any indication of a bile leak or evidence of the small injuries he found in the repair operation. It was possible, he said, that the bile had only begun to leak later, but he was not in a position to say that this was indeed the case.

[29] He then turned to the second operation. He confirmed that he found two injuries that he estimated to be two millimetres in diameter. They were on the bile duct above the clips that he had inserted on the cystic duct. He said of these injuries that he had never seen anything like this before and neither had his colleagues that he spoke to. In his operation notes, he queried whether the cause of the injuries was electro-diathermy. (This was one of the possible causes identified by the experts in their joint minute, and I shall deal with it presently.) The other possibility that he postulated was that the injuries had occurred while he had been dissecting with a blunt instrument in Calot's triangle close to the bile duct.

[30] Finally, in Dr Vogel's evidence in chief, he was asked about the so-called ten commandments of gallbladder surgery that Dr Pienaar and Prof Bornman had alluded

to. He was asked by Revelas J to go through the full list as the experts had tended to focus on only one – to identify the anatomical structures properly. He stated that the first commandment was to ensure proper access to the patient's abdomen. He stressed the importance of using four ports for the procedure in order to 'get maximum exposure in Calot's triangle'. It was important to use a 30 degree laparoscope 'to get an optimum view over Calot's triangle with the critical view of safety'. For the rest, he listed the remaining commandments as follows:

'To do your dissection on the gallbladder side of the cystic duct, dissect on the gallbladder side of the cystic duct and not on the common bile duct side of the cystic duct. Do not use electro-cautery in that critical view of safety. Do not cut any duct or structure until you clearly see two structures clearly entering the gallbladder and identify it as the cystic duct and the cystic artery which we did clearly in this case. Prof Bornman went through the critical view of safety to see those structures against the liver. The other thing he mentioned was to dissect above Rouviere's sulcus so that you're not in the danger zone as such.'

[31] When he was asked whether he applied the ten commandments in the operation in question he answered simply that this is 'standard for any laparoscopic cholecystectomy operation'.

[32] I turn now to Dr Vogel's cross-examination. I shall first deal with his evidence concerning electro-diathermy as a possible cause of the injuries, and then the possibility of mechanically inflicted injuries. This evidence must be seen in the context of Dr Vogel not being able to say definitively what caused the injuries, because he was unaware of them until he found them during the second operation.

[33] Dr Pienaar's evidence concerning the electro-diathermic cause of the injuries was that, in the first place, the instrument must have touched the bile duct to cause the injuries. Dr Vogel disagreed. He referred to what he termed the pedicle effect in terms of which current may be conducted by tissue to a site other than that where contact is made with the instrument. He conceded that this explanation was speculative but was only tendered to explain that direct contact between the electro-diathermy instrument and the bile duct did not necessarily have to have occurred.

[34] He was also cross-examined on the second aspect of the electro-diathermic cause of the injuries, namely a malfunction of the instrument. His evidence was that if the instrument had been faulty, he would have noticed. He said that a sister inspected it for breaks in the insulation. When it was handed to him, he would have seen any defect. And it would not have functioned properly if there had been a defect, and he would have noticed that.

[35] One of the ten commandments was that electro-diathermy should not be used in Calot's triangle. It was put to Dr Vogel that if electro-diathermy had been used in Calot's triangle, the injuries that Ms Meyers suffered were exactly what one would expect. Dr Vogel's answer was that, had he used electro-diathermy in Calot's triangle, which he had not, that certainly would have been a possibility. As a highly skilled surgeon, he knew not to use electro-diathermy in the so-called danger area.

[36] When it was put to him that the probabilities were that he used electro-diathermy in the critical view of safety, and 'erroneously, accidentally made contact with the common bile duct', he immediately referred the court to the operation notes where it was recorded that 'diathermy was used on a hook to [loosen] the gallbladder from its fossa'. Revelas J asked him to repeat his evidence. He clarified that he had said that there was no evidence that 'diathermy was used to dissect out the Calot's triangle, that critical area between the gallbladder, cystic duct and common hepatic duct'. He then stressed:

'There's no evidence in my op note that diathermy was used there and its clearly stated that what we do in every operation we use diathermy only to remove the gallbladder from the bed of the liver where it is safe to use after you have cut the cystic duct and the cystic artery which my sequence of events in my op note clearly state.'

[37] Dr Vogel then repeated, when it was put to him that the explanation for the injuries lay outside the operation notes, that 'I clearly stated that hook diathermy was only used which is our standard procedure in all 400 cases that I've done, we used diathermy to remove the gallbladder from the fossa'. Prof Bornman testified that this was the appropriate time to use electro-diathermy and it ought to have been safe to do so.

[38] The second possible cause of the injuries was mechanical. It was put to Dr Vogel that, as a result of adhesions being present, he had performed the operation under circumstances of poor visibility and in this process caused the injuries. His answer was that adhesions do not necessarily cause poor visualisation but that he agreed with the statement that adhesions in Calot's triangle could make dissection more difficult. When asked by Revelas J whether adhesions could affect the proper identification of anatomical structures he conceded that adhesions could prevent 'a good visual picture of the actual Calot's triangle', but this depended on exactly where the adhesions were. He explained how this problem was dealt with:

'In the location of that critical view and that would happen in a severely inflamed acute cholecystitis. And I think Prof. Bornman indicated our specific technique that we trained with when you have soft inflamed adhesions like that, and he trained us to use a blunt sucker to gently tease the adhesions off that particular or critical view. But these adhesions I don't recollect that . . . you know they could have been high up on the fundus of the gallbladder coming down which we dissected off.'

[39] The second aspect of the 'mechanical' explanation is that Dr Vogel was dissecting in the danger area. Dr Pienaar's evidence was to the effect that the only explanation for the injuries was negligence. Dr Bornman said that if a surgeon encountered inflammation and adhesions in Calot's triangle, he or she would have to dissect there in order to be able to identify the cystic duct and the cystic artery and would of necessity have to dissect close to the bile duct. In these circumstances, the risk of injuries to the bile duct would increase, but that risk must be taken in order to avoid mis-identification of the relevant anatomical structures, with the extreme consequences which that would entail. How much dissection in Calot's triangle is necessary in order to sufficiently make the necessary identifications is a matter of judgment. Dr Bornman pointed to the fact that the clips on the stump of the cystic duct were close to the bile duct. This indicates that Dr Vogel probably had to tease off adhesions close to the bile duct in order to be able to identify the cystic duct and the cystic artery. In that teasing process, with the blunt instrument, a surgeon could 'inadvertently injure the [bile] duct' bearing in mind that the bile duct 'is a very thin structure'.

[40] Although Dr Pienaar took the view that any injury caused to the bile duct (or indeed other anatomical structures) during a laparoscopic cholecystectomy was due to negligence, and that the mere fact of the injury was proof of negligence, his evidence was, in important respects, in line with that of Dr Vogel and Prof Bornman. He conceded, for instance, that a surgeon would be working in a small area, that he or she may have to work close to the bile duct and that sometimes, of necessity, a surgeon would have to dissect in or close to Calot's triangle. He accepted that whenever a gall bladder is removed, there is always 'a real risk to injury of the bile duct'.

[41] He described the injuries in this case as being 'extremely small' defects and 'minute'. Their cause was speculative. He was of the view that, but for these two defects, Dr Vogel's work had been correctly performed. Prof Bornman made the point that Dr Vogel had identified all of the structures and did not divide what should not have been divided. In these circumstances, to hold him liable for 'a small defect like this' was, in his view, harsh.

[42] Prof Bornman drew a distinction between minor injuries – such as the injuries in this case – and major injuries – such as when a surgeon divides the bile duct instead of the cystic duct. He said that if a surgeon caused a major injury, that would in and of itself be indicative of the surgeon having failed to apply the ten commandments: he or she would have divided a structure before having properly identified it. The need to properly identify the cystic duct and the cystic artery 'means that there has to be a degree of dissection in the danger zone' of Calot's triangle.

[43] When he was asked whether in his opinion, and based on the available records, Dr Vogel had complied with the ten commandments, he said:

'Well that is obviously a difficult question to answer. But why I believe that he has followed the rules is the fact that the cystic duct was divided and not the bile duct. And in order for him to have divided the cystic duct he must have clearly identified the structures. So in my opinion he has done a sufficient number of dissections and the rules that I have explained now to ensure that he does not injure the main bile duct but he correctly divides the cystic duct. In addition to that there was no evidence of any vascular injuries because often a sign of major vascular injury . . .'

[44] He disagreed with Dr Pienaar that any injury caused to the bile duct must of necessity have been caused by negligence on the part of the surgeon. He said that in a matter like this, 'to enable [one] to see the critical view of safety you need to do enough dissection in this triangle, the Calot's triangle' and that 'you have to dissect out the critical Calot's triangle to be able to identify your cystic duct particularly and also the cystic artery which also runs in that triangle'. A surgeon may have no choice but to dissect in Calot's triangle and his or her view of the triangle may be 'obliterated by inflammation, adhesions and so on'. He also made the point that the triangle is a very small area.

[45] When Dr Bornman was asked whether, in his opinion, an injury of the size involved in this case would necessarily have been brought about by negligence, he said:

'No, not necessarily as I've explained that that . . . unless you do that dissection you're going to stand a bigger chance of causing major injury in that situation. You have to dissect out that critical view of safety and by doing so you're going from time to time, depending on anatomy, the sort cystic duct, maybe a much smaller triangle that you're working, inevitably at some stage you're going to be close to the bile duct. Obviously you don't want to be there but you cannot actually tell until you've reached a certain stage of the dissection. And as long as you remain vigilant and try to use your anatomical landmarks, which can be difficult in an inflamed gallbladder, there is an element of risk, albeit small but there is an element of risk.'

[46] For the sake of completeness, it is necessary to deal, albeit briefly, with the allegation that Dr Vogel's negligence lay in his failure to convert from a laparoscopic procedure to an open procedure. The basis for this ground appears to have been Dr Pienaar's opinion that Dr Vogel had taken an unduly long time to perform the operation. The argument proceeded that he must have experienced difficulties and as a result, it would have been 'prudent' to have converted to an open procedure. Dr Pienaar and Prof Bornman agreed in their joint minute, however, that Dr Vogel's failure to convert to an open procedure did not necessarily constitute negligence on his part.

[47] Dr Vogel testified that when operating, he did not clock-watch, and that if he experienced difficulties, he sometimes converted to an open procedure as quickly as

within five minutes of the commencement of an operation. In this case, there was no suggestion in the operation notes that difficulties had arisen or that a lack of progress indicated the need to convert to an open procedure. He also did not agree with Dr Pienaar's opinion that 80 minutes was an inordinately long time for the operation in question. (Prof Bornman agreed with Dr Vogel in this respect.) Dr Vogel added that the presence of adhesions, which is recorded in the operation notes, would have added to the time taken to complete the procedure.

[48] In cross-examination, it was put to Dr Vogel that the operation had taken an unduly long time and that this was as a result of 'poor visualisation which made it more difficult for you to do the operation'. He answered this as follows:

'No I don't buy the fact. And I think I explained it to M'Lady, the time of this operation varies greatly depending on the pathology, the anatomy – plenty of other factors, patient, body, habits – there are so many factors that come into play. I don't believe any expert can extrapolate that a long time is due to poor visualisation or a poorly performed op.'

Has negligence been established?

[49] The particulars of claim allege four bases for negligence on the part of Dr Vogel and his team. They are that Dr Vogel failed to convert from a laparoscopic cholecystectomy to an open cholecystectomy; he failed to perform the procedure with the care, diligence and skill required of a reasonable surgeon; he failed to ensure that Ms Meyers' bile duct was not cut during the procedure; and he failed to ensure that the electro-diathermic instrument used in the procedure was properly insulated and therefore fit for use during the procedure.

[50] For Aquilian liability to arise, the harm caused by the defendant must have been both unjustified, or, in other words, wrongful, and culpable, in the sense of having been either negligently or intentionally caused.[9] Put differently, '[n]egligence, as it is understood in our law, is not inherently unlawful – it is unlawful, and thus actionable, only if it occurs in circumstances that the law recognises as making it unlawful'.[10] The

[9] *Perlman v Zoutendyk* 1934 CPD 151 at 155; *Coronation Brick (Pty) Ltd v Strachan Construction Co (Pty) Ltd* 1982 (4) SA 371 (D) at 377D-E.
[10] *Minister of Safety and Security v Van Duivenboden* 2002 (6) SA 431 (SCA) para 12.

element of wrongfulness is not in issue in this matter and it was common cause that the injuries were caused during the operation. The only issue that requires consideration is whether negligence on the part of Dr Vogel has been established by Ms Meyers.

[51] The test for negligence is well-known but worthy of repetition. In *Kruger v Coetzee*,[11] Holmes JA held that negligence arises if a reasonable person in the position of the defendant 'would foresee the reasonable possibility of his conduct injuring another in his person or property and causing him patrimonial loss' and 'would take reasonable steps to guard against such occurrence' but the defendant failed to take those steps.

[52] In a case such as this, where specialised skill is involved, the general standard of the reasonable person is adjusted upwards, as it were, to that of the reasonable person in the field of endeavour involved. In other words, while a person possessed of, or professing to be possessed of, specialised skills is not required to display the 'highest possible degree of professional skill', he or she will be held to 'the general level of skill and diligence possessed and exercised at the time by the members of the branch of the profession to which the practitioner belongs':[12] he or she will be held to a standard of reasonable skill and care within the area of his or her expertise or professed expertise.[13] In this case, then, Dr Vogel's conduct is to be judged against the standard of the reasonable surgeon performing a laparoscopic cholecystectomy.

[53] In assessing a person's conduct in a case such as this, one must guard against the 'insidious subconscious influence of *ex post facto* knowledge', and bear in mind that '[n]egligence is not established by showing merely that the occurrence happened . . . or by showing after it happened how it could have been prevented' – the reasonable person does not have 'prophetic foresight'.[14]

---

[11] *Kruger v Coetzee* 1966 (2) SA 428 (A) at 430E-F.
[12] *Van Wyk v Lewis* 1924 AD 438 at 444; *Charter Hi (Pty) Ltd and Another v Minister of Transport* [2011] ZASCA 89 para 32. See too P Q R Boberg *The Law of Delict* at 346-347; Jonathan Burchell *Principles of Delict* at 87-89.
[13] *Mitchell v Dixon* (note 1) at 525.
[14] *S v Bochris Investments (Pty) Ltd and Another* 1988 (1) SA 861 (A) at 866I-867B.

[54] In *Van Wyk v Lewis*,[15] Innes CJ dealt with the question of the onus. He stated: 'The question of *onus* is of capital importance. The general rule is that he who asserts must prove. A plaintiff therefore who relies on negligence must establish it. If at the conclusion of the case the evidence is evenly balanced, he cannot claim a verdict; for he will not have discharged the *onus* resting upon him.
In determining whether the onus has been discharged, a court must consider all of the evidence.[16]

[55] In this case, the onus rested on Ms Meyers to establish the negligence that she has pleaded. I turn now to a consideration of whether she has discharged that onus.

[56] I shall commence with the assertion that Dr Vogel was negligent in not converting from a laparoscopic procedure to an open procedure. The highwater mark of this argument was that it may have been 'prudent' for Dr Vogel to have converted to an open procedure. The evidence of Dr Pienaar came nowhere close to establishing this as a ground of negligence on the part of Dr Vogel. Even if it did, no evidence was adduced to establish that the injuries were caused by the failure to convert to an open procedure.

[57] In his evidence, Dr Pienaar took the view that any injury to the bile duct, irrespective of how it may have been caused, was indicative of negligence. In other words, the mere fact of the injuries led to an inference that Dr Vogel had been negligent in some or other way. As Revelas J held in the trial court, that sets too high a standard to which the reasonable surgeon performing a laparoscopic cholecystectomy is to be held, and leaves 'no room for human error, which logically, not all surgeons may manage to escape'.[17]

[58] Her approach to the opinion of Dr Pienaar is consistent with this court's judgment in *Buthelezi v Ndaba*,[18] in which an expert witness had also expressed the

---

[15] Note 12 at 444. See too *Medi-Clinic Ltd v Vermeulen* [2014] ZASCA 150; 2015 (1) SA 241 (SCA) para 16; *Goliath v MEC for Health, Eastern Cape* [2014] ZASCA 182; 2015 (2) SA 97 (SCA) para 12.
[16] *Arthur v Bezuidenhout and Mieny* 1962 (2) SA 566 (A) at 574B; *Sardi and Others v Standard and General Insurance Co Ltd* 1977 (3) SA 776 (A) at 780C-H.
[17] Trial court's judgment paras 39-40.
[18] *Buthelezi v Ndaba* [2013] ZASCA 72; 2013 (5) SA 437 (SCA) paras 16-17.

view that the fact that an injury had occurred pointed to negligence on the part of the surgeon. Brand JA dealt with this evidence as follows:

'[16] Turning to the conflicting views of the respective experts, it appears that Prof Green-Thompson's underlying reasoning departs from the inference that the injury to the respondent's bladder would not have occurred if the appellant was not negligent. To me that seems reminiscent of an application of the *res ipsa loquitur* maxim, which the court a quo quite rightly found inappropriate in this case. I say quite rightly because, as was pointed out in the *locus classicus* on medical malpractice, *Van Wyk v Lewis* 1924 AD 438 at 462, that maxim could rarely, if ever, find application in cases based on alleged medical negligence. The human body and its reaction to surgical intervention are far too complex for it to be said that, because there was a complication, the surgeon must have been negligent in some respect. Logic dictates that there is even less room for application of the maxim in a case like this, where it has not even been established what went wrong; and where the views of experts are all based on speculation — giving rise to various but equally feasible possibilities — as to what might have occurred. Moreover, although Prof Green-Thompson did not deny the authority of the international publications, put to him in cross-examination, that contradict his conclusions, he simply seemed to ignore their content. In sum I thus find Prof Green-Thompson's opinion ill-supported by his reasoning.

[17] By contrast, Prof Snyman's opinion, based on his expertise and experience in practice, that this type of injury may result from a hysterectomy operation despite reasonable care on the part of the surgeon, appears to be well supported by views expressed in international journals in the field. In fact, these publications seem to indicate that this type of injury to the bladder is generally accepted as one of the inherent risks of a hysterectomy operation. In these circumstances, I consider that the court a quo erred in finding that negligence on the part of the appellant had been established.'

[59] In this court, no attempt was made to justify the high standard of care postulated by Dr Pienaar. Instead, the argument was advanced that because injuries were caused to the bile duct, Dr Vogel must have failed to comply with one or more of the ten commandments – and his negligence lay in that failure.

[60] I have set out in detail the evidence of Dr Vogel. What is clear from his evidence is that he is a very experienced surgeon who knows and applies the ten commandments as a matter of practice when he performs, almost weekly, a laparoscopic cholecystectomy. He testified that had the electro-diathermy device been defective, it was likely that the sister who tested it would have noticed the problem

and, failing that, he would have noticed breaks in the insulation and the resultant defective working of the instrument. On the probabilities, a defective electro-diathermy device can be discounted as a cause of the injuries.

[61] It can also be accepted that Dr Vogel did not used electro-diathermy in Calot's triangle. His evidence in that respect is clear, adamant and definite, and ought to be accepted. It is highly improbable that an experienced surgeon like him would depart from so obvious and ingrained a precaution against undue injuries in a danger area. His direct evidence is to be preferred to that of Dr Pienaar, who had no direct knowledge of the specific procedure in question, but for the operation notes, and whose evidence is largely based on speculation.[19] Dr Vogel also did not use any sharp instrument in Calot's triangle, and there appears to have been no suggestion that he had done so. Once again, the proposition that he had used a sharp instrument, given his track record and experience, would be improbable. He consequently did not breach these two of the ten commandments, or as far as I can see, any of the others.

[62] Instead, Dr Vogel utilised the proper method of dealing with adhesions in and around Calot's triangle by teasing them away with a blunt instrument – the appropriate instrument for the purpose – in order to give himself a clear view of the structures that he had to divide. He identified the correct structures, divided them and clipped them appropriately. Dr Pienaar and Prof Bornman agreed that the operation was performed properly and correctly in all respects save for the two small injuries to the bile duct.

[63] In all probability, the injuries were caused while Dr Vogel was teasing off adhesions within Calot's triangle. It was only this teasing off of adhesions that could have caused the injury. Dr Vogel would have had no choice but to tease off any adhesions in Calot's triangle so that he could, as indeed, he did, identify the cystic duct and cystic artery. A failure by him to identify these structures would have had far more serious consequences than the small injuries to the bile duct. There are risks inherent in this process and one of them is a risk of injury to the bile duct – a risk that

[19] *Motor Vehicle Assurance Fund v Kenny* 1984 (4) SA 432 (E) at 436H-437A; *Roux v Hattingh* [2012] ZASCA 132; 2012 (6) SA 428 (SCA) paras 19-20; *MV Banglar Mookh: Owners of MV Banglar Mookh v Transnet Ltd* [2012] ZASCA 57; 2012 (4) SA 300 (SCA) paras 50-53; *Vousvoukis v Queen Ace CC t/a Ace Motors* [2015] ZAECGHC 64; 2016 (3) SA 188 (ECG) paras 68-69.

materialises, according to Dr Pienaar, with ‘some regularity’. In working in this area, it is a matter of judgment on the part of the surgeon as to how much to dissect in Calot’s triangle and when he or she believes the area clear enough to make a proper identification of the structures.

[64] In the terminology of *Kruger v Coetzee*,[20] Dr Vogel, as a reasonable surgeon, would have foreseen the possibility of harm to Ms Meyers’ bile duct during the operation, but he took steps to avoid that harm from materialising by performing the operation in accordance with the ten commandments which were developed for the very purpose of avoiding that harm. In these circumstances, I am of the view that Ms Meyers has not discharged the onus on her to prove on a balance of probabilities that Dr Vogel was negligent when he caused the injuries. That means that the appeal cannot succeed.

The order

[65] I would dismiss the appeal with costs.

_____

C Plasket
Judge of Appeal

Ponnan JA (Mbatha JA and Dolamo AJA concurring)

[66] What occupied the attention of both courts below in this matter, and on which Plasket JA and I disagree, is whether or not Dr Vogel applied the degree of professional skill and diligence expected of members of his profession when he performed a laparoscopic cholecystectomy on the appellant, Ms Meyers.

[20] Note 11.

[67] The general rule is that she who asserts must prove. In a case such as this it was accordingly for Ms Meyers to prove that the damage she sustained was caused by Dr Vogel's negligence. As it was put in *Goliath v MEC for Health, Eastern Cape*:[21]
'The failure of a professional person to adhere to the general level of skill and diligence possessed and exercised at the same time by the members of the branch of the profession to which he or she belongs would normally constitute negligence (*Van Wyk v Lewis* 1924 AD 438 at 444). A surgeon is in no different a position to any other professional person (*Lillicrap, Wassenaar and Partners v Pilkington Brothers (SA) (Pty) Ltd* 1985 (1) SA 475 (A) at 488C). It has been pointed out that 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" (*Mitchell v Dixon* 1914 AD 519 at 525). As Scott J put it in *Castell v De Greef* 1993 (3) SA 501 (C) at 512A–B, "(t)he test remains always whether the practitioner exercised reasonable skill and care or, in other words, whether or not his conduct fell below the standard of a reasonably competent practitioner in his field" (cited with approval in *Buthelezi v Ndaba* 2013 (5) SA 437 (SCA) para 15).'

[68] In *Premier of the Western Cape Province v Loots NO*,[22] Brand JA explained:
'For its legal basis the argument rested on the so-called concrete or relative approach to negligence. According to this approach it cannot be said that someone acted negligently because harm to others in general was reasonably foreseeable. A person's conduct can only be described as negligent with reference to specific consequences. Yet, the relative approach does not require that the precise nature and extent of the actual harm which occurred was reasonably foreseeable. Nor does it require reasonable foreseeability of the exact manner in which the harm actually occurred. What it requires is that the general nature of the harm that occurred and the general manner in which it occurred was reasonably foreseeable. At some earlier stage there was a debate as to whether our courts should follow the relative approach as opposed to the so-called abstract or absolute approach to negligence. But it now appears to be widely accepted . . . that our courts have adopted the relative approach to negligence as a broad guideline, without applying that approach in all its ramifications.'

---

[21] Goliath v MEC for Health, Eastern Cape [2014] ZASCA 182; 2015 (2) SA 97 (SCA) para 8.
[22] *Premier of the Western Cape Province v Loots NO* [2011] ZASCA 32; [2011] JOL 27067 (SCA); 2011 JDR 0250 (SCA) para 13 (footnotes omitted).

[69] A court is not called upon to decide the issue of negligence until all of the evidence is concluded.[23] When an inference of negligence would be justified, and to what extent expert evidence is necessary, no doubt depends on the facts of the particular case. Any explanation as may be advanced by or on behalf of a defendant forms part of the evidential material to be considered in deciding whether a plaintiff has proved the allegation that the damage was caused by the negligence of the defendant. As Wessels JA pointed out in *Van Wyk v Lewis*:[24]

'We cannot determine in the abstract whether a surgeon has or has not exhibited reasonable skill and care. We must place ourselves as nearly as possible in the exact position in which the surgeon found himself when he conducted the particular operation and we must then determine from all the circumstances whether he acted with reasonable care or negligently. Did he act as an average surgeon placed in similar circumstances would have acted, or did he manifestly fall short of the skill, care and judgment of the average surgeon in similar circumstances? If he falls short, he is negligent.'

[70] The facts and history to the litigation are comprehensively set out in the judgment of my learned colleague. As is commonplace in cases of this kind, Ms Meyers was simply unaware of what had occurred during the cholecystectomy, because the procedure was carried out under general anaesthetic. But, by the time she came to close her case before Revelas J, the following had become either common cause or undisputed: On 2 March 2010 Dr Vogel performed a laparoscopic cholecystectomy on the appellant for the removal of her gall bladder. During the course of the procedure he inflicted two small injuries, each of about two millimetres in diameter, to her common bile duct. A week later, on 9 March 2010, the appellant was re-admitted to hospital with acute bile peritonitis. On 11 March 2010 Dr Vogel performed a surgical repair to the bile duct injury. The essence of Ms Meyers' case is that Dr Vogel failed to observe reasonable care whilst performing the laparoscopic cholecystectomy and, by reason thereof, an untoward act occurred producing a new, independent injury.

---

[23] *Arthur v Bezuidenhout and Mieny* [1962] 2 All SA 506 (A); 1962 (2) SA 566 (A) at 573H.
[24] *Van Wyk v Lewis* 1924 AD 438 at 461-462.

[71] We are here concerned with an unconscious patient who has suffered an admitted injury. That being so, the spectre of negligence on the part of the attending surgeon loomed large. At the close of Ms Meyers' case before Revelas J, her evidence, together with that of Dr Pienaar and the documentary exhibits, was sufficient as to place an evidentiary burden upon Dr Vogel to shed some light upon the circumstances attending Ms Meyers' injury. Failure to do so meant that, on the evidence as it then stood, he ran the risk of a finding of negligence against him. For, whilst Ms Meyers, as the plaintiff, bore the overall onus in the case, Dr Vogel nonetheless had a duty to adduce evidence to combat the prima facie case made by Ms Meyers.[25] It remained for him to advance an explanatory (though not necessarily exculpatory) account that the injury must have been due to some unpreventable cause, even if the exact cause be unknown.

[72] Dr Vogel was simply unable to account for the injury. It was put to him in cross-examination that 'the cold hard fact is you are unable to tell this Court how those perforations occurred', to which he replied: '[t]hat is correct'. Dr Vogel testified that he could not 'recall this specific operation', so he could only go by what he had written in his 'op note'. He added:

'My note states that I've removed adhesions from the gallbladder. Now I think Prof. Bornman explained what adhesions were. When you get inflammation of the gallbladder due to acute cholecystitis the mentum, a fatty layer in the abdomen often is stuck to the gallbladder and we often have to remove that and other structures like the colon can be pulled up, the duodenum can be close to the gallbladder. And that all has to be divided with a blunt grasper. It sometimes can be a simple procedure where the tissue comes off very easily; and on occasions it can be quite a difficult dissection. I haven't made any note here that it was a difficult dissection.'

However, the operation note itself contained no explanation for the injury and Dr Vogel was driven to concede that the explanation for the injury 'lies outside of the operation note'.

[73] Thus, absent an explanation from Dr Vogel, the evidence of the expert witnesses, in particular Prof Bornman, assumed heightened significance. The experts

[25] *Pillay v Krishna & another* 1946 AD 946 at 952-953.

agreed in their joint minute that 'the injury occurred during the performance of the procedure either due to a mechanical laceration (instrument) or electrothermal injury'. Before turning to a consideration of the two possible causes of the perforations agreed upon by the experts in their joint minute, it is necessary to briefly dispose of two further hypotheses mooted by Dr Vogel during his evidence, namely, a faulty instrument and what he described as the 'pedicle effect'. First, those were not raised with nor did they occupy the attention of the experts in their expert summaries or when they agreed on a joint minute. In that regard Prof Bornman testified:

'You have now agreed that the two perforations were either caused by mechanical laceration or an electro-thermy. --- That's correct.

We're not dealing with speculation about anything else, it was one of those two things that caused it. --- In all probability.'

Second, the experts were not called upon to deal with or express any opinion on these hypotheses when they testified. Third, Dr Vogel was constrained to accept that if the instrument had been faulty, he should have noticed it. And, fourth, Dr Vogel conceded:

'And you are unable to say that there was a pedicle effect? --- No I'm unable to say.

You're speculating that that was a possibility. --- That's a possibility.'

[74] An electrothermal injury was first raised as a possibility by Dr Vogel in his operation note during the surgical repair. As he testified:

'You then wrote question mark diathermy injury. I assume from that that you queried the possibility of it being a diathermy injury. --- That is correct M'Lady. As I stated earlier I have never seen an injury like this. I do not have colleagues that have ever explained that injury to me. So at the time of the operation I did contemplate that this could possibly be a diathermy injury. Subsequently to that the other option has emerged that it could also have been an injury from dissection or tethering of plain fibrotic tissue in Calot's triangle.'

During the course of his evidence, however, he all but discounted that as a possible cause of Ms Meyers' injury. In that regard his evidence ran:

'Now I want to suggest to you that as you correctly pointed out one of the vital requirements of a surgeon performing this procedure, is to not work with a diathermy device in Calot's triangle. --- That is correct.

The reason for that commandment, to use the term, is that if you do use a diathermy device in Calot's triangle there is a great risk of an injury to the common bile duct. --- That is correct M'Lady.

And the terminology you used is in your evidence in chief you said the surgeon must not use electro-thermy in the critical view of safety. --- That is correct.
Now in this particular operation if you did use the diathermy device in the critical view of safety, there would have been a risk of perforating the common bile duct. Would you agree with me on that? I'm not saying you did at this stage, I'm saying if you did. --- You're saying if I did use diathermy in the critical view there is a risk.
There was a risk of direct contact with the common bile duct. --- That is correct, I agree with that.
And if that occurred then perforations such as these that you found is what you would expect to find. --- If I had used diathermy which I didn't use in the critical angle, that would be a possibility.'

Later, Dr Vogel added:

'I've already made the suggestion to you – I don't want to repeat myself but you would agree with me that – and again I'm putting a . . . proposition to you to enable you to comment on it. You would agree with me that if you did use diathermy in Calot's triangle and you made direct contact with the common bile duct, that is something which would have been incorrect and the injury would have then been avoidable. --- Using diathermy in that critical angle close to the common bile duct is incorrect.
Correct.
The surgeon does not need to do it and he should not do it. --- Should not do it.'

[75] Turning to the first possibility recorded in the joint minute of the experts, namely, that 'the injury occurred due to a mechanical laceration with an instrument'. On that score Dr Pienaar testified:

'Those are the two possibilities. Now just to deal firstly with the first possibility, the mechanical laceration. When a surgeon conducts the LC, if he does so properly, can a mechanical laceration occur to the common bile duct? --- I do not think it should happen M'Lady.
Why do you say that? --- If one identifies the structures, you know exactly where you are, you've got absolute control of the instrument, you should not damage any structures in the vicinity. With a laparoscopic cholecystectomy there are some guidelines that there are areas that one should not dissect in.
COURT There are areas which one should not? --- One should not dissect in. So those are boundaries and areas with a no entry sign.
MR NIEKERK Just to put it into very simple terms would Dr Vogel have used sharp instruments which could cause a mechanical laceration to the common bile duct? --- Absolutely. Yes, one would use scissors. You could use a hook dissector. We use an instrument that you suck with,

that has got a sharp edge. There are a number of instruments that could have caused the injury, yes.
Was it necessary for any of those instruments to be at the common bile duct? --- I do not think so, M'Lady.
Is this something that should be known . . . should a surgeon know to stay away from that area? --- I think that is drummed and hammered into us all the time, yes, because of the consequences of damage to the common bile duct.
You've already said that injuries to the common bile duct is something unfortunately which happens fairly regularly? --- It does happen.
Are surgeons made aware of this? Should they be aware of this through training or otherwise? --- We are made aware of this by training. It is one of the banes of general surgery if you want – damage to the common bile duct – it's a subject that is often discussed and advised that it should be prevented.
If Her Ladyship should find that . . . it's not even necessary for a finding but if the injury occurred due to a mechanical laceration, is that acceptable in the circumstances? --- No M'Lady, not in my opinion. It constitutes an injury to the bile duct.
And had Dr Vogel not ignored the so-called no entry signs, and he had performed the operation properly, would the injury to the bile duct have occurred? --- I do not think so M'Lady. What I mean is if he had stayed away from the common bile duct, the injury would not have occurred.
And at the risk of my repeating myself, should he have been aware of the need to stay away from the bile duct? --- I would certainly expect that, M'Lady.'

[76] Revelas J held:

'In my view, Dr Pienaar's approach leaves no room for human error, which logically, not all surgeons may manage to escape. It was not in dispute that Dr Vogel had performed approximately 500 operations of the type under discussion, and that the injury to the plaintiff's bile duct was his first error of this nature. In the absence of any proof to the contrary, I am bound to accept . . . Dr Vogel's observation (as noted down by him during the repair procedure) that the injury comprised of two small perforations.
Based on all the evidence presented, the error in question seems to be one that any reasonably competent practitioner in Dr Vogel's field could also have made. Dr Pienaar's reasoning is simply put, that the injury to the bile duct would not have occurred if Dr Vogel was not negligent and since the injury did occur, Dr Vogel was negligent. He therefore, in my view, set an unreasonably high standard for surgeons. Errors do occur. That is human nature, and to hold that all such errors constitute negligence would be dogmatic and unrealistic.'

[77] It is unclear to me why Revelas J preferred the evidence of Prof Bornman to that of Dr Pienaar, or how acceptance of the former's evidence necessarily impelled her to the conclusion that Dr Vogel was not negligent. During his evidence in chief, Prof Bornman stated:

'So there are minor injuries and there are major injuries. And the major injuries that I just described are where the surgeon fails to adhere to, we call it the ten commandments. What the surgeon needs to do is before he divides any structure, he must ensure that he has identified the anatomy properly. And in particular to know that he is dealing with the cystic duct and not with the bile duct. That inevitably means that there has to be a degree of dissection in the danger zone. And we can easily refer to that as Calot's triangle. Whereas Dr Pienaar correctly points out there are other vascular structures there as well: arteries and veins and so on. So that unless you have identified the anatomy there and you dissect out Calot's triangle, and we call it the critical view of safety and by that we mean that you have to do enough to make sure that what you're going to divide is going to be the cystic duct. If you haven't done that and you then divide the bile duct then in my view, and it is now generally accepted that kind of injury is a negligent act because the surgeon has not taken the precautions of making sure he has seen all the structures; he has divided it at the stage where he is absolutely sure that he is not dealing with the bile duct but with the cystic duct, and then proceeds from there.'

When asked whether Dr Vogel adhered to or complied with the ten commandments, Prof Bornman responded: 'Well that is obviously a difficult question to answer'. He then stated:

'But why I believe that he has followed the rules is the fact that the cystic duct was divided and not the bile duct. And in order for him to have divided the cystic duct he must have clearly identified the structures. So in my opinion he has done a sufficient number of dissections and the rules that I have explained now to ensure that he does not injure the main bile duct but he correctly divides the cystic duct. In addition to that there was no evidence of any vascular injuries because often a sign of major vascular injury . . . [is] injury to the hepatic artery.'

[78] Under cross examination, Prof Bornman added:

'Now Dr Pienaar's evidence is further that if the anatomy is properly identified then the common bile duct injury will not occur. Cannot occur. --- Well I think this is where the question is more difficult to answer. I have explained already it depends on what type of injury we are talking about. If you don't identify the anatomy, then you run the risk of causing a major bile duct trans-section procedure.

Well where you and Dr Pienaar are also in agreement is that there's a no go area. --- There is a no go area but it is a no go area where you have to go at some stage to do the operation otherwise you can . . . never do a standard laparoscopic cholecystectomy.

The part is you must, part of identifying the anatomy is identifying the no go area. Not so? --- M'Lady I think we're beginning to struggle with the terminologies we're talking about here. The Calots triangle is not a no go area, it's a dangerous area; it's not a no go area.

. . . What I'm saying is that Dr Pienaar's evidence is that the common bile duct is a no go area. And part of identifying the anatomy is establishing where that is so that you know you do not go there. --- It's absolutely correct. But if I may refer you to the sketch, the triangle is what you dissect out. The one leg of the triangle is the bile duct. So that is the area you're dissecting. So I agree with you, you try and stay as far away from that plain but at some stage you need to dissect out the cystic duct and the region around the cystic duct to be able to get a critical view of safety, so that in doing that dissection in that field which you refer to as no go area, the bile duct invariably can be close to that area. In fact in the era of open cholecystectomy I have to remind you, is that there they have insisted on dissecting down until you get the bile duct; because the reason for that was they didn't want to leave a long cystic stump because there was a syndrome ascribed to that. Nowadays we say no it doesn't matter.

Let us not get lost in miscommunication. Let's first look at where there is agreement. We agree that the common bile duct should not be injured in any way. --- Ja that's absolutely correct.

That is something any surgeon doing this operation must keep in mind, you agree? --- Absolutely.

He must be aware that he must not injure the common bile duct because it has severe consequences for the patient. --- Indeed so.

It is not necessary for the surgeon to make direct contact either with the instrument or with an electro-thermal device to make contact with the common bile duct. --- No it's not necessary but there are times and part of the dissection that you cannot be hundred percent sure. . . .

Now Dr Pienaar says that if you identify the anatomy properly and you follow the proper rules, you will not make direct contact with the common bile duct. And you agree with that in your report. --- Ideally you want to stay away from the bile duct. I understand that.

You say that in your report. --- Yes.

You say that the surgeon must concentrate on not being too close to the common bile duct. --- Ja that is correct.

Now to take that one step further in logic, what Dr Pienaar says makes perfect sense. If there is any injury to the common bile duct where the surgeon should not have made contact, the logical inference is he made contact when he should not have done so. Not so? --- That is correct.

So what we are saying . . . and Dr Pienaar is saying is that he made a mistake; he made contact with the common bile duct when he should not have done so. You agree with that surely? --- Ja but I think the definition of what is a mistake and whether that mistake is as such an act of negligence or is it actually just part of the risk of performing the operation. In this particular type of injury . . . .

. . . The first part of the inquiry is should the surgeon avoid making contact with the common bile duct. --- Ja I agree with that.

. . . .

The second inquiry from a legal point of view is should the surgeon avoid doing so and can he avoid doing so. --- Can I just rephrase it: the surgeon can make contact with the bile duct and if you do dissection of that area as long as obviously you don't injure it, you can dissect up along the bile duct if he's defined it clearly. So it's not simply a question you're not allowed to contact the bile duct. Operations have been performed, other types of operations we dissect the bile duct and nothing happens. So merely just to say you're not allowed to touch the bile duct I disagree with. You mustn't touch it in such a nature that it can cause damage.

I think you and Dr Pienaar are in agreement on that. He explained it. He said there can be controlled contact. So if you make contact, if you cause an injury to the common bile duct you should know that you've done it and you should fix it up there and then. --- I disagree. We are still not sure at what stage the leak occurred. I can tell you now from own experience that the small little injury to the duct . . . is not an easy injury to pick up . . .

. . .

We are not at odds there. But I do not want to digress, I want to just finish the point we were on. If is for Her Ladyship to decide at the end of the matter whether Dr Vogel was negligent or not. --- Sure.

Questions which Dr Pienaar has answered and which you ought to have answered in your report was should Dr Vogel have been aware that he should not injure the common bile duct. --- Absolutely.

He must have been aware, not so? He is far too competent, he must have . . . . The next question is should he have avoided injuring (intervention) --- Could you just rephrase the sentence . . .

He must have known that he should avoid injuring the common bile duct. --- Okay ja, we've been there.

I mean he must have known that. That is the first question that you were asked. The second question is could he have avoided injuring the common bile duct. And you've answered that positively as well. You said that he can do the operation properly identifying the anatomy and then not cause damage to it. --- Sure.'

[79] In my view, as the above quoted excerpt from the evidence of Prof Bornman reveals, the differences between him and Dr Pienaar, if any, are more illusory than real. Dr Pienaar appeared to recognise this when he stated:

'Prof. Bornman has expressed his disagreement in the joint minute and he is of the view that the operation was not performed negligently. Well he disagrees that the operation was performed negligently. --- I have taken note of that M'Lady.

It was in Prof. Bornman's opinion that a common bile duct injury is not due to negligence. --- Prof. Bornman qualifies injury to the bile duct as far as I know, due to the severity of the injury, whether it is negligent or not.

Are you in agreement with that? --- No I'm not M'Lady. An injury to the bile duct is an injury to the bile duct. It is preventable if one sticks to the rules.

Later he added:

'M'Lady any injury to the bile duct not intended during a laparoscopic cholecystectomy, whether it is caused by the surgeon or by a defective instrument, in my opinion is negligence. It doesn't matter as to the grade and severity of the injury, whether that qualifies that it has negligence or not.

. . . .

Well Prof. Bornman's view is that it is not necessarily accurate. What is your view on it? --- M'Lady I think I've actually exhausted the fact that in my opinion any injury to the common bile duct is a negligent action. Prof. Bornman qualifies his statement where he says "While I agree in principle that a bile duct injury can be regarded as an act of negligence . . .". He then goes on to qualify that and says it's only major bile duct injuries. Now is it then . . . let's say there's an injury, it can only become negligent if it's now really major damage. If there's a leak like in this instance where the patient suffered, she had an acute abdomen, she had bile peritonitis, can that still be regarded as a minor injury and therefore not negligent? And I really think that is not for me to argue. That is my viewpoint. And I'm not going to be swayed from that.'

[80] It is so, as the evidence in this case reveals, that the intersection between law and medicine is often complex. Here there is simply no acceptable evidence as to how the injury came to be inflicted. Importantly, according to Dr Vogel, it was not a difficult dissection. In re-examination Prof Bornman stated:

'But in my comment as well I agreed in principle that a bile duct injury during laparoscopic . . . can be regarded as an act of negligence. This view relates to major bile duct injuries as I explained yesterday where there is complete bile duct dissection. This occurs when the

surgeon fails to take the necessary steps to avoid mis-identifying of the bile duct for the cystic duct.'

This, to my mind, encapsulates the fallacy in Prof Bornman's approach. Whilst a major injury such as a complete bile duct dissection may well, in and of itself, afford proof of negligence, the converse is not necessarily true. A minor injury, without more, would not necessarily constitute evidence of an absence of negligence. It seems to me that in his approach Prof Bornman impermissibly reasons backwards from effect to cause. The extent of the injury, particularly a relatively minor one, hardly answers the anterior question, namely, how did the injury come to be inflicted in the first place? Prof Bornman did not know how the injury came to be inflicted. In his evidence in chief Prof Bornman was asked: 'Can we really say how it [the injury] happened or is it speculation?' He replied:

'Unfortunately it is speculation. That it happens is no question about it. That it happened at some stage during a dissection that is a fact. But was it a diathermy injury or was it a mechanical injury with the teasing, I cannot be sure.'

That notwithstanding, his view appears to have been: however the injury may have been inflicted, it was not on account of any negligence on the part of Dr Vogel.

[81] Both Prof Bornman and Dr Pienaar were at one on the need for a surgeon to properly identify the anatomy and structures. Both accepted that dissecting in the danger zone, namely Calot's triangle, without having properly identified the structures would constitute negligence. However, Prof Bornman was unable to explain why, if Dr Vogel had properly identified the bile duct, he made direct contact with it. In that regard the record reads:

'You told Her Ladyship Dr Vogel did identify all the structures properly. This morning. --- Well he must have identified the bile duct. It was just unfortunately at the time when he was too close.

Why was he too close if he had identified where it was? --- (No audible reply).

. . .

Now in this particular case – let's forget about what happens in other cases – in this particular surgical procedure was there any reason for Dr Vogel to make direct contact with the common bile duct? --- No there was no reason to do that.

. . .

This is . . . unfortunately it is on record, you've given a long response which has nothing to do with the question. With respect my question was in this particular surgical procedure

performed by Dr Vogel on the 2nd March 2010 was there any reason for him to make direct contact with the common bile duct? --- No that should be avoided to the point that you injure it. But sometimes you have to dissect close to the bile duct in order to make sure you see your critical view of safety.
Did he have to do that in this particular procedure? --- It's for him to answer that M'Lady.
You cannot say that? --- I cannot. I don't know what the circumstances exactly was. I'm talking about a general principle . . . .'

[82] In my view, at the close of Ms Meyer's case, after both she and Dr Pienaar had testified, there was sufficient evidence which gave rise to an inference of negligence on the part of Dr Vogel. In that regard it is important to bear in mind that in a civil case it is not necessary for a plaintiff to prove that the inference that she asks the court to draw is the only reasonable inference; it suffices for her to convince the court that the inference that she advocates is the most readily apparent and acceptable inference from a number of possible inferences.[26] That inference remained undisturbed by the evidence of Dr Vogel. And, as I have attempted to show, Prof Bornman's evidence did not tip the scales against Ms Meyers. In short, when Prof Bornman's evidence is read together with the evidence of Dr Pienaar (as, to my mind, it should be), no reasonable suggestion has been offered as to how the injury could have occurred, save for negligence on the part of Dr Vogel.

[83] In the result:

(1) The appeal is upheld with costs.

(2) The order of the full court is set aside and substituted with the following:

'(a) The appeal succeeds with costs.

(b) The order of the court below is set aside and substituted with the following:

"(i) The defendant is held liable for the damages, if any, that the plaintiff has suffered in consequence of the injury inflicted by Dr Vogel, namely two perforations to her common bile duct, whilst

[26] *AA Onderlinge Assuransie-Assosiasie Bpk v De Beer* 1982 (2) SA 603 (A); see also *Cooper & another NNO v Merchant Trade Finance Ltd* 2000 (3) SA 1009 (SCA).

performing a laparoscopic cholecystectomy at the Livingstone Hospital on 2 March 2010;

(ii) The defendant is ordered to pay the plaintiff's costs occasioned by this hearing, such costs to include the qualifying fees of Dr BH Pienaar;

(iii) The matter is postponed sine die."'

_____

VM Ponnan

Judge of Appeal

APPEARANCES

For the appellant:	D Niekerk Instructed by: Swarts Attorneys, Port Elizabeth Bezuidenhouts Inc, Bloemfontein
For the respondent:	B L Boswell Instructed by: State Attorney, Port Elizabeth State Attorney, Bloemfontein