

**THE EASTERN CARIBBEAN SUPREME COURT
SAINT LUCIA**

**IN THE HIGH COURT OF JUSTICE
(CIVIL)**

SLUHCV2017/0284

BETWEEN:

ANNE MARGARET HENRY

Claimant

and

DR. HORATIUS JEFFERS

Defendant

Appearances:

Maureen John-Xavier for the Claimant

Patricia Augustin for the Defendant

2019: January 21st;
2019: February 20th

JUDGMENT

- [1] **SMITH J:** Ms. Anne Henry (“Ms. Henry”), a former Principal Nursing Officer in Saint Lucia, alleges that Dr. Horatius Jeffers (“Dr. Jeffers”), an orthopedic surgeon, was negligent in performing a varus distal femoral osteotomy on her, as well as in his post-operative treatment, which left her with certain disabilities. It is not in dispute that there was non-union of the distal femur osteotomy site and therefore the objective of the surgery was not achieved. Dr. Jeffers says, however, that his surgical procedure and management of Ms. Henry was in accordance with the standard expected of an orthopedic surgeon and that Ms. Henry had been informed of and accepted the risk of non-union.

- [2] The relevant factual background is as follows. In July 2014, Ms. Henry consulted Dr. Jeffers complaining of painful swelling of the right knee. Dr. Jeffers noted no antecedent history of trauma and a grade 1 effusion of the knee joint with valgus alignment of the knee. He recommended a course of physiotherapy, with emphasis on vastus medialis strengthening, and prescribed a course of non-steroidal anti-inflammatory drugs.
- [3] In a follow-up visit on 3rd September 2014, Ms. Henry complained of increasingly severe right knee pain and an increase valgus deformity of the knee joint. Dr. Jeffers, after reviewing standing x-rays and an MRI, recommended a varus distal femoral closing wedge osteotomy ("the surgery") to correct this problem. Ms. Henry did not immediately make a decision.

The Patient Consent Form

- [4] On 16th September 2014, she made a follow-up visit to Dr. Jeffers and informed him that she had agreed to undergo the proposed surgery. Ms. Henry signed a Patient Consent to Investigation or Treatment form which contained the following:

"Name of proposed procedure or course of treatment

Closing wedge distal femoral osteotomy right knee

Statement of Health professional

I am satisfied the patient had the requisite capacity to consent to this procedure. I have explained the procedure to the patient. In particular, I have explained the intended benefits: re-alignment of the right knee to allow for unloading of lateral knee joint and allow for resolution of left [sic] knee pain.

Serious or frequently occurring risks: infection and non-union"

Surgery and Post-Operative Management

- [5] Dr. Jeffers indicated to Ms. Henry that it would take between four to six months before she properly healed and could get back to her normal life. The surgery was performed on 22nd September 2014 at Tapion Hospital and Ms. Henry was discharged on 25th September 2014. She had post-operative consultations with Dr. Jeffers on the following dates: 14th October 2014, 18th November 2014, 11th December 2014, 5th February 2015, 19th March 2015, 23rd April 2015, 9th June

2015, 28th July 2015, 10th September 2015 and 17th September 2015. At each of these consultations (except in November 2014 and June 2015), Dr. Jeffers ordered x-rays to monitor her progress. During these visits, he examined her and reviewed the x-rays but never informed her that there was non-union until 28th July 2015, ten months after the surgery, notwithstanding that the x-rays had been progressively revealing implant failure.

- [6] As part of his post-operative management, Dr. Jeffers, in February 2015, had ordered physiotherapy and, over the period March to June 2015, he recommended that Ms. Henry move from light to moderate to full weight bearing, which she alleges contributed to the failure of the surgery.
- [7] Following Dr. Jeffers' disclosure of non-union, Ms. Henry consulted Dr. Richardson St. Rose, an orthopedic surgeon, who, after examining the post-operative x-rays, noted in a memorandum dated 24th September 2015 that: the objective of surgery was not realized; there was implant failure; non-union of the osteotomy; the valgus deformity recurred; femoral fragments displaced and urgent revision surgery was needed at a centre where proper techniques could be applied.
- [8] Heeding that advice, in October 2015, Ms. Henry had revision surgery (a retrograde intra-medullary nailing of her right femur) performed at the Emory Clinic in Georgia, United States of America. Following her revision surgery, she consulted Dr. St. Rose again on 10th February 2016. In a memorandum dated 29th April 2016, he noted that the post-operative films showed good alignment and advanced healing and she was ambulant.

Disabilities Suffered

- [9] Ms. Henry alleges that, as a result of Dr. Jeffers' negligence, she was required to do revision surgery and now suffers the following disabilities:

- (1) A permanent leg length discrepancy of ¼ inch which requires a lift implant in the right of every pair of shoe to correct the leg length discrepancy and reduce the negative effects on her lower back and knee;
- (2) A permanent cosmetic disability of about 30% and permanent scars on both sides of the knee and over the proximal right thigh;
- (3) Chronic knee pain with a real possibility of occurrence of arthritis of the knee joint producing an additional disability of 25% and muscle weakness; and
- (4) Muscle hypertrophy.

Alleged Particulars of Negligence

[10] In her statement of claim, she lists twenty-one particulars of negligence, which I have distilled to avoid burdening the judgment with unnecessary repetition:

- (i) Failed to provide the Claimant with sufficient information on his personal experience in performing the proposed surgery, sufficient to make a rational judgment on whether or not to accept the medical advice given in respect of the proposed surgery.
- (ii) Failed to give any warning to the Claimant of the possibility that the operation might be unsuccessful and may require revision surgery and of all possible complications which may arise during and/or from the surgery.
- (iii) Failed to perform the surgery sufficiently carefully and to place the hardware correctly to provide complete bone alignment necessary for healing.
- (iv) Failed to take appropriate action within a timely manner after post-surgery x-rays revealed that there was failure of structural implant and non-healing of the osteotomy.
- (v) Continued to advise the Claimant to undergo x-rays for months following evidence of the non-union of the osteotomy thereby exposing the Claimant to unnecessary radiation and placing the Claimant at risk for a malignancy.
- (vi) Failed to advise the Claimant to stop physical therapy in spite of the poor prognosis and implant failure.
- (vii) Failed to heed professional literature and the modern professional practice that in very few occasions does a non-union go on to heal without intervention

and that in general, if a non-union is still evident at 6 months, it will remain unhealed without specific treatment, usually orthopedic surgery.

It is not in dispute that there was appropriate indication for the recommended surgery. The issues that arise are therefore in regards to the surgery and post-operative management.

Issues for Court's Determination

[11] In her written submissions, Mrs. John-Xavier, counsel for Ms. Henry, helpfully narrowed the issues for the Court's determination as follows:

- (1) Whether Ms. Henry gave her informed consent to the surgery?
- (2) Whether Dr. Jeffers negligently used a surgical technique liable to fail?
- (3) Whether Dr. Jeffers failed to manage Ms. Henry in accordance with the standards expected of an ordinary skilled doctor exercising and professing to have that special skill?
- (4) Whether Dr. Jeffers delayed in the management of the Ms. Henry's treatment and did that delay cause any damage to her?
- (5) If Dr. Jeffers was negligent, what is the measure of damages Ms. Henry is entitled to?

Test for Medical Negligence

[12] My task in resolving these issues is twofold. Firstly, I must determine whether the evidence presented supports any of the alleged acts or omissions. Secondly, if it does, I must then determine whether, in the performance of the act or in the omission, Dr. Jeffers was negligent.

[13] How does the court determine if a doctor is negligent? What is the test? In **Shaun Denis v Hospital Administrator of the Victoria Hospital and the Attorney General**¹ this is what the Court stated:

¹ Saint Lucia, Claim No. SLUHCv2013/0435.

“In relation to the standard of care expected of a doctor in treating his patient, the Caribbean Court of Justice in the 2013 judgment **Meenavalli v Matute**² stated that:

‘The classic statement of the standard of care of a professional exercising some special skill or competence is contained in the direction of McNair J in **Bolam v Friern Hospital Management Committee**³ which was cited with approval by Sir Hugh Wooding in **Chin Keow v Government of Malaysia**:⁴

... where you get a situation which involves the use of some special skill or competence, ... the test ... is the standard of the ordinary skilled man exercising and professing to have that special skill. A man need not possess the highest expert skill; it is well established that it is sufficient if he exercises the ordinary skill of an ordinary competent man exercising that particular art.’

Medical negligence therefore means the ‘failure to act in accordance with the standards of reasonably competent medical men at the time.’ Thus, a doctor is not liable for medical negligence if he has acted in accordance with the practice accepted as proper by a responsible body of medical men skilled in that particular art.’”

- [14] The question I must therefore ask myself is this: did Dr. Jeffers, in performing the surgery and in his post-surgery treatment, act in accordance with the practice accepted as proper by a responsible body of orthopaedic surgeons? Put another way: did Dr. Jeffers fail to act in accordance with the standards of reasonably competent orthopaedic surgeons? The court, in order to come to a conclusion as to what were the applicable orthopaedic standards, must rely on the opinion of orthopaedic surgeons.

The Orthopaedic Surgeons

- [15] At the trial, the parties relied on the evidence provided by the following orthopaedic surgeons:

- (1) Dr. Horatius Jeffers, who gave evidence on his own behalf, is a Fellow of the Royal College of Surgeons with a specialty in Trauma and Orthopaedics. He

² CCJ Appeal No. CV 4 of 2012.

³ (1957) 2 All ER 118.

⁴ (1967) 1 WLR 813.

obtained a Certificate of Completion of Specialist in Trauma and Orthopaedic surgery at the Royal College of Physicians and Surgeons Glasgow, United Kingdom in 2001. He has practiced as an orthopaedic surgeon in Saint Lucia for the past 17 years.

- (2) Dr. Jerome K. Jones provided an expert report to the Court. He is a graduate of Cornell University Medical School and a Fellow of the American Academy of Orthopaedic Surgery and has practiced orthopaedic surgery since 1983 in New Mexico, Florida and Barbados. His areas of specialty are total hip and knee replacement and management of blount's disease. He is published in the *Journal of Pediatric Orthopaedics* (29(7):730-735; October/November 2009). His expert report to the court supported Dr. Jeffers case.
- (3) Dr. Richardson St. Rose provided an expert report to the court. He is a Fellow of the Royal College of Surgeons and has practiced as an orthopaedic surgeon in Saint Lucia for the past 38 years. His expert report to the court supported Ms. Henry's case.
- (4) Dr. Richard L. Thomas is a Board Certified orthopaedic surgeon with the American Board of Orthopaedic Surgery and Assistant Professor of Orthopaedics, Orthopaedic Trauma and Adult Reconstruction at the Emory Johns Creek Hospital, Georgia, United States of America. Dr. Thomas did not provide an expert report to the court, did not give evidence at the trial and therefore could not be cross-examined.

[16] I observe that Ms. Henry, in a comprehensive witness statement, alleges that this "is a clear case of professional/medical negligence" and she set out, in great detail, allegations of Dr. Jeffers' failure to act with the degree of skill required of a reasonably competent practitioner. I point out, however, that where Ms. Henry offers medical opinion on issues which require expert opinion, I am obliged to disregard these as she, though a senior registered nurse, is not an expert. I will now examine each of the issues that arise for determination.

Informed Consent

[17] Ms. Henry, in her statement of claim, alleges that Dr. Jeffers failed to inform her of all possible complications which could arise from the surgery. She specifically contends that she should have been informed of material risks inherent in the surgery, which actually occurred, namely:

- (1) continued pain after healing;
- (2) complete fracture;
- (3) mal-union;
- (4) hardware failure; and
- (5) stiffness.

She does not dispute that the patient consent form listed infection and non-union. Her contention is that, like the Operative Report from Emory Healthcare which listed the risks as “infection, malunion, nonunion, hardware failure, need for revision, nerve or blood vessel injury, continued pain, stiffness, DVT or PE”, Dr. Jeffers ought to have informed of those risks, which in fact occurred.

[18] In his witness statement, Dr. Jeffers responded that he gave her all information about the procedure, explained the intended benefits and “advised the Claimant of the most serious and more frequently occurring risks namely infections and non-union.” He stated that non-union is a material risk inherent in that type of surgery and that he had discussed with her the possibility of adverse reactions, including the non-union post surgery. He said that he was satisfied that she understood the nature of the surgery and the risk associated with that type of surgery and signed the patient consent form of her own free will. During cross-examination, he stated that there are multiple risks in every surgery. He would inform a patient of the more relevant complications, but some risks were so infrequent that it would just disturb the patient if you mentioned all of them.

[19] Dr. Jeffers did not inform Ms. Henry of the risks of continued pain after surgery, the alleged complete fracture, mal-union, hardware failure and stiffness. Was he under a duty to do so? What is the law in relation to informed consent?

[20] The Hippocratic Corpus advises physicians to reveal nothing to the patient of his present or future condition, “for many patients through this cause have taken a turn for the worse” (Decorum XVI). This paternalistic approach that existed at the early beginning of the practice of medicine has fallen into desuetude. As observed in **Montgomery v Lanarkshire Health Board**,⁵ legal developments now point towards an approach to the law which, instead of treating patients as placing themselves in the hands of their doctors (and then being prone to sue their doctors in the event of a disappointing outcome), treats them, so far as possible, as adults who are capable of understanding that medical treatment is uncertain of success and may involve risks, accepting responsibility for the taking of risks affecting their own lives, and living with the consequences of their choices.

[21] **Montgomery**, decided by the United Kingdom Supreme Court in 2015, is a recent and authoritative statement of the modern law in relation to informed consent. The relevant passage follows:

[87] The correct position, in relation to the risks of injury involved in treatment, can now be seen to be substantially that adopted in **Sidaway** by Lord Scarman, and by Lord Woolf MR in **Pearce**, subject to the refinement made by the High Court of Australia in **Rogers v Whitaker**, which we have discussed at paras [77]–[73]. An adult person of sound mind is entitled to decide which, if any, of the available forms of treatment to undergo, and her consent must be obtained before treatment interfering with her bodily integrity is undertaken. The doctor is therefore under a duty to take reasonable care to ensure that the patient is aware of any material risks involved in any recommended treatment, and of any reasonable alternative or variant treatments. The test of materiality is whether, in the circumstances of the particular case, a reasonable person in the patient’s position would be likely to attach significance to the risk, or the doctor is or should reasonably be aware that the particular patient would be likely to attach significance to it.

[88] The doctor is however entitled to withhold from the patient information as to a risk if he reasonably considers that its disclosure would be seriously detrimental to the patient’s health. The doctor is also excused from conferring with the patient in circumstances of necessity, as for

⁵ [2015] UKSC 11.

example where the patient requires treatment urgently but is unconscious or otherwise unable to make a decision. It is unnecessary for the purposes of this case to consider in detail the scope of those exceptions.”

- [22] The *ratio decidendi* of **Montgomery** can be distilled to the following principles:
- (1) A doctor has a duty of care to take reasonable care to ensure that the patient is informed of any material risks involved in the recommended treatment as well as any reasonable alternative treatments.
 - (2) A risk is material if a reasonable person in the same position of the patient would be likely to regard a particular risk as significant.
 - (3) It is impossible to reduce to percentage terms the assessment of materiality of risk.
 - (4) The doctor may withhold disclosure if he reasonably considers that disclosure would be detrimental to the patient’s health (this is the “therapeutic exception”) or in cases of necessity as where treatment is urgently required and the patient is unconscious.
 - (5) The doctor has a responsibility to explain why one of the available treatment options is medically preferable to the others.
- [23] Keeping these principles in mind, particularly the first two, I now examine each of the risks of which Ms. Henry was not informed. It is perhaps useful to observe at this juncture that neither Dr. St. Rose nor Dr. Thomas offered any opinion as to whether Dr. Jeffers fell below the accepted standard in failing to inform Ms. Henry of the risks of continued pain after surgery, the alleged complete fracture, malunion, hardware failure and stiffness. Dr. Jones was asked whether he would have informed Ms. Henry of such risks and he replied “yes”. But, as **Montgomery** illustrates, the fact that Dr. Jones would have done so does not mean that Dr. Jeffers was under a duty, as a matter of law, to do so in relation to each risk. The determinative question is: was the risk material?

Continuing Pain

- [24] If the objective of alignment had been achieved and Ms. Henry continued to experience some pain in the knee, I do not think that a reasonable person, similarly circumstanced, would regard that as a significant or material risk. As it turned out, the objective of alignment was not achieved due to non-union, therefore continuing pain was the inevitable corollary. If Ms. Henry was informed that there was a risk that the surgery could fail, that is, that there was a risk of non-union, it follows that she would have been very much alive to the risk of continuing pain if there was non-union, as indeed there was.

Complete Fracture

- [25] Ms. Henry contends that there was a complete fracture at the osteotomy site and she was never informed of the risk of this. She relies on Dr. Jeffers' filed defence in which he stated: "a complete fracture of the femur was a natural consequence of the surgery. Osteotomy is a controlled fracture of the femur so these are naturally implied conditions."
- [26] Neither Dr. St. Rose nor Dr. Thomas commented on the issue of the "complete fracture". Dr. Jones, however, directly addressed this issue when he stated in his expert report that:
- "there was no radiographic evidence of a 'complete fracture of the Claimant's femur' as stated in paragraph 18.1.5 of the statement of claim ... An osteotomy, by definition, creates a discontinuity in the structure of the bone. There was no fracture of the femur in this case."
- [27] At first blush, there appears to be a conflict between Dr. Jeffers describing the osteotomy as a "complete fracture" and Dr. Jones stating there was no radiographic evidence of a complete fracture. Under cross-examination, Dr. Jones appeared to be associating fracture with some kind of trauma. Dr. Jeffers appears to have considered the osteotomy as a "controlled fracture". The apparent conflict is therefore more semantic than substantial. I therefore conclude on this point, that, to the extent that there was a fracture, this was inherent in the nature of an osteotomy. By agreeing to the surgery, Ms. Henry agreed to the fracture of the

femur, which is what an osteotomy is.

Mal-Union

- [28] The expert opinion is unanimous that Dr. Jeffers' surgical procedure resulted in a non-union, not mal-union. There is therefore no basis to find lack of informed consent in relation to mal-union.

Hardware Failure

- [29] Under cross-examination, Dr. Jeffers stated: "If there is a non-union there is hardware failure." Unfortunately, no other expert was asked to comment on that statement. The court is unclear as to whether every instance of hardware failure in an osteotomy of this kind results in non-union. In the absence of any other medical opinion to the contrary, I am not satisfied that hardware failure was a material risk which Ms. Henry should have been informed about in light of the fact that she was informed about the risk of non-union. I am fortified in this conclusion by the opinion of Dr. Jones who states in his expert report:

"Serious or frequently occurring risks were listed as: '(a) infection (b) non-union' This indicates that the patient was sufficiently informed about the risks of surgery and certainly about the possibility of non-union."

I do not think that a reasonable person in the same position as Ms. Henry, knowing of the risk of non-union, would consider hardware failure as a material risk that he ought to have been informed about. It is the failure of the osteotomy to heal - to achieve union – that is the material risk.

Stiffness

- [30] No evidence was presented to satisfy the court that a reasonable person would have considered stiffness a significant or material risk of undergoing the surgery. I cannot, on any reasonable view, see how this could be characterized as a material risk.

[31] During the trial, it was suggested that Dr. Jeffers lacked the necessary experience to perform the surgery. In his memorandum of 29th April 2016, Dr. St. Rose stated that “the surgeon should have been more experienced in dealing with that type of work.” Ms. John-Xavier, in her closing submissions, apparently abandoned this suggestion. In any event, at the trial, no medical opinion whatsoever was presented as to how much experience an orthopaedic surgeon should have had, or how much experience might have been advisable before undertaking the surgery in Saint Lucia. Other than Dr. St. Rose’s bare, unsupported statement, there is no basis upon which it can be concluded that Dr. Jeffers, a practicing orthopaedic surgeon for seventeen years, lacked the necessary experience to perform the surgery.

[32] In summary, on the issue of informed consent, I am satisfied that, keeping the test of materiality in mind, Dr. Jeffers informed Ms. Henry of the material risks associated with the surgery.

Poor Technique?

[33] To support her allegation of negligence, Ms. Henry relied on the medical opinion of Dr. St. Rose and Dr. Richard L. Thomas. By order dated 21st November 2017, the court gave leave for Dr. St. Rose and Dr. Jones, respectively, to be expert witnesses. Dr. St. Rose signed a witness statement and was cross-examined at the trial. Dr. Thomas, on the other hand, cannot be considered as an expert witness since no application was ever made to deem him as such. He provided no expert report or witness statement to the court and therefore was not a witness at the trial who could be cross-examined, like the other orthopedic surgeons were. The contents of his medical report, untested by cross-examination, can therefore only be given limited weight.

Medical opinion of Dr. St. Rose

[34] Given that much is hinged on the evidence of Dr. St Rose, the relevant portion of his witness statement is set out in full below:

- “9. I reviewed the post-operative X-Ray films from September 2014 to September 2015, together [sic] a report prepared by Dr. Jeffers regarding his management of the patient's treatment. The X-Ray films revealed:
- 9.1 Complete failure of hardware of the Femoral blade plate and screws;
 - 9.2 Significant lucency around the blade as well as the proximal screws, suggesting significant loosening;
 - 9.3 Obvious non union of the Distal Femoral Osteotomy;
 - 9.4 Increasing Deformity of the Distal Femur and reoccurrence of the Valgus Deformity of the joint.
10. Therefore the realignment objective failed. This resulted from a poor technique. I say this for the following reasons:
- 10.1 One or more cancellous screws could have been used and inserted through the offset of the plate and parallel to the blade, all within the Distal Femoral Bone. This would considerably increase the fixation of the angled plate in the distal fragment.
 - 10.2 The Cortical Screws were inadequate in length and diameter. The screws did not fully engage the Distal Cortex. Those screws should never have been used in the cancellous bone of the Distal Femoral Fragment.
 - 10.3 The surgeon should have been more experienced in dealing with that type of work. (underlining mine)
11. As a result, I advised the patient that an urgent surgical revision needed to be undertaken by a more experienced surgeon in a proper setting where adequate facilities are readily available.
12. If these were not done urgently then complications of arthritis and deformity would worsen.
13. These would have included:
- 11.1 Thrombo Embolic Phenomena;
 - 11.2 Disuse Osteoporosis;
 - 11.3 Cosmetic deformity;
 - 11.4 Whole limb disfunction;
 - 11.5 Limb length inequality due to chronic overlap of the osteotomy fragments and wedge not well compensated”
14. I finally saw the patient on the 10th February, 2016 after revision surgery in the United States of America was done in October, 2015. She had a Retrograde Intra Medullary Nailing of her right Femur. The post-operative Films showed good alignment and advanced healing. She is ambulant. There are permanent

operative scars about the knee and proximal thigh: An 8" long scar anteriorly over the knee and scars on either side of the knee from insertion of Anti Rotation Screws. There are similar scars over the proximal right thigh.

15. In view of the above she will suffer from:
 - 15.1 A permanent cosmetic disability of about 30%;
 - 15.2 About 1/4" permanent shortening producing limp;
 - 15.3 Chronic pain in the right knee and real possibility of the occurrence of Osteoarthritis of the knee joint producing an additional disability of 25%. There will be a periodic need of Physiotherapy over an infinite period."

[35] Dr. St. Rose has therefore offered three reasons why, in his opinion, Dr. Jeffers' surgical procedure was not in accordance with the proper practice. Under cross-examination, however, Dr. St. Rose made certain admissions that undermined his credibility and the coherence of his evidence. Firstly, he admitted that he was wrong when he said that the cortical screws were inadequate in length. He stated: "I will not quarrel with the length. I was wrong in talking about the length." Secondly, he admitted that, though he had stated that the cortical screws were inadequate, he was merely "suspicious of the diameter of the screws, but just suspicious, no proof." He admitted he never saw the screws; he just looked at the x-rays. Dr. St. Rose offered no explanation as to why he changed his initial opinion that the cortical screws were inadequate in both length and diameter. He had the opportunity to correct this before he was cross-examined but did not do so, lending some whimsicality to his testimony. He simply withdrew what he had said in a cavalier manner and, in doing so, eliminated the second of the three reasons he had advanced for opining that Dr. Jeffers' technique was poor.

[36] Dr. St. Rose's first reason – that "one or more cancellous screws could have been used and inserted through the offset of the plate and parallel to the blade, all within the distal femoral bone" – was partially weakened by the concession made by Mrs. John-Xavier that the Claimant was not disputing that a cancellous screw had in fact been used. What, therefore, remained of Dr. St. Rose's evidence against Dr. Jeffers?

- [37] At the invitation of the court, Dr. St Rose, using one of the x-rays of the knee, indicated where he thought the implant should have been placed. He stated: “the screw went through the osteotomy. The screw was put in the wrong place. The plate ought to have been placed lower down. Get that plate downwards under x-ray control and the fixation would have been more stable.” It was put to Dr. St. Rose by Ms. Augustin, counsel for Dr. Jeffers, that the cancellous screw could not have been placed lower down because it would have interfered with the cruciate ligaments. Dr. St. Rose rejected that suggestion and stated that the cruciate ligaments would be well away from this cut.

Medical opinion of Dr. Thomas

- [38] I turn now to the evidence of Dr. Thomas which comprised two letters dated 4th October 2016 and 25th December 2017, respectively. Neither of these letters expressed any opinion on Dr. Jeffers’ technique and are therefore of no assistance in resolving this particular issue.

Medical opinion of Dr. Jeffers

- [39] This is what Dr. Jeffers said in relation to his surgical procedure:

“The osteotomy on completion was fixed/stabilized with 90 degree blade plate with screws construct. I used a partially threaded cancellous screw that was inserted through the plates crossing the osteotomy site and anchored in the epiphysis/distal femoral bone. The remainder of the fixation included four cortical screws that were inserted through the plate into the proximal femoral bone. These screws were all of adequate length. They all had a bicortical hold. In other words they went through the bone on the plate side and the cortex or bone surface on the opposite side of the plate.

The procedure that I chose is acceptable in the practice of orthopaedics as it is conventional to put the screw perpendicular to the plane of the osteotomy and not parallel to the blade of the plate used to fix the osteotomy.”

Medical opinion of Dr. Jones

- [40] Dr. Jones' opinion contradicted Dr. St. Rose's opinion that Dr. Jeffers' technique was poor. He disagreed that the implant ought to have been placed lower down. He stated in his expert report:

"In a number of statements made by Dr. Richardson St. Rose he mentioned that the failure of the initial surgery (with non-union and recurrence of the valgus mal-alignment) was a result of "poor technique". I disagree; complications can occur even with correct surgical technique. In a systematic review of sixteen studies, Wylie et al described a non-union rate of 3.2% and a delayed union of 3.8%. X-rays showed that the cortical screws placed by Dr. Jeffers were of adequate length and diameter and did engage both cortices. X-rays also showed that a cancellous lag screw was placed across the osteotomy site and this is an acceptable method of increasing fixation of the distal fragment of the osteotomy."

- [41] Under cross-examination, Mrs. John-Xavier pressed Dr. Jones to examine the x-rays and admit that the screw did not cross the osteotomy site. He disagreed and pointed out on the x-ray that in fact the screw is across the osteotomy site. The court specifically asked him about the technique that Dr. St. Rose stated that Dr. Jeffers ought to have used. Dr. Jones replied that both techniques were acceptable.

- [42] How is the court to reconcile the conflict of medical opinion between Dr. St. Rose and Dr. Jones? In **Eckerley v Binnie**,⁶ this is what the court stated:

"In resolving conflicts of expert evidence, the judge remains the judge; he is not obliged to accept evidence simply because it comes from an illustrious source; he can take account of demonstrated partisanship and lack of objectivity. But, save where an expert is guilty of a deliberate attempt to mislead (as happens only very rarely), a coherent reasoned opinion expressed by a suitably qualified expert should be the subject of a coherent reasoned rebuttal, unless it can be discounted for other good reasons."

⁶ [1988] 18 Con LR 1 at pp 77-78.

[43] In **Wilsher v Essex Area Health Authority**,⁷ Lord Bridge cautioned that:

“Where expert witnesses are radically at issue about complex technical questions within their own field and are examined and cross-examined at length about their conflicting theories, I believe that the judge’s advantage in seeing them and hearing them is scarcely less important than when he has to resolve some conflict of primary fact between lay witnesses in purely mundane matters.”

[44] Applying these principles to the instant case, I have no difficulty preferring the evidence of Dr. Jones to that of Dr. St Rose for the following reasons. Firstly, as I have stated above, Dr. St. Rose undermined his own testimony by his unexplained withdrawal of his accusations in relation to the length and diameter of the screws and the use of cancellous screw. It raises significant doubt as to the rigour of his analysis if it could be so casually withdrawn. Secondly, he suggested that Dr. Jeffers lacked the necessary experience for the surgery without offering any opinion on what that experience should be. Thirdly, Dr. St. Rose admitted that his method of determining that Ms. Henry had a ¼ leg length discrepancy (LLD) was imprecise and was just an estimation. Fourthly, Dr. St. Rose appeared to be imprecise and somewhat offhanded in his testimony compared to Dr. Jones who was careful, precise and methodical. He forthrightly stated that he would have informed Ms. Henry of the implant failure at the earliest opportunity. He presented as an objective witness.

[45] The last of the three reasons cited by Dr. St. Rose (that Dr. Jeffers lacked the necessary experience) has already been disposed at paragraph 31 above, namely, there was no evidence or coherent argument as to why Dr. Jeffers lacked the necessary experience.

[46] On this issue, I therefore conclude that Dr. Jeffers did not negligently use a poor technique liable to fail. In performing the surgery, he acted in accordance with the standard accepted as proper by orthopaedic surgeons.

⁷ [1988] 1 AC 1074 at p 1091.

Post-Operative Management

- [47] Ms. Henry alleges that Dr. Jeffers fell below the standard of a reasonably competent orthopaedic surgeon in his post-surgery management in that he:
- (a) Failed to take timely and appropriate action after post-surgery x-rays revealed that there was implant failure and non-healing of the osteotomy; and
 - (b) Failed to advise her to stop physical therapy in spite of the poor prognosis and implant failure.
- [48] The combined effect of these failures, she contends, resulted in her suffering:
- (a) financial loss;
 - (b) a ¼ inch LLD;
 - (c) “muscle hypertrophy;” and
 - (d) extended scarring.
- [49] She also alleged that he continued to advise her to undergo x-rays for months following evidence of the non-union of the osteotomy thereby exposing her to unnecessary radiation and the risk of a malignancy. However, no evidence was presented to support this particular allegation and it was not pursued in the closing submissions of Mrs. John-Xavier. The court’s examination will therefore be confined to the question of whether Dr. Jeffers’ was negligent in his post-operative management of Ms. Henry resulting in financial loss, LLD, muscle hypertrophy and extended scarring to her.
- [50] Before turning to these issues, I must first address Mrs. John-Xavier’s technical point that Dr. Jeffers’ defence is fatally flawed since it consists of bare denials to the eleven allegations of post-operative mismanagement, without setting out the facts to support his defence. Part 8 of the **Civil Procedure Rules 2000** (“CPR”) requires that a party’s pleadings must fully disclose its case. This is so that each side knows the case to which it has to respond to. Where a party has not pleaded an allegation in his defence he may be prevented from adducing facts to support that allegation, introduced for the first time in a witness statement or at the trial.

[51] The allegations of post-operative mismanagement, though sliced into eleven specific allegations, really amount to those allegations, which I have distilled above at paragraph 47 of this judgment. At paragraph 7(viii) of his defence, Dr. Jeffers stated, firstly, that at all times he acted in conformity with the standards expected from him as a surgeon. Secondly, at paragraph 7(ix), he stated that the x-rays were necessary at the time they were recommended. Thirdly, at paragraph 7(x), he stated that any physical therapy would have been manageable and in keeping with what Ms. Henry could bear at the time. Fourthly, at paragraph 7(xvi), he stated that there would have been union at six months in the majority of cases but it was not invariable since osteotomy can still progress to union even after six months. It is therefore clear that Dr. Jeffers sufficiently set out the foundation of his defence upon which he would rely in answer to the claim of post-operative mismanagement. Having done so, he later developed these in his witness statements. This is in accordance with the CPR. I therefore am unable to conclude that his defence is fatally flawed.

Extended Scarring

[52] The issue of whether Dr. Jeffers is liable for Ms. Henry's extended scarring can be disposed of shortly. Dr. Jeffers' evidence was that scarring is inherent in a surgical procedure like osteotomy, which Ms. Henry knew would be permanent. More important, however, was the opinion of Dr. St. Rose who, in response to a direct question put by the court, responded: "I don't think that I could blame Dr. Jeffers for extended scarring." There is therefore no basis for the court to conclude that Dr. Jeffers is liable for extended scarring.

"Muscle Hypertrophy"

[53] Similarly, this issue can be disposed of shortly. In response to a question posed by the court, Dr. St. Rose responded that the muscle hypertrophy⁸ suffered by Ms. Henry is attributable to Dr. Jeffers but that he expected the muscle to recover. There is, however, no medical opinion presented that the muscle hypertrophy

⁸ The term used by the claimant and Dr. St. Rose is "muscle hypertrophy" and not "muscle atrophy."

suffered was due to the absence of the required degree of skill on the part of Dr. Jeffers. If union can occur up to nine months after surgery, was it to be expected that there would during that period, be muscular atrophy? In any event, the medical opinion of Dr. St. Rose is that the muscle would recover.

Leg Length Discrepancy

[54] It is not disputed that: (1) Dr. Jeffers managed Ms. Henry, post-operatively, from September 2014 to September 2015; (2) during that period he examined her and ordered and reviewed a number of x-rays to monitor her progress; (3) the series of x-rays showed a progressive loosening of the screws and implant migration; and (4) Dr. Jeffers did not inform Ms. Henry that there was non-union until July of 2015.

[55] Three questions arise for determination. Firstly, did Dr. Jeffers fall below the accepted standard in waiting ten months before informing Ms. Henry that there was non-union? Secondly, did he fall below the accepted standard in failing to discontinue physiotherapy despite implant failure? Thirdly, if he did, did that delay and/or failure to suspend physiotherapy cause or contribute to the disabilities suffered by Ms. Henry?

Waiting Ten Months Negligent?

Evidence of Dr. Jeffers

[56] Dr. Jeffers maintained that while the x-rays did reveal the loosening of screws and backing off of the plate, this was not the paramount consideration since the osteotomy could still progress to healing. He stated that fractures could heal by primary or secondary intention and that there was evidence of a “large amount of callous indicative of a change in the direction of remodeling.” He stated that after reviewing the x-ray of 23rd April 2015, he made a notation that there was evidence of healing by secondary intention. He concluded: “my analysis was that there was still possibility of union.” He said he did not inform Ms. Henry of the backing out of the screws because implant failure did not mean you cannot have union and he

did not wish to unduly alarm her until he had concluded there was non-union, a conclusion he arrived at in July of 2015.

Evidence of Dr. St. Rose

- [57] Dr. St. Rose stated that if revision surgery had been done after two months, it would have been much easier and would have made the surgery less hazardous than having waited until nine months had passed. He did not opine, however, as to whether Dr. Jeffers fell below the accepted standard in waiting ten months to inform Ms. Henry of non-union. Neither did Dr. Thomas' documentary evidence offer any opinion on this issue.

Evidence of Dr. Jones

- [58] Under cross-examination, Dr. Jones stated that the purpose of the x-rays was to monitor the progress of the patient, who should be informed of progress at all times. He stated that he would have informed the patient of any progress he saw in the x-rays. Dr. Jones was asked to review each of Ms. Henry's x-rays separately and he commented in relation to each one. The essence of his observations was that he observed that they showed the progressive backing out of the screw, backing away of the fixation and bone loss, but "no real bone loss at the osteotomy site." In relation to each x-ray, he said that informing the patient is something he probably would have done. He stated that, once backing away of the screw and implant was apparent he would have mentioned that the patient could consider revision surgery. Or, he said, waiting to see if fusion occurred is an acceptable alternative, if there was still alignment. As long as alignment is intact, he stated, "you do not lose anything." He was asked to comment on his observation of loss of alignment. He stated that the x-ray at page 297 of the trial bundle showed loss of alignment but the previous x-rays did not. On the previous x-rays, he said, the alignment was acceptable.

- [59] This is a significant statement by Dr. Jones. The study date of the x-ray at page 297 of the trial bundle is 10th September 2015. Ms. Henry stated at paragraph 34

of her witness statement that, it was during the visit of 10th September 2015, after reviewing the x-ray, that Dr. Jeffers “apologized and stated that we were back where we started – meaning the alignment problem was not solved.” Following this visit, Ms. Henry consulted Dr. St. Rose and then did revision surgery at Emory.

[60] The conclusion I draw from this, as to when Ms. Henry ought to have been informed about the implant failure, is that there were two alternatives. The first was to keep Ms. Henry advised on what each x-ray revealed. The second was to wait to see if fusion occurred and alignment maintained. The second alternative was the one chosen by Dr. Jeffers.

[61] In an attempt to clarify this matter, I specifically asked Dr. Jones whether, in his opinion, Dr. Jeffers fell below the standard expected of a reasonably competent orthopaedic surgeon in waiting ten months to disclose to Ms. Henry that there was non-union. His answer was that Dr. Jeffers did not. There being no conflicting medical opinion on this issue, I am obliged to accept the opinion of Dr. Jones, whose opinion I had no reason to discount. Much of Ms. Henry’s distress and resentment at Dr. Jeffers might have been avoided if he had informed her of the progressive implant migration. The backing out of the screws and plate, in the eyes of a lay person, is indeed alarming. The prevailing medical opinion appears to be, however, that it is not implant failure but alignment that is the critical factor. That, however, does not dispose of the issue of post-operative mismanagement. There remains the question of whether the delay or continuing the physiotherapy, notwithstanding implant failure, caused or contributed to LLD. This, as I see it, is the more critical question. If Dr. Jeffers had fallen below the standard in waiting to inform Ms. Henry of the non-union, but no damage resulted from the delay, it could not be concluded that he was liable for her disabilities. On the other, if he did not fall below the standard but damage nevertheless resulted from his decision not to discontinue physiotherapy and weight bearing, he would inevitably have to bear responsibility for that. It is to this question that we must now turn.

Did Dr. Jeffers Cause Bone Loss Leading to LLD?

[62] Mrs. John-Xavier contends, at paragraph 23 of her written submissions, that LLD was not one of the listed risks of any of the surgeries that Ms. Henry underwent. She nevertheless suffered LLD. This, she submitted, “is a complication that the [Ms. Henry] suffered from as a result in [sic] the delay in her management, caused by the significant bone loss, destruction and erosion.” Dr. Jeffers, she contends, caused the bone loss, destruction and erosion.

[63] Medical opinions clashed on causation of the LLD. It is therefore best that this evidence be examined in some detail.

[64] *Evidence of Dr. St. Rose*

The evidence of Dr. St. Rose comprised three memoranda (dated 20th September 2015, 24th September 2015 and 29th April 2016) and his witness statement. Neither of the 2015 memoranda (which were shortly after Dr. Jeffers’ disclosure of non-union to Ms. Henry) mentioned anything in relation to LLD. His memorandum of 29th April 2016, however, mentioned LLD. This reference to LLD was then repeated in his witness statement already set out above at paragraph 31 of this judgment.

For ease of analysis, I reproduce Dr. St. Rose’s comments on LLD:

“If [revision surgery] were not done urgently then complications may have quickly arisen.

Those would have included:

...

Limb length inequality

I finally saw the patient on the 10th February, 2016 after revision surgery in the United States of America ... There are permanent operative scars about the knee and proximal thigh: An 8” long scar anteriorly over the knee and scars on either side of the knee from insertion of Anti Rotation Screws. There are similar scars over the proximal right thigh.

In view of the above she will suffer from:

...

About ¼” permanent shortening producing limp.”

[65] No conclusion as to causation of the LLD can be drawn from Dr. St. Rose’s witness statement. His pre-revision surgery observation is that that there is a ¼” shortening, but he does not comment on causation. He stated that if revision surgery was not done urgently then complications could arise which would include LLD. Ms. Henry did in fact have urgent revision surgery the month after Dr. St. Rose recommended urgent revision surgery.

[66] During cross-examination, Dr. St. Rose was asked about the absence of any mention of LLD in his two memoranda of April 2015. He responded that it was “implied” in his statement that “femoral fragments were displaced.” He said that when he looked at an x-ray and he observed the relationship of fragments and he saw bone destruction around screws and plates, when that is put together there is leg length discrepancy. He said that with that kind of looseness he expected shortening of the limb. He was then asked by the court whether he considered LLD, consequent on a surgery, a major or a minor event. He replied that it would be a major event. When asked again why he had not listed it among his other five observations, he replied: “My focus was not on leg length discrepancy.”

Evidence of Dr. Jeffers on LLD

[67] In his witness statement, Dr. Jeffers stated:

“The Claimant alleges that as a result of my negligence I caused severe bony destruction of the medial femoral condyle. The bony destruction referred to is confined around the bony tissue surrounding the blade part of the blade plate implant and does not extend to the region of the hypertrophic non-union and therefore cannot contribute to a leg length discrepancy. The bone that is juxtaposed to the region of the hypertrophic nonunion is not affected. Further there is no lucency at this time as images presented by the Claimant at three months and conclusively at eleven months post surgery reveal complete resolution or filling of the area of lucency with healthy visible bone.

...

At the centre of excellence where she did corrective surgery the Claimant consented to the doctors doing everything necessary in the circumstances to alleviate her situation. If she had a leg length discrepancy it was incumbent on Emory Hospital to deal with this at the same time that they performed reconstructive surgery. Addressing a non-union and ensuring that there is balance in leg length are not mutually exclusive. I note the doctor's use of the bovy cord at Emory Hospital during surgery an indication that leg length was being considered during surgery. The bovy cord is one of the most reliable and effective modalities used to establish leg length equality during surgery.

...

Crucially she was not alerted to the presence of a leg length discrepancy at the time neither was she alerted of the possibility of one developing in the future.

In the preoperative consent given by the Claimant at Emory Hospital I note that the Claimant consented to bone grafting of the non union site if it was thought to be required as an integral part of the operative procedure. This indicates a clear intention of dealing with leg length balance and union using bone grafting techniques should the need arise.

The Claimant at paragraph 9 of her claim states that the procedure had to be revised failing which she would have suffered limb length deformity. The procedure was revised yet she suffered a length discrepancy an indication that the leg length discrepancy was not caused at my hands. At paragraph 14 the Claimant states that corrective surgery was successful, as at her 11-month follow up visit the non union was noted to be completely healed. The length discrepancy could have been averted once the revision procedure was done correctly as a procedure to address a non union takes into account equality in leg length. An orthopedic surgeon must ensure that there is equality in leg length before completion of the procedure. This is a basic requirement and an integral component in the performance of that type of surgery.

During the time that the Claimant was under my care there was no sign of a length discrepancy and consequently I made no record of same. After the Claimant left my care she was cared for by Dr. St. Rose. I note that Dr. St. Rose made no mention of a leg length discrepancy in his medical reports an indication that there was none present.

The Claimant returned to Emory Hospital for additional surgery on 22nd September 2016 to have the distal screws in the nail removed. The non union was noted to be completely healed but there was no record of a leg length discrepancy.

Mention of a leg length discrepancy was made in October 2016 after the Claimant had returned to Emory Hospital two weeks post the second operation on 22nd September 2016. No foundation had been laid to connect that condition to me. Once mention of it was made Emory Hospital sought to blame me for it notwithstanding that they had had consultations with the Claimant pre and post surgery and none of these complaints had been made or documented at these times.”

[68] From the above statements of Dr. Jeffers, I distill the following as his medical opinion:

- (1) The bony destruction of the medial femoral condyle is confined around the bony tissue surrounding the blade part of the blade plate implant and does not extend to the region of the hypertrophic non-union and therefore cannot contribute to a leg length discrepancy;
- (2) Addressing a non-union and ensuring that there is balance in leg length are not mutually exclusive. The length discrepancy could have been averted once the revision procedure was done correctly, as a procedure to address a non-union takes into account equality in leg length

[69] Under cross-examination, it was put to Dr. Jeffers that his delay in recommending revision surgery caused Ms. Henry bony destruction. He disagreed and stated that bony destruction at the fracture site is what would cause shortening. He stated that bony destruction of the medial femoral condyle could not contribute to leg length discrepancy.

Evidence of Dr. Jones on LLD

[70] In his expert report Dr. Jones stated:

“x-rays taken on 11th December 2014 and 5th February 2015 reported showing loosening of the proximal screw of the implant fixation. Dr. Jeffers recommended physiotherapy maintaining non-weight bearing on the right lower extremity until 18th November 2014 when partial weight bearing was initiated. The patient continued to have pain at the knee and on Dr. Jeffers notes stated that on 28th July 2015 the presence of a fibrous non-union at the surgical site was determined. Further surgery to allow for healing at the non-union site was recommended.

Dr. Jeffers determined that there was a non-union in July 2015, ten months after her surgery. The time frame for healing of distal femoral osteotomies is variable. Van der Woude et al (Strategies in Trauma Limb Reconstruction 2016) reported that some patients in his series took up to nine months to heal. In the literature there are many definitions of the “non-union” time-frame. The US Food and Drug Administration defines non-union as a fracture that is at least 9 months and has not showed any evidence of healing for 3 consecutive months. Dr. Jeffers’ post-operative management is in keeping with this time frame; there is no negligence by Dr. Jeffers and his time frame for management did not have a negative impact or adverse effect on the subsequent surgery or its outcome. It was appropriate to continue with physiotherapy limiting the weight bearing on the right lower extremity during the initial post-operative period.

In his statement dated 29/04/2016 Dr St Rose stated that the patient will suffer about ¼ inch permanent shortening of the limb. I did not see any mention of a leg length discrepancy before the revision surgery. I did not see any mention in any of the records I reviewed on the method used to measure the resulting leg length discrepancy. X-ray scanograms of the lower extremities would give an accurate measurement. Also, if a leg length inequality was identified at the time of the retrograde nailing, then this could have been easily corrected with traction on the extremity at the time of fixation of the retrograde nail. This would not be a separate procedure but adjusting for leg length discrepancy is a common component of the femoral intra-medullary nailing procedure. The retrograde nailing technique used at Emory was the appropriate fixation technique for correcting the non-union in this patient.

I have looked at the Claimant’s preoperative notes and the intraoperative notes from Emory Hospital. The Claimant consented to bone grafting of the non-union site if it was thought to be required as an integral part of the operative procedure. At surgery the bony ends of the non-union site were prepared by removal of the interposed fibrous tissue to allow for good bone and bone contact thereby optimizing the chances for union. It was noted that post compression of the non-union site there was a large hypertrophic area of cortical bone on the anterior aspect of the shaft fragment. This was debrided of any soft tissue and then a rongeur was used to resect this hypertrophic bone and the bony pieces were then placed medially and laterally as local bone graft.

In the surgical treatment of non-unions use of bone graft is often used to augment the internal fixation and increase the potential for successful healing. In this case, autogenous bone graft (example, from the iliac crest) would add healthy bone with osteoconductive and osteoinductive properties to the surgical site. With bone graft interposed between the bone ends at the non-union site, the desired impaction could be achieved while any adjustments to correct leg length discrepancy are performed.

In the "Operative report-final report" from Emory Healthcare (dated 10/12/2015; page 2) it was stated that pre-operative x-rays showed 'significant bone destruction of the medial femoral condyle'. This is not mentioned in the description of the intra-operative findings. Loosening of screws and the blade plate would likely contribute to erosion of bone."

[71] From the above statements, I distill the following as the medical opinion of Dr. Jones:

- (1) Dr. Jeffers' time frame for management did not have a negative impact or adverse effect on the subsequent surgery or its outcome;
- (2) It was appropriate to continue with physiotherapy limiting the weight bearing on the right lower extremity during the initial post-operative period;
- (3) If a leg length inequality was identified at the time of the retrograde nailing, it could have been easily corrected with traction on the extremity at the time of fixation of the retrograde nail. This would not be a separate procedure but adjusting for leg length discrepancy is a common component of the femoral intra-medullary nailing procedure; and
- (4) The retrograde nailing technique used at Emory was the appropriate fixation technique for correcting the non-union in this patient.

[72] Under cross-examination, Dr. Jones stated that the x-rays showed evidence of bone loss, and suggested lucency between the proximal and distal femur. He stated that he did not see "any real loss of bone at the osteotomy site." After reviewing the x-rays, he stated that if there was bone healing it was minimal and not solid. He cautioned that his observations were subject to the quality of the x-rays. He agreed with Mrs. John-Xavier that there was no evidence of healing at six months. He was questioned about Dr. Jeffers' decision to continue physiotherapy even after the x-rays showed plate and screw migration. Dr. Jones stated: "Continuing physiotherapy is absolutely important. If the patient is putting too much weight on the leg, it could lead to loss of alignment. It would not lead to bony destruction or bone loss; it could lead to loss of fixation or alignment, but not loss of bone."

- [73] The court specifically asked him whether Dr. Thomas' observation that there was "significant bony destruction of the medial femoral condyle secondary to the plate" could contribute to LLD. Dr. Jones stated that erosion at blade plate in the distal femur would not contribute to leg length discrepancy. He was asked to review both of Dr. Thomas' letters to see if they mentioned bone loss at any other location that could contribute to LLD. After reviewing the medical evidence of Dr. Thomas, Dr. Jones concluded that there was no reference to bone loss that could actually contribute to LLD.

Evidence of Dr. Thomas

- [74] In his letter of 4th October 2016, Dr. Thomas stated:

"She presented to my clinic on 10/02/2015 where x-rays revealed complete failure of hardware of the distal femur blade plate with significant lucency around the blade plate, as well as the proximal screws. There was also clearly a nonunion of the distal femur osteotomy site with some hypertrophic and significant bony destruction of the medial femoral condyle secondary to the plate. As a result from the osteotomy surgery performed on 9/22/2014, the patient was unable to bear weight on her right leg without severe pain and required significant assistance to help her with ambulation.

...

Given the significant bony destruction of the medial femoral condyle secondary to the plate, it was determined that replating the distal femur with a lateral plate may cause an additional failure; therefore, the patient elected to undergo a retrograde intramedullary nailing of the distal femur nonunion.

...

At her 11-month-old follow up visit the patient's nonunion was noted to be completely healed, however, there was evidence that one of the screws within the nail had backed out partially from the distal femur. This made the screw head prominent within the knee joint, which was causing significant pain with range of motion of the knee as soft tissue would catch on the screw head. The screw potentially backed out secondary to the bone loss in the distal femur, however, I cannot firmly make that conclusion because it is a known potential complication with all orthopedic hardware involving screws. The patient required an additional surgery on,

9/22/2016, to have the distal screws in the nail removed, which was uneventful.

...

She will require referrals for physical therapy to increase her strength, a chiropractor for her low back pain secondary to her altered gait, and shoe orthotics for her leg length discrepancy. The leg length discrepancy is likely secondary to the deformation created by the original surgery in St. Lucia.

[75] In his letter of 25th December 2017, Dr. Thomas stated:

"This letter is an addendum to previous letter pertaining to my patient, Mrs. Anne Margaret Henry, regarding her diagnosis and treatments for her right femur non-union.

Technically, Mrs. Henry's case was not considered an emergency, given that her life or limb was not in immediate danger. However, given the disruption to her function, quality of life and active bony destruction from the failed implant, her case needed to be treated urgently. Understanding also, that her non-union was well over a year, was of particular concern.

When I first meet Mrs. Henry and reviewed her case with her, I explained at length that the primary goal of the corrective surgery would be to get her bone to heal, and to stabilize her leg so she would have the ability to walk again. We discussed that there may be the potential for a leg length discrepancy following the corrective surgery due to the extensive bone loss from the significant bony destruction due to the failed implant and surgery.

It is well documented, that bone healing is best done under compression and not distraction. If we had distracted her non-union to correct her leg length at the time of the corrective surgery, her chances of failure would have increased significantly, which would have been harmful towards our primary goal of the surgery.

I wish to reiterate that correction of a non-union, and correction of a length leg discrepancy, are separate and opposite surgeries. For a patient like Mrs. Henry who had a non-union for well over a year, healing and restoring mobility had to be the primary goal. I believe the use of any biologics or artificial bone material would have placed Mrs. Henry at a risk for a second non-union given the gravity of bone loss and significant bony destruction from the failed implant and surgery. Additionally, Mrs. Henry's leg length discrepancy is as a result of the severe bone loss due to the significant bony destruction she suffered from her failed surgery. As stated

in my previous report, Mrs. Henry was referred to a number of specialists to manage the leg length discrepancy and the associated complications.

- [76] From Dr. Thomas' statements above, I distill the following crucial medical opinion:
- (1) There was significant bony destruction of the medial femoral condyle secondary to the plate;
 - (2) The screw potentially backed out secondary to the bone loss in the distal femur, however, this conclusion could not firmly be made conclusion because it is a known potential complication with all orthopedic hardware involving screws;
 - (3) The leg length discrepancy is likely secondary to the deformation created by the original surgery in St. Lucia;
 - (4) There was potential for a leg length discrepancy following the corrective surgery due to the extensive bone loss from the significant bony destruction due to the failed implant and surgery;
 - (5) Correction of a non-union, and correction of a length leg discrepancy, are separate and opposite surgeries; and
 - (6) Mrs. Henry's leg length discrepancy is as a result of the severe bone loss due to the significant bony destruction she suffered from her failed surgery.
- [77] The conflict of medical opinions that emerges is that, firstly, Dr. Thomas says that Ms. Henry's LLD was caused by the significant bony destruction she suffered from Dr. Jeffers' failed surgery. Dr. St. Rose's opinion appears to supports this. On the other hand, Dr. Jones and Dr. Jeffers say that the bony destruction to which Dr. Thomas refers could not contribute to LLD. Secondly, Dr. Thomas states that correction of a non-union and correction of LLD are separate and opposite surgeries. Dr. Jones and Dr. Jeffers were adamant that they were not. Whose evidence do I prefer and why?
- [78] I am persuaded by the opinion of Dr. Jones for the following reasons:
- (1) Dr. Jones stated that bony destruction of the medial femoral condyle secondary to the plate (as noted by Dr. Thomas) could not contribute to LLD.

He said that loss of bone at the osteotomy site would have contributed to LLD but he did not observe any such bone loss. He helpfully illustrated his explanations by using a model of the knee and femur.

- (2) Having carefully reviewed Dr. Thomas' letters, I can find no reference to bone loss other than at the medial femoral condyle. Having not put in an expert report and not being a witness at the trial, the court was deprived of the opportunity to hear him respond to the opinion of both Dr. Jones and Dr. Jeffers that the bony destruction he [Dr. Jones] observed could not contribute to LLD. It is to be regretted that he was not called as a witness.
- (3) Dr. St. Rosen admitted that LLD could be described as major event consequent on the surgery. Yet he failed to note any LLD in either of his two memoranda following Dr. Jeffers' surgery. He sought, unconvincingly in my view, to explain this omission by stating that it was to be "inferred" from his statement that "femoral fragments were displaced" and that he was not focused on LLD. I found his opinion on this issue to be vague and therefore unpersuasive.
- (4) Dr. Thomas' bare statement that a non-union and correction of LLD are separate and opposite procedures suffers, regrettably, from the fact that he was not present at the trial to explain or defend his opinion. Both Dr. Jones and Dr. Jeffers emphatically disagreed with his opinion. Dr. Jones, in particular, illustrated and explained, in a logical manner, why the retrograde intra-medullary nailing was designed to do precisely that, that is, correct alignment and any LLD.
- (5) Doubt arises from the fact that Emory only mentions a leg length discrepancy in October 2016, after Ms. Henry had returned to Emory Hospital two weeks after Emory's second operation on 22nd September 2016 to have distal screws in the nail removed. Dr. Thomas, not being a witness, could not clear up this doubt.

Conclusion

[79] I have not been persuaded, on the medical opinion presented, that Dr. Jeffers was responsible for Ms. Henry's LLD either as a consequence of his surgical technique, his decision to wait ten months to inform her of non-union, or his recommendation of physiotherapy despite implant failure. I have been persuaded on the medical evidence that both his surgical procedure and his post-surgery management of Ms. Henry was in accordance with the standard expected of a reasonably competent orthopaedic surgeon. On the medical evidence presented, I therefore cannot find that he is responsible for any financial loss or disabilities suffered by Ms. Henry.

[80] I therefore make the following orders:
(1) The claim is dismissed.
(2) Prescribed costs are awarded to the Defendant in accordance with CPR 2000.

Justice Godfrey Smith
High Court Judge

By the Court

Registrar