Neutral Citation Number: [2021] EWHC 323 (QB)

Case No: QB-2018-001590

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 18/02/2021

Before :

JASON COPPEL QC
SITTING AS A DEPUTY JUDGE OF THE HIGH COURT

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Between :

Sarah Jarman	**Claimant**
- and –	
Brighton and Sussex University Hospitals NHS Trust	**Defendant**

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Daniel Lawson (instructed by **Stewarts LLP**) for the **Claimant**
Aidan O'Brien (instructed by **Hempsons LLP**) for the **Defendant**

Hearing dates: 8-11, 14-16 December 2020

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Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

Covid-19 Protocol: This judgment was handed down remotely by circulation to the parties' representatives by email and release to Bailii. The date for hand-down is deemed to be on 18 February 2021 at 10:30am.

Jason Coppel QC (sitting as a Deputy Judge of the High Court):

The claim

1. The Claimant, a primary school teacher, injured her back in an accident at work on 17 February 2015. Following consultations with her GP and physiotherapists, she attended the Accident and Emergency ("A&E") Department of the Royal Sussex County Hospital, which is operated by the Defendant, the Brighton and Sussex University Hospitals NHS Trust ("the Trust") on 3 March 2015. The Claimant was examined on the same day in the Trust's orthopaedics department. The outcome of that examination was that she was referred for an MRI scan on a "routine" timescale. The MRI scan was performed on 18 March 2015 and showed probable Cauda Equina Syndrome ("CES"), as she had a prolapsed disc compressing the right anterior cauda equina. The Claimant had urgent spinal decompression surgery on 21 March 2015. But this was not successful in preventing her from suffering permanent neurological damage, and long term consequences of CES.

2. CES is a relatively rare condition which is commonly caused by a disc prolapse. The disc bulges and puts pressure on the bundle of nerve roots emerging from the end of the spinal cord below the first lumbar vertebra. These nerves transmit messages to and from the bladder, bowel, genitals and saddle area, and control sensation and movement in that area. CES is typically characterised by severe lower back pain with bilateral sciatica and is associated with saddle anaesthesia, urinary retention and bowel dysfunction. As the Court of Appeal has recently noted in *Hewes v West Hertfordshire Acute Hospitals NHS Trust & Ors* [2020] EWCA Civ 1523, §5, once CES has been diagnosed, it is seen as an emergency, because unless the pressure on the nerves is released quickly, they can be damaged permanently. CES may be suspected following consideration of a patient's symptoms (as subjectively reported) and, following examination, of any objective physical signs of CES, but a diagnosis of CES can only be confirmed by an MRI scan.

3. The Claimant claims that the Trust acted negligently in causing decompression surgery to be delayed until 21 March 2015. She contends that upon her attendance at A&E on 3 March, she should have been referred for an urgent MRI scan, which should have been completed by, at latest, 7 March 2015 and that she should have been operated on by, at latest, 9 March 2015; and that the delay until 21 March 2015 caused a worsening of the outcome which she has experienced following her decompression surgery. The Defendant, for its part, maintains that the timing of the Claimant's scan and subsequent surgery was appropriate, as she was not showing any signs of CES upon examination by Muhammad Kahn, a specialist orthopaedic registrar. Further, the Defendant contends that a delay in surgery from 9 March 2015 to 21 March 2015 did not cause any injuries or additional damage to the Claimant.

4. As well as the present claim, the Claimant brought a personal injury claim against her employer, East Sussex County Council ("the Council"), which was subsequently settled, along with a Part 20 claim which had been brought by the Council against the Trust, to the effect that the Trust's actions had worsened the consequences of the workplace injury sustained by the Claimant. By Order of Master Yoxall made on 5 July 2019, the first stage of the determination of the Claimant's action against the Trust is the trial of preliminary issues to the following effect:

"whether or not the Trust Defendant is liable to the Claimant by reason of the matters alleged in the Particulars of Claim and, if so, whether or not any of the injuries pleaded were caused thereby; if any such injuries were so caused, the extent of the same"

5. In summary, therefore, I must decide, first, whether the Claimant undergoing surgery on 21 March 2015 and not earlier was the result of negligence by the Trust; and secondly whether the delay which ensued from such negligence caused the Claimant to suffer any further or more serious injury than would have occurred if she had been operated on without that delay.

6. I heard evidence and argument going to these issues over seven days. Three factual witnesses gave evidence: the Claimant herself, Mr Khan and Dr Gareth Chan, who had completed the form referring the Claimant for an MRI scan on 4 March 2015. The Claimant gave evidence in a measured and dignified manner and I pay tribute to her fortitude in the face of much suffering. She, and the other factual witnesses, seemed to me to give evidence truthfully and to the best of their abilities. There was, in truth, little in issue between them, in part because of the passage of time since March 2015 and the frank acceptance by the Defendants' witnesses that they had no recollection of the relevant events and so necessarily relied almost entirely for their evidence on the contemporaneous medical records. I was also provided with witness statements from five other employees of the Defendant who dealt with the Claimant's case in March 2015, Messrs Danciut, Elias, Marenah, Hamad and Bush, the latter being the radiologist who interpreted her MRI scan. Their evidence was not challenged by the Claimant. It was either of no assistance in determining the issues before me, or (in the case of Dr Bush's statement) was not controversial.

7. I also heard evidence from no less than seven expert witnesses. There were two experts in orthopaedic and spinal surgery, Mr Jonathan Spilsbury instructed by the Claimant and Mr Neil Chiverton by the Defendant, and it was common ground that their evidence was by far the most pertinent expert evidence on the question of breach of duty. There were three experts in neurosurgery, Mr Nicholas Todd instructed by the Claimant, Mr Richard Mannion instructed by the Defendant and Mr Robert Maurice-Williams who had been instructed by the Council for the purposes of defending the claim brought against it by the Claimant, and whose evidence was relied upon by the Claimant. There were also three experts in neurology, Professor Anthony Schapira instructed by the Claimant, Dr Peter Newman instructed by the Defendant and Dr Oliver Cockerell who had been instructed by the Council and whose evidence was relied upon by the Claimant. The evidence of the neurosurgery and neurology experts was primarily directed to the issue of causation, whether and to what extent the Claimant's condition had deteriorated during the relevant period in March 2015, but the neurosurgery experts in particular also offered opinions on the issue of breach of duty. Three experts in radiology, Dr James Rankine, Dr Gabriel Lamb and Dr Sarah Burnett-Moore, were not called and their reports, and their joint statement, were admitted into evidence without challenge.

8. In reaching my decision, I have taken into consideration the Claimant's medical records, her witness evidence, that of the two other factual witnesses who gave evidence at the trial, the statements of the other factual witnesses who were not cross-examined, the various expert reports and four joint statements, and the oral evidence given by the orthopaedic, neurosurgical and neurological expert witnesses. I have also received and taken into account helpful written and oral submissions by Mr Daniel Lawson

representing the Claimant and Mr Aidan O'Brien representing the Trust. I am grateful to both Counsel for their assistance in navigating a complex case.

The applicable legal principles

9. There was no dispute between the parties as to the applicable legal principles. I must apply the well-known *Bolam* test (see *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582), whereby a doctor must provide care which conforms to the standard reasonably to be expected of a competent doctor and will not be in breach of the duty of care if a responsible body of medical opinion would have approved of the treatment given, even if other experts might disagree. The relevant doctors in the present case, Mr Khan and other specialist members of his team, were practitioners in the field of general orthopaedics and the parties agreed that the issue of breach of duty should be determined according to the standards reasonably to be expected of competent general orthopaedic specialists, rather than, say, specialists in spinal surgery. It was also common ground that the relevant standards were those which were applicable in March 2015, when the Claimant attended the Trust, and not those which a general orthopaedic specialist would apply today.

10. Where, as in the present case, the Court is presented with a range of expert views, some of which support the defendant and some of which do not, it is of particular importance to understand the basis upon which the Court would be entitled to reject the evidence on behalf of the defendant as not reflecting a "responsible body of medical opinion". *In Bolitho v City and Hackney Health Authority* [1997] UKHL 46, [1998] AC 232, Lord Browne-Wilkinson stated, on this issue:

> "These decisions demonstrate that in cases of diagnosis and treatment there are cases where, despite a body of professional opinion sanctioning the defendant's conduct, the defendant can properly be held liable for negligence (I am not here considering questions of disclosure or risk). In my judgment that is because, in some cases, it cannot be demonstrated to the judge's satisfaction that the body of opinion relied upon is reasonable or responsible. In the vast majority of cases the fact that distinguished experts in the field are of a particular opinion will demonstrate the reasonableness of that opinion. In particular, where there are questions of assessment of the relative risks and benefits of adopting a particular medical practice, a reasonable view necessarily pre-supposes that the relative risks and benefits have been weighed by the experts in forming their opinions. But if, in a rare case, it can be demonstrated that the professional opinion is not capable of withstanding logical analysis, the judge is entitled to hold that the body of opinion is not reasonable or responsible.
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> I emphasise that in my view it will seldom be right for a judge to reach the conclusion that views genuinely held by a competent medical expert are unreasonable. The assessment of medical risks and benefits is a matter of clinical judgment which a judge would not normally be able to make without expert evidence. As the quotation from Lord Scarman [in Maynard v West Midlands RHA [1984] 1 WLR 634 at 638E] makes clear, it would be wrong to allow such assessment to deteriorate into seeking to persuade the judge to prefer one of two views both of which are capable of being logically supported. It is only where a judge can be satisfied that the body of expert opinion cannot be logically supported at all that such opinion will not provide the benchmark by reference to which the defendant's conduct falls to be assessed".

11. In considering the legal basis upon which it might be appropriate to reject the expert evidence in support of the Claimant, I have also been assisted by the analysis of Green J (as he then was) in *C v North Cumbria University Hospitals NHS Trust* [2014] EWHC 61 (QB). He stated (§25):

"In the present case I have received evidence from 4 experts, 2 on each side. It seems to me that in the light of the case law the following principles and considerations apply to the assessment of such expert evidence in a case such as the present:

i) Where a body of appropriate expert opinion considers that an act or omission alleged to be negligent is reasonable a Court will attach substantial weight to that opinion.

ii) This is so even if there is another body of appropriate opinion which condemns the same act or omission as negligent.

iii) The Court in making this assessment must not however delegate the task of deciding the issue to the expert. It is ultimately an issue that the Court, taking account of that expert evidence, must decide for itself.

iv) In making an assessment of whether to accept an expert's opinion the Court should take account of a variety of factors including (but not limited to): whether the evidence is tendered in good faith; whether the expert is "responsible", "competent" and/or "respectable"; and whether the opinion is reasonable and logical.

v) Good faith: A sine qua non for treating an expert's opinion as valid and relevant is that it is tendered in good faith. However, the mere fact that one or more expert opinions are tendered in good faith is not per se sufficient for a conclusion that a defendant's conduct, endorsed by expert opinion tendered in good faith, necessarily accords with sound medical practice.

vi) Responsible/competent/respectable: In Bolitho Lord Brown Wilkinson cited each of these three adjectives as relevant to the exercise of assessment of an expert opinion. The judge appeared to treat these as relevant to whether the opinion was "logical". It seems to me that whilst they may be relevant to whether an opinion is "logical" they may not be determinative of that issue. A highly responsible and competent expert of the highest degree of respectability may, nonetheless, proffer a conclusion that a Court does not accept, ultimately, as "logical". ..

vii) Logic/reasonableness: By far and away the most important consideration is the logic of the expert opinion tendered. A Judge should not simply accept an expert opinion; it should be tested both against the other evidence tendered during the course of a trial, and, against its internal consistency. For example, a judge will consider whether the expert opinion accords with the inferences properly to be drawn from the Clinical Notes or the CTG. A judge will ask whether the expert has addressed all the relevant considerations which applied at the time of the alleged negligent act or omission. If there are manufacturer's or clinical guidelines, a Court will consider whether the expert has addressed these and placed the defendant's conduct in their context. … If on analysis of the report as a whole the opinion conveyed is from a person of real experience, exhibiting competence and respectability, and it is consistent with the surrounding evidence, and of course internally logical, this is an opinion which a judge should attach considerable weight to."

12. On the question of causation of loss, the parties both relied upon *Tahir v Haringey Health Authority* [1998] Lloyd's Rep. Med. 104, as authority that it was incumbent upon the Claimant to prove that delay in her treatment had caused actual injury or damage which she would not have suffered if she had been operated on more quickly, rather than that delay had merely increased the risk of injury. Otton LJ stated in that case (at 108):

> "It is not sufficient to show that delay materially increases the risk or that delay can cause injury. The Plaintiff has to go further and prove that damage was actually caused, that is, that the delay caused injury. In my judgment, it is not sufficient to show a general increment from the delay. He must go further and prove some measurable damage."

The relevant facts

13. The Claimant attended her GP, Dr Georgina Marton, on 17 February 2015, very shortly after the accident at work on that day. According to Dr Marton's notes, the Claimant reported having had low back pain for several months and pain radiating down her right leg for two weeks. She had a weak pelvic floor and would leak urine when coughing. Following the accident, the Claimant had tingling around her vaginal area and was incontinent of urine when a sharp pain occurred. Dr Marton investigated possible symptoms and signs of CES and observed that the Claimant had normal control over her bowels, no perianal numbness, normal saddle sensation (as the Claimant put it, she could feel the seat beneath her), normal power in both legs and normal anal tone. Dr Marton suspected a disc prolapse. She prescribed medication for pain, suggested physiotherapy and explained the "red flags" for CES which should prompt the Claimant to come back to see her (although she may not have used that term).

14. The Claimant did return on 23 February 2015, on account of the continuing pain. Again, "red flags" were discussed, with the Claimant being advised to come back to Dr Marton or attend A&E if any occurred. The Claimant underwent physiotherapy on 23, 26 and 27 February. She returned to Dr Marton on 3 March 2015, who advised her to attend A&E straightaway on account of her reporting increased numbness around her S3 vertebrae.

15. The Claimant went home to urinate – she had a preference to use her own toilet rather than any public toilet - and then reported to A&E where she was first seen by a Dr Webb. He noted that the Claimant had had progressive loss of feeling around her anus and could not feel herself passing a stool. He referred her for orthopaedic assessment.

16. The Claimant was then examined by Mr Khan. He had no recollection of the examination and what occurred is to be gleaned from the notes of the examination, written up by Dr Kimberley Powell, and by certain additional recollections of the Claimant. The examination notes record various symptoms reported by the Claimant. She had had a deterioration in back pain symptoms since her accident two weeks previously. She had burning pain into her right hamstring and around her genitalia. She had pins and needles around her back passage. She had no urge to open her bowels and had to force out stools. She had no urge to pass urine but no incontinence other than a long term problem with stress incontinence. She reported no leg weakness. These were, he accepted in evidence, "very worrying symptoms and lots of them" (9 December 2020, p. 18, line 17).

17. Mr Khan also looked for signs of CES, which are largely objective indications, as distinct from subjectively-reported symptoms. She had sensation in her lower vertebrae and a slight loss of power in her right leg which was likely due to pain. He found that she had no loss of perianal sensation upon a pinprick test. Reduced anal tone is a sign of CES, but the Claimant had good anal tone upon a digital rectal examination. He also arranged for her to have a bladder scan which showed, after voiding, a volume of urine of 48ml. This was normal. A higher volume of urine would have indicated a loss of bladder control, another sign of CES. It was common ground between the parties that Mr Khan's examination of the Claimant had been thorough; Mr Spilsbury agreed that Mr Khan's decision to perform a bladder scan was "unusually thorough" (10 December 2020, p. 15, line 11).

18. I accept the Claimant's evidence that Mr Khan informed her following his examination that he thought that she had a disc prolapse and that this was "nothing too serious". The notes of the examination record Mr Khan's diagnosis, under "Problems and Differential Diagnoses", as follows: "Either L1/L2 or L5/S1 prolapse, no evidence of cauda equina."

19. The notes record Mr Khan's "Plan" for the Claimant as being (inter alia): "[To Come In] for MRI back in next few days. .. If symptoms deteriorating go to A&E."

20. Mr Khan doubted that he had said to the Claimant that her MRI would be in the "next few days". However, he could not remember what he had said, and could not be categorical that he didn't use those words. But it would not have been his usual practice to say this, as the Trust had discouraged its clinicians from putting firm timeframes on MRI scans, the conduct of which was outsourced to a third party provider.

21. Mr Khan stated that he would have discussed the Claimant's case with more senior clinicians. He says that he may have done so before advising the Claimant on 3 March but there is no positive evidence that he did. Her case was certainly mentioned at a multi-disciplinary team meeting on the morning of 4 March 2015 but the Trust was not able to produce any minutes of that meeting or any evidence as to who attended it. It is known, as a result of Dr Chan's evidence, that the Trust's "Bluespier" computer records arising from the examination of the Claimant were displayed at the front of the meeting room. These had been entered the previous evening and stated, materially, that the Claimant had been "referred as ?cauda equina due to pins and needles around back [passage]" but "most likely disc prolapse either L1/L2 or L5/S1" and a conclusion of "Come in for MRI in next few days".

22. It is also known that following discussion of the Claimant's case, Dr Chan, who was the most junior member of staff in attendance, filled out a form to request an MRI scan of the Claimant's lumbar spine region, as directed by that discussion. Dr Chan wrote on the form that the reason for referral was "lumbar spine pain" and "rectal numbness" and that the Claimant had been "? referred as cauda equina". The "degree of urgency" of the request was stated as "Routine". The Trust accepts that that was an error – the form should have specified "Urgent". But neither Dr Chan nor any other witness could assist in explaining how a "Routine" timescale came to be specified.

23. On 5 March 2015, the Claimant phoned her GP and said, according to the contemporaneous notes, that she had been seen in A&E, that there were "no signs of cord compression/cauda equina" but due to concern about severity of her pain the hospital was "arranging MRI in next few days". She reported to her physiotherapist,

according to contemporaneous notes, that she had seen the consultant who had concluded that she did not have CES but that she would be referred for an urgent MRI due to concern about the region and severity of her pain. The Claimant stated that she was expecting a date for an MRI in the "next few days".

24. The Claimant's case of breach of duty is put, firstly, on the basis that the only possible explanation of the Trust's plan to MRI scan the Claimant within a few days was that she was suspected of having CES, and the Trust acted negligently in failing to implement that plan. Since, the Claimant says, so short a timescale would not have been appropriate for the investigation of lumbar spine pain, it must follow that the purpose of the MRI scan was to investigate possible CES. The Claimant argues that it is to be inferred that a diagnosis of suspected CES was made either by Mr Khan or by more senior members of his team with whom the Claimant's case was discussed, either on 3 March or at the 4 March team meeting.

25. I do not accept that the Trust diagnosed the Claimant as having suspected CES. On the contrary, Mr Khan's diagnosis was that she had a suffered a disc prolapse but that there was no evidence of CES. That clearly appears from the notes of his attendance upon the Claimant and is repeated in the Bluespier records and on the MRI request form. The Claimant herself recalls that Mr Khan did not consider that she had CES and reported the same both to her GP and to her physiotherapist (although she did not recall the use of the specific term "cauda equina syndrome"). Further, I accept Mr Khan's evidence that his diagnosis was based on the Claimant having no clinical signs of CES and that if she had had any such sign he would have referred for an urgent (by which he meant immediate) scan.

26. The Claimant relied upon the fact that she was told, and it was recorded in the attendance notes and on the Bluespier system, that she would be scanned within a few days, whereas the normal timescale for an urgent scan could be up to two weeks. I find, based on the records, that Mr Khan did use the phrase "next few days" and that he did so because of the severe pain that the Claimant was suffering and in order to reassure her that she would be treated quickly to relieve that pain. Although Mr Khan did not consider her case to be an emergency, as he had excluded CES, it would seem that he thought it appropriate that the Claimant should have a quicker than usual "urgent" scan because of the considerable pain that she was suffering. I do not accept that the promise of a scan within a few days should be taken to mean that Mr Khan did consider that there was a significant suspicion of CES, contrary to the clear indication in the notes and other contemporaneous evidence that he had excluded that possibility. The Claimant also relied upon the references in the Bluespier notes and the MRI referral form to "? Referred for cauda equina". However these words recorded that the Claimant had been referred to A&E and onwards to an orthopaedic specialist because of the suspicion of CES rather than that, following examination, she was being referred for a scan because of the suspicion of CES.

27. It is correct that the Trust did not implement Mr Khan's plan in that, as I have noted, the Claimant's scan did not take place in the next few days, but only on 18 March 2015. The Trust's uncontradicted evidence was that this was within the period which would have been appropriate for an "urgent" scan at that time. Nor was it in dispute that this period was appropriate for investigation of lumbar spine pain following diagnosis of a likely disc prolapse. So it would seem that the error in completing the MRI referral form and requesting a scan as "Routine" had no material impact in terms of the

appropriate response to Mr Khan's diagnosis. It was poor service to tell the Claimant that she would be scanned within a few days and then to fail to action that, but this was not, in itself, negligent.

28. I address the Claimant's alternative case on breach of duty, that the Trust should have diagnosed her as having suspected CES and should have ensured that she was scanned on or before 8 March 2015, in §§34-49 below.

29. In the early hours of the morning of 12 March 2015, the Claimant suffered a serious episode of incontinence, during which she discharged a substantial amount of urine whilst lying in bed.

30. Her MRI scan was performed on 18 March 2015. On 20 March 2015, at around 17:07 hours, Dr John Bush, a senior consultant radiologist employed by the Trust, reported the MRI scan as follows:

> "There is a huge central and right sided paracentral L5/S1 disc protrusion compressing the right anterior cauda equina on series 2, image 7 and series 5 image 14. I note that the bladder is grossly distended on series 2, image 14. .. No further significant findings. Results phoned to orthopaedic consultant on-call. CRITICAL, URGENT OR SIGNIFICANT UNSUSPECTED FINDINGS. .."

31. Given the finding of compression of the cauda equina, urgent decompression surgery was required. Shortly afterwards, during the evening of 20 March, the Claimant was telephoned by a registrar employed by the Trust, Mr Kebba Marenah, the upshot of which was that she would have an operation the following day. Brief records of his conversation with her establish that they discussed her symptoms and she conveyed that her urinary symptoms had improved (which I interpret as meaning that she had had no further episodes of incontinence after 12 March), that she was not suffering "saddle anaesthesia" and that there was no abnormality in her bowel movements. The Claimant disputed some of the details recorded by Mr Marenah but the differences between them, which were not substantial, are largely explained by him using terminology which may not have been her actual words.

32. The Claimant attended the Princess Royal Hospital, Haywards Heath the next morning, 21 March 2015, where she was first seen by a Dr Cheng. She was then examined by the consultant who would be performing the decompression surgery, Mr Mihai-Robert Danciut. Amongst the findings which he recorded upon examining her were that she had a weakness in her right ankle (4/5 weakness of right plantar flexion with normal reflexes") and saddle numbness on a sensory test. Dr Cheng's examination had not detected any weakness in the Claimant's right ankle or any impairment of sensation in response to a pinprick test.

33. The decompression surgery proceeded without incident. However, it did not result in the Claimant's recovery; far from it. She experienced a deterioration in saddle sensation, pins and needles and more serious weakness in her right leg; her urinary functions deteriorated and her overall level of pain was worse. Following a worsening in her condition after the decompression surgery, she was admitted to Stoke Mandeville hospital for rehabilitation and she subsequently had a second operation. As well as long term damage to her urinary functions, her mobility continues to be limited, her sexual function is impaired and she suffers from fatigue and Adjustment Disorder with

Depressed Mood. She continues to suffer serious physical and mental impairment and will do so in the long term.

Was the Trust negligent?

34. The remaining, and key, allegation of breach of duty is that the Trust acted negligently in not recognising that the Claimant could be suffering from CES and sending her for an expedited scan in order to investigate that possibility.

35. As I have already noted, CES can only be definitively diagnosed with an MRI scan. Prior to a scan, diagnosis of possible CES is a matter of clinical assessment based on symptoms and signs. However, a number of the symptoms of CES are also typical of other, less serious lower back conditions. This means that the number of patients presenting with symptoms indicative of CES is far greater than the number of patients who could be scanned given conventional resource constraints. Even amongst those patients who are sent for scans, on account of symptoms and/or signs of CES, only around 20% are diagnosed with CES. Accordingly, there is a significant element of clinical judgment to be applied when determining whether a patient's presentation contains sufficient evidence of CES as to warrant an immediate scan.

36. The Claimant had several "very worrying symptoms" of CES but, upon thorough examination, was found to have no clinical signs of CES. In particular, she had no loss of perianal sensation on a pinprick test, a digital rectal examination showed good anal tone and she had a normal bladder scan. With the benefit of the MRI scan results, it is apparent that the Claimant was in fact in the early stages of CES. Mr Todd has promoted use of the term CESE (or "CES early") for a patient at this stage; other experts would regard her as having early CESI (or 'CES incomplete'). Ultimately, the terminology matters little in this case.

37. Applying the *Bolam* test, the question is whether, in these circumstances, in March 2015, there is no body of reasonable opinion which would have supported arranging a scan for a patient in the apparent condition of the Claimant on an "urgent", approximately two week timescale, whilst giving the patient "safety netting advice", to return to hospital if there was any deterioration in her condition.

38. The orthopaedic experts, whose evidence is of primary relevance in determining that question, were in agreement on one important point. Both would have sent the Claimant for an emergency scan, by the morning following her attendance at A&E. Mr Chiverton regards himself as having a particularly low threshold for scanning; Mr Spilsbury regards that low threshold as more common amongst orthopaedic surgeons. But they disagreed on the answer to the relevant question. Mr Chiverton's view was that there is a reasonable and responsible body of clinicians who would have arranged for the Claimant to have a scan within 14 days, whilst instructing her to return to hospital if her condition deteriorated. He stated in the joint statement compiled with Mr Spilsbury, but not in his original report, that there was also a reasonable and responsible body of clinicians who, having given safety netting advice, would have arranged for a routine outpatient scan (which could have taken a number of weeks) or simply referred the Claimant back to her GP without organising any scan. Mr Spilsbury's view on the *Bolam* question was that it was negligent not to have scanned the Claimant within three days. In other words, that there was a body of reasonable opinion to support a scan within three days, but not thereafter. In his report, Mr Spilsbury took the start of that

three day period as the date of team meeting on 4 March, so his view was in fact that there was a body of reasonable opinion to support a scan within four days of the Claimant's presentation at A&E. Whilst the parties were agreed that the evidence of other experts was of less significance on the breach of duty issue, it is worthy of note that the neurosurgical and neurological experts on both sides opined that they also would have sent the Claimant for an immediate scan.

39. I have concluded, for the following reasons, that the Trust did not act negligently in failing to carry out an MRI scan within four days of the Claimant's attendance at A&E. First, no criticism was made of Mr Khan's examination of the Claimant; on the contrary it was roundly praised. He obtained a comprehensive report of her symptoms and carried out thorough checks for clinical signs of CES. It was common ground that she had no such signs.

40. Second, the Claimant's case therefore rested upon the proposition that a patient with symptoms, even a range of worrying symptoms, but no clinical signs of CES was, in March 2015, required to be sent for an MRI scan on an emergency or urgent basis. However, the Claimant could not cite any published guidelines or academic literature or decided cases on CES (of which there are several) to that effect. I would have expected there to be some such material if Mr Khan's approach were truly to be regarded as negligent. CES is a relatively rare condition, but it is far from obscure. I was told that a hospital A&E department would expect to see multiple patients per day who have symptoms consistent with CES (albeit that the overwhelming majority will not have CES). Such is the catastrophic damage commonly caused by CES that it is a common subject of medical negligence litigation. Guidelines have been issued by the National Institute for Clinical and Healthcare Excellence for primary care medical practitioners to assist them in identifying possible CES and referring patients to A&E on a timely basis. But there were in 2015 no equivalent guidelines for hospital care which would suggest that a patient with certain symptoms but no signs of CES must be scanned immediately, and nor have any been published subsequently. If that were indeed the position, there would be significant resource implications for hospitals, given the numbers of patients who present with symptoms but no signs of CES. So one would expect this position not to have gone un-noted. The absence of any guidelines to contradict Mr Khan's approach is, therefore, significant. Similarly, I regard as significant the absence of published literature to support the Claimant's core proposition that a patient with symptoms but not signs of CES should be scanned immediately.

41. Third, it was common ground, and Mr Spilsbury accepted during his cross-examination, that there is a trajectory towards increased numbers of scans, and that the threshold for scanning was, in general, higher in 2015 than it is today (10 December 2020, p. 25, line 8). In other words, whilst the precise approach adopted would differ between clinicians, the evidence of CES would have to have been stronger in 2015 in order to justify a scan than it would have to be today. That serves to support the approach of not scanning a patient for CES who presented with symptoms but no signs of CES in 2015, even if there is a greater likelihood that such a patient would be scanned on an emergency basis today.

42. Fourth, Mr Chiverton was able to point to a reputable journal article which supported Mr Khan's diagnosis and decision not to send the Claimant for an immediate scan. This was a research paper written by staff of the Centre for Spinal Studies and Surgery at the

Queen's Medical Centre in Nottingham (Venkatesan et al, Bladder Scans and Postvoid Residual Volume Measurement Improve Diagnostic Accuracy of Cauda Equina Syndrome, Spine 2019. Volume 44, Number 18, pp 1303–1308). The key conclusion of the paper, based on a study of 92 patients, was that "..where there is normal perianal sensation and a PVR <200 mL, then the risk of CES is negligible. That individual does not require an urgent, often out-of-hours MRI scan, rather, the associated radiculopathy should be treated according to local protocols and practice. A PVR of <200mL allows the assessing physician confidence to defer a scan till normal working hours". In other words, where as in the Claimant's case, a patient exhibits no sign of perianal numbness on a pinprick test and has a postvoid bladder scan indicating a volume of less than 200ml (it was 48ml in the Claimant's case), the risk of that patient having CES is negligible. Such a patient does not require an immediate MRI scan to investigate CES but rather their symptoms should be treated according to local protocols and practice. In the Claimant's case, this dictated a scan on an urgent timescale to investigate lumbar pain. But it is plain that the authors of the paper regard their findings as supporting decisions not to scan at all and not merely a delay in scanning.

43. I do not place undue weight on this single paper, not least because we now know that the Claimant did indeed have CES, such that the "negligible" risk identified by the authors based on their study of 92 patients did manifest itself in the Claimant's case. However, given the burden on the Claimant to establish that the Trust's actions are not supported by any reasonable body of opinion, I regard it as significant that specialists at one of the leading centres for spinal surgery in the UK would not consider a patient presenting as the Claimant did to be at such risk of having CES as to require an emergency scan. I note that this study was not available in 2015, but the trend over time towards greater scanning indicates that a patient who would not be sent for an emergency scan in 2019 would be less likely to have been sent for an emergency scan in 2015. I also note that there was little attempt by the Claimant to undermine or contradict the findings of the Nottingham paper. Indeed, Mr Todd, her neurosurgical expert, agreed on the basis of the paper that her bladder scan showing under 200ml "would add considerable weight to an argument that there was probably not a large central disc prolapse" (11 December 2020, p. 39, line 21). Mr Todd's evidence militated against the Claimant presenting with suspected CES in another way, which was that he identified a key characteristic of suspected CES as bilateral radicular problems, such as pain or motor weakness. The Claimant only had pain and possible weakness on her right side.

44. Fifth, the Claimant's case, and Mr Spilsbury's evidence on which it was based, suffered from a fundamental flaw. The Claimant's primary case was, as I have indicated, that she should have been scanned within a few days, in accordance with Mr Khan's indication following her examination. Mr Spilsbury supported this by opining that a scan within 48-72 hours would have been "the medically correct treatment of this patient" (expert report, p. 11) and that "it was a breach of duty not to have performed the scan within this time" (p. 20). There was a strong measure of agreement between the experts on both sides other than Mr Spilsbury, and I accept, that once CES is suspected, a scan should be undertaken as quickly as possible and, in effect, on an emergency basis (and see the finding of the Court of Appeal in *Hewes* noted in §2 above). There is nothing to be gained by delay (in particular, the resource implications are the same for the treating hospital) and potentially much to be lost, as CES can progress rapidly and irreversibly over a short period of time. As I have noted, Mr

Spilsbury himself confirmed in the relevant joint statement that he would have sent the Claimant for an emergency MRI, undermining his opinion in his report that a scan within 48-72 hours would have been the correct course. Mr Todd confirmed that if there was a concern about CES, there was no logic in deferring an MRI for 72 hours (11 December 2020, p. 26, line 4). Mr Spilsbury himself stated in cross-examination that "I would agree there is no logic in delaying it and I wouldn't have delayed it" (10 December 2020, p. 86, line 8).

45. Mr Spilsbury was not proposing that an active choice should be taken to delay a scan for up to four days in the case of a patient who is suspected of having CES, where it was possible to scan sooner. But he could not satisfactorily explain why a four day delay would have been appropriate, let alone correct. I did not see or hear evidence from any source other than Mr Spilsbury to support a view that scanning the Claimant on 7 March would have been the correct course of action, or would even have been a defensible course of action if Mr Khan had diagnosed suspected CES. Indeed, the consensus view amongst the other experts was that – like Mr Spilsbury himself - they would have sent the Claimant for an immediate scan and none could offer any, or any plausible, justification for delaying a scan until 7 March. I therefore reject Mr Spilsbury's contention and such is the oddity of his position that I am driven to accept the Defendant's submission that Mr Spilsbury was guilty, to some extent at least, of framing his position to fit the Claimant's primary legal argument, that the Trust was negligent by not implementing Mr Khan's plan to scan within "a few days". This was, in my view, an important shortcoming in Mr Spilsbury's evidence.

46. Sixth, I found Mr Spilsbury's evidence to be unsatisfactory in other respects. He showed a marked tendency under cross-examination to shift his position, both from his written statements and also from answers he had given earlier in oral evidence. He was unconvincing when challenged for failure to cite any literature or even previous case studies from his own practice in support of propositions which could and should have been supported in that way. Mr Chiverton, by contrast, was, on the whole, a careful and impressive witness, who adopted measured positions and defended them coherently when challenged. I found his reasoning, and his conclusions, to be logical and reasonable.

47. There was one potentially significant discrepancy in Mr Chiverton's evidence, which was that it was only in the joint statement and not in his original report that he opined that a reasonable body of orthopaedic opinion would have supported not conducting any scan on the Claimant at all, but simply referring her back to her GP. He was rightly challenged on that significant addition but I was satisfied by his explanation of it. He testified that he had become aware of the Nottingham paper only after his original report had been prepared and noted that discharge without scanning was an option suggested in that paper for a patient who had no sign of perianal numbness and a postvoid bladder scan of <200ml. He confirmed that that was a legitimate view by telephoning colleagues, including at the Queen's Medical Centre, Nottingham. I was satisfied by Mr Chiverton's explanation on this point, which militated further against the Claimant's case on breach of duty. Overall, insofar as there were differences between them, I prefer the evidence of Mr Chiverton to that of Mr Spilsbury. In particular, I accept his opinion that there was, in March 2015, a body of reasonable opinion which would have supported arranging a scan for the Claimant on an "urgent", approximately two week

timescale, whilst giving her "safety netting advice", to return to hospital if there were any deterioration in her condition.

48. The Claimant's argument that the Trust should have diagnosed suspected CES and sent her for an immediate scan was also supported to a greater or lesser extent, by other of the experts who gave evidence on her behalf, or on whose evidence she relied. However, experts in other disciplines readily deferred to the orthopaedic experts and it was not suggested by the Claimant that her allegation of breach of duty could succeed on the basis of other experts' evidence if I held against her on the orthopaedic evidence.

49. In conclusion, therefore, I find that the Trust did not act negligently in failing to diagnose the Claimant as having suspected CES and referring her for a scan on or before 7 March 2015. The course adopted by the Trust, of arranging an MRI in longer time to investigate the Claimant's lumbar back pain, whilst advising her to return if her symptoms deteriorated, was a course which would have been supported by a responsible body of medical opinion in March 2015.

Causation of loss

50. Given that conclusion, the question of causation of loss does not arise. However, I shall address it for completeness and given that I heard extensive evidence and argument on that question.

51. The Claimant's case is that she suffered a worse outcome following decompression surgery on 21 March than she would have experienced if surgery had been performed earlier. Her pleaded case (Amended Particulars of Claim, §29) is that the delay in her undergoing surgery resulted in continuing progressive harm to the Claimant's nerve roots from 10 March 2015 to 21 March 2015. She alleges that had she undergone decompressive surgery by 10 March 2015 she would have retained some sensation in her bladder and bowel and would not suffer such severe bladder and bowel dysfunction; she would have retained significantly better sexual function; she would not have suffered such severe neuropathic pain; she would not have suffered such significant fatigue and it is likely that she would also have an improved mental state.

52. As I have noted, it was common ground between the orthopaedic experts that they would have sent the Claimant for an emergency scan on 3 or 4 March 2020, and Mr Khan would also have done so if he had suspected CES. He stated in his oral evidence that "if I've got a patient who had any symptom .. of suspected cauda equina syndrome and I could elicit a positive sign on examination, I would get an emergency scan" (9 December 2020, p. 35, line 13). It was common ground between the experts (and I so find) that a scan on 3 or 4 March would have shown materially the same results as the scan on 19 March showed, namely that she had a "huge central and right sided paracentral L5/S1 disc protrusion compressing the right anterior cauda equina". And that the scan would then have prompted emergency surgery, so on 4 or 5 March. In the event, the Claimant was not operated on until 21 March.

53. The parties' experts were agreed that the main determinant of success of outcome of decompression surgery to relieve CES is the neurological condition of the patient at the time of surgery. This was, for example, the clear view expressed by Mr Todd, the Claimant's neurosurgical expert. In his view, if the Claimant had been operated on within 48 hours of attending A&E she would have had a "very good outcome" but "once

you have got beyond the 48-hour window in my opinion, we need to demonstrate, the claimant needs to demonstrate, neurological deterioration to succeed in saying the outcome would have been better. Neurological deterioration between the 9th and the 21st, and if she cannot then in my opinion there is no causation case; it would have been the same outcome" (11 December 2020, p. 114, line 22).

54. Consistent with the expert evidence, the Claimant sought to demonstrate that her neurological condition deteriorated during the period of delay between when she should have been operated on and when the operation actually took place. She accepted the principle derived from *Tahir* which I have set out in §12 above, and so accepted that it was incumbent upon her to establish that delay had caused her to suffer a specific injury or some measurable damage.

55. The period between 4 or 5 March and 21 March 2015 is relatively short in absolute terms. However, the way in which the Claimant's case has been put has served to narrow the relevant "window" even further. Her pleaded case is that the Trust was negligent in not scanning her by 7 March and operating upon her by 9 March. On that case, the period of delay relevant to causation of damage starts on 00.01 on 10 March. Further, as a result of the withdrawal of a previous complaint that the reporting of her scan results had been unlawfully delayed (so that it took roughly 48 hours rather than 24 hours), it is accepted by the Claimant that there was no material delay and no material deterioration in her condition between 20-21 March. Therefore, the end of the relevant period for causation purposes is at 11.59pm on 19 March 2015.

56. The narrow window of attention between 10-19 March 2015 poses significant challenges for the Claimant at the causation stage. It follows, for example, that any deterioration which occurred between her attending A&E on 3 March and 9 March would be immaterial. As would any deterioration in her condition which occurred between the date of her accident on 15 February and attending A&E on 3 March. She was only examined on 3 March and again on 21 March when she attended for surgery and so was not examined at either the beginning or the end of the window of attention, thereby leaving open the possibility that any deterioration may have occurred either before or after that window. On 3 March she was examined by Mr Khan, a competent orthopaedic specialist, not of consultant rank. It would have been of greater assistance in assessing her neurological condition on that date if she had been examined by a neurosurgeon or a neurologist. Further, given that the experts were in agreement that competently performed decompression surgery could nevertheless cause a worsening of a patient's condition in certain respects as a result, for example, of scarring, the Claimant cannot simply rely upon her neurological condition after that operation as an indication of what her condition was by 19 March, before the operation. Then, if the Claimant were able to show a deterioration in her neurological condition between 10-19 March 2015, there would remain the question of whether that deterioration can be established to have caused a specific injury or measurable damage which can be identified and quantified in damages.

57. The Claimant did not return to A&E during the period between 3-21 March having been advised by Mr Khan that she should do so if her condition deteriorated. That is, in itself, contemporaneous evidence that her condition did not significantly deteriorate during the period 10-19 March 2015. She relies upon four specific indications that her neurological condition deteriorated during that period: the episode of incontinence she experienced on 12 March, the "grossly distended" condition of her bladder identified

from the MRI scan on 18 March; her reduced plantar flexion identified by Mr Danciut on 21 March; and the saddle numbness recorded by Mr Danciut on 21 March.

58. Before I consider these matters in more detail, I should return briefly to the period between 3-9 March 2015. I have noted that if I had considered the Trust to have been negligent in not identifying possible CES on 3 March, it would have followed that she should have been scanned more or less immediately and, in my view, operated on by 4 or 5 March. There would then have been a potentially troublesome conflict between my findings, and the Claimant's pleaded case, which alleged that she should have been operated on by 9 March, and sought to establish causation based on events from 10-19 March. However, any such difficulties fall away as there is no indication of neurological deterioration between 3-9 March 2015. The Claimant reports having had symptoms vis-à-vis bladder and bowel function during that period which are similar to those which she reported to Mr Khan on 3 March. Mr Todd, her neurosurgical expert accepted in his evidence that the Claimant did not experience any progression of neurological deficit between 3-11 March (11 December 2020, p. 81, line 19) and Mr Spilsbury, her orthopaedic expert, that she did not deteriorate between 3-9 March (10 December 2020, p. 110, line 9).

59. The episode of incontinence in the early hours on 12 March is the first indication in time which is relied upon as evidence of neurological deterioration. This was a serious and distressing episode, in which the Claimant discharged a large volume of urine in her sleep. It was different in kind to previous episodes of stress incontinence and nothing of this nature had been reported to Mr Khan on 3 March or to any of the other professionals who had seen the Claimant since her accident. For that reason, it is a troubling episode and, in my view, the most significant evidence of possible neurological deterioration. On the other hand, it is notable that there were no subsequent similar occurrences before the Claimant's operation. Indeed, she reported to Mr Marenah on 20 March that her urinary symptoms had improved, which, as I have noted above, I take to be a reference to the fact that there were no subsequent episodes similar to what occurred on 12 March.

60. Alone amongst the experts, Mr Todd advanced a theory (as a "possibility") that the 12 March episode signifies that the Claimant had progressed to the stage of Retention CES ("CESR") by that date. I reject that theory. CESR entails that a patient has lost executive control of their bladder function and no logical explanation was advanced by Mr Todd as to why, if the Claimant's condition had deteriorated to the point of being in CESR, no similar episodes of incontinence occurred before her operation, or indeed subsequently. For like reasons, I was also unpersuaded by the less extreme theory of Mr Maurice-Williams that the 12 March episode established that the Claimant's neurological condition had significantly worsened, but short of her being in CESR. That theory, put forward in oral evidence, represented a material change from his previous position, including in the neurosurgeon's joint statement, where he had opined that the 12 March 2015 episode was due to stress incontinence. This change of position was not, in my judgment, satisfactorily explained.

61. In my judgment, the most likely explanation for the occurrence of this single episode of incontinence, and the fact that it was not repeated, was advanced by Mr Mannion, the Defendant's neurosurgical expert (and also Mr Maurice-Williams up to the point at which he gave oral evidence). Mr Mannion's explanation, which I accept, was that the 12 March incident was an episode of stress incontinence which occurred as a result of

the same mechanism which had previously given rise to incontinence in the Claimant but which was larger in volume as a result of the Claimant's loss of sensation of bladder fullness which she had reported to Mr Khan on 3 March. Her bladder was more full, and so released a greater volume of urine, when stress incontinence occurred while she slept during the early hours of 12 March. Subsequent similar episodes would have been avoided by the Claimant controlling the volume of urine in her bladder overnight by reducing her liquid intake in the evenings and/or forcing out urine before going to bed. If, contrary to that explanation, she had suffered a neurological deterioration affecting her bladder function, I would have expected there to have been some evidence at least of subsequent incontinence issues between 12-21 March, including during the daytime. It follows that I do not regard the single episode of incontinence on 12 March as indicative of a significant deterioration in the Claimant's neurological condition.

62. The second indication of deterioration relied upon by the Claimant is the appearance of her bladder as "grossly distended" on the MRI scan performed on 18 March. The radiology experts did not dissent from any aspect of the radiographer's reporting of the scan, including that description. A full or very full bladder can be an indication of loss of bladder function due to neurological deficit, but I do not accept that the fullness of the Claimant's bladder on 18 March should be regarded as evidence of significant deterioration in her neurological condition, for four reasons. First, as Mr Todd, the Claimant's neurosurgical expert, agreed, the MRI scan does not itself provide any evidence of the cause of bladder fullness in the Claimant's case. Second, she had reported to Mr Khan on 3 March that she did not have the urge to pass urine, so her bladder was susceptible to becoming full at or before that date. Third, it would appear that the Claimant's bladder was not particularly full. Dr Lamb, the Defendant's radiology expert, estimated the volume of urine visible on the MRI scan as 400ml, evidence which was unchallenged, and there is relevant evidence, albeit from 2017, more than two years after the relevant events, that her bladder is capable of holding at least 900ml of urine. Fourth, the Claimant gave evidence that she was reluctant to urinate in public toilets, including those in hospital, and it would be unsurprising if her bladder had not been emptied for a significant time before the scan was conducted. In my judgment, therefore, the MRI scan is evidence only that the Claimant had a moderately full bladder and not of significant neurological deterioration between 10-19 March. I therefore do not accept the view of Dr Cockerell, who – in his oral evidence - regarded it as "more clinically likely that the full bladder was neurogenic" (15 December 2020, p. 55, line 17). Dr Cockerell was not taken to the evidence regarding how full the Claimant's bladder actually was, and he accepted that his view was not a medical opinion as such but one of "inference based on the possibilities that maybe have less to do with medicine such as what are the habits of people before they have scans". I have taken a view of the factual evidence which differs from that on which his opinion was based.

63. The Claimant next relies upon Mr Danciut's finding on 21 March that she had only 4/5 strength of plantar flexion on her right side. Mr Khan did not detect that weakness on 3 March; but neither did Dr Cheng, who examined her shortly before Mr Danciut did. When Professor Schapira examined the Claimant, some time after her operation, he found that she had full power in this respect. Plantar flexion is the movement whereby the top of the foot points downwards, away from the leg, which is required, for example, to stand on tiptoes. A loss of plantar flexion power is a sign which may indicate that neurological damage has occurred. However, I do not accept that Mr Danciut's finding

establishes deterioration in the Claimant's neurological condition during the period 10-19 March 2015, for three reasons. First, as Dr Cockerell, the Claimant's neurological expert, informed me, testing for lower limb power involves a degree of subjectivity in the interpretation of the patient's capabilities. Two physicians could examine the same patient at the same time and draw (at least slightly) different conclusions from what they see.

64. Second, whilst I also accept Dr Cockerell's surmise that Mr Danciut was more likely to have interpreted the Claimant's condition correctly than Dr Cheng, given his seniority and his greater experience and specialism in conducting such examinations, it must also follow that Mr Danciut was, albeit to a lesser extent, more likely to have interpreted the Claimant's condition correctly than Mr Khan, who was junior to Mr Danciut and not as specialist. Mr Todd accepted that proposition during his evidence, as well as the related proposition that Mr Danciut may have found 4/5 power if he had examined the Claimant on 3 March (11 December, p. 122, line 18-). So did Mr Maurice-Williams (14 December 2020, p. 34, line 5). In other words, the Claimant's neurological condition may have been the same on 3 March as on 21 March yet given rise to different findings by Mr Danciut and Mr Khan. Third, as Mr Todd also accepted, leg weakness can be caused by pain as opposed to neurological damage. The Claimant's GP had noted as much upon examining her after her accident. The consequence is that the results of an examination for plantar flexion power can differ according to how much pain the patient is in at the time of the examination and Mr Danciut's findings may be explicable by the Claimant being in more pain when he examined her than she was when Mr Khan examined her rather than by neurological deterioration. The fact that the Claimant was found to have full power in this regard after her operation is at least an indication that any loss of power before the operation was pain-related or related to a limited recruitment of effort on her part for reasons other than pain (as Professor Schapira told me could also be a factor in the outcome of these tests: 14 December 2020, p. 132, line 25). It follows that, in my view, Mr Danciut's finding is not sufficient evidence of neurological deterioration.

65. The fourth indication of neurological deterioration on which the Claimant relies is Mr Danciut's finding, on examination of the Claimant, of "saddle numbness". The Claimant had reported to Mr Khan that she had felt pins and needles around her back passage, which is a symptom of saddle numbness. But Mr Khan had found that her perianal sensation was intact on a pinprick test, which I take as a finding that there was no sign of saddle numbness when he examined her. It is not known how Mr Danciut reached his conclusion, whether by a pinprick or touch test, or how widespread or serious the problem was. The Claimant had told Mr Danciut that she had been having intermittent episodes of saddle numbness over the last few weeks. But, based on the notes of their call, I find that she conveyed to Mr Marenah the previous evening that she had no saddle numbness (recorded as "no saddle anaesthesia"). Dr Cheng recorded the Claimant as having "intact sensation to pinprick" but is not clear from his notes whether he performed that test on her lower back. To add to this somewhat confusing picture, the Claimant had been alerted by her GP to a "red flag" test of saddle numbness, which was whether she could feel the chair she was sitting on. She gave evidence that she could do so right up until the time of her operation and that she felt numbness in her buttocks for the first time when she was assessed prior to being admitted to Stoke Mandeville hospital.

66. The evidence on this issue is slight and, to some extent, inconsistent. I accept that, on the face of it, the Claimant may have progressed from having a symptom of saddle numbness on 3 March to having a sign of saddle numbness on 21 March, which would – as Mr Mannion accepted in his evidence – evidence a deterioration in her condition (14 December 2020, p. 107, line 6). In my judgment, however, there is insufficient evidence that the Claimant developed saddle numbness, or suffered a deterioration in saddle numbness, between 3-21 March, still less between 10-19 March. The most likely explanation for Mr Danciut's finding is that, once again, he was the most expert of the physicians to examine the Claimant and so liable to detect less obvious signs which both Mr Khan and Dr Cheng may have missed, or interpreted differently. But even if this was a new sign, it was not an indication of significant deterioration given the Claimant's own perception that her saddle sensation was intact.

67. Of course, even If I had considered that the Claimant had developed saddle numbness prior to her examination by Mr Danciut, there would remain the difficulty of establishing that this was a deterioration in her neurological condition which occurred between 10-19 March rather than before or indeed after that period and before the examination on 21 March. This is a difficulty for the Claimant's case which applies equally to the other alleged indications of neurological deterioration. I accept the evidence of Mr Todd, her neurosurgical expert, that it was not possible to tell when during the period between 3-21 March any deterioration took place. Mr Maurice-Williams also accepted that it was "difficult to say" when any deterioration had taken place (14 December 2020, p. 25, line 21) and "all you can say is that on 21 March she was worse than on 3rd" (14 December 2020, p. 58, line 6). Professor Shapira, the Claimant's neurology expert stated in his oral evidence that he considered it more likely that deterioration took place towards the end of the period, based on the extent of the Claimant's recovery after decompression surgery (14 December 2020, p. 149, line 9). But he also accepted that it was simply not possible to tell when during the relevant period any deterioration occurred (14 December 2020, p. 131, line 21; p. 146, line 7) and neither his expert report nor the joint statement to which he contributed addresses the issue of when during the relevant period deterioration occurred. I therefore consider that I have no firm foundation on which to reach a conclusion that the uncertainty as to timing which he accepts should be resolved in favour of a finding that deterioration occurred towards the end of the relevant period.

68. I have paid particular attention to the opinions of Mr Maurice-Williams and Professor Schapira, both eminent specialists in their field, that the Claimant should be found to have suffered injury or greater damage by reason of having been operated on later than she should have been. The view of Mr Maurice-Williams was that the Claimant's outcome from surgery would have been "considerably better" if she had been operated on by about 5 or 6 March 2015 (expert report, §14). Professor Schapira predicted a "better outcome for her bladder, bowel and sexual function, and her neuropathic pain" if she had had surgery by 9 March 2015 (expert report, §285) and supplemented his report with an opinion given in oral evidence that the prolongation of compression of the cauda equina is itself likely to cause a worse outcome following surgery. This was in conflict with the view of Mr Todd, another of the Claimant's experts, which I have quoted in §53 above, and which was to the effect that after 48 hrs had passed from the Claimant's attendance at A&E, she could only succeed in demonstrating that delay had caused her additional damage or injury if she could demonstrate deterioration in her neurological condition.

69. These views of Mr Maurice-Williams and Professor Schapira were underpinned, to a greater or lesser extent, by reliance upon the signs of deterioration in the Claimant's neurological condition on which she relied and which I have rejected in §§59-67 above. I cannot accept their views without that necessary factual underpinning.

70. Further, this potentially significant evidence on causation was undermined in my estimation by being proffered by both experts as a high level view based on their own experience and without any evidential support in the way of published literature or even case studies of their own patients. Mr Maurice-Williams told me that "relying on the literature is difficult" because, in the case of CES, it is "vast" and also "I do not think that any paper has ever been published where somebody cannot find flaws in it" (14 December 2020, pp. 50-51). I have considerable difficulty accepting that proposition. The existence of a "vast" literature in CES made it more rather than less surprising that none was cited by him. I would have found his evidence much more persuasive if it had been supported in some concrete or objective way. As it was, the only literature to which I was referred on the significance of delay in the treatment of CES concerned the impact on bladder function of delay in decompression surgery beyond 24 and 48 hours of the onset of CESI and could not be directly applied to the Claimant's case.

71. Accordingly, I do not accept that the Claimant's neurological condition was materially worse by the end of 19 March than it had been at the beginning of 10 March. In the absence of that fundamental component of her case on causation, even I had found the Trust to have been negligent, I would have rejected the claim on the basis that the relevant delay in treating the Claimant did not cause her any loss. The very difficult question of precisely what additional injury or damage the Claimant suffered as a result of delay therefore does not arise.

Conclusion

72. For the reasons set out above, I determine the preliminary issue in favour of the Trust. It follows that the claim must be dismissed.