Neutral Citation Number: [2022] EWHC 100 (QB)

Case No: QB-2018-06710

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: Thursday 20 January 2022

Before:

HUGH SOUTHEY QC
(sitting as a Deputy High Court Judge)

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Between:

STUART NEIL DALCHOW	**Claimant**
- and -	
ST GEORGE'S UNIVERSITY NHS FOUNDATION TRUST	**Defendant**

- -
- -

Dr Peter Ellis (instructed by **Shoosmiths**) for the **Claimant**
Nadia Whittaker (instructed by **Bevan Brittan LLP**) for the **Defendant**

Hearing dates: 22 – 25 November 2021

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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.

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HUGH SOUTHEY QC

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 20 January 2022.

Hugh Southey QC (sitting as a Deputy High Court Judge):

Introduction

1. This claim relates to an alleged delay in taking steps that it is said would have resulted in the speedier diagnosis and treatment of Fournier gangrene ('FG'), a life-threatening infection of skin and other soft tissues, at St George's Hospital London on 15 April 2015. FG is a form of necrotizing fasciitis ('NF'), which in FG is mainly confined to the perineum and scrotum.

2. The agreed case summary states:

   The Claimant's case is that there was a failure to investigate his condition by means of an urgent ultrasound or CT scan, and to start intravenous broad spectrum antibiotic therapy, following review by Dr Faure Walker at around 11.00 hours.

3. The Defendant accepted at the outset a breach of duty in failing to commence the Claimant on intravenous antibiotics by 12:00 hours (although breach of duty alleged by the Claimant from 11:00 hours is denied). However, it has been denied that provision of this treatment would have made any difference to the Claimant's outcome. It has been denied throughout that the failure to investigate the Claimant by way of an ultrasound scan ('USS') was a breach of duty or that the same would have led to a differential diagnosis of NF to be made such that the Claimant would have been taken to an operating theatre. It is argued that earlier surgery was required if injuries were to have been less.

4. The matter was listed to determine whether there was a breach of duty beyond that admitted and whether any breach of duty caused or materially contributed to the Claimant's injuries. Further detail of what is in issue is provided in a helpful case summary agreed by the parties. I have taken account of that when preparing this judgment.

5. I would like to thank all on the Claimant's and Defendant's legal teams for their helpful written and oral submissions.

Structure of the judgment

6. What follows is divided into the following sections:

   i) A list of the dramatis personae.

   ii) A list of the abbreviations used.

   iii) A summary of my approach to factual findings.

   iv) A summary of the evidence regarding the factual background.

   v) Factual findings regarding matters that are said to amount to a breach of duty.

   vi) A summary of the evidence regarding reasonable standards of care.

vii) Directions regarding the law to be applied when determining whether there has been a breach of duty.

viii) Findings regarding breach of duty.

ix) Directions regarding the law to be applied when determining whether there has been a loss.

x) Factual findings regarding loss.

xi) Concluding remarks.

Dramatis Personae

7. Professor Christopher Chapple: Consultant urological surgeon at Sheffield Teaching Hospitals NHS Trust. Instructed to provide an expert urology report by the Claimant.

Mrs Jeanette Dalchow: Claimant's wife.

Mr Stuart Dalchow: Claimant.

Dr James Gray: Consultant Microbiologist at Birmingham Children's Hospital. Instructed to provide a report in microbiology by the Defendant.

Mr Samer Sabbagh: At all material times a consultant employed by the Defendant. He operated on the Claimant and subsequently treated him.

Professor Krishna Sethia: Consultant urologist at Norfolk and Norwich NHS Trust. Instructed to provide an expert urology report by the Defendant.

Dr Nandini Shetty: Consultant in clinical microbiology at University College London Hospitals NHS Foundation Trust. Instructed to provide a report in microbiology by the Claimant.

Mr Nicholas Faure Walker: At the relevant time a senior registrar employed by the Defendant. Now a consultant urologist employed by Kings College Hospital NHS Foundation Trust. It is his examination of the Claimant that is at the heart of this case.

Mr Nick Watkin: Reader in urology who recommended the Claimant's surgery.

Abbreviations used

8. CRP: C-reactive protein

CT: Computerised tomography

FG: Fournier gangrene

NF: Necrotizing fasciitis

USS: ultrasound scan

Approach to factual findings

9. When reaching the findings below I have taken account of all of the evidence, whether it is written or oral. I have also taken account of the written and oral submissions. To the extent that matters below were in dispute (and some matters were not), I have reached findings applying the balance of probabilities. That means I have considered whether matters are more likely than not. I have explained my reasons for those findings below.

10. Both parties made criticisms of the other party's expert. I did not find many of those criticisms of assistance. Ultimately it appeared to me that all experts were seeking to do their best to assist the Court. That does not mean that I accepted all the expert evidence. Where there was a dispute, I have explained my findings and reasons below.

11. There has been a dispute about the extent to which I can draw an inference from the absence of evidence. In *Wisniewski v Central Manchester Health Authority* [1998] Lloyd's Medical Report 223 Brooke LJ gave the following guidance:

> "*(1) In certain circumstances a court may be entitled to draw adverse inferences from the absence or silence of a witness who might be expected to have material evidence to give on an issue in an action.*
>
> *(2) If a court is willing to draw such inferences they may go to strengthen the evidence adduced on that issue by the other party or to weaken the evidence, if any, adduced by the party who might reasonably have been expected to call the witness.*
>
> *(3) There must, however, have been some evidence, however weak, adduced by the former on the matter in question before the court is entitled to draw the desired inference: in other words, there must be a case to answer on that issue.*
>
> *(4) If the reason for the witness's absence or silence satisfies the court then no such adverse inference may be drawn. If, on the other hand, there is some credible explanation given, even if it is not wholly satisfactory, the potentially detrimental effect of his/her absence or silence may be reduced or nullified.*"

As set out below, I have applied the approach in *Wisniewski* where it appears to me that there is an absence of evidence.

Factual background

12. The Claimant was born on 18 October 1966.

13. At the date of the events giving rise to the claim, the Claimant was living with his wife Jeanette, and their six children, and working in demolition. He was fit and well, and enjoyed cycling, playing football, and supporting Chelsea FC.

14. The Claimant was seen by Mr Nick Watkin, reader in urology, on 13 January 2015. Mr Watkin noted a 3cm right epididymal cyst, which trans-illuminated. He recommended removal as a day case under general anaesthetic. He noted that the Claimant had been treated for hepatitis C in the past.

15. On 14 April 2015 the Claimant was subject to routine and uncomplicated scrotal surgery for removal of a benign epididymal cyst performed by Mr Samer Sabbagh, consultant urologist. The procedure is said by the Claimant to have been 'uncomplicated'. It is said to have been 'uneventful' by the Defendant.

16. The Claimant was discharged at 15:45, wearing a scrotal support. A pro forma prior to discharge form recorded that pain/discomfort was 'within patient's own acceptable limits'. Paracetamol analgesia was prescribed, 500-1,000mg 4 times a day as required.

17. The Claimant then suffered increasing pain which became so severe that by 04:30 on 15 April he went back to St George's Hospital.

18. At 05:23 there was a nurse triage assessment. It was noted that:

    Area appears bruised and swollen.

    The pain score was said to be 10/10.

19. When cross-examined Mr Faure Walker, the doctor whose examination is in issue, accepted that the level of pain and the fact it had not responded to paracetamol and ibuprofen meant the case was a 'very, very unusual presentation for post-operative pain or small haematomas'.

20. Dr Gray is of the opinion that by this stage the pathogenic processes had started.

21. Subsequent assessments and treatment followed. I will not set them out in detail as they are not the subject of criticism. However, I would highlight the following aspects of the evidence:

    i) The Claimant was first treated with morphine at 06:00. That was followed by additional doses at 07:30, 09:00 and 10:00. That is obviously indicative of significant levels of pain.

    ii) At 07:10 an examination of the Claimant was said to have been limited by pain. That is further evidence that pain was a significant issue.

    iii) The 07:10 examination reported a CRP of less than 4 and a white cell of 5. That led Professor Chapple to accept that the Claimant was not septic at that stage.

    iv) At 08:30 the Claimant was said to be losing sensation to the scrotal area. Mr Faure Walker accepted that this is 'not part of [a] normal small haematoma or post-operative pain'. However, he said that it can be the result of an incision. Dr Shetty states, with the benefit of hindsight, that that is when the destructive process resulting from NF started. She states that destruction produces an anaesthetic effect. During oral evidence it was suggested that there is a degree of disagreement between Dr Shetty and Dr Gray about the progress of the NF. I am not sure that is correct as it appears to me that Dr Shetty and Dr Gray were to some extent talking about different things. However, in any event, there is no evidence that necrosis started any later than 08:30. That is relevant to the effectiveness of antibiotics (see below).

v) Observations started at 9:45. At that time the Claimant's heart rate was 133. His respiration rate was 35. Pain was said to have been 4 out of 4. In evidence, Mr Faure Walker said that he had seen the level of tachycardia as being caused by pain.

vi) Fluid balance was monitored. No output was noted until 14:00. At that point the Claimant vomited and urinated. That was said by Professor Sethia to be a low urine output.

22. At 11:00 on 15 April 2015 the Claimant was assessed by Mr Faure Walker, then a urology senior registrar. As the pleadings make clear, it is that examination that is at the heart of the case. In evidence he explained that a senior registrar is not a formal term and he was in the second year of five years training as a registrar.

23. Mr Faure Walker's evidence is that medical records prepared by a physician's assistant recorded, among other matters, that:

Very painful …

On examination it was recorded that there was skin discolouration all the way down Buck's fascia, with extreme tenderness.

During cross-examination it was suggested to Mr Faure Walker that the notes suggested that there was a lack of detail obtained regarding the pain. For example, there was no record of when the pain commenced and what its nature was. Mr Faure Walker responded by noting that the record was maintained by a physician's assistant. The fact that something was not recorded did not mean that the information had not been obtained.

24. It appears to me that there may be grounds for criticising the lack of detail in the medical notes (as the Claimant did). Professor Sethia said in cross-examination that:

… in medical notes … what we are trying to do is provide a record that gives a new clinician, or a clinician who may never have seen the patient before, an opportunity to understand what has been going on.

The medical notes arguably failed to meet this standard by, for example, failing to record a working diagnosis. However, I fail to see how that assists me with the issues I have to decide. Ultimately, it appears that there is little dispute as to what the working diagnosis was.

25. Professor Chapple suggested that the examination would have been limited because of the pain that the Claimant was in. However, Mr Faure Walker's witness statement states that 'I remember examining the Claimant's penis very closely.' Again I have concluded that I need not resolve this issue because key aspects of the Claimant's presentation are not in dispute.

26. Mr Faure Walker's 1st statement is that there were no abnormalities of the Buck's fascia other than tenderness and bruising. In oral evidence he also made the point that there was no big football sized swelling that would have suggested a 'significant haematoma'. That meant that Mr Faure Walker accepted that 'there was nothing which would be inconsistent with a normal post-operative appearance'.

27. The Claimant's witness statement says that he can remember little if anything of what happened on the ward. His wife suggests that a doctor, who may have been Mr Faure Walker, expressed concerns that pain medication was not working. According to the Claimant's wife, this doctor raised a potential explanation for that, which does not appear to be relied upon in the Defendant's evidence. For privacy reasons it appears to me to be inappropriate to describe that further. It is not a part of the Defendant's case.

28. No diagnosis was apparently recorded in the notes at this stage. However, the 1st statement of Mr Faure Walker states that:

It was my opinion that the differential diagnosis included post-operative pain, a small haematoma (collection of blood) or an early infection.

29. Mr Faure Walker accepted in oral evidence that in retrospect 'a small haematoma is simply illogical and incapable of explaining' the Claimant's condition. That was because the level of pain was 'very, very severe'. A small haematoma would not explain the level of pain present.

30. In oral evidence Mr Faure Walker indicated that one 'very, very rare complication' that was at the back of his mind was that the blood supply to a testicle had been interrupted. He accepted that he had failed to record this. He accepted that would have mandated an urgent USS.

31. Mr Faure Walker's 1st witness statement states:

I know that the Re-Amended Particulars of Claim suggests that there were "cardinal symptoms of necrotising fasciitis" present at this assessment. With respect, I disagree with these statements. At the time of this consultation, there were no crepitations or skin breakdowns, and there was no foul smell.

32. There is no record of any prescription of antibiotics at this point in time. Mr Faure Walker seemed somewhat surprised by this when cross-examined. He agreed that antibiotics should have been started at 11:00 hours.

33. Mr Faure Walker appeared to accept in oral evidence that a diagnosis was required and a USS would assist. He stated that 'an ultrasound would have been a very helpful investigation'. In particular, it would assist with the management. However, he argued that a USS would not have made any difference to the outcome as it would not have led to a diagnosis of FG.

34. Mr Faure Walker's 1st witness statement states:

I know that the Claimant is critical that I did not immediately proceed to arrange an urgent ultrasound or CT scanning following my examination at 11.00. As a Registrar, I would have been happy to organise an urgent ultrasound without Consultant approval. However, I am not aware that it is mandatory to arrange urgent scanning where the working diagnosis is haematoma.

However, in oral evidence Mr Faure Walker said that as a relatively junior doctor he consulted the relevant consultant, Mr Sabbagh before requesting a USS. He stated that would have been immediately after the ward round.

35. There is some documentation that Mr Faure Walker did discuss the need for a USS with Mr Sabbagh. In particular, there is a nursing note timed at 11:00 that notes a diagnosis of haematoma and states that the case is for senior review later. There is a subsequent note recording the need for a USS as well as a bladder scan. Mr Faure Walker suggested that this is timed 11:15. However, it appears to me that the writing is unclear. It is likely this record is timed at 12:15 as it follows attendance by a consultant and the evidence is clear that the Claimant was seen by his consultant at 12:00.

36. As I have just noted, Mr Sabbagh examined the Claimant at 12:00. There is no record of scrotal swelling having been seen. However, in oral evidence Mr Sabbagh stated that:

There was a swelling and kind of small type of enlargement, which you would expect with an early post-operative day or a small haematoma, so at that particular time my working diagnosis was one of a haematoma.

In addition, the x-ray request form notes:

Rapidly enlarging and painful scrotum ?haematoma/active bleeding??

37. The Claimant's wife states in evidence that Mr Sabbagh explained the Claimant's position on the basis that there was a bleed from the previous day's operation. This was said to have stopped. The Claimant's wife also states that his testicles looked black and the discolouration was moving up his penis.

38. In oral evidence Mr Sabbagh stated that at that stage:

The most likely working diagnosis is a haematoma, however everything is on the table so we are thinking kind of in all directions and trying to put a plan whereby we can get the best outcome and the best investigations. … I made the plan for antibiotics, pain relief and ultrasound scan, with a working diagnosis of haematoma or a bleed, which seemed the likely diagnosis to me.

39. Consistent with evidence of Mr Sabbagh, the examination at 12:00 resulted in the prescription of erythromycin, an antibiotic. However, this was not actually dispensed. There is no dispute that this amounted to a breach of duty.

40. The prescription indicates that the antibiotic was prescribed for 'scrotal infection'. Mr Sabbagh said that those words were not in his writing and the prescription was a prophylaxis. He denied diagnosing an infection and said that was consistent with the prescription being a prescription of erythromycin. Consistent with that in his witness statement he indicated that the prescription had been made because '[c]ollections of blood can be prone to infections'.

41. Mr Sabbagh concluded that the Claimant should no longer be nil by mouth. Professor Chapple stated that would have led the medical team to assume that the case was not urgent as surgery was not being considered.

42. Mr Sabbagh said in oral evidence that the USS requested at 12:00 was intended to be urgent. By that he meant that it was intended to be conducted that day and in a 'timely' fashion. When questioned as to whether an urgent scan should be conducted in 2 hours, Mr Sabbagh explained that what is urgent may depend upon what is practical. He might

ask for something to be conducted urgently but it might take 3 hours. In his written evidence he stated that:

At St George's we aim to undertake inpatient scanning within 4 hours, which was an adequate timescale in light of my working diagnoses of haematoma.

43. Mr Sabbagh also stated that because of the lack of clarity about the diagnosis, he wanted the USS to be conducted as quickly as possible. He said that this was:

... just for because of the whole bizarre situation and unusual presentation, and we have no clear diagnosis, that is all. But it was not by any means for us to confirm or kind of nullify necrotising fasciitis, because this is not the way we diagnose necrotising fasciitis.

44. Mr Sabbagh said that there was no system for indicating urgency. If a matter is urgent he would attempt to speak to colleagues to alert them to the urgency.

45. Mr Faure Walker stated that an urgent USS would be expected to come back in 2 to 3 hours. However, he also stated that:

... may I explain with ultrasound as well, it can actually be very difficult to get in hospitals. Sometimes it's at the whim of the radiographer, the person doing the ultrasound or a consultant radiologist. It is actually very difficult to get them as urgently as you are suggesting.

46. The evidence that an urgent scan might take 2 to 3 hours was inconsistent with evidence of Professor Christopher Chapple, the expert urologist instructed by the Claimant. He stated that:

I have never not, in the last 35 years in specialist practice, been unable to get an ultrasound within two hours at the latest, but certainly often in a much shorter period of time as we saw yesterday, maybe 40 minutes after the record was requested.

47. The USS request form was apparently completed at 14:39 on 15 April 2015. It was said that the USS was sought for a:

... rapidly enlarging and painful scrotum? haematoma/active bleeding. (p657)

48. There is no evidence to explain the delay in making the USS request. Mr Sabbagh was cross-examined about this and accepted that it could have been overlooked.

49. The USS was completed at 15:12. The final report concluded that 'no apparent fluid collections or haematoma formation amenable for drainage'. This also noted, among other matters, that:

There are multiple small locules of gas within the fluid surrounding the right testicle, tracking up along the spermatic cord.

50. The USS also demonstrated that there was a blood supply to the testicles at the time it was conducted.

51. Mr Sabbagh's witness statement says this about the USS report:

... the ultrasound report ... had identified small locules of gas within the fluid surrounding the right testicle. These findings on their own were not specific for a diagnosis of necrotising fasciitis and would not have led to a suspicion of this condition or the requirement for surgery before the onset of blistering.

52. The Claimant was reviewed by Mr Faure Walker at 18:15 on 15 April 2015. He concluded that the diagnosis was NF. Mr Sabbagh stated that the key to the diagnosis was skin breakdown, which had not been present at midday and therefore was of rapid onset. He noted the USS report but stated that this alone would not have led to a conclusion of NF.

53. The Claimant was subsequently sent to theatre and his first debridement commenced at 19:30. There was a debridement of the peno-scrotal skin, the lower abdominal wall and the perineum. A right orchidectomy was also performed. Further re-look and debridement procedures were performed on 17, 18 and 20 April 2015. A debridement with skin grafting took place on 23 April 2015.

54. Following discharge the Claimant suffered worsening left testicular pain. On 7 July 2015 he was readmitted to hospital and underwent a left orchidectomy.

55. The claim was issued on 16 November 2018.

Factual findings regarding the matters that are said to amount to a breach of duty

56. It appears to me that the following findings can be made about the situation when Mr Faure Walker and Mr Sabbagh examined the Claimant at 11:00 and 12:00 on 15 April 2015.

57. The Claimant was plainly presenting in an unusual manner. The most obvious indication of this is the fact that the Claimant was suffering a very high level of pain. As already noted, Mr Faure Walker was of the opinion that the level of pain was 'very, very severe'.

58. Although it appears that there was a focus on the potential for a small haematoma, it is accepted by Mr Faure Walker that a diagnosis of a small haematoma would not explain the high level of pain. Mr Faure Walker also suggested that diagnoses being considered were post-operative pain, infection and the interruption of blood to a testicle. Despite that evidence, it appears to me on the balance of probabilities that there was little or no consideration of an alternative diagnosis to that of a small haematoma. My reasons for that conclusion are as follows. Firstly, the evidence from the Claimant's wife about what she had been told by Mr Sabbagh and the x-ray request form essentially refers to haematoma as being the cause. Consistent with this, Mr Sabbagh stated in oral evidence that was the most likely working diagnosis. Secondly, Mr Sabbagh stopped the Claimant being nil by mouth. That implied he had ruled out diagnoses that might require surgery. Finally, it appears to me that the examinations were likely to have been relatively rushed. That is consistent with the focus being upon the most likely diagnosis.

59. What clearly had been ruled out at this stage was a 'significant haematoma'. That was because there was no big football sized swelling.

60. In addition, it is clear that there was no diagnosis of NF at the stage of the examination by Mr Faure Walker and Mr Sabbagh.

61. Mr Faure Walker did not either request a USS or prescribe antibiotics. His evidence has developed to some extent so that he explains the decision not to request a USS on the basis that he wanted to consult Mr Sabbagh. There is some tension between that evidence and his witness statement. However, the nursing notes are consistent with Mr Faure Walker seeking to consult a senior colleague. There is no explanation for the failure to obtain antibiotics.

62. Erythromycin, an antibiotic, was prescribed by Mr Sabbagh but not dispensed. As already noted, there is no dispute that this was a breach of duty.

63. Had there been uncertainty about the diagnosis, Mr Faure Walker accepts that it would have meant that it was clear that there was a need for a USS. Indeed, he explains the decision to seek a USS on that basis. Mr Sabbagh also said that the lack of clarity about the diagnosis meant he wanted the USS to be conducted as quickly as possible. Obviously, my findings about the focus on a small haematoma imply that there was less uncertainty in the minds of Mr Faure Walker and Mr Sabbagh than they suggested in oral evidence.

64. The lack of uncertainty about the diagnosis is likely to explain the lack of urgency in obtaining a USS. Mr Sabbagh states that because of the lack of clarity about the diagnosis, he wanted the USS to be conducted as quickly as possible. He also says that in case of urgency he would speak to a colleague to alert them to the urgency. However, there is no evidence that he did this. Instead, there was no request until 14:39. That is obviously inconsistent with the claim that matters were urgent. It appears to me that is likely to be explained by the focus on this being a case of a simple haematoma.

65. If I am wrong in my findings in the paragraph above, there is no explanation for the delay in obtaining a USS. Both Mr Faure Walker and Mr Sabbagh essentially state that it can be difficult to get a USS in a hospital. Professor Chapple disputed this. Whether or not it is correct that it can be difficult to obtain a USS in some cases, that does not explain what happened in this case. It is striking that the USS was conducted within 33 minutes of the request being made.

Expert evidence regarding reasonable standards of treatment

66. FG is a form of necrotizing fasciitis, which in FG is mainly confined to the perineum and scrotum.

67. The urology experts are agreed that the symptoms of FG are:

> *Pain, swelling, erythema, fever. The onset of these symptoms may be insidious* (Joint urology report prepared using the Claimant's agenda).

> The signs are:

> *Tachycardia, hypotension, crepitus, pyrexia. Tissue destruction may result [sic] necrosis and suppuration* (Joint urology report prepared using the Claimant's agenda).

68. The joint urology report prepared using the Claimant's agenda states:

a) The nature, progression, severity and management of symptoms of post-operative pain?

In general the incision may be sore or painful. This pain is usually moderate but there is a degree of variation between individuals. Some patients also experience pain in their testicles which again can be moderate or severe. It is however uncommon for a patient to require such severe pain as seen in this case, requiring opiates, having been relatively pain free after the operation for some hours without a clear reason being evident such as a large haematoma.

b) The symptoms and signs of haematoma?

Moderate discomfort/pain and scrotal swelling which may extend as described above.

c) The symptoms and signs of bleeding?

Increasing swelling, pain, tachycardia, hypotension.

69. The oral evidence of Professor Chapple was that during the early stages of the Claimant's admission, the most significant aspect of the Claimant's presentation was the level of pain and the requirements of analgesia, which were significantly more than normally expected after minor surgery. During cross-examination, he accepted that the only 'red flag' present was pain.

70. In cross-examination it was made clear that it was not the Claimant's case that NF should have been diagnosed at 11:00. Indeed, Professor Chapple expressly accepted that the treating team were 'reasonably entitled to investigate' a possible haematoma and treat that as a working diagnosis. However, he was of the opinion that an urgent USS was required to confirm that diagnosis. The unusual presentation meant that it was necessary to determine whether in fact there was a haematoma as quickly as possible. He stated in oral evidence that:

I think that you would need to consider why a patient was in such severe pain. You would want to do imaging at an early stage to make the diagnosis and you would want to act upon it.

71. Professor Sethia stated in the joint urology report that:

[Professor Sethia] thinks that the differential diagnoses as stated in Dr Walker's witness statement were reasonable. He points out that it is often easy to make a diagnosis in retrospect but common diagnoses are common and rare conditions are very difficult to diagnose even by experienced clinicians. [Emphasis added]

72. I have emphasised the underlined words because it is important to remember what the witness statement of Mr Faure Walker said. It said that the working diagnoses included post-operative pain, a small haematoma or an early infection. I have already indicated that I have found as a matter of fact that the actual focus of Mr Faure Walker and Mr Sabbagh was on there being a small haematoma.

73. Consistent with joint urology report, Professor Sethia stated that in oral evidence:

I think in that clinical scenario, where a man has just had an operation; there is some swelling; he is in a great deal of pain, the best way I can put it is that common things are common. You know, post-operative haematoma, to some extent post-operative infection much of a lesser extent, I should say, post-operative infection, post-operative haematoma is common, which may be within the skin, maybe within the scrotum has previously been discussed.

74. The problem with the evidence of Professor Sethia is that it treats the Claimant's case as a common case. However, both Mr Walker and Mr Sabbagh said that this was an unusual presentation. That is consistent with the evidence of high levels of pain. It appears to me that Professor Sethia has to some extent proceeded on the basis that the Claimant's presentation was less unusual than it was. I will return to the significance of that later.

75. It was the Claimant's case that there should have been an urgent USS and treatment with antibiotics.

76. Mr Faure Walker agreed with the joint expert report that:

… antibiotics should have been prescribed at 1100.

77. Professor Chapple accepted in oral evidence that it would have been reasonable to prescribe intravenous erythromycin.

78. The joint urology report prepared using the Defendant's agenda states that:

[Professor Sethia] agrees that an ultrasound should have been requested but it was reasonable to wait until the consultant review which happened shortly thereafter as the working diagnosis was of a haematoma i.e. not a critically dangerous condition.

[Professor Chapple] thinks the ultrasound should have been requested at 1100, when seen by the registrar and in fact potentially even earlier. This is not an investigation which requires a consultant review to authorise. The patient had been in hospital having been admitted the day after an uncomplicated relatively minor scrotal operation, in severe pain requiring opiate therapy after a simple scrotal procedure and there was a significant delay in carrying out imaging. (p225)

79. The joint urology report prepared using the Claimant's agenda states that:

If it is found that a haematoma was a reasonable diagnosis the scan should have been performed by approximately 1500. If it is found that the diagnosis of NF should have been made on the morning of 15 April any scans thought necessary should have been performed within one hour.

80. This might seem to suggest that there is no basis for finding a breach of duty. That is because there is no doubt that a small haematoma was a reasonable working diagnosis and there was no basis for finding that there should have been a diagnosis of NF. However, earlier the same joint report states:

[Professor Chapple] is of the view that a haematoma was unlikely to be the most likely diagnosis as noted above. Nevertheless in an emergency situation with an unusual

presentation of symptoms post-operatively it is difficult to understand why there should be a delay in requesting radiological assessment. (p216)

Professor Chapple's oral evidence appeared broadly consistent with this. He stated that 'the reason for doing an ultrasound within a couple of hours is to get a clear diagnosis'. He also made it clear that it was the 'severe presentation' that was qualifying the diagnosis.

81. Professor Chapple stated that:

It's the old medical adage, if you don't look you won't see, and the only way you can look at somebody where you think there may be a haematoma is to do an ultrasound. In a severely ill patient, you need to make that or refute that diagnosis at an early stage.

82. The expert urologists agree that:

… an ultrasound requested as being urgent would have been performed within 2 hours at the very most, i.e. by 1300. (Joint urology report prepared using the Defendant's agenda).

83. Professor Chapple qualified that in oral evidence and accepted that there may be district hospitals where it is reasonable for a urologist to accept that they need to wait 4 hours. However, those urologists would not regard the situation as 'appropriate'. He stated:

… it is the difference between what sometimes happens and what people feel would be the appropriate thing to do.

84. Professor Sethia stated that waiting times for USS vary between hospitals. However, he stated that:

I cannot possibly be precise about the situation at St George's on that morning. But if you do particularly want an urgent ultrasound scan, you should be able to get it done within a couple of hours.

Law regarding breach of duty

85. The principles to be applied when determining whether there was a breach of a duty in a case like this are well established and set out in well known authorities.

86. In *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582 McNair J held*:*

[A doctor] is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in this particular art … Putting it the other way around, a man is not negligent, if he is acting in accordance with such a practice, merely because there is a body of opinion that would take a contrary view. (p587)

87. In *Maynard v West Midlands Regional Health Authority* [1984] 1 WLR 634 Lord Scarman gave guidance on the role of judges where there is a conflicting body of medical opinion. He held:

. . . a judge's 'preference' for one body of distinguished professional opinion to another also professionally distinguished is not sufficient to establish negligence in a practitioner whose actions have received the seal of approval of those whose opinions, truthfully expressed, honestly held, were not preferred. If this was the real reason for the judge's finding, he erred in law even though elsewhere in his judgment he stated the law correctly. For in the realm of diagnosis and treatment negligence is not established by preferring one respectable body of professional opinion to another. Failure to exercise the ordinary skill of a doctor (in the appropriate speciality, if he be a specialist) is necessary. (p639)

88. The judgments in *Bolam* and *Maynard* do not mean that it is enough for a defendant to call professional expert demonstrating support for the approach that he or she took when providing the treatment in issue. In *Bolitho v City and Hackney Health Authority* [1998] AC 232 Lord Browne-Wilkinson held:

… 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.

It appears to me that this demonstrates how I need to review the medical evidence and not merely accept the evidence of experts. However, I need to recognise that the experts have far greater relevant expertise than any judge.

89. Helpfully guidance on the approach to be adopted is provided by Green J (as he then was) in *C (By his Father and Litigation Friend F) v North Cumbria University Hospitals NHS Trust* [2014] EWHC 61 (QB). He reviewed the authorities and concluded that:

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". Nonetheless these are material considerations. In the course of my discussions with Counsel, both of whom are hugely experienced in matters of clinical negligence, I queried the sorts of matters that might fall within these headings. The following are illustrations which arose from that discussion. "Competence" is a matter which flows from qualifications and experience. In the context of allegations of clinical negligence in an NHS setting particular weight may be accorded to an expert with a lengthy experience in the NHS. Such a person expressing an opinion about normal clinical conditions will be doing so with first hand knowledge of the environment that medical professionals work under within the NHS and with a broad range of experience of the issue in dispute. This does not mean to say that an expert with a lesser level of NHS experience necessarily lacks the same degree of competence; but I do accept that lengthy experience within the NHS is a matter of significance. By the same token an expert who retired 10 years ago and whose retirement is spent expressing expert opinions may turn out to be far removed from the fray and much more likely to form an opinion divorced from current practical reality. "Respectability" is also a matter to be taken into account. Its absence might be a rare occurrence, but many judges and litigators have come across so called experts who can "talk the talk" but who veer towards the eccentric or unacceptable end of the spectrum. Regrettably there are, in many fields of law, individuals who profess expertise but who, on true analysis, must be categorised as "fringe". A "responsible" expert is one who does not adapt an extreme position, who will make the necessary concessions and who adheres to the spirit as well as the words of his professional declaration (see CPR35 and the PD and Protocol).

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. There are 2 other points which arise in this case which I would mention. First, a matter of some importance is whether the expert opinion reflects the evidence that has emerged in the course of the trial. Far too often in cases of all sorts experts prepare their evidence in advance of trial making a variety of evidential assumptions and then fail or omit to address themselves to the question of whether these assumptions, and the

inferences and opinions drawn therefrom, remain current at the time they come to tender their evidence in the trial. An expert's report will lack logic if, at the point in which it is tendered, it is out of date and not reflective of the evidence in the case as it has unfolded. Secondly, a further issue arising in the present case emerges from the trenchant criticisms that Mr Spencer QC, for the Claimant, made of the Defendant's two experts due to the incomplete and sometimes inaccurate nature of the summaries of the relevant facts (and in particular the clinical notes) that were contained within their reports. It seems to me that it is good practice for experts to ensure that when they are reciting critical matters, such as clinical notes, they do so with precision. These notes represent short documents (in the present case two sides only) but form the basis for an important part of the analytical task of the Court. If an expert is giving a précis then that should be expressly stated in the body of the opinion and, ideally, the Notes should be annexed and accurately cross-referred to by the expert. If, however, the account from within the body of the expert opinion is intended to constitute the bedrock for the subsequent opinion then accuracy is a virtue. Having said this, the task of the Court is to see beyond stylistic blemishes and to concentrate upon the pith and substance of the expert opinion and to then evaluate its content against the evidence as a whole and thereby to assess its logic. 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… [25]

90. I have set out this passage of the judgment of Green J in full despite the length because it appears to me to be a comprehensive and practical guide to the approach I am required to adopt. The Defendant suggested I should simply focus on the leading authorities such as *Bolam.* I can see no reason for doing that. I am required to follow Green J unless satisfied that he is clearly wrong (*R v Greater Manchester Coroner ex p Tal* [1985] QB 67 at 81B). Neither party suggested he is. I am satisfied that he is right.

Conclusions regarding breach of duty

91. In reaching the findings below I have directed myself in accordance with the approach set out in the case law cited above. In particular, I have been cautious to ensure that I have not merely decided which expert evidence I prefer. Instead, I have sought to determine whether the medical opinions relied upon are reasonable.

92. In light of the matters above, it appears to me that I cannot conclude it was unreasonable to treat a small haematoma as a working diagnosis when Mr Faure Walker and Mr Sabbagh examined the Claimant. Professor Chapple appeared to accept that. However, Professor Sethia by referring back to the witness statement of Mr Walker in his written evidence appears to agree to some extent with the evidence of Professor Chapple that there were other working diagnoses that needed to be considered. It appears to me that Professor Sethia is not in a position to contradict the evidence of the treating doctors that the Claimant was presenting in a highly unusual manner because of his high level of pain. That is a factual matter that the treating doctors are plainly in the best position to give evidence about. To the extent that it is necessary for me to apply the *Bolitho* test, it appears to me that there is a flaw in the logic of Professor Sethia as he fails to grapple with the high level of pain when reaching conclusions regarding diagnosis.

93. There is, as already noted, no doubt that there was a breach of duty as a consequence of the failure to administer antibiotics at 12:00. I can see no evidence that justifies the failure to prescribe antibiotics at 11:00. Mr Faure Walker agreed with the joint expert evidence that the antibiotics should have been prescribed at 11:00. The more difficult issue is when the USS should have been ordered.

94. It appears to me that I cannot conclude it was unreasonable for Mr Faure Walker to consult Mr Sabbagh. Although Professor Sethia bases his conclusion that it was reasonable for Mr Faure Walker to consult with Mr Sabbagh on the working diagnosis of a small haematoma and I have concluded that the position was more complex, the complexity of the position makes it very difficult for me to conclude that a senior opinion should not have been sought. The issue is not whether Mr Faure Walker was able to authorise a USS. He plainly was. That appears to me to be the focus of the evidence of Professor Chapple. The issue was whether it was unreasonable for him to consult Mr Sabbagh. I cannot conclude it was.

95. There appears to be no doubt that a USS was required after Mr Faure Walker and Mr Sabbagh consulted and one was requested. It appears to me that the real issue is the urgency of the USS. It appears to me that it needed to be urgent. As a matter of fact both Mr Faure Walker and Mr Sabbagh accept that an urgent USS was required in light of the degree of uncertainty about the diagnosis. That appears to me to be consistent with the evidence of Professor Chapple. Professor Sethia disagrees but it appears to me that his conclusions are undermined by the flaw in logic I have just identified. That is the failure to grapple with the level of pain being experienced by the Claimant. That appears to have been unusual. Common sense as well as the evidence of Mr Faure Walker, Mr Sabbagh and Professor Chapple demonstrated that it had a significant impact on the urgency. The uncertainty about the diagnosis meant that there was an urgent need to obtain as much information as possible.

96. The agreed evidence was that an urgent USS should be conducted within 2 hours. There was some evidence that in some cases this standard may not be practically possible. However, in this case I have no evidence that any efforts were made to obtain an urgent USS. It appears that nothing happened for over 2 hours before the USS form was completed. The Defendant does not accept that I should conclude that it was practical to conduct a USS within 2 hours. Although I do not have direct evidence on this issue, applying the approach in *Wisniewski* it appears to me that I am entitled to find that a USS could have been conducted within 2 hours. The expert evidence makes it clear that it is unusual for it not to be possible to conduct a USS within 2 hours. The issue in this case appears to have been the delay in completing a request form. This was a sufficiently unusual incident that it is likely to have been memorable and so there is no reason to believe that an explanation for the delay in completing the USS could not have been provided if there was one. Mr Sabbagh accepted that the need to complete the form could have been overlooked. In those circumstances, the absence of evidence explaining the delay in obtaining the USS and, in particular, the absence of evidence explaining the failure to complete the request for the USS means that I can find there was no good reason for it.

Law regarding loss

97. It appears to me that there is no dispute that I have to apply the following principles:

i) The Claimant accepts that there is a burden on him to demonstrate that any breach of duty caused or materially contributed to loss.

ii) In determining whether the breach of duty caused or materially contributed to loss, I have to make findings as to what treatment would have been delivered had there been no breach of duty. That issue requires me to make factual findings applying the balance of probabilities.

iii) Assuming that I reach findings regarding what would have happened that are adverse to the Claimant, I then have to apply the *Bolam* test to determine whether the treatment that would have occurred would have been negligent. A Defendant cannot rely on a finding that the treatment that would have been offered would have resulted in the same outcome if that treatment would have been negligent (*Bolitho* at 240F).

iv) If I conclude that the breach duty denied the Claimant of alternative treatment that would not have been negligent, I have to determine whether loss was caused. In that context there was a dispute about whether it is sufficient for the Claimant to prove a material contribution to the loss. Although I received carefully considered written submissions regarding this issue, for reasons set out below I have concluded that I need not determine it although for the sake of completeness I make some comments regarding it.

Loss

98. The expert urologists agree that had a USS been conducted at 13:00, at the latest a report would have been available by 14:14. Given that I have accepted it was reasonable for Mr Faure Walker to consult with Mr Sabbagh, that implies that there was no need for a USS to be ordered until 12:00. The evidence that an urgent USS should be conducted within 2 hours suggests it should have been conducted by 14:00. Applying the logic of the expert urologists, it would appear that a report should have been made available by 15:14.

99. The urology experts are agreed that an earlier ultrasound would have similar abnormalities to those discovered when the USS was actually conducted but they would probably have been less obvious. It is agreed that the report would have been suggestive of infection.

100. Mr Faure Walker was clear:

... based on that ultrasound I don't think we would have taken him to theatre … I still don't think on the back of a negative ultrasound I would have taken him to theatre then without evidence of skin breakdown.

However, he also stated:

If he continued to be in severe pain <u>several hours later</u> and we had run out of options, then I think we may have [taken him to surgery]. [Emphasis added]

I have emphasised the words 'several hours later' because it was Mr Faure Walker's subsequent evidence that a USS ruling out other diagnosis would not have resulted in a trip to surgery.

101. Mr Faure Walker gave evidence that what prompted the decision to take the Claimant to theatre was an additional item of evidence, namely 'skin breakdown'.

102. Mr Sabbagh gave evidence that he would not have authorised the Claimant being taken to theatre merely because there was suspected infection. There had to be a plan. He would only take a patient to theatre where the treating team was expecting a 'huge haematoma' or where there is a diagnosis of NF. The concern was 'you may even add to the insult that the organ has already suffered from' if surgery is conducted without good reason.

103. This evidence means that I find, applying the balance of probabilities, that the Claimant would not have been taken to theatre following an earlier report from the USS. He may have been taken 'several hours later' but there is no evidence that would have been any quicker than when he did go to theatre. That conclusion is consistent with the evidence that it was not the USS that prompted the Claimant to eventually be taken to theatre.

104. The finding reached in the paragraph above is not an end of the matter. I have to consider whether a decision not to take the Claimant to theatre after the USS was reasonable applying the principles in *Bolam.*

105. Professor Chapple accepted that FG would not be diagnosed on the basis of a USS. However, he also stated in oral evidence that:

> *In this case if an ultrasound had been carried out and there was no haematoma, then I feel that it would have been by the Bolam test inappropriate not to go to theatre, yes, and that is clearly stated in my witness statement and clearly in the joint statement of experts.*

106. He explained that the 'loculi of gas and gas extending up the spermatic cord which was a cause for concern'. He stated that a suspicion of an abnormality on the USS that might represent infection would make it 'appropriate' to take a patient to theatre.

107. Professor Chapple accepted that a reasonable body of professional opinion would conclude that a patient should not be returned to theatre without a target. However, his opinion was that the target was the absence of haematoma and gas extending up the spermatic cord, which was where surgery had not been conducted.

108. Professor Sethia stated that the correct treatment of a patient with a presumed diagnosis of infection because a USS had ruled out a haematoma was intravenous antibiotics. He described how many urologists would draw around the area of infection and return after 3 or 4 hours to see whether the infection was spreading. At that initial stage Professor Sethia stated that he would have consulted a microbiologist about antibiotics. Subsequently, if the area was spreading then it might be necessary to seek further advice from a microbiologist. He said at that stage without a breakdown of skin or crepitus, it might be necessary to arrange a CT scan. Professor Sethia stated that he would not take a patient to theatre without a plan.

109. Professor Sethia also made the point that when the USS was conducted, the Claimant's skin cannot have suggested the necrotising process. Had it suggested that, the radiologist would have raised concerns. That appears to me to be significant as my findings imply that the USS report should have been available at about the time when

the USS was actually conducted. As a consequence, it suggests that the Claimant's skin would not have suggested the necrotising process when the USS report could have been considered.

110. Applying the approach in *Bolam* and *Bolitho*, it appears to me that I cannot conclude it would have been unreasonable to fail to conduct surgery following receipt of the USS report. I can see no basis upon which I can reject the opinion of Professor Sethia as lacking logic. It appears to me to be supported by the evidence of Mr Sabbagh that 'you may even add to the insult that the organ has already suffered from.' By this stage the Claimant was plainly in a serious condition. It appears to me to be reasonable to be concerned about causing further harm. It appears that Professor Chapple accepted that there was a body of professional opinion that would have been reluctant to conduct surgery. This means that I cannot conclude the breach of duty in failing to arrange a USS delayed surgery.

111. In reaching the conclusion in the paragraph above, I have taken account of the fact that Dr Gray accepted when cross-examined that had advice been sought from a microbiologist after the USS, it is likely that the advice would have been that there was a need to consider NF. That was because the USS showed infection and there was disproportionate pain. He stated that he might ask if surgery had been considered but whether to commence surgery would ultimately be a decision for the surgeons. He would have also considered advising broad spectrum antibiotics in addition to the erythromycin already prescribed.

112. It appears to me that the evidence of Dr Gray does not undermine my findings. Firstly, he accepts that questions about surgery were ultimately for surgeons. More importantly, he was not saying that NF should have been diagnosed. He was merely saying he would have advised consideration being given to NF.

113. If surgery would reasonably not have been conducted earlier following an earlier USS, that implies that no loss was caused by the breach of duty that I have found.

114. Surgery was regarded by all experts as fundamental to the successful treatment of NF. The microbiologists report that antibiotics are important but are not enough. Dr Shetty states in her written report that:

Antibiotics play an important adjunct role to surgical debridement in affecting killing of the organism, reducing the bacterial load and preventing spread of infection to surrounding healthy tissue and systemically.

Dr Gray states in his written opinion that:

A combination of antibiotic therapy and surgical debridement is required to control the infection.

That causes them to reach the joint conclusion that:

… antibiotic therapy alone between 12.00 and 20.00 would not have altered the outcome.

115. In oral evidence Dr Shetty stated that earlier antibiotics alone would have at best had 'a marginal outcome'. She could not say it would have been significant. Dr Gray stated in

oral evidence that erythromycin (which is what was prescribed at 12:00) would not have made 'much difference to this case at all'.

116. Dr Shetty did, however, state that if broad spectrum antibiotics had been administered mid-afternoon:

I think on balance there would have been some benefit to the tissue salvaged because from my understanding of the operation notes, that the necrotising fasciitis had started to spread up the anterior abdominal wall, and maybe some of that tissue could have been saved but I cannot say how much.

117. Dr Gray disagreed with this and stated that 5 or 6 hours after the administration of broad spectrum antibiotics, their effect would have largely worn off and the progression of the FG would have been 're-established'. That meant that the administration of broad spectrum antibiotics mid-afternoon with surgery at the same time would not have made a 'significant difference'.

118. The reason why antibiotics alone are not adequate is that once necrosis commences, antibiotics cannot get to the source of the infection. The microbiologists agree that antibiotics have a limited effect once necrosis has commenced. Dr Shetty stated in oral evidence that:

… antibiotics will only protect tissue that has a blood supply and it will protect the organism spilling into the blood stream and causing systemic sepsis.

119. As already noted, there is no dispute that necrosis had commenced before the examination by Mr Faure Walker at 11:00.

120. It appears to me that the evidence about the effectiveness of antibiotics means that no loss can be established once I have rejected the claim that surgery should have been commenced earlier. Arguments about whether broad spectrum antibiotics should have been administered earlier do not appear to assist me. Any benefit is extremely uncertain and so it cannot be demonstrated on balance of probabilities that there would have been a significant difference in the outcome. Any benefit is also likely to be limited because of the impact of necrosis on the effectiveness of antibiotics. In fairness to the Claimant, that conclusion is consistent with the Claimant's pleadings. For example, the re-re-amended particulars of claim state:

But for the delay in administering antibiotic <u>and</u> performing surgical debridement the peripheral extent of the skin and soft tissue loss would have been substantially less. [Emphasis added]

In other words what is pleaded is that it was the combination of antibiotics and surgery that was required to make a material difference.

121. I should add that even if I am wrong and earlier surgery (with earlier antibiotics) should have occurred, it appears to me that I would have found that no qualifiable loss was caused. I have reached that conclusion for reasons that I have set out below.

122. Professor Chapple is of the opinion that it is significant that there was a normal blood flow to the testicles at the time of the USS. He believes that would have allowed antibiotics to have been potentially reached the testicles at that stage.

123. Professor Chapple accepted when cross-examined that what was critical when determining whether a testicle can be saved is whether the degree of skin loss meant that there was insufficient skin available to cover the testicle.

124. Professor Sethia also focused on skin loss. His view was that the loss of testes was 'inevitable' once the Claimant had 'lost his scrotum and some surrounding skin.'

125. In Professor Chapple's view delay of 6 or 7 hours was potentially significant as it would have resulted in greater skin loss. However, he accepted it was difficult to identify the time when it became impossible to save a testicle. His position was that 'the sooner the surgery was carried out, the less of the tissue loss'. It is clear that one reason for reaching that conclusion is that the progression of FG is not 'linear'.

126. That was reflected in the joint statement of the experts. It stated that:

It is impossible to categorically state what tissue loss would be evident at any particular time frame but the earlier that surgery is carried out the better the prognosis for the patient, both in terms of morbidity and mortality, based on their personal experience with this condition.

127. The microbiologists are agreed that a diagnosis of NF requires immediate resuscitation, intravenous antibiotics, and early surgical referral. They also agree that there is a need for urgency. However, there is no clarity about the rate of spread of NF. Both Dr Shetty and Dr Gray agreed with Professor Chapple that the spread is not 'linear'.

128. The evidence summarised above mean that it appears to me that earlier surgery is likely to have resulted in a better outcome. However, it is impossible to assess how much better. This is where, as I understand it, the arguments about material contribution potentially arise.

129. The re-re-amended particulars of claim state:

In the alternative, the delay in administering antibiotic therapy and performing surgical debribement materially contributed to an indivisible injury, namely skin and soft tissue necrosis and loss. [Emphasis added]

130. As I have already made clear, my findings of fact mean that this issue does not arise because there was no delay in performing surgery. However, if that finding is wrong, it appears to me that the injury cannot be described as indivisible. In *Ministry of Defence v AB* 117 BMLR 101 the Court of Appeal commented that:

This principle applies only where the disease or condition is "divisible" so that an increased dose of the harmful agent worsens the disease. … Cancer is an indivisible condition; one either gets it or one does not. The condition is not worse because one has been exposed to a greater or smaller amount of the causative agent. [150]

It appears to me that the Court of Appeal is clear. The distinction between 'divisible' and 'indivisible' is essentially that a 'divisible' condition is one where increased exposure increases the harm. On my findings that implies that what was in issue was a divisible condition. The NF is worsened by delay causing greater tissue and skin loss. That implies that in principle it should have been possible to identify the impact of delay. I do not accept that it is possible to distinguish between divisible conditions and

divisible injuries as the Claimant argued. What the Court of Appeal was making clear is that there is a distinction between cases where there is a dose/exposure relationship between the effect of the breach of the duty and the degree of harm caused and cases where there is no relationship.

131. Here material contribution is only pleaded on the basis of indivisible injury. It is obviously too late to amend the pleading. In any event, for the reasons already given it appears to me the issue would only arise if I am wrong in my primary finding about delay in surgery. It would not be appropriate to permit amendment when that would require further evidence.

Concluding remarks

132. For the reasons set out below, it appears to me that I must dismiss this claim. Although it appears to me that breach of duty has been established (including breach of duty not admitted), it cannot be proved that the breach of duty caused loss. I am sure that that conclusion will disappoint Mr Dalchow. Mr Dalchow has plainly suffered life changing injury following routine surgery when he developed FG. I hope that the trial process has helped him and all who treated him to understand what happened.