Northland District Health Board

A Report by the
Deputy Health and Disability Commissioner

(Case 18HDC01344)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report concerns the services provided to a man by Northland District Health Board (NDHB) between 18 April and 7 May 2018. The Deputy Commissioner highlighted the importance of hospital staff providing sufficient information to patients when they are discharged with ongoing symptoms.

2. The man was admitted to hospital on 18 April 2018 with a four-day history of swelling in his left testis, pain in his lower abdomen and groin, nausea, and fever. He was diagnosed with inflammation of his epididymis (part of the testis) and provided with intravenous antibiotics and strong painkillers.

3. Between 18 and 22 April, the man's condition appeared to improve, and he was discharged from hospital on 22 April with oral antibiotics. His documented discharge plan was for him to return home, complete his 10-day course of antibiotics, and continue taking strong painkillers. His discharge summary advised him to "seek medical attention" if he experienced "worsening pain, fevers, red/hot/swollen scrotum". The man recollected that he was advised to return to hospital if he deteriorated or remained in pain.

4. The man re-presented to hospital on 1 May, as his left testis was still painful and swollen. An ultrasound revealed that no blood flow could be seen within the testis. The man was transferred to another hospital for surgery. During the surgery on 4 May, it was discovered that part of the left testis had become necrotic (dead), and the testis was removed.

Findings

5. The Deputy Commissioner accepted that there was evidence that the man was verbally advised to return to hospital in a week's time if he had not improved, but considered that the man was not provided with sufficient information about follow-up at the time of discharge. Given the man's ongoing symptoms and his risk factors, including not having a GP, the Deputy Commissioner considered that the lack of information "resulted in a delay in the man re-presenting to hospital and receiving timely care". The Deputy Commissioner found NDHB in breach of Right 6(1) of the Code. The Deputy Commissioner also criticised NDHB's documentation of the man's care.

Recommendations

6. The Deputy Commissioner recommended that NDHB use this case as an anonymised case study to provide staff training on discharge information, develop staff guidelines on written discharge advice and definitive follow-up plans, and provide a written apology to the man for its breach of the Code.

Complaint and investigation

7. The Health and Disability Commissioner (HDC) received a complaint from Mr B about the services provided to his son, Mr A, by Northland District Health Board (NDHB). The following issue was identified for investigation:

- *Whether Northland District Health Board provided Mr A with an appropriate standard of care in April 2018 and May 2018.*

8. This report is the opinion of Kevin Allan, Deputy Health and Disability Commissioner, and is made in accordance with the power delegated to him by the Commissioner.

9. The parties directly involved in the investigation were:

Mr A	Consumer
Mr B	Complainant/consumer's father
Northland District Health Board	Provider/District Health Board

10. Also mentioned in this report:

Dr C	Urgent care practitioner
Dr D	General practitioner

11. Independent expert advice was obtained from a general physician, Dr Philippa Shirtcliffe (Appendix A), and a rural hospital medicine specialist, Dr Pragati Gautama (Appendix B).

Information gathered during investigation

Background

12. On 18 April 2018, Mr A (then aged in his thirties) presented to the Emergency Department at Hospital 1, which is operated by Northland District Health Board (NDHB). He complained of a four-day history of swelling of his left testis[1] and pain in his lower abdomen and groin, which had been worsening gradually, and also nausea and fevers over the previous night.

13. The triage notes document that Mr A had a recent history of a urinary tract infection and a past history of testicular torsion[2] as a result of an injury that did not require surgery. Mr A also had a history of two previous admissions for epididymo-orchitis[3] positive for *E. coli*,[4] chlamydia,[5] and gonorrhoea,[6] and his partner had a recent history of gonorrhoea.

[1] Male reproductive organ.
[2] Twisting of the spermatic cord, which carries blood to the testicles.
[3] Inflammation of the epididymis (the tube at the back of the testicle that carries sperm) and the testis.
[4] A type of bacteria.
[5] A sexually transmitted infection.

14. The subsequent nursing notes also record that Mr A suffered from post-traumatic stress disorder (PTSD).

Admission — 18 April 2018

15. On admission to Hospital 1, Mr A was febrile[7] with a temperature of 38.4°C. All his other observations were within normal limits.

16. At 11.15am, Mr A was reviewed by Dr C,[8] who undertook a point-of-care ultrasound[9] of Mr A's testicles. The results are not documented in the progress notes, but it was later recorded in the discharge summary that the scan showed decreased blood flow to the left testis.

17. Blood tests showed a raised white cell count of 16.9,[10] mildly raised CRP[11] of 33, and mildly raised creatinine of 107µmol/l.[12] A urethral swab was collected.

18. Mr A was reviewed by Dr D[13] and started on intravenous (IV) antibiotics (ceftriaxone 1g IV daily), and charted regular analgesia (paracetamol 1g four times a day, ibuprofen 400mg three times a day, oral or IV tramadol[14] 50–100mg as required up to four times a day, and Sevredol[15] 10mg every two hours) and the antiemetic ondansetron 4mg (oral or IV).

19. The recorded impression was epididymo-orchitis, and Mr A was admitted to the General Medicine ward for ongoing care.

20. NDHB told HDC that in a subsequent conversation between Dr C and Dr D following the point-of-care ultrasound, "they recall that there was flow to the affected testis but they wondered if it was reduced compared to the other side and as such a formal ultrasound scan was requested for the next day".

21. In relation to the diagnosis of epididymo-orchitis, NDHB stated:

> "The differential diagnosis of acute testicular torsion was considered as is evidenced by the performance of the point of care ultrasound scan … [T]he fact that the symptoms had been present for 4 days, were associated with fever, and that there was some blood flow in the testis it was felt that acute testicular torsion was an unlikely diagnosis while epididymo-orchitis was very likely. In the unlikely event that testicular torsion had been present after 4 days it was thought that the testis would not have been viable."

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[6] A sexually transmitted infection.
[7] Showing signs of fever. Normal temperature is 37.5°C.
[8] Dr C is vocationally registered in Urgent Care.
[9] A portable ultrasound.
[10] Normal range is 4–11.
[11] A protein marker indicating infection or inflammation.
[12] Creatinine indicates the functioning of the kidneys. Normal range is 60–105.
[13] Dr D is registered with the Medical Council of New Zealand under a general scope of practice.
[14] Tramadol is used to relieve moderate to severe pain.
[15] Sevredol (morphine) is used to treat severe pain.

22. The nursing notes indicate that Mr A reported moderate pain and was given regular analgesia, which initially did not help. At 6.30pm, Dr C undertook a further point-of-care ultrasound of Mr A's bladder. Dr C documented that Mr A "[complained of] pain ++ across lower [abdomen] (sharp shooting)". Dr C noted that Mr A had not urinated since his admission to hospital, and that the ultrasound indicated 200ml of urine in his bladder. The recorded plan was to encourage fluid intake and to repeat the ultrasound the following morning.

23. At 9.45pm, Mr A was given his regular analgesia, and he reported that his pain was "just [a] dull ache, not shooting pain". At 11.30pm, Mr A reported 6/10 pain, but was noted to sleep throughout the night. When he was woken for routine observations, he declined analgesia.

19 April 2018

24. Mr A was seen during the morning ward round. The notes record that the swelling of his left testis had increased and his pain was controlled with analgesia, but that "once that wears off pain is bad". The documented plan was for a repeat ultrasound and blood tests for sexually transmitted infections, and to continue antibiotics.

25. The ultrasound showed that the left testis was enlarged, with normal echogenicity[16] and blood flow. A small hydrocele[17] with web-like septations[18] was noted, and particulate material throughout "consistent with an infective element". The epididymis was noted to be grossly enlarged and hyperaemic.[19] The report concluded: "Appearances are in keeping with left epididymitis.[20]"

26. NDHB told HDC that following receipt of Mr A's complaint, the reporting sonographer reviewed the scan and confirmed that "the inflammatory material was organised and not amenable to incision and drainage at that time".

27. The nursing notes record that during the day Mr A experienced nausea and vomiting when he ate. He was noted to be mobilising, and showered himself independently. At 7.30pm, Mr A complained of 5/10 pain, and reported that his testis felt "larger than earlier" in the day.

28. The medication chart shows that Mr A was given regular analgesia throughout the day. In addition, he was given tramadol 100mg at 6pm, and Sevredol 10mg at 11.30pm. He experienced some nausea and was given ondansetron. At 1am he was given paracetamol 1g, and at 1.30pm he was given tramadol 100g. At that time he reported 7/10 pain and his testis was red and sore to touch, although he reported that the pain was not as severe as the previous night. He was given an ice pack for the swelling.

[16] A measure of how well a tissue reflects an ultrasound wave.
[17] Swelling in the scrotum (the sac that contains the testicles).
[18] Divisions in a cavity.
[19] An increased amount of blood in the vessels of an organ or tissues of the body.
[20] Inflammation of the epididymis.

20 April 2018

29. Mr A was seen during the morning ward round. The notes from this review record that the ultrasound results from the previous day showed "good blood flow and inflammatory fluid", and that the urethral swabs were positive for gonorrhoea. On examination, the swelling was noted to have increased. The notes record: "[P]ain still severe requests testicle to be 'cut off'." Mr A's case was discussed with the infectious diseases service. His antibiotics were doubled and his medication chart was updated accordingly.

30. The nursing notes for the day record that Mr A complained of nausea, but that his "pain [had] improved" from the previous day and was "well managed on [regular] analgesia". Mr A was reported to be mobilising independently. The nursing notes at 11.35pm record that Mr A reported 4/10 pain initially, which increased to 6–7/10 with nausea, and that he was feeling "worse tonight". Mr A's temperature was recorded as 38°C.

31. The medication chart shows that in addition to his regular analgesia, Mr A was given tramadol at 7.45am, 2.50pm, and midnight, and Sevredol at 7.40pm.

21 April 2018

32. The nursing notes record that overnight Mr A was kept awake by noisy roommates, and that he complained of pain, which was managed with "good effect" with analgesia. He was noted to be up to the toilet independently.

33. The medication chart shows that Mr A was given Sevredol at 3am and tramadol at 6.10am.

34. Mr A was seen during the morning ward round. He was noted to have slept poorly overnight and to have had "fever + chills". On examination, his temperature was normal and his left "hemi-scrotum" was noted to be swollen but to look "well otherwise". The records document that the epididymo-orchitis was "slow to resolve", and note: "? Abscess[21] with swinging fevers."

35. The recorded plan was to continue treatment on the ward for another 24 hours, and to allow short-term leave in between administration of his IV antibiotics.

36. Mr A was given regular analgesia and Sevredol at 8.45am, and tramadol at 3pm.

37. Mr A's observations, recorded approximately four hourly, were all normal, with the exception of his temperature recorded in the afternoon (time illegible) as 37.4°C or 37.7°C (unclear from the chart).

38. The nursing notes record that Mr A "denied pain at start of shift", and that he was allowed to go home between his antibiotic infusions. At 10.30pm, it was noted that Mr A was complaining of pain on movement, but that he was moving independently.

39. Overnight, Mr A reported pain of 7/10. He was given Sevredol at 11.40pm but otherwise slept.

[21] An accumulation of pus.

22 April 2018

40. Mr A was seen during the morning ward round. It was noted that the swelling had "calmed down" and his nausea had settled, and that he had had no fevers for 24 hours. On examination, the redness and swelling was noted to have decreased, and the epididymo-orchitis had "[s]tarted to improve". The recorded plan was to check his bloods and possibly to discharge him later that day.

41. NDHB said that the plan to check Mr A's bloods related to "any outstanding screening bloods for sexually transmitted infections and other pending micro[22] prior to discharge". NDHB noted that the query regarding an abscess was no longer in the differential diagnosis at that time, as "[i]t would not be usual practice to repeat inflammatory markers on day of discharge in a patient who was clinically improving and whose fever had resolved".

42. The nursing notes record that Mr A reported feeling "much better". He was noted to complain about pain later during the shift, and was given tramadol at 11am.

Discharge

43. In the afternoon of 22 April, Mr A was discharged on oral antibiotics (doxycycline), with paracetamol, ibuprofen, and tramadol for pain relief.

44. NDHB noted that the rationale for discharge included:

> "Pain improving and manageable on oral analgesia (as documented by pain scores, nursing notes, independent mobility and desire to take ward leave between doses of IV antibiotics i.e. increasing levels of activity). No fevers for over 24 hours allowing transition to oral antibiotics."

45. In relation to the slight temperature recorded on the evening prior to discharge (documented as either 37.4°C or 37.7°C), NDHB stated:

> "[A]n isolated rise in temperature to 37.7°C in the context of deep infection … would not be cause for alarm for most clinicians, and many would not consider this true 'fever'."[23]

46. Further to this, NDHB stated:

> "[W]e feel that the combination of increased level of activity, improved pain scores, improved fevers and improvement documented in nursing notes all attests to the fact that there was satisfactory improvement."

[22] Micro-organisms.

[23] To support its statement, NDHB provided a reference from *Harrison's Internal Medicine*, which states that an evening temperature of greater than 37.7°C would be defined as febrile, and in "some individuals recovering from a febrile illness, this daily variation can be as great as 1.0°C".

Discharge information

47. The nursing notes record that Mr A was given his discharge summary and "[e]ducation", with advice "to come back if he [became] ill". No further details of the information provided are documented.

48. The discharge summary states: "[I]f you have worsening pain, fevers, red/hot/swollen scrotum please seek medical attention." The documented discharge plan was for Mr A to return home, complete his 10-day course of antibiotics, and take analgesia as prescribed. No follow-up by a GP or the hospital was recommended, and no GP was listed on the discharge documentation.

49. Mr A told HDC that at the time of discharge:

> "I didn't see my GP. I wasn't registered up here at the time, and when I was discharged from the hospital, they told me to come back to them if I felt in decline or was still in pain by the end of that week."

Post discharge

50. Mr A's father told HDC that his son continued to experience a significant amount of pain following his discharge, and was "unable to stand for more than a few minutes at a time". Mr B stated:

> "Things did not get worse, they just did not get better and he was still in significant pain on discharge. He was not advised what he should do if things were just not improving within an acceptable time frame."

Readmission to Hospital 1 May 2018

51. On 1 May 2018, Mr A re-presented to Hospital 1 Emergency Department reporting ongoing pain in his testis.

52. Dr D reviewed Mr A, noting that while his left testis was red/hot/swollen, his other observations were within normal limits.

53. Following a discussion with the Urology registrar at Hospital 2, a decision was made to admit Mr A to Hospital 1 and start him on two antibiotics (gentamicin and cefaclor), and to perform an ultrasound scan the following day. The scan revealed that no blood flow could be seen within the testis.

54. Mr A was then transferred to Hospital 2 to undergo surgery.

Surgery at Hospital 2

55. A Urology registrar performed the surgery on 4 May 2018. During surgery, part of the testis was noted to be necrotic and to contain pus. Following a discussion with the consultant, it was decided that the testis was not salvageable, and it was removed.

56. Mr A's wound healed satisfactorily, and he was discharged from hospital on 7 May 2018. His discharge summary noted: "You had surgery to remove the testicle, which went well.

You are now safe to be discharged." There is no documentation of a discussion with Mr A about the psychological implications of his operation.

Further comment by NDHB

57. In relation to Mr A's initial admission, NDHB considers that his presentation was "within the scope of rural hospital generalism" and did not need to be discussed with Urology.

58. NDHB noted that the results of the point-of-care ultrasound should have been recorded "in a more thorough and clear manner". However, NDHB stated:

> "[I]t is difficult to be sure the significance of this test, particularly given that it was noted by the house officer (not the test performer), and the comments regarding blood flow were over-ridden by a formal scan the following day showing normal testicular flow with hyperaemia of the epididymis."

59. In relation to the advice given to Mr A at the time of discharge, NDHB stated:

> "We agree that the documentation of the plan following discharge was not explicit, particularly in terms of timeframes for improvement. It is unclear from the information documented exactly what was explained to [Mr A] in terms of expected timeframes for review if not improving … We agree that neither of these documents stipulate timeframes and what to do should improvement fail to meet expected patterns."

60. In relation to Mr A not having a GP listed, NDHB stated:

> "The issue of planned follow up in [Hospital 1] is difficult when patients do not have their own GP. The hospital is not resourced or staffed to allow for routine follow up clinics and as such patients are appropriately referred back to primary care for their follow up. If the patient does not have a GP then the hospital acts as the default back-up service given that the on call GP works from the hospital after hours, and during hours the hospital is able to refer patients to the on call GP should they present requiring primary care."

61. NDHB agreed that Mr A had several risk factors that made primary care follow-up important, and that discharge information should have been more specific.

Changes made by NDHB

62. NDHB advised that it is working through the process of establishing a credentialing and recording system for point-of-care ultrasound in order to improve documentation of the findings.

63. Hospital 1 has reviewed its medical orientation document to include the following:

> "Discharge summaries should include estimated timeframes for improvement, and what the patient should do if they don't improve as expected, or if they get worse. In

> the case that the patient is not registered with a GP then that advice needs to include the option of returning to the hospital A+M."

64. In addition, in relation to ward round documentation, the orientation document now states:

> "On the ward round the clinical notes will state the date and time of the ward round encounter, the initials of the team of doctors seeing the patient, and then a clear name and signature of the scribe at the conclusion of the ward round note."

Further comment from Mr A's father

65. Mr B told HDC that what is written in the clinical records does not reflect the true situation. He said that while the nursing notes state that his son was mobilising independently, this was never the case. Mr B also noted that his son's pain levels never went lower than 5/10 despite being given a significant amount of analgesia. Furthermore, he said that his son was also asked what his pain score was when he was at rest and after he had been given a significant amount of analgesia. Mr B stated: "My primary concern from the start has been the discrepancy between the documented level of pain and what [Mr A] has reported to me of his pain experience."

66. Mr B also stated:

> "As you are aware there are a number of reasons that people may under report pain and it takes a degree of skill to take these into account and ascertain a more accurate understanding of the patient's pain experience. There seems to have been an over reliance on just using verbal accounts. Anyone observing [Mr A's] body language and facial expressions when mobilising would have realised he might be under reporting. My impression is that throughout his hospitalisation pain was poorly evaluated and the significance of his pain to the underlying physiological process under estimated."

67. Mr A told HDC that while he was in hospital, his partner washed him and assisted him to the toilet, and often he would use a wheelchair because the pain was so severe. He said that he was on a lot of medications, and that when these wore off he would be in pain again. He stated: "I assume that with the amount of pain relief given to me it would be clear that the pain level would be high, and that the given dosage would of course numb it."

68. Mr A also raised concerns that while he was in hospital, on one occasion he was woken because a number of people wanted to see his testicles, but no one ever asked whether he consented to this.

Statement from Mr A about impact of care

69. Mr A told HDC that these events have had a significant impact on him. He stated:

> "The time off work put me and my partner under considerable strain with difficulty meeting rent commitments meaning we almost lost the right to stay in the house, loss of self image due to loss of a testicle. I already have self image/worth issues for

> historical reasons my self image further eroded by the prolonged inability to contribute financially to the relationship impact on my ability to perform sexually causing strain on our relationship, which has now ended. This was not an issue prior to the loss of my testicle. Sense of being invalidated by the lack of empathy from the DHB in relation to my physical and psycho social outcomes. I have at no time felt that they have comprehended or cared about the trauma that all this has created in my life.
>
> I had felt that after many years struggling to overcome demons and create a life I was actually beginning to do so and now I am back to starting again with the added issues raised above."

Responses to provisional opinion

70. Mr A and his father, Mr B, were given an opportunity to respond to the "Information gathered" section of the provisional opinion, Dr Shirtcliffe's expert advice, and Dr Gautama's expert advice. Mr B emphasised that his son reported a high level of pain both while in hospital and throughout the period between the two admissions. Mr B also submitted that NDHB staff did not consider that the "pressure of the need for [his son] to get back to work ASAP contributed to his wanting to seem to be better than he was".

71. Mr B stated:

> "[T]here seems to have been a large emphasis on the medical, to be expected in an acute situation such as this, and insufficient regard given to the psychosocial elements of his care."

72. NDHB was given the opportunity to respond to the provisional opinion. It noted Mr A's statement that "they told [him] to come back to them if [he] felt in decline or was still in pain by the end of that week". NDHB submitted:

> "[T]he patient says he was given timeframes and told to return to hospital if things weren't improved by the end of the week … [W]e agree that the written advice was not explicit but … it has been demonstrated that the advice was imparted and understood by the patient."

73. NDHB also submitted that "the vast majority of patients who are discharged from hospital in New Zealand do not receive a 'fact sheet' about their condition, and rather such information is generally imparted verbally and on the discharge summary".

74. NDHB stated:

> "[W]hile there were likely many factors that resulted in a delay in [Mr A] re-presenting to hospital we have demonstrated that he was advised what to look out for, where to seek help if he needed it, and that he should seek help if he got worse or did not recover within a stated timeframe. As such we do not believe that we have breached Right 6(1), although we do agree that the information could have been more optimally documented."

Opinion: Northland District Health Board — breach

Failure to provide reasonably expected information — breach

75. NDHB was responsible for ensuring that Mr A was provided with services that complied with the Code of Health and Disability Services Consumers' Rights (the Code). In my view, for the reasons set out below, NDHB failed to ensure that it provided Mr A with the information that a reasonable consumer in his circumstances would expect to receive. This led to missed opportunities to diagnose and treat Mr A in a more timely manner.

76. Mr A was discharged on 22 April 2018. The progress notes record that "education" was given, but there is little detail on what that included. The electronic discharge summary given to Mr A stated that he should take his antibiotics for ten days, and that if there were any problems, to "contact [his] GP".

77. At the time, Mr A was not registered with a GP. He told HDC that he was told to return to hospital if he "felt in decline or was still in pain by the end of that week".

78. My clinical advisor, general physician Dr Shirtcliffe, advised that when Mr A was discharged, he should have been provided with better information (which she referred to as a "fact sheet") that included the expectations around the timeframe for resolution, possible complications, and follow-up.

79. Dr Gautama, my rural medicine advisor, made similar criticisms, and advised that at the time of discharge Mr A should have been provided with clear guidance on when to seek further review. Dr Gautama noted Dr Shirtcliffe's comments on pain being a subjective experience that can be altered by fear, anxiety, and fatigue, and said that while she accepts NDHB's submission that there did appear to be an overall reduction in pain, more explicit advice should have been given to Mr A regarding continued or increased pain levels triggering review. Dr Gautama stated:

> "[G]iven the continued requirement for opiate analgesia (Sevredol 60 mg over the 24 hours prior to discharge) and continued pain and fever, at discharge there should have [been] an explicit documented plan (with potential input from Urology) regarding continued symptoms for the next 48 hours."

80. Dr Gautama considered the failure to do so to be a moderate departure from accepted standards.

81. I accept this advice. While I understand that Mr A may have expressed a desire to return home, given his slow recovery and his ongoing reports of pain, he should have been provided with clear advice on when to seek further review. This was particularly important given that Mr A did not have a GP. Dr Gautama advised:

> "I am concerned that the patient ([Mr A]) did not present for over a week (9 days in total) as a result of poor guidance, and there were clear potential barriers to return to

the hospital during this first admission (lack of sensitivity when being examined on a ward round, past PTSD and thus anxiety)."

82. I agree with Dr Gautama that although this may not have altered the outcome, it may have helped to avoid some of the distress subsequently experienced by Mr A.

83. In response to the provisional opinion, NDHB noted Mr A's statement that "they told [him] to come back to them if [he] felt in decline or was still in pain by the end of that week". NDHB submitted that this statement showed that its staff advised Mr A "to return to hospital if things weren't improved by the end of the week", and that this advice "was imparted and understood by the patient".

84. NDHB submitted that Mr A "was advised what to look out for, where to seek help if he needed it, and that he should seek help if he got worse or did not recover within a stated timeframe", and that therefore NDHB did not breach Right 6(1) of the Code.

85. I have considered NDHB's submissions, and I accept that there is evidence of Mr A being verbally advised to return to hospital if his pain had not improved within a week. However, I remain highly critical of the information that NDHB provided to Mr A at discharge. Mr A was discharged despite experiencing continued pain (for which he was taking opiate analgesia (a strong pain killer)), and having a continued fever. Moreover, I note that NDHB agrees that Mr A had several risk factors, including two previous admissions for epididymo-orchitis, episodes of chlamydia and gonorrhoea, a history of testicular torsion and urinary tract infections, and not having a GP.

86. I am persuaded by Dr Gautama's rationale that in such circumstances, "at discharge there should have [been] an explicit documented plan (with potential input from Urology) regarding the continued symptoms for the next 48 hours". This rationale aligns with Dr Shirtcliffe's view that staff should have provided Mr A with better information. It also aligns with the New Zealand Sexual Health Society's guidelines on managing epididymo-orchitis (to which both Dr Gautama and Dr Shirtcliffe referred), which state that the patient's symptoms "should be improving after 3 days".[24] Accordingly, my view is that it was not sufficient to give verbal advice to return if pain had not improved within a week.

87. Overall, guided by expert advice, I am concerned that Mr A was not provided with sufficient information about follow-up at the time of discharge. Given his risk factors, I consider that this failure resulted in a delay in Mr A re-presenting to hospital and receiving timely care. Accordingly, I find that NDHB failed to ensure that it provided Mr A the information that a reasonable consumer in his circumstances would expect to receive, and breached Right 6(1) of the Code.[25]

[24] New Zealand Sexual Health Society, "Epididymo-orchitis Management Guidelines", September 2017.
[25] Right 6(1) states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive."

Documentation — adverse comment

88. On 18 April, point-of-care ultrasounds of Mr A's testes and bladder were performed by Dr C. However, the details of both ultrasounds are not clearly documented, and it is not recorded that they were point-of-care ultrasounds.

89. Dr Gautama advised:

> "It would be standard practice to identify that the ultrasound carried out is a Point of Care ultrasound (and thus not performed by a trained Ultrasonographer), a short report of the findings and a brief note of the adequacy of the ultrasound image would be appropriate."

90. Dr Gautama considered that the failure to do this was a minor departure from accepted practice.

91. I note that NDHB agrees that the results of the point-of-care ultrasound should have been recorded "in a more thorough and clear manner".

92. Dr Gautama was also critical of the adequacy of the documentation during the second admission to Hospital 1. In particular, she noted that while the treatment plan was documented on the electronic discharge form, it was not recorded in the progress notes, and the ward round notes are minimal, not clearly signed, and there is no record of what information was given to Mr A regarding the ultrasound findings and management plan.

93. I agree with these criticisms. Clinical records allow care to be provided in an appropriate manner in light of past treatment, including when new providers become involved in a patient's care; they also allow providers to verify when and what occurred during a patient's admission. I am critical that the documentation of Mr A's care was not adequate.

94. I note the changes NDHB has made to its medical orientation document to improve documentation of ward rounds.

Recommendations

95. I recommend that NDHB:

a) Use this case as an anonymised case study to provide staff training on the importance of clear and documented discharge information, and provide HDC with evidence of the training within six months of the date of this report.

b) Develop a guideline for staff to ensure that more specific written discharge advice and definitive follow-up plans are provided to patients, and report back to HDC on the development of the guideline within three months of the date of this report.

c) Provide a written apology to Mr A for its breach of the Code. The apology is to be sent to HDC within three weeks of the date of this report, for forwarding to Mr A.

Follow-up actions

96. A copy of this report with details identifying the parties removed, except the experts who advised on this case and NDHB, will be sent to the Medical Council of New Zealand, the Royal New Zealand College of General Practitioners, the New Zealand Rural General Practice Network, and the Health Quality & Safety Commission, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent advice to the Commissioner

The following expert advice was obtained from a general physician, Dr Philippa Shirtcliffe:

"**Report for the Health and Disability Commissioner: C18HDC01344.**

Preamble

I have been asked to provide an opinion to the Commissioner on case number **C18HDC01344**. I have read and agree to follow the Commissioner's Guidelines for Independent Advisors. I am a duly qualified and registered medical practitioner, NZMC registration number 18251. My qualifications are MBChB, FRACP. I am employed by Capital and Coast District Health Board as a General Physician at Wellington Hospital. I have been a fellow of the Royal Australasian College of Physicians since April 2003 and have been employed as a General Physician at Capital and Coast DHB since 2006.

Expert advice requested

Please review the enclosed documentation and advise whether you consider the care provided to [Mr A] by [Hospital 1] was reasonable in the circumstances, and why. In particular, please comment on:

1. *The appropriateness of [Mr A's] discharge from his first admission at [Hospital 1].*
2. *Whether the antibiotic treatment for [Mr A's] diagnosis of epididymitis was reasonable.*

For each question, please advise:

a. *What is the standard of care/accepted practice?*

b. *If there has been a departure from the standard of care or accepted practice, how significant a departure do you consider this to be?*

c. *How would it be viewed by your peers?*

d. *Recommendations for improvement that may help to prevent a similar occurrence in future.*

To assist in answering this, I have reviewed the documents sent to me by the Commission comprising:

- a letter of complaint to the HDC,
- Northland DHB's response dated 7 September 2018,
- clinical records from Northland DHB covering the period 18 April to 7 May 2018
- comments from the complainant and consumer received 30 October 2018.

A literature search was also done. Please refer to references at end of report.

Factual summary

Presentation

[Mr A] presented to [Hospital 1] Emergency Department (ED) on 18th April 2018 (Day 1) with left testicular swelling and pain. The triage note says 4 days of swelling, the admission note records 7 days. These symptoms had been gradually worsening. The night prior to presentation he described abdominal pain, vomiting, fevers and rigors. He was febrile on presentation with a temperature of 38.4.

In the past medical history it is recorded that he had had two prior admissions for epididymo-orchitis (*E coli* and chlamydia and gonorrhoea). Additionally there is mention of a left past testicular torsion (no surgery required). A point of care ultrasound was completed in the ED and showed a decreased blood flow to the testis. Acute testicular torsion was considered but felt unlikely in the clinical context. A formal ultrasound was scheduled for the next day. His white blood cell count was raised at 16.9, CRP (a marker of infection or inflammation) was mildly elevated at 33. There was a mild acute kidney injury with a creatinine of 107 µmol/l (normal range 60–105). He was admitted to the General Medicine Ward with a diagnosis of epididymo-orchitis.

Treatment

He was treated with intravenous (iv) antibiotics and analgesia for five days (counting day of presentation as Day 1) until his discharge on 22 April 2018. Antibiotics were IV ceftriaxone (dose doubled on infectious disease advice on Day 3 — 20/4 — and ceased on discharge), azithromycin (one off dose in ED) and doxycycline (10 days in total).

Analgesia administered was regular paracetamol, regular ibuprofen, and as required tramadol and sevredol (morphine). It is difficult to be accurate due to difficulty reading some of dates and doses on the drug chart but a 'best interpretation' shows that on the day of admission *additional* analgesia included:

- 18/4 tramadol 150mg, sevredol 40mg, paracoxib 40mg.
- 19/4 tramadol 250mg, sevredol 10mg.
- 20/4 tramadol 400mg, sevredol 10mg.
- 21/4 tramadol 200mg, sevredol 60mg.
- 22/4 tramadol 100mg (discharged in morning).

Progress

[Mr A] was seen daily by the medical team (largely unclear from notes who/what designation involved clinicians were).

1. Further investigations:

a. The formal ultrasound done on Day 2 (19/4) showed an enlarged left testicle with normal echogenicity and blood flow. There was a small hydrocele with septations

and particulate material ('consistent with an infective element'). The epididymis was grossly enlarged and hyperaemic.

b. On Day 3 (20/4) it is noted in the medical team entry that swabs were positive for gonorrhoea, however the microbiology report of 21/4 states no gonorrhoea. The discharge summary states negative for chlamydia and gonorrhoea. Mid-stream urine (MSU) negative. It is unclear when microbiology specimens were taken relative to administration of antibiotics (ED note suggests urethral swabs taken on 18/4 but report for urethral swab records specimen received 19/4 ie after antibiotics commenced. MSU received 18/4 prior to antibiotics).

2. Regarding entries in the notes about pain and fever:

   a. On Day 3 (20/4) it is recorded that 'pain is still severe, requests testicle to be cut off'. Infectious diseases are consulted and advise doubling the dose of iv antibiotics. There appears to be a spike in pain scores Day 3–4.

   b. On Day 4 (21/4) the ward round notes mention poor sleep due to 'uncomfortable and room-mates noisy' as well as fevers/chills. The impression is 'epididymo-orchitis slow to resolve with ?abscess with swinging fevers'.

   c. Nursing notes from morning shift on Day 4 (21/4) are difficult to decipher. Northland DHB's report suggests they say 'Pt denied pain at start of shift'; however he had had sevredol at 0300, Panadol 0610, ibuprofen 0600 (or 0800) and tramadol 0610 and possibly another dose of sevredol at ?0835.

   d. [Mr A] did go home for several hours on Day 4. He also had a total of 60mg sevredol and 200 mg tramadol over and above regular medication that day.

   e. On the evening of Day 4 (21/4), nursing notes record pain on movement. A temperature of 37.7 is also recorded. This contrasts with the entry the following morning which records 'no fevers for >24 hrs'.

   f. It is also recorded in the night nursing notes on night of 21/4 that pain woke [Mr A] from sleep at 2340 and sevredol 20mg was given. 'Pain 7/10' is recorded in the body of the notes but not reflected on the observations chart or on the graph of pain scores over time in the Northland DHB report.

   g. The medical entry prior to discharge on Day 5 (22/4) does not comment on any ongoing requirement for opiate analgesia (60mg sevredol in total previous 24 hours). Nursing notes record that the patient says he feels much better and wants to go home. The notes also mention that he complained of pain later in the shift (tramadol administered).

   h. Northland DHB's report indicates that the rationale for discharge included 'pain scores, nursing notes, independent mobility and desire to take ward leave … ie increasing levels of activity'. It also mentions 'no fevers for over 24 hours allowing transition to oral antibiotics'.

3. Regarding discharge advice:

a. The nursing notes record that the patient 'needs to come back if he becomes ill, same communicated to patient'.

b. The written discharge summary plan 'advice to patient' states to: complete 10 days of antibiotics, wear supportive underwear, if you have worsening pain, fevers, red/hot, swollen scrotum please seek medical attention.

c. Elsewhere the summary notes 'if you experience any problems after discharge, please contact your GP'. It is unclear if [Mr A] had a GP (Discharge summary is to 'No Clinician'. Under appointment with GP it states 'No').

d. Presumably this is the 'safety netting was done both verbally and in writing' that the report from Northland DHB refers to.

Subsequent events

On 1 May 2018, [Mr A] re-presented to [Hospital 1] with ongoing pain and a swollen testicle. He received a further ultrasound which showed no blood flow through the left testicle and he was transferred to [Hospital 2]. Another ultrasound confirmed complete left testicular ischemia. He underwent an orchiectomy, which revealed frank pus draining from the scrotum, and necrosis of the left testicle. Histology confirmed that the lack of blood supply was due to infection rather than testicular torsion (and this scenario was confirmed by the urologist at [Hospital 2] and the pathologist).

Opinion

a. *The appropriateness of [Mr A's] discharge from his first admission at [Hospital 1].*

It is my opinion that [Mr A] should not have been discharged from his first admission without further investigation and/or urology referral. However I am unable to comment on whether this would have changed the eventual outcome (loss of a testicle).

What is the standard of care/accepted practice? (regarding management of epididymo-orchitis)

The correct diagnosis of epididymo-orchitis was made on [Mr A's] presentation, following considering of the most important differential diagnosis (testicular torsion). Appropriate treatment was initiated ie antibiotics, bed rest, scrotal support and analgesia. It is noteworthy that [Mr A] had already had symptoms for 4–7 days by the time of presentation. He was febrile and unwell and was appropriately assessed as requiring intravenous antibiotics. This is all in accordance with clinical guidelines on the management of epididymo-orchitis as per the New Zealand Sexual Health Society.[1]

However these guidelines also state that referral to or discussion with urology is recommended for 'severe epididymo-orchitis requiring iv antibiotics and bed rest'.[1]

The NZ guidelines also state that 'complete resolution of the swelling may take several weeks, but a response should occur in 4–5 days'. If symptoms and signs persist a

review of diagnosis, testicular ultrasound and urology referral are all suggested.[1] Other guidelines suggest a similar time frame for a response and similar action plan:

— UK guidelines suggest if there is no improvement in the patient's condition after 3 days, the diagnosis should be reassessed and therapy re-evaluated. 'When there is little improvement further investigations such as ultrasound scan or surgical assessment should be considered. Differential diagnoses to consider in these circumstances include testicular ischaemia/infarction … or progression to an abscess.'[2]

— European guidelines also suggest the diagnosis is reassessed at 3 days if there is no improvement. They explicitly state that 'in patients where there has not been significant improvement in symptoms/signs after completion of therapy or if there is diagnostic doubt, a scrotal ultrasound should be ordered. Differential diagnoses to consider … include progression to abscess, testicular ischaemia/ infarct … further referral to urology should be considered.'[3]

Testicular infarction is a recognised although rare complication of epididymo-orchitis. Chia et al note in their introduction in a case report of the same however that it 'can be difficult as clinical examination and laboratory investigations do not reliably differentiate it from uncomplicated epididymo-orchitis'.[4] They note that ultrasound with colour duplex is a useful investigation. Elsewhere they note that 'conservative management does not preclude the need for follow-up and reassessment if symptoms do not resolve. Failure to do so can result in infarction'.[4] Case reports of testicular infarction accessed mention the development of unbearable or severe pain.[4–6] On Day 3 [Mr A's] pain was noted to be such that he was 'requesting his testicle to be cut off'. This would suggest unbearable pain. With the benefit of hindsight, this could reflect developing abscess or ischemia/infarction.

In the context of epididymo-orchitis, testicular infarction is caused by the compression of the blood vessels to and from the testicle by the inflammation and swelling of the epididymis. It is thought that endothelial damage (ie to the blood vessel lining) secondary to bacterial toxins and leading to thrombus (clots) may also contribute.[4] It would appear from the literature that this is an adverse outcome that can occur especially with delayed treatment (and I note 4–7 day history of symptoms prior to presentation).

That a formal ultrasound was done on Day 2 would indicate that at that time the left testicle had normal blood flow. However by Day 3 the pain was severe (and there is a spike in pain scores). It would seem that other causes of scrotal pain were considered (eg abscess) but for some reason not further investigated/referred. That this did not happen must be due to cognitive error. At some level there was recognition that recovery was slower than anticipated as reflected in the call to ID on Day 3. There is further evidence of consideration of a developing adverse outcome when the possibility of an abscess is raised on Day 4. On Day 3 and certainly by Day 4 further imaging at least or referral to urology at best (or both) should have occurred.

This may not have altered the eventual outcome for [Mr A] (ie loss of a testicle) but it is likely that earlier appreciation and management of the complication would have resulted in a less prolonged period of pain for [Mr A]. He did not represent until May 1st ie nine days later. A urologist could provide a further opinion regarding this.

The basis of the management decisions regarding [Mr A] (ie discharge rather than further imaging/referral) appears to be around his apparent improvement as documented by pain scores, independent mobility and resolution of fevers.

— With regards to pain — Pain scores are written in the body of the nursing notes as well as recorded on the observation chart but these are not necessarily the same (and presumably relate to pain at the time BP etc is checked). For example, there is a lack of consistency between what is in the nocte nursing notes on 21/4, and what is on the observations chart (which is also graphed on the Northland DHB report). If this is taken into account, the pain scores are not improving in the same way. Furthermore, the amount of additional analgesia required by [Mr A] that day would be consistent with ongoing severe pain not an improving pain. There is no direct equivalence between tramadol and sevredol (due to differing mechanisms of action) but as a general rule, tramadol is appropriate for moderate pain and sevredol for severe pain. On the 21st April, [Mr A] appeared to have an increased requirement for sevredol. It is not immediately apparent that this is the case however as the information has to be gathered from different places.

— As regards his independent mobility, [Mr A] indicated that he was often assisted by his partner and used a wheelchair and was also receiving significant analgesia. As regards nursing notes, they generally report 'mobilising independently'. It is unclear what 'independent' means to the nursing staff. On 20/4 there is mention of 'waiting for partner for shower'. He did go out on leave for several hours on the 21/4 but had significant analgesia prior. On subsequent admission there is an entry from 3/5 recounting the details of the illness which notes that (following infection) 'Pain had improved but remained abnormal. Pain ++ if walks>5 mins'.

— There is a discrepancy between the temperature chart and nursing notes which both record a fever on the night prior to discharge (low grade at 37.7 but significant) and the medical notes recording 'no fever >24hours'.

— Thus looking back, it would appear that pain scores were not improving and fevers had not settled.

What is the standard of care/accepted practice? (regarding follow up of epididymo-orchitis)

Given that [Mr A] was discharged (and it appears from recorded notes that he was keen to get home), New Zealand, UK and European guidelines all state that the patient should be provided with a fact sheet including expectations around time frame for resolution, possible complications and follow up[1–3] (as an example see reference 7). The NZ guidelines[1] suggest that complete resolution of swelling may take several

weeks, but a response should occur in 4–5 days. They also suggest a review at 24–48 hours (not relevant here as [Mr A] was admitted) and then 'at least once more at 1–2 weeks' and 'if not improving or condition worsening, consider specialist referral'.[1]

It is not clear if [Mr A] had a GP. The information written on the discharge summary is not specific. Given that his scrotum was swollen on discharge, the advice states that 'if it gets worse' to seek medical attention. It does not address what a reasonable period is to wait if it does not get better or at what point pain levels and swelling should resolve. The discharge summary advice seems to read that no appointment with hospital or GP is required.

How would the care be viewed by your peers? If there has been a departure from the standard of care or accepted practice, how significant a departure do you consider this to be?

I note that [Mr A] was admitted to a rural hospital without the ready availability of general physicians and, more especially, urologists available in larger centres.

Given that there was no urologist on site but that a correct differential was considered, and correct diagnosis and appropriate treatment was commenced (ie his initial care was reasonable), I would view failure to discuss with a urologist at the time of admission with mild disapproval. In a tertiary hospital an admission with this diagnosis would likely be under urology.

However I would view the fact that further imaging and/or referral to urology did not occur at Day 3/4 with moderate to severe disapproval.

I would view the apparent lack of adequate follow up (both discharge advice and specific review plans) with moderate to severe disapproval.

This may not, however, have altered the eventual outcome.

Recommendations for improvement that may help to prevent a similar occurrence in future Review of assessment and recording of pain.

1. It is well recognised that the subjective and multidimensional nature of the pain experience render pain assessment really challenging.[8] People also vary hugely in their expression of pain. The numeric rating scale used for [Mr A] has been broadly validated, however it evaluates only one component of the pain experience (ie intensity). There is a need for clinical judgment to be incorporated into the assessment of pain intensity including how much analgesia is actually required to achieve said pain scores, and assessing how pain affects function. Having this information in one location rather in three different places (ie observation chart, nursing notes, medication chart) might help. Whilst the Northland DHB graph of pain scores is a useful visual aid in concept, this was done in retrospect (ie for the report not at the time of [Mr A's] admission), and with what seems to be incorrect data. Better documentation of pain would be more useful than the completed

documentation around falls prevention, and even the EWS is of limited relevance here.

2. Ensure any admissions are within scope of practice of supervising clinicians (acknowledging rural location of hospital).
3. Ensure that there are no barriers to referral to tertiary services (in this case urology).
4. More specific, written discharge advice, and definite follow up plans.

b. *Whether the antibiotic treatment for [Mr A's] diagnosis of epididymitis was reasonable.*

Antibiotic treatment was reasonable as outlined in the answer to part (a). It was in accordance with the NZ Sexual Health Guidelines on epididymo-orchitis.[1] Furthermore, antibiotic choice and dose appear to have been discussed with ID as per medical entry in the notes on Day 3 (20/4). The adverse outcome experienced by [Mr A] was not a result of the wrong choice of antibiotic.

c. *Further comment*

The loss of a testicle is a devastating outcome. I find no comment in the notes of the second admission regarding any discussion with [Mr A] about this. The discharge summary merely says 'You were admitted with a necrotic left testicle following an infection … You had surgery to remove the testicle, which went well'.

Philippa Margaret Shirtcliffe

References

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3. European guideline on the management of epididymo-orchitis 2012 https://www.iusti.org/regions/Europe/pdf/2017/EOguideline220117.pdf. Last accessed 19th December 2018
4. Chia D, Penkoff P, Stanowski M et al. Testicular infarction and rupture: an uncommon complication of epididymo-orchitis. Journal of Surgical Case Reports 2016;5:1–3
5. Calcagno C, Introini C, Calcagno S. Testicular infarction in the presence of epididymitis: an anatomo clinical continuum? Journal of Genital System and Disorders 2015, 4:3 http://dx.doi.org/10.4172/2325-9728.1000140. Last accessed 18th December 2018

6. Jahangii F, Moghadam F, Godinho S et al. Testicular infarction due to unremitting epididymitis. Electronic Presentation Online System. Doi 10.1594/ranzcr2015/R-0003. Last accessed 18th December 2018.

7. Patient information sheet "Epididymitis". https://www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/epididymitis (last accessed 26 December 2018)

8. Karrcioglu O et al. A systematic review of the pain scales in adults: which to use? American Journal of Emergency Medicine 2018;36: 707–714

9. Levy N et al. Pain as the fifth vital sign and dependence on the numerical pain scale is being abandoned in the US: why? British Journal of Anaesthesia 2018;120(3):435–438.

10. Brevik H et al. Assessment of pain. British Journal of Anaesthesia 2008;101(1):17–24.

11. UpToDate: Evaluation of acute scrotal pain. www.uptodate.com, accessed 13/12/2018"

Appendix B: Independent advice to the Commissioner

The following expert advice was obtained from a rural medicine specialist, Dr Pragati Gautama:

"Documents reviewed:

- Letter of complaint dated …
- Northland DHB's response dated 7th September 2018
- Clinical records from Northland DHB covering the period from 18th April 2018 and 7th May 2018
- Comments from [Mr A's] father, [Mr B], and from [Mr A] dated 30th October 2018
- HDC Guidelines for Independent Advisors

I have been asked to review the above case and respond to the following questions:

1. The appropriateness of the care provided to [Mr A] during his first admission to [Hospital 1] on 18th April 2018, including:
   a. Whether the antibiotic treatment for [Mr A's] diagnosis of epididymitis was reasonable
   b. The adequacy of investigations undertaken during the admission
   c. The appropriateness of the care provided to [Mr A] on discharge from his first admission at [Hospital 1].
2. The appropriateness of the care provided to [Mr A] during his second admission to [Hospital 1] on 1st May 2018
3. Any other matters in this case that you consider warrant comment.

For each question I have been asked to detail:

a. What is the standard of care/accepted practice?
b. If there has been a departure from the standard of care or accepted practice, how significant a departure do you consider this to be?
c. How would it be viewed by your peers?
d. Recommendations for improvement that may help to prevent a similar occurrence in the future.

My Background:

I am a doctor with a primary qualification in medicine from the UK (1990) and also an intercalated BSc (Hons) in Pharmacology from London University, completed while studying medicine.

I have two Fellowships (awarded in New Zealand) in Rural Hospital Medicine and General Practice and therefore Vocationally trained in these fields of medicine and have been working in New Zealand from 1992. By 2020, I will have completed 30 years of postgraduate practice. I have Postgraduate Diplomas and Certificates covering the following:

- Rural Hospital Medicine
- Tropical medicine
- Point of Care Ultrasound
- Obstetrics and Gynaecology

I have been working in Rural Hospitals and Rural General Practice in a large variety of placements (part of our expected practice of continuing education) not only in New Zealand but also in Australia, thus allowing me to experience a variety of models and provision of Rural Health Services and this has included occasional locum placements at [Hospital 1].

For 6 years until January 2019, I have represented the Division of Rural Hospital Medicine as the South Island Clinical lead.

I am now the (full time) Clinical Director of Oamaru Hospital, Waitaki District Health Services Ltd (commenced January 2019).

I also continue to participate as a Trainer for both Advanced Paediatric Life Support and Emergency Management of Surgical Trauma, which are (internationally recognised) resuscitation courses for Doctors.

Details of the admission to [Hospital 1] on the 18th April 2018

(Some of the detail has been copied from [the Clinical Director's] report as noted to be accurate as corresponds to the inpatient notes)

18 April 2018

1100 hours. [Mr A] presented to [Hospital 1] Accident and Medical department with a 4-day history of a swollen left testicle. His observations revealed a fever of 38.4℃. His heart rate was 71, blood pressure 131/66, respiratory rate 18 and saturations 99% on room air. He was seen by [Dr C] at 1115 hours.

IV access was obtained, and blood samples sent for analysis. A urine sample was requested.

Admission bloods showed normal electrolytes, creatinine of 107 micromol/L, CRP of 33, WCC of 16.9 with neutrophils of 13.7 and normal haemoglobin and platelets. A point of care ultrasound of the scrotum was performed by [Dr C]. At admission the impression was of epididymo-orchitis. And it was noted he had an allergy to Penicillin.

[Mr A] was prescribed the following by [Dr D]: Paracetamol 1g orally (given 1150hrs), Ibuprofen 400mg orally (given 1150hrs), tramadol 50 to 100mg orally or intravenous (50mg given IV 1150hrs), and ondansetron 4mg orally or intravenous (given IV 1150hrs).

Urethral swabs were taken. [Dr D] prescribed further Sevredol 10mg orally (given 1450hrs) and ceftriaxone 1g IV (given 1500hrs). [Mr A] was then admitted to the

[Hospital 1] inpatient ward on regular paracetamol 1g orally four times a day, ibuprofen 400mg orally three times a day and daily IV ceftriaxone 1g.

Oral Azithromycin 1g was given at 1600hrs. Nursing notes … document that [Mr A] was sleeping after this medication.

The appropriateness of the care provided to [Mr A] during his first admission to [Hospital 1] on 18th April 2018, including:

a. Whether the antibiotic treatment for [Mr A's] diagnosis of epididymitis was reasonable
b. The adequacy of investigations undertaken during the admission

Given the admission notes (both in the form of the Emergency Department Discharge summary, that identifies discharge to the ward at 1415, and the handwritten notes in the Clinical notes), I am satisfied that the choice of the antibiotic (Azithromycin 1 g, oral dose, and 1 g Ceftriaxone iv) was appropriate and in keeping with current New Zealand Sexual Health guidelines. The choice takes into account the past history of Gonorrhoea identified in the past year for his partner, two previous admissions for epididymo orchitis and his allergy to Penicillin. **Of minor relevance the discharge summary identifies the azithromycin dose given as 2 g, which is incorrect**.


Epididymo-orchitis-guideline-2017.pdf


Epididymoorchitis study guideline Euo


Chlamydia-guideline-2017.pdf

There is also note in the electronic discharge summary of a conversation with [the Infectious Diseases consultant] who advises more blood test investigations for HIV and Syphilis. Furthermore, a Point of Care Ultrasound is carried out by [Dr C] as torsion of testes is considered on admission. It is also to be noted that although Point of Care Ultrasound was noted to show reduced blood flow to the left testes, [Dr D] does suggest a repeat of this Ultrasound will be carried out, in the electronic ED discharge summary, should symptoms deteriorate. The following morning on the ward round (19th April 2018), the decision is made to repeat an Ultrasound. (Entry — handwritten by Dr …)

A minor departure from the standard practice of Point of Care Ultrasound, is the lack of a clear entry by [Dr C] — who performed both the initial Ultrasound of the left testes and later (1830 hrs, 18th April 2019) an ultrasound of the bladder, when the patient exhibited symptoms of urinary retention. It would be standard practice to identify that the ultrasound carried out is a Point of Care ultrasound (and thus not performed by a trained Ultrasonographer), a short report of the findings and a brief note of the adequacy of the ultrasound image would be appropriate.

Formal Ultrasound was completed on the 19th April by [Ultrasonographer] at 1103:

REPORT: The left testicle is enlarged measuring 4.4 x 3.2 x 3.2 cms.

Echogenicity and blood flow are normal. A small hydrocoele has developed with web-like septations and particulate material throughout it. This would be consistent with an infective element. The epididymis is grossly enlarged and hyperaemic. The right testicle and epididymis have normal appearances. Right testicle measures 3.5 x 1.7 x 2.3 cms.

CONCLUSION: Appearances are in keeping with left epididymitis

Other Investigations during the admission (18th to 22nd April 2019)

- Blood tests for FBC, U and E's, CRP on day of admission 18.04.2019
- Urine tests (first catch and Mid-stream urine)
- Urethral swab
- Blood tests for HIV and Syphilis

During this first admission to [Hospital 1], there was only one set of blood tests (for Full Blood Count and CRP), despite an entry on the 20th April, on the ward round, that the 'swab positive for gonorrhoea' and 'pain overnight and increased swelling'. This triggered a discussion with Infectious Diseases (no name of Consultant) and advice was given by this Consultant, to double the Ceftriaxone dose to 2 g daily and the addition of oral doxycycline 100mg bd. I would suggest again a **minor departure from standard practice**, given the increasing symptoms of pain and swelling, that another set of blood tests should have been ordered, to review the inflammatory markers (WCC and CRP), which if increasing may have indicated deterioration and perhaps triggered discussion with **Urology team** for further advice. (See guidelines attached.)

Somewhat mitigating the above comment is that during the next 24 hours, Nursing notes completed for the morning shift at 1540 21st April 2018, identifies that [Mr A] returned home for leave in between iv antibiotic doses. This would imply that pain levels had improved to allow [Mr A] to feel comfortable to travel between home and hospital.

Nursing notes for the afternoon shift 21st April 2018 and for the night shift completed 0630 hrs 22nd April 2018, also identify [Mr A] sleeping and responding to analgesia: 'no concerns voiced by patient'; 'Pt slept well, some pain during night, relieved with analgesia'; 'Independent'.

The ward round on the 22nd April 2018, identifies that 'nausea has settled', 'no fever for 24 hours' and 'reduced redness and swelling'. It is decided that the epididymo-orchitis has improved, and the decision is made to check bloods and for 'likely discharge' and to be 'on orals later that day'. Progress notes are then only made by nursing staff, identifying that the discharge summary is given to the patient and 'education' is given, although there is no detail around what this was.

The electronic Discharge summary from the Ward on the 22nd April 2018 does identify:

a. That 10 days of oral doxycycline is required
b. That if any problems after discharge, please contact your GP (last line).

In keeping with the guidelines for acute epididymo orchitis from a presumed STI (Guideline included with this response), **a minor departure from standard practice is the lack of guidance for [Mr A] to ensure an appointment is made with his own GP**; in fact there is no GP identified for this patient on the discharge summary. In the situation of lack of improvement, or deterioration of symptoms he would have been referred (by his GP) for a prompt hospital review.

During this admission there are nursing notes (on day of admission 18/04/18 at 2145 [RN]) that identify concerns (by the patient himself) of PSTD and the need for counselling. On 19/04/18, [RN] notes he is waiting for a Medical Social Worker.

Given the chronicity of some of his problems (Sexually Transmitted Infection history and PTSD) General Practitioner review would be a high priority.

Discussion around reported pain and objective reports from Clinical staff with EWS records

I note the following report from [the Clinical Director]:

Analgesia daily totals:
18/4/18
Paracetamol 2g oral
Ibuprofen 800mg oral
Tramadol 50mg IV + 100mg oral
Sevredol 40mg oral

19/4/18
Paracetamol 4g oral
Ibuprofen 1200mg oral
Tramadol 250mg oral
Sevredol 10mg oral

20/4/18
Paracetamol 4g oral
Ibuprofen 1200mg oral
Tramadol 400mg oral
Sevredol 10mg oral

21/4/18
Paracetamol 3g oral
Ibuprofen 1200mg oral
Tramadol 200mg oral
Sevredol 60mg oral (over 20hrs, and note reduced tramadol use)

22/4/18
Paracetamol 2g oral
Ibuprofen 800mg oral

Tramadol 100mg oral
Sevredol none

Pain scores are also identified by [the Clinical Director] and I note her graphical display of pain levels (scale 0–10). Of note during this admission is that the EWS score remains zero (0) throughout, hence as per the guidelines (included) for EWS use, there would appear to be no physical deterioration in parameters during this admission.

Vital_sign_chart_us
er_guide_July_2017_

It would be an expectation that given the degree of soft tissue swelling of a sensitive area of the body that there would be the need for ongoing analgesia, even when discharged home. The nursing notes also demonstrate that [Mr A] did go home on leave towards the end of the 4-day admission, which would indicate an improvement in pain levels **in my opinion**.

I would suggest that the management of pain for this condition, is within accepted practice and is the standard of care. I include the WHO analgesic ladder for chronic pain as a guide to how analgesia can be used and the escalation of types of pain killer.

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<u>Summary comments for the first admission to [Hospital 1] for [Mr A] 18th to 22nd April 2018</u>

- Diagnosis of epididymo-orchitis (and all tests performed) meets standard practice
- Management of epididymo-orchitis does meet standard practice (antibiotic choice, consultation with [the] Infectious Disease Consultant and alteration to antibiotics, repeat formal Ultrasonography, decision to discharge after improvement of symptoms)
- Minor departure from standard practice, in not enforcing GP follow up within a week of discharge, given that acute symptoms were not fully alleviated and chronic health issues remain.
- Minor departure from standard practice, in not clarifying that lack of improvement should also trigger hospital review.
- Comments regarding documentation (Point of Care Ultrasound findings and ward round notes) will be made at the end of this report along with recommendations.

The appropriateness of the care provided to [Mr A] during his second admission to [Hospital 1] on 1st May 2018

Below is the description of the admission on the 1st May 2018 by [the Clinical Director]:

'***01 May 2018***

1524hrs

[Mr A] represented to [Hospital 1] A+M complaining of on-going swelling and pain in his left testis. He was afebrile with heart rate 91 BP 110/79 RR 18 and SpO2 94% on room air. He was seen by [Dr D] who discussed the case with urology (name not recorded) and documented "advised an USS tomorrow and if inpatient abx= gent and amoxicillin (cefaclor penicillin allergic), if outpatient=cipro". [Dr D] prescribed gentamicin 600mg IV (given at 1705hrs) as well as cefaclor 500mg orally TDS, Paracetamol 1g orally QID, ibuprofen 400mg orally TDS, Tramadol 50 to 100mg orally QID PRN, Sevredol 10mg orally Q2H PRN (not utilised) and Laxsol 2 tabs orally BD PRN (not utilised). [Mr A] was admitted to ward where he was independent and appeared to sleep well overnight according to nursing notes.'

The decision to commence the antibiotics described above, and the discussion with the Urology team at time of attendance to the Emergency Department, is documented in the ED electronic discharge, and not in the handwritten patient notes. **I would not see this as a departure from standard patient care and documentation,** as the electronic Discharge letter would have been available at the time of transfer of [Mr A] to the inpatient Ward. **A minor departure**: is the absence of documenting the name of the Urologist, from whom advice was taken, however this would not have impacted on any outcome for this patient.

On the 2nd May 2018, Ward Round notes are minimal and not clearly signed (no NZMC number for the Doctor who writes the notes, or a legible surname).

The notes simply state, in terms of addressing the plans for the patient's care:

'*Plan 1) USS 2) Bloods*'

Hence no identification or documentation of what information is given to the patient, [Mr A], on the Ward round, the members of the ward round team, and from the subsequent hand written inpatient notes, no clarity around the decision making to transfer to [Hospital 2] under the Urology team. This would represent a **mild to moderate departure from standard record keeping** as noted in Point 5 of *Good Medical Practice* and the guidelines for maintenance and retention of records (Medical Council resources). This has clear relevance as part of [Mr A's] complaint identifies the lack of consent process when being examined, with a full Ward Round team present.


Good-Medical-Practice.pdf


Maintenance-and-retention-of-records.

Of note however is that the electronic discharge for the second admission to [Hospital 1], 1st May 2018 to 2nd May 2018, does present the USS result (as below), and notes the decision to transfer the patient under the Urology team to [Hospital 2] and the antibiotic management. There are however no notes relating to information given to [Mr A] or his Whānau.

On the 2nd May 2018 at 1002 Ultrasound was performed showing:

SCROTAL ULTRASOUND

CLINICAL INFORMATION: *Ongoing swollen painful left testis despite abx.*

REPORT: *The echo pattern of the left testicular parenchyma has become less uniform than expected and also compared to previous scan 3 1/2 weeks ago. There are small hypoechoic areas within the testicle which were not evident previously. The 'honeycomb' pattern previously seen in the surrounding hydrocoele has changed to uniformly echogenic fluid and has reduced in size.*

The layers of the scrotal sac remain thickened and hyperaemic. No flow can be demonstrated with power doppler within the testicle. No abnormality seen in the right scrotum.

CONCLUSION: *Appearances suggest an ischaemic event — likely torsion of the left testis with areas of infarction manifesting within the parenchyma.*

Any other matters in this case that you consider warrant comment.

- Subjective and objective measures of pain, by Medical and Nursing staff, compared to the patient's account.

It is difficult to comment on this variance, given that there are notes by clinical staff (especially Nursing staff), whereby [Mr A] is able to complete activities of daily living and even cope with periods of time away from the hospital, so that he can return to his own home, in between antibiotic dosing. This is evident on both the [Hospital 1] admissions and the [Hospital 2] admission.

- The potential for ischaemia and abscess formation of the left testis, in the context of epididymo-orchitis was considered in the first admission to [Hospital 1], hence repeat Ultrasound (formal) and iv antibiotics.

However, the lack of clarity around follow up (as per European and New Zealand Guidelines) — '*at 3 days if there has been no improvement in symptoms, the patient should be seen for clinical review and the diagnosis should be reassessed*' — is unfortunate, and there appears to be no guidance for this patient to seek Primary

Care management which would have addressed on going issues such as health literacy around Sexually Transmitted Illness, the diagnosis of Epididymo-Orchitis and its potential effect on fertility and Chronic PTSD symptoms that he alleged he was experiencing (noted in both [Hospital 1] and [Hospital 2] Nursing notes).

- Use of Augmentin for a patient with a documented anaphylaxis to Penicillin.

This is evidence in the notes from [Hospital 2], when on admission [Mr A] receives a dose of iv Augmentin, which is later changed to iv Ceftriaxone. It appears there are no symptoms following this potential error. Furthermore, on discharge from [Hospital 2], the electronic discharge summary shows he is discharged on oral Augmentin (625 mg tds) for 5 days. Once again there appears to be no reference to this either by the patient, [Mr A] himself, or the Medical Team. This may imply that the documentation that this patient has anaphylaxis to Penicillin is in fact incorrect.

Summary

Diagnosis and management of Epididymo-orchitis during the first admission to [Hospital 1] (18th to 22nd April 2018).

- Within the standard of care for this diagnosis

Minor departure from standard of care:

- Documentation for Point of Care Ultrasound
- Information provided to [Mr A] (the patient) about his diagnosis (no evidence this was provided in written form, details of verbal discussion with either Medical or Nursing staff not documented)
- [Mr A] did not receive guidance to seek review of his condition 3 days from discharge with his Primary Care Physician and if there was no resolution of symptoms, return to [Hospital 1], as there was the potential for necrosis or ischaemia of the left testis.

Management of [Mr A], during his second admission to [Hospital 1] (1st to 2nd May)

- Within the expected standard of care

Minor to moderate departure of standard of care:

- Documentation of Ward round notes during this admission, identifying Clinician signing notes and members of the Team on the ward round.

It is to be noted that [the Clinical Director] at the time identifies that adequate recording of Point of Care Ultrasound will be addressed across the DHB and [Hospital 1]:

Changes to practice:

Northland DHB is currently working through the process of establishing a credentialing and recording system for point of care ultrasound use that will be implemented, once

completed, across the DHB including [Hospital 1]. This will improve [Hospital 1] clinicians recording of specific point of care ultrasound findings.

Further options to explore, as learnings from this case could include the following:

1. Improved documentation of Team Ward rounds (identify team members, and identify the Clinician writing the notes with clear surname and MC Registration number — a stamp could be used, as noted by Nursing Clinicians).
2. Clarity and documentation that on discharge, patients receive explanation (verbal or written) about diagnosis and follow up with their GP, even in the circumstance of symptoms not resolving.

Finally, it is regrettable that [Mr A's] epididymo-orchitis resulted in the loss of his left testis and does appear to have occurred as a result of a Sexually Transmitted Illness. This is a known complication of the disease, in this context and I would suggest that this outcome may not have been altered significantly with the delay in presentation (9 days) while remaining on oral antibiotics, however Specialist Urology advice should be consulted."

Further advice

"**Review of response from Dr P Shirtcliffe (General Physician from Wellington Hospital)**

Summary of details:

As per the letter sent to me dated 16th September 2019, the Commissioner is now asking that I review the earlier report provided by Dr Shirtcliffe about the care that Northland DHB provided to [Mr A] and also Northland DHB's response to that report and advise whether these cause me to change my original advice in anyway, or whether these raise any new issues.

Comments on delay of response to 18th October 2019.

I apologise for my delay as from the 28th September to 14th October, I was away on Study and Annual Leave and on return, was expected to cover a staffing shortfall at Oamaru Hospital (level 3 Rural Hospital).

I have chosen not to restate my credentials, and instead direct you to the original document submitted by me in August 2019, for reference.

Contentious areas to discuss:

- Failure to discuss the initial presentation with Urology, by Rural hospital team.
- Apparent lack of adequate follow up, both discharge advice and specific review plans (from first admission to [Hospital 1])
- Review of assessment and recording of pain
- Ensuring that admissions to [Hospital 1] are within the scope of Supervising Clinicians
- Ensuring no barriers to referral to tertiary services

My summary findings:

Summary

Diagnosis and management of Epididymo-orchitis during the first admission to [Hospital 1] (18th to 22nd April 2018)

- Within the standard of care for this diagnosis

Minor departure from standard of care:

- Documentation for Point of Care Ultrasound
- Information provided to [Mr A] (the patient) about his diagnosis (no evidence this was provided in written form, details of verbal discussion with either Medical or Nursing staff not documented)
- [Mr A] did not receive guidance to seek review of his condition 3 days from discharge with his Primary Care Physician and if there was no resolution of symptoms, return to [Hospital 1], as there was the potential for necrosis or ischaemia of the left testis.

Management of [Mr A], during his second admission to [Hospital 1] (1st to 2nd May)

- Within the expected standard of care

Minor to moderate departure of standard of care:

- Documentation of Ward round notes during this admission, identifying Clinician signing notes and members of the Team on the ward round.

Discussion of each point:

1. Failure to discuss the initial presentation with Urology, by Rural hospital team.
2. Ensuring no barriers to tertiary services.
3. Ensuring that admissions to [Hospital 1] are within the scope of Supervising Clinicians

In considering these three points together, we need to remind ourselves of the scope of Rural hospital practice (as per the following quote from the 2017 DRHMNZ handbook):

> 'In 2008 the Medical Council of New Zealand (MCNZ) recognised rural hospital medicine as a distinct vocational scope of practice and accepted the following definition:
>
> > *"The vocational scope of rural hospital medicine practice is determined by its social context, the rural environment. The demands of this environment include professional isolation, geographic isolation, limited resources and special cultural and sociological factors. The single factor that most determines this scope of practice, its depth and its nature, is that it is practiced at a distance from comprehensive specialist medical and surgical services and investigations. A broad body of knowledge, skills and attitudes, not common to any other medical*

vocational group, is required to deliver optimum secondary care patient outcomes in rural hospitals. Working in a rural area demands high levels of individual responsibility and clinical judgement.

In contrast to rural general practice, the other rural medical scope of practice, rural hospital medicine is orientated to secondary care, is responsive rather than anticipatory and does not continue over time."

The breadth of rural hospital medicine is a defining feature. Rural hospital medicine involves the set of skills needed to deal, at least initially, with any presenting medical problem. It is defined by an inability, as a consequence of distance, to confine a doctor's scope of practice to a particular range of illnesses or acuity of presentation (as is done by practitioners in most other branches of medicine).'

Furthermore we do need to consider differences in referral processes in Rural New Zealand and the impact of travel for patients, as per the following quote from the 2017 DRHMNZ handbook:

'Limited local resources and distances to base hospitals mean patients frequently face an inevitable delay to definitive care. Rural hospital generalists need particular skills at recognising serious illness at an early enough stage to ensure that patients can be safely and appropriately transferred to an appropriate place of definitive care. Rural hospital generalists frequently need to be able to predict any significant clinical deterioration before it occurs. This requires a high level of understanding of the likely course of major medical problems and high levels of clinical judgement especially where a single practitioner is providing care.

The scope includes particular skills in assessing the appropriateness of referral, or continued patient management within the skill and resource constraints of the rural hospital environment. This includes balancing the potential clinical benefits of referral to a base hospital against the risks of transfer and removing the patient from their own community. It includes effectively communicating this to the patient in order to allow them to make informed choices.

The scope includes particular skills in deciding on the appropriate means of inter-hospital transfer, making transfer arrangements and preparing patients for transfer. This involves a thorough understanding of the risks of transfer, the potential treatment needs of the patient during the period of transfer and the limitations of treatment during transfer.'

My comments regarding these points:

— The Rural Hospital Clinicians did consult with an Infectious Diseases Consultant when considering poor resolution of temperature and pain scores, persisting on day 3 of the initial presentation. A formal ultrasound was performed a day earlier (day 2 of the presentation) and confirmed epidydimo-orchitis. Hence it is my

opinion that the DRHMNZ fellows were within scope and at this point the patient's condition did not necessitate a discussion with Urology.

— I do however accept that given the continued requirement for opiate analgesia (Sevredol 60 mg over the 24 hours prior to discharge) and continued pain and fever, at discharge there should have [been] an explicit documented plan (with potential input from Urology) regarding continued symptoms for the next 48 hours. This is a **moderate departure** from standard of care for this patient.

— Reviewing the observation chart (page 45 of 162, of the clinical notes sent to me) it is very unclear if there was a temperature above 37.4 in the last 24 hours of admission due to the manner in which temperature is documented. (Temperature is identified by a 'number' and a 'dot' — the practice somewhat distracts from the visual pattern). I too would have missed this, as a Rural Clinician completing the round, and I did on first review of these notes.

4. Apparent lack of adequate follow up, both discharge advice and specific review plans (from first admission to [Hospital 1])

In discussing the points above and reviewing my opinion, I would suggest that this would be a **moderate departure** from standard of care. Although Northland DHB does identify that the patient could have returned to the Hospital as a generic GP afterhours existed 'under the same roof'. I am concerned that the patient ([Mr A]) did not present for over a week (9 days in total) as a result of poor guidance, and there were clear potential barriers to return to the hospital during this first admission (lack of sensitivity when being examined on a ward round, past PTSD and thus anxiety). As I have highlighted along with Dr Shirtcliffe, this does need to be acknowledged. While this may not have altered [Mr A's] outcome (and this is noted by [the consultant's] email to [the Clinical Director]: see below) I believe this has impacted on the complainant and could have avoided his distress with the final result of orchidectomy.

[The consultant] stated by email (see attached):

'I agree with you that the findings seem to suggest necrosis secondary to infection, rather than a true torsion. These infections can be extremely severe and can sometimes need an orchiectomy as there is poor penetration of AB's into the testis.

I don't think his outcome would have been different if we had explored him initially.

He could have ended up needing two surgical procedures and also was at risk of developing Fournier's gangrene.'

5. Review of assessment and recording of pain

This potentially is the most contentious area, as pain is a subjective experience and can be altered by fear, anxiety and fatigue (see references provided by Dr Shirtcliffe). And I would agree that with hindsight, there does appear to be a reduction in overall pain as tabled by [the Clinical Director] in her response.

My opinion, is that with more explicit verbal and written statements to [Mr A] on discharge regarding **continued or increased pain levels** triggering review within 48 hours, this would have been mitigated. Furthermore, it would have been more appropriate to have suggested Emergency Department attendance, rather than General Practitioner, as he was not registered with one and this was known at discharge. And reattendance would have required repeat Ultrasound and discussion with the Urology team (as it did).

In Conclusion:

Moderate departures from Standard:

— Lack of adequate follow up in discharge advice and specific plans

DRHMNZ Fellows are within scope, when providing care to this patient, and must assume full responsibility for care.

What has also been identified:

— Poor documentation: inpatient notes (nursing)/ward rounds/POCUS findings/ observation chart: temperature/pain scores during admission
— Improved communication (written and verbal) with [Mr A] regarding potential (and rare) outcomes, would have had an important (positive) impact for him and perhaps mitigated the subsequent complaint.

Dr Pragati Gautama
MBBS, B Sc (Hons), FDRHMNZ, FRNZCGP"

Final advice

"**Response (3rd) for the Health and Disability Commissioner re 18HDC01344 — [Mr A]**

Documents reviewed:

(1) A copy of Northland DHB's letter to HDC (dated 13 December 2019).
(2) A copy of some blood sampling guidelines that Northland DHB provided HDC.
(3) A copy of some chlamydia and gonorrhoea protocols that Northland DHB provided HDC.

From the letter received from the HDC, I am asked to provide advice as sought below:

(1) Could you please review Northland DHB's letter to HDC (dated 13 December 2019), and the associated documents, and advise whether any of the new information provided causes you to change, or add to, your previous advice (dated 18 October 2019).

(2) Could you please comment on the appropriateness of Northland DHB's:

(a) Blood sampling guidelines;

(b) Chlamydia and gonorrhoea protocols; and

(c) Phlebotomy policy.

(3) Could you please advise whether any of the new information provided raises any new issues not already discussed.

My response to the Northland DHB's Letter (13th December 2019):

I only have a few additions, in reply to the statement provided by [the DHB] and would like the points that I raised in my response (18th October 2020) to remain as stated.

1. During the first inpatient admission to [Hospital 1] there was only ever one set of blood tests taken, it could be argued that a second set was a reasonable expectation for a patient admitted for 5 days, with a continued requirement for iv medication, including antibiotics, to provide an added evaluation of clinical improvement. I do support the philosophy of clinical deterioration prompting repeat, or more frequent blood tests. The question is whether there was a marked deterioration (see page 45/162 — observations). On the day of discharge 22nd April, pain scores are recorded as 1/10 on two occasions, [Mr A] is afebrile and blood pressure and HR recordings are not very different to those on admission.

2. In my practice and in my experience in other Rural Hospitals, we have always considered an elevated temperature as over 37.4.

3. Whether I would have kept [Mr A] on I.V. Ceftriaxone, and as an inpatient — in the context of his wish to go home, and his statement 'feels much better' (page 30/162) on the day of discharge, is really the issue — rather than the single elevated temperature recording — the night before. I would support the concept of allowing this patient to return home (as he was) and as stated before, an explicit and well documented discharge plan was not provided, and which may have resulted in a delay in representation.

4. The delay in processing of the urethral swab would not have altered the management plan, and it was safer to presume infection (sexually transmitted) and cover for this. Timely discussion did occur with [the Infectious Diseases Consultant] to ensure the choice of antibiotic was adequate. Subsequently we do not see evidence of a positive swab or Urine result for an STI (Gonorrhea or chlamydia), while there is a written statement (page 28/162) that the swab was positive on the 20th April for Gonorrhoea and should be notified to MOH. This note is not signed, and presumably written by a Medical Officer as headed 'Day 3 Admission'.

Comments regarding:

(a) Blood sampling guidelines;
(b) Chlamydia and gonorrhoea protocols; and
(c) Phlebotomy policy.

- I have no comment regarding the blood sampling guidelines (unclear of the relevance to this case)
- Chlamydia and Gonorrhoea Guideline provided is for patients self-referring to a Public Health Clinic, and so may not be relevant to a situation where a patient presents to an Emergency Department of a Rural Hospital. Complications of such infections are however identified. A better document is the guideline from www.nzshs.org (The New Zealand Sexual Health Society), that is endorsed by the MOH for Epididymo-orchitis — I included this in my first response in August 2019.
- I have no comment relating to the Phlebotomy policy, and unclear around its relevance.

(3) Could you please advise whether any of the new information provided raises any new issues not already discussed

Other than my comment above around the potential improvement of care that could have been provided with repeat blood testing, I have no further comments to make.

I would like to comment that it is reassuring that [the DHB has] already instigated changes to practice as a result of reflection around this case.

Dr Pragati Gautama
MBBs, B.Sc. (Hons), FDRHMNZ, FRNZCGP"