Southern District Health Board
General Surgeon, Dr B

A Report by the
Deputy Health and Disability Commissioner

(Case 19HDC01214)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Contents

Executive summary

1. This report concerns the care provided by SDHB to a man in 2019, when he presented to an Emergency Department (ED) seven times with abdominal pain.

2. The man (aged in his fifties at the time of events) had a history of schizophrenia and chronic thought disorder, and lived in a community residential mental health service. Of the seven times he presented to the ED, he was admitted under General Surgery four times, and the working diagnosis was that of constipation secondary to his anti-psychotic medication, clozapine.

3. At each presentation, the man's diagnosis remained the same despite little improvement, and in the presence of "red flag" symptoms. Each staff member across the multiple presentations failed to question the diagnosis of clozapine-induced constipation, and further investigations were not undertaken until surgery to examine the abdomen was performed.

4. During the operation, the man was found to have widespread colon cancer with tumours that had caused a complete bowel obstruction. Sadly, he died of septic shock secondary to metastatic colon cancer.

Findings

5. The Deputy Commissioner noted that there were numerous missed opportunities by many SDHB clinicians across multiple presentations to investigate the man's symptoms further and reconsider his diagnosis when he failed to improve. She considered that the cumulative effect of these missed opportunities demonstrated a concerning lack of critical thinking and acceptance of the man's unimproved condition by SDHB staff, attributable to the DHB as the overall service provider. Accordingly, the Deputy Commissioner found that SDHB breached Right 4(1) of the Code.

6. The Deputy Commissioner considered that by the time the man was first seen by the clinician responsible for his care, the man had had repeated presentations and an abnormal CT scan, but the general surgeon disregarded the scan and did not initiate further investigation with a colonoscopy or CT colonography. Accordingly, she found that the general surgeon breached Right 4(1) of the Code.

7. Adverse comment was made about a second general surgeon for the care he provided to the man.

Recommendations

8. The Deputy Commissioner recommended that SDHB (a) provide HDC with any protocols or procedures that have been developed as a result of the meetings it has since had with mental health care providers from the community, along with evidence of relevant staff training and orientation to these new protocols or procedures; (b) present an anonymised case study of this case to all ED and General Surgery staff at the public hospital, for educational purposes; (c) implement a new policy/procedure (or amend a current policy)

about the use of CT scans in the ED; and (d) consider how SDHB can improve continuity of care in situations where a patient is presenting to hospital multiple times.

9. The Deputy Commissioner recommended that the first general surgeon present an anonymised case study of this case to his colleagues and training doctors within his department, for shared learning.

Complaint and investigation

10. The Health and Disability Commissioner (HDC) received a complaint from a residential mental health service (the residential service) about the services provided to Mr A by Dr B and Southern District Health Board (SDHB). The following issues were identified for investigation:

- *Whether Southern District Health Board provided Mr A with an appropriate standard of care in Month1[1] and Month2 2019.*
- *Whether Dr B provided Mr A with an appropriate standard of care in Month1 and Month2 2019.*

11. This report is the opinion of Deputy Commissioner Dr Vanessa Caldwell, and is made in accordance with the power delegated to her by the Commissioner.

12. The parties directly involved in the investigation were:

Complainant/CEO of the residential service	
SDHB	Provider
Dr B	Provider/general surgeon

13. Further information was received from:

Dr C	Consultant general surgeon
Dr D	Consultant general surgeon
Dr F	Consultant general surgeon
Dr E	Consultant general surgeon

14. Also mentioned in the report:

Dr G	Consultant general surgeon
Dr I	ED registrar
Dr J	Colorectal surgeon

[1] Relevant months are referred to as Months 1–3 to protect privacy.

15. Independent expert advice was obtained from general surgeon Dr Gerrie Snyman (Appendix A) and emergency medicine specialist Dr Vanessa Thornton (Appendix B).

Information gathered during investigation

Background

16. Mr A (aged in his fifties at the time of events) had a history of schizophrenia and chronic thought disorder, and had lived in a community residential mental health service since 2014.

17. Between 12 Month1 and 24 Month2, Mr A presented to the ED at the public hospital seven times with abdominal pain. Of these times, he was admitted under General Surgery four times, and the working diagnosis was that of constipation secondary to his anti-psychotic medication, clozapine.[2]

18. This report concerns the care provided to Mr A at SDHB, in particular the care provided during his surgical admissions.

First ED presentation — 12 Month1

19. At 9.36pm on 12 Month1, Mr A was taken to the ED by residential service staff, as he had been complaining of pain, nausea, and that something "was not right" in his stomach.

20. Mr A was reviewed by ED registrar Dr I, who obtained Mr A's history (with assistance from a support worker from the residential service) as recurrent sharp abdominal pain and a three-day history of constipation and nausea, but no vomiting. Vital signs and a full blood count were taken, with no abnormalities noted other than a C-reactive protein (CRP) of 16[3] (marking inflammation) and a fast heart rate of 113 beats per minute (bpm).[4] At this presentation, it was recorded that Mr A expressed fear that he might have bowel cancer.

21. A rectal examination found no masses or blood, and although an X-ray showed a distended (swollen) transverse colon,[5] this was noted to be similar to previous X-ray imaging undertaken in 2013. Mr A was examined by an ED consultant, who noted his abdomen to be soft and non-tender.

22. The impression was that of constipation secondary to clozapine, and Mr A was discharged home with laxative medication and paracetamol for pain relief.

[2] Constipation is often regarded as a frequent, minor side effect of clozapine. However, review of New Zealand reports received by the Intensive Medicines Monitoring Programme shows that clozapine-induced constipation may be associated with serious effects such as intestinal obstruction and bowel perforation.
[3] Normal CRP levels are typically below 3.
[4] A normal resting heart rate for adults ranges from 60 to 100 beats per minute.
[5] A segment of the large intestine that passes horizontally across the abdomen.

Second ED presentation and first surgical admission — 13 Month1

ED care

23. Mr A re-presented to ED the following afternoon (13 Month1) around 3.00pm, accompanied by a care worker, as he was not eating, his bowels had still not opened, and he had ongoing discomfort. The ED notes state that Mr A denied rectal blood, weight loss, vomiting, fever, or discomfort with urinating, but it was noted that he was a poor historian.[6]

24. Mr A's abdomen was noted to be tender all over and "distended ++", and his blood test revealed a slightly elevated CRP level of 22. The impression was that of severe constipation secondary to clozapine, and Mr A was admitted to the General Surgery ward under consultant general surgeon Dr G.

Surgical care

25. During this admission, Mr A was provided with laxative medications as per SDHB's "Porirua Protocol", which provides guidance to staff on the management of constipation in patients taking clozapine.

26. By 15 Month1, Mr A had passed three large bowel motions. He was also reporting no pain, and his observations were stable, so he was discharged with laxative medication to take in the community, and advice to seek medical attention if he could not pass bowel motions again.

Third ED presentation — 18 Month1

27. Mr A was taken to ED on 18 Month1 by residential service staff because of further abdominal pain, but it was noted that he had opened his bowels that morning. He was seen again by Dr I. Blood tests were unremarkable (other than a slight increase in his CRP level to 28), and an X-ray of his abdomen showed a reduced distended transverse colon compared to the X-ray taken on 12 Month1.

28. Residential service staff relayed to the ED staff that Mr A had been more aggressive and threatening in the last few weeks, which was abnormal. In view of Mr A's worsening aggression, ED staff decided to refer him to the Emergency Psychiatric Service (EPS), where he was assessed and admitted to the acute psychiatric ward. Residential service staff told HDC that they were not informed of this admission, and were advised that Mr A had been discharged to EPS only when they contacted the hospital to see how Mr A was doing the following morning.

29. During his stay in the acute psychiatric ward, Mr A declined blood and urine tests, but laxative medication given was effective at relieving his constipation. By 25 Month1, Mr A's mood had settled, and he reported his bowels being regular with no abdominal pain or bloating, and so he was discharged from EPS.

[6] A phrase used to describe patients who are unable to describe their own symptoms and medical history.

Fourth ED presentation — 1 Month2

30. On 1 Month2, Mr A again presented to the ED with abdominal pain, and was noted to be distressed. Blood tests were unremarkable, other than an increased CRP level of 36. X-rays of Mr A's chest and abdomen showed no free gas or obstructions.

31. Mr A's pain was considered to be a result of the recent laxative use (from his 13 Month1 admission), and he was discharged home shortly after having presented, with the advice to stop taking the laxatives.

Fifth ED presentation and second surgical admission — 3 Month2

ED care

32. Mr A was taken to the ED via ambulance on 3 Month2 with abdominal pain, and again was seen by Dr I. Dr I documented:

> "Patient known to me from previous presentations. Very poor historian. Right sided abdominal pain. Not sure about duration. ? for 3–4 days. Not sure when last opened his bowels. Denied nausea, vomiting, [discomfort when urinating]."

33. It was also noted that despite the advice from his last presentation to stop taking the laxative sachets, Mr A was still taking these. A rectal examination revealed no abnormalities, and a full blood count was unremarkable aside from a further increase in CRP level to 43 and a mild rise of lipase.[7] X-rays of Mr A's chest and abdomen were similar to his previous images.

34. Mr A was reviewed by the ED Senior Medical Officer, who queried the possibility of a large bowel obstruction, and Mr A was admitted to the General Surgery ward that evening under consultant general surgeon Dr C.

Surgical care

35. Dr C's General Surgery admission note documented Mr A's multiple previous admissions to ED with similar symptoms, and noted that Mr A had an increased body mass index (and weighed over 100kg), and had had "possible unquantified weight loss recently". A plan was made to keep Mr A in hospital for observation and pain relief, and to repeat blood tests and review him in the morning.

36. On 4 Month2, Mr A was not in his ward for the morning ward round, but repeat bloods showed that his lipase levels were stable and that there were no other concerning signs. Dr C told HDC that he recalls seeing Mr A in the corridors during his evening ward round, and Mr A relayed that his pain was settling. The nursing notes document that Mr A's vital signs remained normal, and he was eating and drinking and given pain relief regularly. However, his bowels had not yet opened.

37. By 5 Month2, Mr A was passing gas well, had eaten breakfast, and had minimal abdominal pain with stable observations. Dr C reviewed Mr A on the morning ward round and palpated his abdomen, and noted that no mass or tenderness was felt.

[7] An enzyme primarily produced by the pancreas to help digest dietary fats.

38. Dr C told HDC that the investigations undertaken during this admission (rectal examination, bloods, and X-rays) indicated that Mr A's clinical picture was consistent with clozapine-associated constipation, and did not clearly indicate another diagnosis (such as a mechanical large bowel obstruction) at that time. As such, no further investigations were initiated.

39. Mr A was asked to remain in hospital until he had passed a bowel motion, at which point he could be discharged. He remained in hospital overnight, and whilst he did not pass a bowel motion, he was noted as feeling "well" on 6 Month2, and was discharged back to the residential service.

Sixth ED presentation and third surgical admission — 13 Month2

40. On the morning of 13 Month2, Mr A reported to residential service staff that he was not feeling well, and a GP appointment was made for the following day. However, by that afternoon, Mr A was noted by staff to be in "obvious distress", as he was vomiting, crying, and begging for help. He was unable to get off his bed as he was too weak, and he appeared very pale and gaunt. It was also noted that he had lost a "noticeable" amount of weight recently.

41. An ambulance was called and Mr A was taken to hospital, with a "very tight and distended" abdomen.

ED care

42. Mr A was reviewed in the ED at approximately 5pm, where the history of abdominal pain associated with vomiting "brown stool" was described. On examination, Mr A's abdomen was distended with high-pitched bowel sounds.

43. Blood tests showed an elevated CRP at 117 with a rise in urea and creatinine (indicating impaired renal function). Mr A's haemoglobin levels were on the low side at 142g/L (normal levels for males are between 140 g/L to 180 g/L), indicating a slightly low red blood cell count.

44. Intravenous fluids were initiated. An X-ray of the abdomen showed "dilated loops" of the small bowel (indicating a possible obstruction). A computerised tomography[8] (CT) scan of the abdomen was arranged, and Mr A was admitted to the General Surgery ward under the care of consultant general surgeon Dr B, with the impression of a potential small bowel obstruction.

45. The CT scan was reported that evening and showed a "transition point" (a point where the bowel changes from normal to abnormal, potentially indicating an obstruction) on the left side of the transverse colon, with no obvious cause. A plan was made for Dr B to review Mr A in the morning.

Surgical care

46. At 8.30am on 14 Month2, Dr B reviewed Mr A on the morning round. Dr B considered Mr A's CT scan and noted that Mr A had been vomiting (which had not been the case on

[8] A scan that combines a series of X-ray images taken from different angles around the body.

previous admissions) and he had a distended, soft and non-tender abdomen, and was dehydrated. However, by that morning, Mr A had had four loose bowel motions. Dr B's impression was that of Mr A's previous diagnoses, ie, clozapine-induced constipation that had resolved with laxatives.

47. The plan made was to undertake a bowel and fluid chart and repeat blood tests to check Mr A's renal function.

48. Mr A was next reviewed by Dr B on the morning ward round on 15 Month2. Dr B noted that Mr A was "feeling okay today. Nil pain today in abdomen" and that he looked comfortable. Dr B told HDC that his plan was to request a contrast CT scan[9] to see whether the contrast dye passed the transverse colon, but when he saw Mr A in the ward, he had a soft, non-tender abdomen and had started to pass a large amount of bowel motions. It was also noted that Mr A's bloods showed that his kidney function had improved during his admission. Dr B told HDC that this clinical picture fitted very well with a pseudo obstruction,[10] and so he decided to discharge Mr A.

49. On the afternoon of 15 Month2, Mr A was documented to be agitated about his impending discharge from hospital, and was "refusing to go home". As such, he was kept overnight until he became more settled. Mr A was discharged home on 16 Month2 with a primary diagnosis of clozapine-related constipation and a pseudo obstruction, and a plan for him to follow up with his GP, continue laxative medication, and have repeat blood tests to check his kidney function.

50. Dr B told HDC that he has had the opportunity to reflect on this admission with the benefit of hindsight. He stated:

> "I accept that there was an abnormality on the limited CT scan and I should have planned to urgently assess this further. As [Mr A] had opened his bowels, it would have been appropriate to do this investigation as an inpatient or as an urgent outpatient colonoscopy. I acknowledge the error of not referring him for an urgent outpatient colonoscopy.
>
> In addition, [Mr A] had a slight anaemia [low red blood cell count] and hypoalbuminemia [a deficit of the protein albumin in the blood] ... I accept that these blood samples, in combination with the finding on the CT scan warranted further investigation with colonoscopy."

51. Dr J, a colleague of Dr B, provided further comment about Mr A's presentation on this occasion. Dr J stated that Mr A's situation (and in particular the results of his CT scan) is not infrequently seen with a pseudo obstruction. He noted that it was documented that by the following day Mr A had had a dramatic improvement — he was moving his bowels and his abdominal distention had resolved. Dr J stated that while this can occur with a mechanical

[9] A scan that uses dye to highlight areas of the body being examined.
[10] A pseudo obstruction is characterised by signs and symptoms of a mechanical obstruction of the small or large bowel in the absence of a mechanical cause.

obstruction, this type of dramatic resolution is more common with a pseudo obstruction. He told HDC: "[T]he clinical picture did seem consistent with the previous (in retrospect incorrect) diagnosis of a functional colonic disorder [the clozapine-induced constipation]."

Seventh ED presentation and fourth surgical admission — 24 Month2

52. On the morning of 24 Month2, residential service staff requested an ambulance for Mr A as again he was complaining of increased pain in his abdomen. On arrival, the ambulance officers felt that Mr A's abdomen was significantly distended and firm to touch. At this time, Mr A told the officers that his pain had reduced, but his caregiver noted that Mr A often understated his pain.

53. Mr A was transferred to the ED, and arrived at approximately 7.42am.

ED care

54. On examination in the ED, Mr A's pain was described as being "5/10" across his abdomen, and his bowel sounds were noted to be "very very very scant". He had a high heart rate at 115 beats per minute and a CRP level of 65.

55. The impression was that of an obstruction, potentially related to clozapine, and Mr A was referred to General Surgery under the care of consultant general surgeon Dr F.

Surgical care — 24 Month2

56. On admission, Mr A was reviewed and examined by a surgical registrar, who documented a plan to continue laxative therapy and encourage eating and drinking as tolerated and document this on a food and stool chart, and to repeat blood tests the following day.

57. Contact was made with Mr A's primary caregiver, who provided background information relating to Mr A's changes in behaviour (decreased activity and mobilisation, and less general interest) and also reported that he had had a loss of appetite with some notable, but unquantifiable, weight loss. It was documented that Mr A's caregiver thought that something else was going on rather than just constipation.

58. Mr A was noted to have slept overnight, without any complaints of pain or nausea.

25 Month2

59. Mr A was reviewed by Dr F and his team on the morning of 25 Month2. Dr F considered Mr A's three previous admissions with similar symptoms, and it was noted that Mr A's bowels had moved the previous night, and that he felt that his symptoms were not as severe as during his last admission. Dr F told HDC that Mr A's radiology was reviewed at this time, comparing the abdominal X-rays from the current admission with those from previous admissions, and he noted that there appeared to be little change. He also reviewed the CT scan from Mr A's previous admission, and his assessment was that there was a pseudo obstruction.

60. Dr F documented a plan to start Mr A on a laxative regimen and to liaise with his psychiatrist regarding the possibility of alternative therapy for his mental health.

61. Dr F stated that the confounding issue in this case was Mr A's continued prescription of clozapine. Dr F stated:

> "Clearly, if his obstructive symptoms had continued despite cessation of this medication, then there would have been a strong indication for further investigation of the colon for an alternative diagnosis."

62. On behalf of Dr F, his team made contact with Dr B, to enquire whether he would like to resume care of Mr A considering that he had been the consultant from Mr A's previous admission, or whether he had any management advice that could be useful. Dr F told HDC that Dr B did not wish to transfer Mr A to his team, and Dr B stated his view that Mr A did not have a surgical problem, and that medical treatment of his constipation should suffice.

63. In response to the provisional opinion, Dr B clarified that the reason he could not take over care of Mr A was that he was leaving for a holiday the following day. He noted that he did not do any clinical examination of Mr A on 25 Month2 when he was admitted under Dr F, and that he did not review any charts or blood samples of Mr A at that point.

64. The night nurse documented that Mr A was asleep during each overnight check.

26 Month2

65. On the morning of 26 Month2, Mr A was reviewed by consultant general surgeon Dr E. Dr E was charged with reviewing Dr F's patients at this time, as Dr F was working at a private hospital all day.

66. Dr E noted that Mr A had slept well overnight, was passing gas, and had had no increased distress despite his distended abdomen. Dr E reviewed the notes from the previous day and saw that Mr A's imaging had been reviewed and that the plan was to continue a laxative regimen as per the Porirua Protocol unless new changes developed.

67. That afternoon, Dr F's team contacted Mr A's psychiatric service to ask whether the clozapine could be discontinued, but they were advised against this given Mr A's unstable schizophrenic psychosis.

27 Month2

68. At approximately 5am on 27 Month2, Mr A woke up unsettled. He was noted to be unable to explain exactly how he felt, but he stated that he was "not right", and vomited a small amount of brown faecal-looking liquid. The night nurse (who had reviewed Mr A during his last hospital admission) documented that Mr A appeared pale, with a rigid and distended abdomen. The nurse also noted that Mr A appeared to have lost weight around his face and limbs.

69. That afternoon, Mr A became more distressed, uncomfortable, and agitated, with increasing pain. Blood tests showed an increased CRP to 149, a high lactate of 9.6 (which can indicate sepsis or shock), and increased potassium and sodium levels.

70. Owing to increasing concern about Mr A's clinical deterioration and his worsening test results, the decision was made to undertake surgery to examine the abdomen[11] for a presumed large bowel obstruction. During the operation, Mr A was found to have widespread colon cancer with tumours that had caused a complete bowel obstruction.

71. Mr A was transferred to the intensive care unit (ICU) after the surgery, but he made very little progress postoperatively. Given the operative finding of extensive metastases, and the poor prognosis, palliative care was commenced.

Subsequent events

72. Sadly, Mr A died on the evening of 1 Month3. His cause of death was noted as septic shock, secondary to metastatic colon cancer.

Further information

73. The CEO of the residential service told HDC that Mr A had no family to advocate on his behalf, and that the residential service as an organisation and individual staff had to intervene to ensure that he was able to access services when he was experiencing severe pain, and strongly advocated for appropriate treatment of this. She stated:

> "I have to question if [Mr A] would have received a different service and experienced a better outcome if he was not a mental health consumer experiencing a chronic mental illness."

SDHB

74. SDHB stated that this case has highlighted the importance of ensuring patient-centred care and the need to communicate appropriately with the primary caregivers for patients in vulnerable situations. It told HDC:

> "With the additional challenges [Mr A] faced and lack of family available to support and advocate for him, there should have been more proactive engagement with his primary carer and/or the clinical manager of [the residential service]. The primary carers could have provided valuable additional information and were clearly taking an interest in his clinical progress."

75. SDHB also told HDC that this case highlights the detrimental effect that results when there is lack of continuity of care, such as when a patient is readmitted to different inpatient areas on multiple occasions or cared for by different staff. The DHB noted that often this is dictated by bed availability at the time.

Dr B

76. Dr B told HDC:

> "I have reflected long and hard on my role in this matter and the care that I provided. The lesson I have learned from managing this patient is that a suspicion of a change on a CT scan should be further assessed … The fact that [Mr A] had a poor medical history

[11] A laparotomy.

> and had presented on two earlier occasions with little improvement in his symptoms suggested that an urgent further investigation with colonoscopy was appropriate."

77. However, Dr B stated that Mr A's diagnosis was not an easy one to make at the time, and noted that Mr A presented to four experienced consultants during the span of two months.

Responses to provisional opinion

78. SDHB was provided with the opportunity to comment on the provisional opinion. It stated that with minor exceptions, SDHB considers that the provisional opinion is fair and accurate, and that the proposed recommendations are appropriate. It does, however, believe that the context of the care is important and that the proposal to refer SDHB to the Director of Proceedings is disproportionate to the failings, particularly given the steps taken by SDHB since the event.

79. SDHB stated:

> "SDHB extends its sincere condolences to those who knew [Mr A], including staff at [the residential service]. As you know, SDHB and [Dr B] have since reflected on the care provided to [Mr A] and consider that it should have been of a higher standard. SDHB has also taken steps to ensure a situation like this does not occur again."

80. SDHB told HDC that it is also in the process of making changes to its process, including changes that go further than the recommendations made in the provisional opinion, for which I commend SDHB. These changes have been added below, in the "changes made since events" section of the report.

81. Dr G stated that it is unfortunate that Dr B has been "singled out" in the report, and that there were a number of failings shared by a number of people, which were exacerbated by the clinical factors as outlined in the report. In particular, Dr G noted that Dr B was practising in an environment that was different from the environment in his home country, and Dr G recalls Dr B saying that in his home country he would have arranged an inpatient colonoscopy (which he probably would have done himself) — but he had found it almost impossible to get an inpatient colonoscopy approved in the public hospital.

82. I acknowledge the stated access issues for this service, but consider that this should not be a reason for not making an appropriate referral. In not making the referral, Dr B himself made the decision for the service not to be available for Mr A.

83. Dr F acknowledged the adverse comment made in respect of the care he provided to Mr A, and stated:

> "This case has caused me to reflect on the problem of cognitive bias in clinical medicine, and I have taken away the valuable lesson of always considering the patient in front of you with an open mind and a willingness to consider all options."

84. In mitigation, Dr F re-stated that he was the fourth consultant surgeon caring for this patient, and his admission findings appeared identical to those observed by his colleagues on Mr A's three previous admissions.

85. Dr B was provided with the opportunity to comment on sections of the provisional opinion relevant to him. He stated that while he largely agreed with the report, he asked that the decision to find him in breach of Mr A's rights be reconsidered.

86. Dr B has submitted that at the time of the events he was new to New Zealand, and the traditions of care were quite different to what he was used to. In particular, in the normal course of events he would have arranged for an inpatient colonoscopy, which is always available in his home country, but this was not the case in the public hospital. He stated: "The imposition of a breach leaves me with the impression of being singled out for what was an issue involving many consultants and systemic issues."

Opinion: Introductory comment

87. First, I wish to acknowledge that Mr A's diagnosis was not straightforward. My independent general surgery advisor, Dr Gerrie Snyman, noted that "it is unlikely that the diagnosis of metastatic cancer could have been made much earlier than at the time of surgery". He stated that from the documentation, there was no specific reason to suspect the possibility of metastatic disease. I also acknowledge that this was further complicated by Mr A's use of clozapine, a medication known to cause constipation.

88. However, the issue here is not the failure to diagnose cancer earlier, but the failure to investigate Mr A's symptoms fully, and to consider an alternative diagnosis after multiple presentations with no improvement. This case highlights the importance of critically assessing patients when they present to hospital on multiple occasions with the same symptoms within a relatively short period of time.

Opinion: Southern District Health Board

Care provided to Mr A — breach

89. Mr A had a history of schizophrenia and chronic thought disorder, and took the anti-psychotic medication clozapine to manage this. Between 12 Month1 and 24 Month2, he presented to SDHB's ED seven times with abdominal pain. On four of these occasions, he was admitted as an inpatient under the General Surgery team. At each presentation, the same investigations were undertaken — abdominal X-rays, rectal examinations, and blood tests — and the same diagnosis of clozapine-induced constipation was made. Blood tests

showed that Mr A's CRP levels were increasing steadily, but the abdominal X-rays and rectal examinations were unremarkable.

90. Mr A was under the care of a different consultant at each of his four General Surgery admissions (Drs Dr G, Dr C, Dr B, and Dr F), but the overall care provided was the same (laxatives and pain relief). A CT scan was not undertaken until Mr A's sixth presentation, and, despite the scan showing the possibility of an obstruction, further investigations were not undertaken and the diagnosis did not change at any time.

91. It was not until the fourth day of Mr A's seventh presentation (and fourth surgical admission), when Mr A's condition began to deteriorate, that further investigation by way of a laparotomy was undertaken. At this time, Mr A was found to have widespread colon cancer with tumours that had caused a complete bowel obstruction. Mr A died on the evening of 1 Month3 as a result of sepsis secondary to the cancer.

92. My independent emergency medicine specialist, Dr Vanessa Thornton, advised that abdominal pain continues to be a diagnostic challenge and a common presentation for emergency clinicians. She stated that in many cases, the differential diagnosis is wide, ranging from benign to life-threatening conditions. Often the associated symptoms lack specificity, and atypical presentations of common diseases are frequent, further complicating matters. Regarding the care provided to Mr A at the public hospital's ED, Dr Thornton advised that each of the seven presentations were met with appropriate ED assessments, and referrals to the surgical inpatient team were made when warranted.

93. I accept that when looking at each of the ED visits in isolation, the care provided to Mr A was appropriate, and he was referred to General Surgery when necessary.

94. My expert general surgery advisor, Dr Gerrie Snyman, noted that a functional bowel problem is a diagnosis by exclusion, and the initial diagnosis of clozapine-induced constipation fitted with this. However, he stated that with each subsequent admission, doubt about this diagnosis should have arisen, especially as there had been no investigations to clear the bowel. His concern is that the possibility of an alternative diagnosis was not considered. Dr Synman advised:

> "I, and a good many of my colleagues, would consider new onset abdominal pain with associated change in bowel habit that does not settle on adequate treatment to be a definite red flag for further investigation."

95. This widespread failure to think critically about other causes for Mr A's symptoms was then compounded by Mr A's abnormal CT scan, taken on his sixth admission, which raised the possibility of an obstruction. Despite not undertaking any further investigations into this possibility, SDHB staff continued to believe that the clinical presentation fitted with a diagnosis of pseudo obstruction, and did not amend the working diagnosis. Dr Snyman advised:

> "By [Mr A's] third admission to general surgery it should have been a duty of care to ensure that pathology was excluded. This happened with the performance of a CT scan.

> When the CT was abnormal, this should have been followed up with further investigations, not discarded."

96. Dr Snyman advised that noting the continued relatively benign abdominal findings on subsequent ward rounds, these clinical findings were not enough to discard the CT findings in the context of Mr A's longitudinal history. Dr Snyman considers that a diagnostic colonoscopy/CT colonography should have been undertaken as the next step (as either an in-patient or out-patient), and that the omission to do so was a "major deviation" from the accepted standard of care, which I accept.

97. Mr A presented again to SDHB after the CT scan had been taken, on 24 Month2. Dr Snyman stated that at this admission, the possibility and plan to investigate the bowel to exclude pathology should have been front and centre in Mr A's care plan. However, despite the abnormal CT scan, no further investigations were undertaken until Mr A's condition deteriorated on the fourth day of this admission.

98. Overall, Dr Snyman advised:

> "[Mr A] presented and represented multiple times to SDHB with the same complaint. During the first few presentations it would have been reasonable to treat him without further investigations. During subsequent presentations and admissions, the responsibility to ensure appropriate diagnosis and treatment should have increased significantly. This did not happen. Instead every admission steadfastly repeated the previous admission plan, despite the evidence that the treatment was not working, hence the representation. No further tests were undertaken to ensure the appropriate diagnosis has been made."

99. I agree with this advice. Unresolved and new symptoms in the context of repeated presentations to hospital should have triggered a reconsideration of the working medication-related diagnosis, and broader investigations into the cause of the abdominal symptoms, with greater urgency.

100. While there is individual accountability for the decisions made (discussed below), I consider that the system let Mr A down. The issue at the centre of this case is that Mr A re-presented to SDHB on multiple occasions, and whilst the initial diagnosis of clozapine-related constipation was reasonable, each time Mr A presented subsequently with the same unresolved issue, that working diagnosis became less probable, and should have triggered further investigation and other alternative diagnoses by any of the many doctors who saw Mr A.

Conclusion

101. As set out above, Mr A presented to SDHB on multiple occasions during Month1 and Month2. At each presentation, Mr A's diagnosis remained the same despite little improvement, and in the presence of "red flag" symptoms. Each staff member across these multiple presentations failed to question the diagnosis of clozapine-induced constipation, and further investigations were not undertaken until the laparotomy on 27 Month2.

102. I consider that these failures were compounded by anchoring bias, a lack of continuity of care, and the failure to engage with the residential service to elicit further details of Mr A's symptoms and history, in light of him being a poor historian. Mr A was a vulnerable mental health patient who had no family to advocate on his behalf, and he was let down immensely by the DHB and a number of its staff.

103. There were numerous missed opportunities by many SDHB clinicians across multiple presentations to investigate Mr A's symptoms further, and re-think his diagnosis when he failed to improve. The cumulative effect of these missed opportunities demonstrates a concerning lack of critical thinking and acceptance of Mr A's unimproved condition by SDHB staff, attributable to the DHB as the overall service provider. Accordingly, I find that SDHB breached Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[12]

104. I acknowledge that Mr A's illness was metastatic when diagnosed on 27 Month2, and that an earlier diagnosis may not have influenced the ultimate outcome. However, I note my expert's comments that an earlier diagnosis of colon cancer could have opened up opportunities for palliative care that could have led to Mr A having a significantly different end to his life.

Consideration of an earlier CT scan in ED — other comment

105. My independent emergency medicine specialist, Dr Thornton, considered that there was the potential for Mr A to have undergone an earlier CT scan. Noting that it was Mr A's sixth presentation to the ED when the abdominal CT was performed, she advised:

> "A CT can assist in the diagnosis of undifferentiated abdominal pain and ED can initiate an abdominal CT. CT is the study of choice in the evaluation of undifferentiated abdominal pain. Approximately two-thirds of patients presenting to the ED with acute abdominal pain have a disease that can be diagnosed by CT … With the frequency of presentations an earlier CT may have assisted with the diagnostic dilemma with [Mr A]."

106. Dr Thornton did, however, note that the diagnosis of constipation made in the early presentations would not require a CT, and that consideration of the use of clozapine as a probable cause of constipation "was not unreasonable".

107. I am mindful of the apparent reluctance to perform a CT scan in the ED until Mr A had presented with the same symptoms six times in little over a month. Having a lower threshold to undertake a CT scan in the ED may have assisted in an earlier diagnosis of Mr A's symptoms. I consider that this is a potential area for improvement by SDHB, and I will make a recommendation to this effect.

[12] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."

Opinion: Dr B — breach

108. Dr B was the consultant general surgeon overseeing Mr A's care from 13 Month2 to 16 Month2. By the time Dr B saw Mr A, he had been seen in the ED at the public hospital six times previously, and it was his third admission under General Surgery.

109. At this time, a CT scan of Mr A's abdomen had been performed and showed a transition point, potentially indicating an obstruction, with no obvious cause. Dr B reviewed Mr A on the morning ward round on 14 Month2. Dr B looked at the CT scan and noted that Mr A had been vomiting, and that he had a distended, soft and non-tender abdomen, and was dehydrated. By that morning, Mr A had had four loose bowel motions.

110. Dr B told HDC that his plan was to arrange a contrast scan to see whether the dye passed the transverse colon, but by the following morning, Mr A had a soft, non-tender abdomen and had started to pass a large amount of bowel motions. As such, Dr B considered that Mr A's clinical picture fitted very well with a pseudo obstruction, and he decided to discharge Mr A. No further investigations were undertaken, and the diagnosis remained that of Mr A's previous admissions, ie, clozapine-induced constipation.

111. My independent general surgery advisor, Dr Gerrie Snyman, stated that by Mr A's third admission to General Surgery, pathology should have been excluded, and this happened with the performance of a CT scan. However, when the CT was reported as abnormal, this should have been followed up with further investigations, not discarded.

112. Dr Snyman considers that the relatively benign clinical findings during the ward rounds in this admission were not enough to discard the CT findings in the context of Mr A's longitudinal history. Dr Snyman stated: "I personally, and I suspect a good proportion of my colleagues, would have completed an in-patient colonoscopy or CT colonography during this admission." He advised that if Mr A did not receive a same-admission colonoscopy or CT colonography, he should at least have received an urgent out-patient colonoscopy. Neither occurred in this case.

113. Dr Snyman considers the disregard of Mr A's CT scan and the lack of considering alternative causes to constitute a "major deviation" from the expected standard of care, which I accept.

114. I note Dr J's statement that Mr A's situation (and in particular the results of his CT scan) is not infrequently seen with a pseudo obstruction. I also note Dr B's comment that Mr A's diagnosis was not an easy one to make at the time, and that Mr A presented to four experienced consultants during the span of two months before the diagnosis was made.

115. In response to the provisional opinion, Dr B submitted that at the time of the events, he was new to New Zealand and the traditions of care were quite different to what he was used to. In particular, in the normal course of events he would have arranged for an inpatient colonoscopy, which is always available in his home country, but this was not the case in the public hospital. He stated: "The imposition of a breach leaves me with the impression of being singled out for what was an issue involving many consultants and systemic issues."

116. I have considered Dr B's submissions. My expert advisor considers that further investigation should have been done during Mr A's 13 Month2 admission either by way of a same-admission colonoscopy or CT colonography, or at least by an urgent out-patient colonoscopy. Neither occurred in this case. While SDHB has acknowledged (outside of this case) that there were access issues for colonoscopy services, considerable improvements have been carried out in partnership with the Ministry of Health, and access to colonoscopy services will continue to be monitored. Nevertheless, the accepted standard of care was to have arranged a colonoscopy, and even if Dr B was not sure whether it would be approved, it was his responsibility to take steps to request it. In not making the referral, Dr B made the decision himself not to make the service available to Mr A. It is necessary to single out Dr B in this instance, as he was the clinician responsible for Mr A's 13 Month2 admission and, by this time, Mr A had had an abnormal CT scan that warranted further investigation, which makes the omission to arrange a colonoscopy significant.

117. As noted previously, the issue in this case is not the delay in diagnosing Mr A's condition, but the failure to reconsider Mr A's diagnosis in the context of his repeated presentations and abnormal CT scan, and the failure to investigate this abnormality further by way of a colonoscopy or CT colonography. I find that for the above reasons, Dr B did not provide Mr A with services with reasonable care and skill, in breach of Right 4(1) of the Code. I note that Dr B has reflected on the care he provided, and accepts that further investigation was warranted.

Opinion: Dr F — adverse comment

118. On Mr A's seventh presentation to the public hospital's ED on 24 Month2, he was admitted for the fourth time to the General Surgery team under the care of consultant general surgeon Dr F. During this admission, Dr F reviewed the CT scan from Mr A's previous admission, and his assessment was that there was a pseudo obstruction.

119. Contact was also made with Dr B to enquire whether he wished to resume care of Mr A or whether he had any management advice that could be useful. Dr F told HDC that Dr B did not wish to have Mr A transferred to his team, and Dr B's view was that Mr A did not have a surgical problem, and medical treatment of his constipation should suffice.

120. Mr A was continued on his laxative therapy until 27 Month2, when he deteriorated and was taken for surgery. At this time, his diagnosis of metastatic cancer was made, and, sadly, he died shortly afterwards.

121. My independent general surgery advisor, Dr Snyman, noted that at the time Mr A was reviewed by Dr F, it was Mr A's fourth admission under General Surgery and his seventh admission to hospital overall with persistent symptoms. Dr Snyman feels strongly that as soon as Mr A was readmitted on this occasion, the previous CT scan result should have taken centre stage in formulating a care plan. Dr Snyman stated:

> "The review of the CT scan should have raised a red flag and the possibility of pathology. In my opinion the care plan should have included a repeat CT scan or colonoscopy or both."

122. Dr Snyman considers that the three days on which Mr A was in hospital with no documented plan to clarify or investigate the persistent symptoms and abnormal CT shows a "trend towards deviation from standard of care". I accept this advice, and consider that in light of Mr A's previous abnormal CT scan, and his continuing unresolved symptoms, Dr F should have arranged for further investigations before Mr A's deterioration on 27 Month2.

123. I do wish to acknowledge that Dr F's team made contact with Dr B, for advice on management and to enquire whether he would like to resume care of Mr A. This was an attempt to keep Mr A's care continuous, and I commend Dr F for this.

Changes made since events

SDHB

124. SDHB told HDC that over recent months there have been a number of meetings with mental health care providers from the community (including the residential service), led by the Director of Nursing Surgical. These have been aimed specifically at developing protocols and procedures to improve communication and environmental aspects, so that SDHB can better meet the needs of consumers with mental health needs who develop acute surgical or medical issues.

125. SDHB stated that there were a number of learnings from the meetings, which included:

- Recognising the vulnerability of patients with chronic mental health conditions when they enter the hospital for physical health care;
- How to value the input from, and work more collaboratively with, NGO providers;
- Identifying that it did not have a sound communication pathway;
- For this type of vulnerable patient who is presenting repeatedly to ED, to create an alert and plan to send the patient to a "home ward" for subsequent admissions for continuity of care (noting that Mr A was admitted to different surgical wards on each admission); and
- Ensuring that the NGO providers know who to go to with concerns about care or management plans and issues with hospital process.

126. At the time of meeting with the residential service, SDHB provided residential service staff with a formal apology for the care provided to Mr A.

127. In response to the provisional opinion, SDHB informed HDC of other changes that currently it is in the process of making.

128. To further improve communication between the residential service and medical staff at SDHB, SDHB has provided the residential service with contact details for the charge nurse managers for all wards, as well as the directors of nursing. This is so that the residential service can contact these people with any concerns, and they can share valuable information they may have about patients. These SDHB staff members are then able to help advocate for the patients, and can facilitate meetings between the residential service and medical staff if needed.

129. In addition, SDHB has considered the use of alerts for vulnerable patients who attend ED frequently. The alerts would be linked to an electronic ED care plan for the person, provide the contact details for the relevant NGO provider, and identify the patient's "home" ward where the person would be placed (except in situations where the patient needed specialist care). SDHB told HDC that this would enhance continuity of care and communication between SDHB and mental health care providers. SDHB expects to implement this project by mid-2022.

130. SDHB has also begun work on the "Yellow Envelope" initiative for patients who also have mental health needs. This is a communication tool currently used in the clinical handover of residents of aged-care facilities to and from hospital. The tool involves the completion of a checklist that includes key information about the patient, to assist with the evolution and management of the patient.

131. SDHB told HDC that it recognises that the way in which acute surgical patients have been assessed, admitted, worked up, operated on, and discharged from the General Surgery service has remained largely unchanged for a number of years, and that there is room for improvement in this area. To address this, SDHB has introduced the "General Surgery Acute Service Project 2021" (the "Acute Surgical Project"). The aim of the Acute Surgical Project is to deliver a service to patients who need acute general surgical care that is timely, of a high quality, equitable, and good value for money. In addition, SDHB aims to optimise the working conditions, teaching, learning, and satisfaction of staff who deliver the care.

132. SDHB stated that it is in the process of accurately defining the current state of the acute General Surgery service, defining the issue/s with the service, identifying data, developing solutions to achieve the ideal or optimal state, and identifying the enablers essential to success and the measures to demonstrate whether outcomes are achieved. SDHB noted that it has also sought input on the Acute Surgical Project from relevant stakeholders, including patients/whānau, GPs, rural hospital doctors, ED staff, surgical house officers/ registrars/consultants, surgical nurses, theatre staff and anaesthetists, as well as line managers and the Executive Leadership Team as necessary.

133. Since these events, improvements have also been made to SDHB's inpatient colonoscopy services. In particular, the DHB has streamlined referral acceptance processes, increased clinical capacity, and reviewed acute bowel cancer presentations. The Ministry of Health told HDC that SDHB now delivers a service that meets all of the standards outlined by the National Bowel Screening Programme.

Dr B

134. Dr B currently works as the head of a public colorectal unit in his home country. He told HDC that the lesson he has learnt from the management of Mr A is that suspicion of a change on a CT scan should be assessed further, even if the clinical problem has resolved and the patient looks much better the next day. Dr B stated that this is something he will change in his future practice.

Recommendations

135. I acknowledge that SDHB has already provided residential service staff with a formal apology for the care provided to Mr A. In addition, I recommend that SDHB:

a) Provide HDC with any protocols or procedures that have been developed as a result of the meetings outlined in paragraph 124, along with evidence of relevant staff training and orientation to these new protocols or procedures. The first update on these developments is to be provided to HDC within three months of the date of this report. Three-monthly updates are then to be provided to HDC until the completion of this recommendation.

b) Present an anonymised case study of this case to all ED and General Surgery staff at the public hospital, for educational purposes. The main learnings from the presentation should include the importance of:

- Continuity of care;
- Having a low threshold for obtaining a CT scan in the ED when a patient presents with abdominal pain;
- Thinking critically when a patient presents to hospital with the same unresolved symptoms multiple times in a short period of time;
- Recognising and addressing anchoring bias; and
- Communication with a patient's primary caregiver when the patient is unable to communicate effectively.

Evidence that this has been done is to be provided to HDC within three months of the date of this report.

c) Implement a new policy/procedure (or amend a current policy) about the use of CT scans in the ED. This policy/procedure should provide guidance to ED staff on having a lower threshold for requesting a CT scan as a diagnostic tool when a patient presents to the ED multiple times with abdominal pain. Evidence that this has been done is to be provided to HDC within three months of the date of this report.

d) Consider how SDHB can improve continuity of care in situations where a patient is presenting to hospital multiple times. The outcome of the consideration, and any

changes made as a result, are to be sent to HDC within three months of the date of this report.

136. I recommend that Dr B present an anonymised case study of this case to his colleagues and training doctors within his department, for shared learning. Evidence that this has been done is to be provided to HDC within three months of the date of this report.

137. I recommend that the Medical Council of New Zealand consider whether this matter should be brought to the attention of Dr B's Medical Association, as currently Dr B is working in his home country.

Follow-up actions

138. SDHB will be referred to the Director of Proceedings in accordance with section 45(2)(f) of the Health and Disability Commissioner Act 1994 for the purpose of deciding whether any proceedings should be taken.

139. A copy of this report with details identifying the parties removed, except the experts who advised on this case and SDHB, will be sent to the Medical Council of New Zealand, and it will be advised of Dr B's name.

140. A copy of this report with details identifying the parties removed, except SDHB and the experts who advised on this case, will be sent to the residential service, the Director of Mental Health (the Ministry of Health), the Mental Health and Wellbeing Commission, the Cancer Control Agency, 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 clinical advice to the Commissioner

The following expert advice was obtained from general surgeon Dr Gerrie Snyman:

"REF: 19HDC01214

Complaint: Southern District Health Board/[Mr A] (dec)

I have been asked by the HDC to provide an opinion to the Commissioner on case number 19HDC01214.

I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

My name is Christoffel Gerhardus Snyman. I qualified as a Fellow of the Australasian College of Surgeons (FRACS) in 2003. I am a full time consultant general surgeon in a public hospital.

I do not have a personal or professional conflict in this case.

Expert advice requested

Please review the documentation and advise whether you consider the care provided to [Mr A] at SDHB was reasonable in the circumstances, and why.

Please note that we have already sought expert emergency specialist advice on the care provided to [Mr A] at [the public hospital's] emergency department.

In particular, please comment on:

1. The reasonableness of the overall general surgical management of [Mr A] at SDHB.
2. The adequacy of the care provided to [Mr A] by each individual general surgeon ([Dr C], [Dr G], [Dr F], [Dr D], [Dr B] and [Dr E]).
3. Whether a CT scan or other imaging should have been considered earlier.
4. Whether it was reasonable to attribute [Mr A's] bowel obstruction episodes to a functional disturbance given the CT scan result of 13 Month2, and whether further follow up of this result should have occurred.
5. The adequacy of the pain relief provided to [Mr A] (both as an inpatient and on discharge).
6. Whether the multiple presentations of [Mr A] to SDHB should have triggered any further investigations or course of action that was not done in this case.
7. The adequacy of the communication with staff from [the residential service].
8. The adequacy of the relevant SDHB policies and procedures in place at the time of these events.
9. Any other matters in this case that you consider warrant comment/amount to a departure from accepted standard of care.

For each question, please advise:

a. What is the standard of care/accepted practice?
b. If there has been a departure from 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.

Documents provided

1. Letter of complaint dated 4 July 2019
2. Southern District Health Board's response dated 16 August 2019 and attachments.
3. Clinical records from Southern District Health Board covering the period [Month1] and [Month2].
4. Response and clinical records from [the ambulance service]
5. Southern District Health Board's response dated 18 May 2020

Additional Resource

- Referral Criteria for Direct Access Outpatient Colonoscopy or Computed Tomography Colonography. Ministry of Health Guidelines.
- NZFormulary.org — Clozapine
- https://bpac.org.nz/2017/clozapine.aspx (reference Porirua protocol)

Summary

[Mr A], aged [in his fifties] at the time of these events, had a history of Schizophrenia and chronic thought disorder, and lived in a contracted community residential mental health service.

Between 12 [Month1] and 24 [Month2], [Mr A] presented to the … emergency department seven times with abdominal pain and BNO — bowels not opening. Of these times, he was admitted under general surgery four times, and the working diagnosis was that of constipation secondary to his anti-psychotic medication.

On 14 [Month2], during his third admission under the general surgery team, a CT scan of [Mr A's] abdomen showed a distended bowel and a possible obstruction. The general surgeon's plan was to do an acute contrast colon however when he saw [Mr A] in the ward, he had a soft non-distended and non-tender bowel, and had started to pass a large amount of bowel motions. The general surgeon subsequently discharged him with pseudo obstruction.

On 27 [Month2] an urgent laparotomy was performed after a CT scan of [Mr A's] abdomen showed evidence of an obstruction, and [Mr A] was becoming increasingly unwell. The laparotomy found an obstructive tumour, and significant colorectal metastasis throughout the abdomen.

Summary of Questions.

1. The reasonableness of the overall general surgical management of [Mr A] at SDHB.

Major Deviation from Standard of Care

2. The adequacy of the care provided to [Mr A] by each individual general surgeon ([Dr C], [Dr G], [Dr F], [Dr D], [Dr B] and [Dr E]).

[Dr B]: **Major** Deviation from Standard of Care

[Dr F]: **Trending** towards a Deviation from Standard of Care

3. Whether a CT scan or other imaging should have been considered earlier.

No Deviation from Standard of Care

4. Whether it was reasonable to attribute [Mr A's] bowel obstruction episodes to a functional disturbance given the CT scan result of 13 [Month2], and whether further follow up of this result should have occurred.

Major Deviation from Standard of Care

5. The adequacy of the pain relief provided to [Mr A] (both as an inpatient and on discharge).

No Deviation from Standard of Care

6. Whether the multiple presentations of [Mr A] to SDHB should have triggered any further investigations or course of action that was not done in this case.

Major Deviation from Standard of Care

7. The adequacy of the communication with staff from [the residential service].

No Deviation from Standard of Care

8. The adequacy of the relevant SDHB policies and procedures in place at the time of these events.

No Deviation from Standard of Care

9. Any other matters in this case that you consider warrant comment/amount to a departure from accepted standard of care.

No Deviation from Standard of Care

Discussion

The reasonableness of the overall general surgical management of [Mr A] at SDHB.

Major deviation from standard of care.

Specific deviations discussed below.

1. I have reviewed the surgical admissions. In general I have found the admissions to be well documented with appropriate investigations and management plans on admission.

2. The document entries from both medical and nursing staff are readily legible or can be deciphered and are generally well identified.

3. There is documented evidence that [Mr A] was considered during all his admissions. This is reflected in documented consultations with his mental health team, his care givers and placing him in a single room as required aiding his mental wellbeing.

4. The discharge summaries contain comprehensive relevant information and clear post-discharge plans.

5. I consider the referrals from the emergency department to the surgical team to have been consistently appropriate and timely.

6. The **deviation in care** stems from the lack of considering an alternative diagnosis when [Mr A] continued to represent with unresolved symptoms despite adequate initial care.

The adequacy of the care provided to [Mr A] by each individual general surgeon ([Dr C], [Dr G], [Dr F], [Dr D], [Dr B] and [Dr E]).

[Dr B]: Major deviation from standard of care

[Dr F]: Trending towards a deviation from standard of care.

[Dr G], admission 13–15 [Month1].

7. No concerns that I could identify from review of the admission. It is documented that [Mr A's] symptoms improved after evacuating his bowel. Management, diagnosis and post discharge plan was appropriate.

[Dr C], admission 03–05 [Month2].

8. I have reviewed both the admission notes and read [Dr C's] reply to the HDC 30 July 2019.

9. I did notice no documented ward round the day after admission, however, [Dr C] clarifies that in his report and I am satisfied in this regard.

10. This was [Mr A's] second admission under general surgery for abdominal pain and variable, mostly lack thereof, bowel habit. This was [Mr A's] fifth presentation to Southern District Health Board with the same symptoms and his third admission overall. He had been admitted to the Mental Unit once.

11. [Dr C's] reply to the HDC, 30 July 2019, clearly states that he and his team reviewed [Mr A's] case notes and consulted both the literature as well as a colleague to ensure their diagnosis and management was appropriate.

12. I therefore consider the continued diagnosis of Clozapine induced functional bowel disorder to be appropriate upon discharge, as no other red flags had been raised.

[Dr B], admission 13–16 [Month2]

Major Deviation from standard of care

13. This was [Mr A's] third admission to surgery with the same unresolved symptoms.

14. A CT scan was done at the request of the Emergency Department.

15. The admission note by the surgical registrar notes in addition to the previously noted symptoms of pain and bowel problems, now also vomiting. The admission note records the clinical examination and X-Ray to suggest bowel obstruction. [Mr A] is further noted to have an elevated respiration rate and an acute kidney injury. Following the placement of a nasogastric tube the respiration rate settled down and the kidney function improved with intra-venous fluids.

16. The CT scan report noted marked distension of the whole intestinal tract to a transition point in the distal transverse colon. No obvious cause for this was seen.

17. On subsequent ward rounds [Mr A] is noted to improve clinically and he was discharged without further investigations done or planned.

18. I consider the management of [Mr A] following his CT scan to be a **deviation from standard of care**.

19. I personally, and I suspect a good proportion of my colleagues, would have completed an in-patient colonoscopy or CT colonography during this admission.

20. This opinion is based on:

a. Multiple presentations and admissions to hospital with the same unresolved symptoms.
b. Adequate treatment of presumed diagnosis during previous admissions without improvement.
c. An admission that clinically suggested a bowel obstruction.
d. A CT scan suggesting possible pathology in the distal transverse colon.
e. No previous bowel investigation that cleared the colon.
f. A vulnerable mental health patient that has been noted to be an inconsistent historian and therefore unlikely to adequately advocate for himself.

21. The diagnostic colonoscopy/CT colonography would have been to either diagnose or exclude pathology once and for all to aid future management.

22. I am comfortable that all my colleagues would agree that if [Mr A] did not get a same admission colonoscopy/CT colonography, he should have received an urgent out-patient colonoscopy.

23. I consider the omission of colonoscopy as either an in- or out-patient to constitute a Major Deviation from standard of care.

24. A review of the admission documents for this period does not clarify why it was thought appropriate to desist from further investigations. I take note of the continued relatively benign abdominal findings on subsequent admission ward rounds. These clinical findings are, in my opinion, not enough to discard the CT findings in the context of [Mr A's] longitudinal history (see point 20).

25. In [Dr F's] reply to the HDC, 04 August 2019, he refers to a discussion with [Dr B] regarding the CT scan both when [Mr A] was an in-patient as well as what appears to be at a later date. In the statement [Dr F] states that [Dr B] was satisfied that the CT appearance was an artefact based on the clinical assessment.

26. In Southern DHB's reply (18 May 2020) [Dr B] is quoted as stating that he felt the clinical picture was sufficient to ignore the CT scan result and refrain from further investigations. He is further quoted as stating that he acknowledges that he was in error when looking back at the case.

27. [Dr J] is quoted in Southern DHB's reply (18 May 2020) as stating that he felt after reviewing the notes, there were no red flags during this admission to indicate the possibility of colorectal cancer or mass lesion. In principle I agree with this statement. However, a functional bowel problem is a diagnosis by exclusion. The initial diagnosis fitted with this. With each subsequent admission the doubt of this diagnosis should have risen, especially as there had been no investigations to clear the bowel. My concern is not that a bowel cancer was missed, I agree this possibility was difficult to predict based on [Mr A's] presentations. My concern is that the possibility of an alternative diagnosis was not considered (see point 20).

28. For the reasons discussed above, I consider the disregard of the CT scan and the lack of considering alternative causes to constitute a **Major Deviation** from standard of care.

[Dr F], admission 24–27 [Month2].

Trending towards a deviation from standard of care

29. [Mr A] was re-admitted under general surgery with persistent pain and bowel dysfunction. This was his fourth admission under general surgery and his fifth admission overall to hospital with persistent symptoms.

30. There is a good admission note and documented consultation with [Mr A's] care team, the mental health team and the medical team to consider options.

31. [Dr F] states in his reply to the HDC, 04 August 2019, that he also consulted [Dr B], specifically, discussing the CT scan with him. The plan was to continue with a laxative regime.

32. [Mr A] deteriorated on day 3 of his admission and went to theatre for an emergency laparotomy.

33. I feel strongly that as soon as [Mr A] was readmitted the previous CT scan result should have taken centre stage in formulating a care plan. The review of the CT scan should have raised a red flag and the possibility of pathology. In my opinion the care plan should have included a repeat CT scan or colonoscopy or both.

34. As events overtook [Mr A] during this admission, it is impossible to say how he would have been managed further had he not gone to theatre. However the three days in hospital with no documented plan to clarify or investigate the persistent symptoms and abnormal CT shows a **Trend towards Deviation from standard of care**.

[Dr D], [Dr E], admission 24 [Month2]–01 [Month3]

35. No concerns regarding the decision to proceed with surgery, the surgery itself or the subsequent management post-operatively.

Whether a CT scan or other imaging should have been considered earlier.

No deviation from standard of care

36. There may have been an opportunity for a CT scan during [Mr A's] second admission to surgery under [Dr C], 03–05 [Month2].

37. In the absence of definitive findings or red flags, the omission of further investigations at that stage was probably acceptable.

38. During [Mr A's] third admission, 13–15 [Month2] a CT scan was appropriately ordered.

Whether it was reasonable to attribute [Mr A's] bowel obstruction episodes to a functional disturbance given the CT scan result of 13 [Month2], and whether further follow up of this result should have occurred.

Major deviation from standard of care

39. The reasonableness of attributing [Mr A's] symptoms to a functional bowel disorder diminishes during each subsequent admission.

40. It was a perfectly reasonable diagnosis during his first admission and cautiously reasonable during his second admission.

41. By his third admission to general surgery it should have been a duty of care to ensure that pathology was excluded. This happened with the performance of a CT scan.

When the CT was abnormal, this should have been followed up with further investigations, not discarded.

42. With his fourth admission, the possibility and plan to investigate the bowel to exclude pathology should have been front and centre in his care plan.

43. The lack of consideration for possible bowel pathology during his third and fourth admissions constitutes a **Major Deviation from standard of care**. I have no doubt that my colleagues would agree.

The adequacy of the pain relief provided to [Mr A] (both as an inpatient and on discharge).

No deviation from standard of care

44. Pain is subjective. We rely on the patient to inform us of their pain evaluation. We do not have an objective method by which pain specifically can be measured or tested for.

45. During the various admissions there are multiple entries from staff documenting that [Mr A] responded well to Paracetamol and that his pain has resolved. There are multiple entries from staff documenting that his pain was intermittent.

46. I could find no documentation that [Mr A] did not respond to simple pain relief. Judging from the documentation it would have been inappropriate to give more complex pain relief as an in-patient or to send [Mr A] home on anything more than Paracetamol.

Whether the multiple presentations of [Mr A] to SDHB should have triggered any further investigations or course of action that was not done in this case.

Major deviation from standard of care

47. As discussed above. My opinion is that [Mr A] should have received an in-patient colonoscopy during his third admission or, at the very least, a booking for an urgent out-patient colonoscopy.

48. As discussed above, my opinion is that [Mr A] should have received urgent further investigations as the central part of his care plan during his fourth admission.

49. The lack of these constitutes a **Major Deviation from standard of care**.

The adequacy of the communication with staff from [the residential service].

No deviation from standard of care

50. This is a difficult question to evaluate. The quality of the discharge summaries and documentation is very good. There are multiple entries in the clinical notes referring to 'care workers' which I presume reference [residential service] staff.

51. There are only one or two entries stating what was discussed with care staff. It is therefore difficult to comment on the quality and content of the discussions with care staff in general.

52. Based on regular entries in the clinical notes I conclude that there appears to have been adequate communication with [residential service] staff.

53. The appropriateness of discharge summaries or information divulged to [residential service] staff, as [the residential service] was neither [Mr A's] family nor POA is beyond my review. Common sense would dictate that regardless of policies, every effort should have been made to involve [residential service] staff in [Mr A's] care as they were the only remaining constant in his life.

The adequacy of the relevant SDHB policies and procedures in place at the time of these events.

No deviation from standard of care.

54. The Porirua protocol is the only one provided and raises no concerns.

Any other matters in this case that you consider warrant comment/amount to a departure from accepted standard of care.

55. It is unlikely that the diagnosis of metastatic cancer could have been made much earlier than at the time of surgery. The CT scan during [Mr A's] third admission to general surgery showed no evidence of metastatic disease. There was no reason from the documentation to specifically suspect the possibility of metastatic disease.

Gerrie Snyman"

The following further advice was provided by Dr Snyman:

"**REF: 19HDC01214**

Complaint: Southern District Health Board/[Mr A] (dec)

I have been asked by the HDC to provide a further opinion to the Commissioner on case number 19HDC01214.

I have read and agree to follow the Commissioner's Guidelines for Independent Advisors.

My name is Christoffel Gerhardus Snyman. I qualified as a Fellow of the Australasian College of Surgeons (FRACS) in 2003. I am a full time consultant general surgeon in a public hospital.

I do not have a personal or professional conflict in this case.

Please take note of my initial report written 22 February 2021.

Further opinion requested

Following review of SDHB's response to your report, please advise:

1. Whether any of this further information changes any aspects of your initial advice.
2. Any further comments you wish to make about the care provided by [Dr B].
3. Any further comments you wish to make about the care provided by Southern DHB.
4. The adequacy of the changes made as a result of this case, and any further recommendations that you may have for improvement (both on a systems and an individual level).

Documents provided

1. My original report 22 February 2021.
2. Further response from [Dr B].
3. SDHB response 08 April 2021.
4. Further information from SDHB via HDC by email 16 June 2021.
5. Southern District Health Board's response dated 16 August 2019 and attachments.

Additional Resource

- Referral Criteria for Direct Access Outpatient Colonoscopy or Computed Tomography Colonography.
- Ministry of Health Guidelines.
- Up-To-Date

Summary

Whether any of this further information changes any aspects of your initial advice.

My opinion remains as Major Deviation from Standard of Care

Any further comments you wish to make about the care provided by [Dr B].

None

Any further comments you wish to make about the care provided by Southern DHB.

None

The adequacy of the changes made as a result of this case, and any further recommendations that you may have for improvement (both on a systems and an individual level)

No comment

Whether any of this further information changes any aspects of your initial advice.

1. SDHB have requested in their reply that I reconsider my opinion of Major Deviation from standard of care.

2. They acknowledge that there was some deviation from standard of care.

3. They ask that I reflect on the reports by [Dr B] and [Dr J] specialist colo-rectal surgeon.

4. In reviewing the case, I considered [Mr A's] presentations to SDHB and how these were processed and how it would compare in my opinion to a similar presentation elsewhere in NZ.

5. I considered the proposed diagnosis of Clozapine induced bowel obstruction and whether this was reasonable.

6. I considered whether reasonable care was taken with investigations and the results.

7. I considered the care for a vulnerable patient unable to adequately advocate for themselves.

8. When patients present with symptoms, the onus is on us to make a reasonable diagnosis with the information on hand. This diagnosis is often made based on clinical assessment (history and examination) without further investigations.

9. This is reasonable provided there are no 'Red Flags' identified. If any 'Red Flags' are identified, or if the condition does not resolve as expected, or the condition evolves, then it is our duty of care to ensure that we have the appropriate diagnosis by performing further investigations. These investigations may be to confirm our clinical diagnosis, look for alternative diagnosis or, simply, to exclude unconsidered pathology.

10. [Mr A] presented with new onset symptoms of abdominal pain and a change in bowel habit to constipation. He was taking Clozapine for his Schizophrenia.

11. Clozapine is only relevant as it is but a part of the differential diagnosis for his new symptoms. Clozapine is well known to slow down colonic transit and potentially cause severe constipation. [Mr A] had been on Clozapine for approximately 20 years at this stage with minimal colon transit concerns previously.

12. [Mr A] was diagnosed with Clozapine induced bowel dysfunction. This diagnosis was initially reasonable and as there were no 'Red Flags', no further investigations were required.

13. [Mr A] then continued to represent with persistent symptoms that had not resolved despite adequate treatment.

14. The lack of reconsidering the initial diagnosis and the lack of further investigations is what constitutes, in my opinion, the deviation from care.

15. The deviation does not stem from the retrospective incorrect diagnosis of Clozapine induced bowel obstruction nor does it stem from the missed diagnosis of colon cancer.

16. It stems from the inadequate investigation of new onset symptoms that did not settle with adequate treatment. This was compounded by the lack of further investigations following an abnormal CT result.

17. The final diagnosis of metastatic colon cancer is not considered to be relevant in the review of the care provided to [Mr A]. I agree that an earlier diagnosis of colon cancer or metastatic colon cancer would not have influenced the ultimate outcome for [Mr A] nor would it have changed his life expectancy significantly.

18. It must be reflected on, however, that an earlier diagnosis of colon cancer could have opened up opportunities for palliative care that could have led to [Mr A] having a significantly different end to his life.

19. Considering the persistent diagnosis of Clozapine induced obstruction. It is an obstruction caused by faecal impaction. I have dealt with cases of Clozapine induced bowel obstruction and one Clozapine induced stercoral perforation. The striking feature in these cases, and with most Clozapine induced faecal impaction leading to obstruction, is the vast amount of feaces within the colon. They are absolutely loaded from rectum proximally. I did not get the sense of this from any of the X-Rays and certainly not from the CT scan result.

20. The included Constipation Formulary (Otago) [SDHB 24312 V6 27/07/2017] suggests further investigations may be necessary if there is bleeding, abdominal pain, weight loss, a history of bowel disease or severe constipation with no obvious cause. [Mr A] presented repeatedly with persistent constipation despite adequate treatment, abdominal pain and a possible history of weight loss.

21. The Clozapine Best Practice Guidelines [SDHB 65221 V6 22/04/2020] references the Porirua protocol and it is appendix 1 in the guideline. The protocol lists as Red Flags: Moderate to severe abdominal pain lasting over an hour OR any abdominal pain and one or more of the following: abdominal distension, diarrheoa (especially bloody), vomiting, absent or high pitched bowel sounds, metabolic acidosis, haemodynamic instability, leucocytosis or other signs of sepsis. [Mr A] presented on several occasions with pain that had lasted more than an hour. [Mr A] was found on multiple admissions to have abdominal pain and abdominal distension. [Mr A] is recorded to have had vomiting.

22. [Mr A] presented and represented multiple times to SDHB with the same complaint. During the first few presentations it would have been reasonable to treat him without further investigations. During subsequent presentations and admissions,

the responsibility to ensure appropriate diagnosis and treatment should have increased significantly. This did not happen. Instead every admission steadfastly repeated the previous admission plan, despite the evidence that the treatment was not working, hence the representation. No further tests were undertaken to ensure the appropriate diagnosis has been made. See my original report points 13–23, 27.

23. It is my opinion that an average patient that presents to their local hospital and surgical services 7 times in 2 months with symptoms of abdominal pain and change in bowel habit will receive (or be booked for) at least a colonoscopy and CT scan as a matter of urgency.

24. My opinion of major deviation from standard of care is based on

    a) 7 presentations over 8 weeks with persistent unchanged symptoms and no resolution despite adequate initial treatment with minimal further investigations to confirm the diagnosis.

    b) Persistent change in bowel habit with associated abdominal pain without a colonoscopy, or plan for one.

    c) An abnormal CT scan that suggested pathology without further investigation. This CT did not specifically support the diagnosis of Clozapine constipation and obstruction or colon dysfunction. This finding without further investigation at a time when [Mr A] had already presented and represented multiple times without sustained resolution of his symptoms is the major deviation from standard of care.

25. Had a colonoscopy been planned following the abnormal CT scan, then the deviation of care would be minor or moderate at worst. I would have considered it no deviation from care if booked as urgent, minor to moderate if booked as routine.

26. As an aside, I disagree that there were no red flags in [Mr A's] presentations. I, and a good many of my colleagues, would consider new onset abdominal pain with associated change in bowel habit that does not settle on adequate treatment to be a definite red flag for further investigation.

27. [Dr B's] response shows reflection on his care and is to be commended. It does not change my report.

28. A review of [Dr J's] report does not change my opinion.

29. My opinion of a **Major Deviation from Standard of Care** remains unchanged.

Any further comments you wish to make about the care provided by [Dr B].

30. None

Any further comments you wish to make about the care provided by Southern DHB.

31. None

The adequacy of the changes made as a result of this case, and any further recommendations that you may have for improvement (both on a systems and an individual level)

32. I take note of the included documents. Their assessment sit outside my review of the surgical care.

Gerrie Snyman"

Appendix B: Independent clinical advice to the Commissioner

The following expert advice was obtained from emergency medicine specialist Dr Vanessa Thornton:

> "I have been asked to provide an opinion to the commissioner on case number C19HDC01214, and I have read and agree to follow the commissioner's Guidelines for Independent advisors.
>
> I am the Clinical Director of Middlemore Hospital Emergency Department New Zealand the largest Emergency Department in Australasia. I have been the CD since 2019. Prior to this I was the HOD of MMH since 2008. My qualifications are FACEM (Fellow of the Australasian College of Emergency Medicine) and MBChB at Auckland University. I have been a fellow of the college for 19 years and graduated as a Doctor in 1992. I am drawing on my experience as an Emergency Physician.
>
> I have reviewed the following documentation:
>
> 1. Letter of complaint dated 26th June 2019
> 2. Southern DHB's response 16th of August 2019
> 3. Clinical records from Southern DHB
> 4. Copies of x-rays CT and other imaging taken between [Month1] and [Month3].
>
> I have been advised to provide advice and will comment on the Emergency Department aspect in particular on the following:
>
> a) Adequacy of assessment carried out of [Mr A's] presenting symptoms
> b) The appropriateness of the investigations and tests and imaging undertaken and whether further investigations are warranted
> c) Whether a USS is indicated at an earlier stage
> d) Adequacy of pain relief prescribed
> e) The safety and appropriateness of [Mr A's] discharges home and transfers to the wards
> f) Any other matters
> g) The recommendations made
>
> **Summary of presentation**
>
> [Mr A] was a [man in his fifties] who had multiple presentations with abdominal pain.
>
> **First presentation 12 [Month1]**
>
> [Mr A] presented to the ED at 1942 on the 12 of [Month1]. The triage nurse has noted a history of abdominal pain with constipation ongoing for a couple of days. He was

noted as a triage 4. He was reviewed by a nurse in the ED who noted a history of abdominal pain for 2 months worse today with pain coming and going. The last time the bowels had opened was two days ago. They noted a past history of schizophrenia and his usual meds of metformin clozapine and valproate simvastatin and clonazepam. On examination his observations were HR 113 BP 121/68 temp 36.8 and saturations of 94%. At 2045 the nurse gave some Panadol and laxsol.

The ED RMO saw [Mr A] at 923pm. In his clinical note the RMO noted that [Mr A] was a difficult historian. The noted history was that [Mr A] had recurrent lower abdominal pain and sharp in nature. Bowel motion more runny than normal. There was no blood with the stool. [Mr A] reported that he had not passed a bowel motion in the last 3 days. He reported nausea with no vomiting. He denied dysuria or hematuria.

On examination the observations were as per the nursing note. The abdomen was soft and non-tender and there was no evidence of a hernia. The RMO completed investigations in the form of 2 blood tests which reported a slight elevation in lipase but were otherwise normal. (I have not viewed the result)

The RMO reviewed an abdominal x-ray and completed a rectal examination which noted minimal stool in the rectum and treated with a microlax on the impression that [Mr A] had constipation.

The RMO reviewed the case with [an ED SMO] and discussed some collateral history with [Mr A's] caregiver. The history was of intermittent abdominal pain for 1 month and a story of the patient's anxiety about bowel cancer. [The SMO] reviewed the abdominal xray and reported fecal loading in the colon and distended transverse colon the same as the 2013 AXR. [The SMO] felt that there was no evidence for a bowel obstruction based on the abdominal examination and considered clozapine as a possible contribution to the constipation.

[Mr A] was reviewed at 2229 and felt better after his bowel had opened and [Mr A] was discharged home with laxsol sachets.

Second presentation 13 [Month1] and discharged on the 15th [Month1]

On the 13th [Mr A] represented with abdominal pain at 1339. He was seen by the triage nurse and triaged as a triage category **4** patient. He was reviewed by the ED RMO at 258pm and had a history taken of being discharged the night before with abdominal pain likely as a result of constipation in association with the use of clozapine. Since discharge [Mr A] had a history of colicky abdominal pain and despite laxative the pain had persisted. He had a history of passing wind but limited bowel motions over the last 5 days. He described intermittent severe pain and vomiting on the morning of presentation. The pain was worse with eating. On examination it was noted that [Mr A] had a distended abdomen but it was soft to exam and his observations were HR 110 temp 35.6 Sats 95% and BP 158/103.

The RMO noted abnormal looking loops of bowel in the xray with ascending colon loading and after discussion with [the SMO], the SMO on the previous day, [Mr A] was referred to surgery.

Third presentation 18th [Month1]

[Mr A] presented to ED on the 18th of [Month1] at 820pm. He was reviewed by the registered nurse and was noted to have abdominal pain and pain in the groin. The nurse has noted his past medical history and questioned whether the patient has had a bowel obstruction as a result of constipation.

The observations were taken and noted to have a RR 18 sats 95% HR 111 and a BP 160/99.

[Mr A] was seen by the same ED RMO at 820pm who had seen [Mr A] on his first presentation in [Month1]. He noted the history from the patient and his support worker. The history was of intermittent abdominal pain similar to what he had last week. He noted that he had opened his bowels three times and was having laxsol sachets every 2–3 x a day. He had a more aggressive attitude toward the carers in the last couple of days. The RMO completed an abdominal examination and noted that the abdomen was distended but non tender. The impression at the time was bowel obstruction secondary to constipation. There was also concern about deterioration in his mental health.

The RMO completed a set of investigations including an abdominal xray, blood tests and a urine test.

The blood tests noted a hemoglobin 125 lower normal with a CRP of 28, normal liver and renal functions (not viewed by me). The abdominal x-ray noted a colon at 7cm not no clear evidence of obstruction.

The RMO discussed the case with the SMO and he suggested a period of observation and a review of his mental health by the psychiatric team for his change in behaviour. The RMO charted paracetamol and brufen for [Mr A]. It is not clear whether the patient was given pain relief. The nurses report that [Mr A] denied pain and appeared comfortable at 2210. At 0130 the Psych team took [Mr A] from the ED to the acute psych ward. I could not see the discharge summary.

Fourth presentation 1st [Month2]

[Mr A] presented at 1705. He was seen by a triage nurse and coded as a triage category 3 patient. His presenting complaint was abdominal pain with diarrhea. He had a history of a recent bowel obstruction and was given a triage category 3.

In ED a registered nurse completed a history at 2038 of abdominal pain radiating to the groin and to the shoulder. His past history was of schizophrenia and his observations were HR 103 RR 18 BP 150/92 temp 37 with a RR 18. His Blood sugar was 4.8. At 2100

the nurse recorded an early warning score of 1 for tachycardia and completed some bloods and an ECG.

At 2137 [Dr H], an ED SMO, reviewed the patient. She reported a difficulty in taking the history. She noted a history that included 'devil and henchmen' being discussed. The support worker reported an episode of abdominal pain at which time [Mr A] was distressed and then he had a large bowel motion. This was unwitnessed by the ED staff. [Dr H] examined the patient and noted a large soft abdomen which may have been tender in the epigastrium. [Dr H] received the blood tests which were unremarkable except for CRP of 36 and the x-ray showing no bowel obstruction but distended loops. [Dr H] wondered if the pain was related to laxative use and suggested stopping the laxatives but continuing the other medications.

Fifth presentation 3rd of [Month2]

[Mr A] presented by ambulance on the 3rd of [Month2] to the ED with acute pain. He was triaged as a category 4 with a history of ongoing pain for 3 weeks. He was reviewed at 424pm by an ED RMO. He was reviewed by an RMO who had previously seen the patient. It was reported that the history was difficult. [Mr A] complained of abdominal pain and was still taking laxatives despite being told to stop. The pain was intermittent and he couldn't remember the last time his bowels had opened. On examination [Mr A] was comfortable with normal examination and observations. Investigations were initiated which included Blood tests and an abdominal x-ray. It was noted that his lipase was 11 and his CRP was 43 so rising. The x-ray was similar to previous presentation with ascending loop dilatation up to 10cm.

The ED RMO discussed this case with the surgical registrar who advised that surgical input was not needed acutely and suggested discharge.

The RMO then discussed this case with [another ED SMO] and the radiology registrar and due to the dilatation, the ED SMO suggested the differential diagnosis of a bowel obstruction and asked the surgeon to review this patient clinically.

[Mr A] was referred to the surgical team at 844pm.

Sixth presentation 13 [Month2]

[Mr A] represented on the 13th of [Month2] at 1600. He was brought in by ambulance. He was given the triage code 3 by the triage nurse and was noted to have abdominal pain and was vomiting fecal matter.

An ED SMO reviewed [Mr A] at 503pm. The history of abdominal pain associated with vomiting brown stool was described. On examination [Mr A's] abdomen was distended and he had high-pitched bowel sounds. Blood tests were initiated and the CRP was elevated at 117 with a rise in Urea and Creatinine (renal function). [The doctor] initiated IV fluid and arranged a CT abdomen and referred [Mr A] to the surgical team.

Seventh presentation 24th [Month2]

Admitted via ambulance at 0746am. The ambulance notes that he was admitted to the hospital 1 week ago and had been unwell since discharge with increasing abdominal pain. The ambulance notes that at the time of transport the patient was comfortable and they had given [Mr A] clonazepam to facilitate the transfer to hospital. [Mr A] was seen by an ED triage nurse and given a triage category 2. The triage nurse described [Mr A] as pale sweaty and looking unwell.

In ED an RMO reviewed at 0825. [Mr A] repeated the history as noted in previous presentations. [Mr A] had not been himself since discharge from the hospital. He had been eating and denying pain. On the day of presentation, he had severe pain and had been brought to ED. On examination he was noted to have a distended abdomen with RR 28 HR 115 and BP 140/97. His saturations were 95%. The ED RMO completed a full set of blood tests including a lactate which was mildly elevated and referred [Mr A] to the surgical team with a differential diagnosis of bowel obstruction at 1045 am.

Questions

I have been advised to provide advice and will comment on the Emergency Department aspect in particular on the following:

a) Adequacy of assessment carried out of [Mr A's] presenting symptoms

b) The appropriateness of the investigations and tests and imaging undertaken and whether further investigations were warranted

c) Whether a USS was indicated at an earlier stage

d) Adequacy of pain relief prescribed

e) The safety and appropriateness of [Mr A's] discharges home and transfers to the wards

f) Any other matters

First presentation

The ED RMO completed a thorough assessment of [Mr A]. He took a complete abdominal pain history and collaborated the story with the care giver. He performed a complete abdominal exam and undertook the basic screen tests required for a workup of abdominal pain including a FBC U and Es and Abdominal x-ray. He discussed the case with a senior ED physician who reviewed the case in person and considered that the clozapine which [Mr A] was on may contribute to his diagnosis of constipation. Clozapine has a side effect protocol which includes 14–25% of patients having constipation associated with its use. Observation of [Mr A] occurred for 3 hours and there was no evidence of significant pain throughout the period of time [Mr A] was in the ED and his clinical examination remained with a soft abdomen. [Mr A] was discharged to his usual residence. Advice about the pain was given to [Mr A] and his care givers.

This presentation was completed with the appropriate standard of care and appropriate investigations for any patient presenting to ED with abdominal pain. Throughout the presentation [Mr A] remained comfortable so adequate pain relief was prescribed. The right advice was given and there was no deviation in the standard of care expected by an Emergency medicine physician.

2nd presentation

The ED review in this presentation was thorough with a complete history and examination. Appropriate discussion with a SMO occurred and referral to an inpatient service. If a patient has returned within a short time as occurred in this case then a surgical review and further investigations would be recommended in the Emergency Department.

This patient was admitted by the surgical team and this is expected standard of care for a patient with abdominal pain.

3rd presentation

[Mr A] represented only 2 days after discharge from a surgical presentation. The diagnosis after two days on the ward was of severe constipation secondary to clozapine. Once again a thorough work up was completed by the ED; this included a history, examination and investigations including an x-ray and blood tests. [Mr A] had a documented history of opening his bowel and passing a bowel motion. The ED RMO who reviewed [Mr A] on his first presentation reviewed him and noted that he was more aggressive than previously. The differential diagnosis of obstruction in the setting of constipation was considered. All investigations were similar to previous presentations. The RMO discussed this case with a SMO and due to his behavioural change, he recommended a period of observation and review by the psych team to consider his medications.

[Mr A] remained pain free in ED and was admitted to the psych unit.

The appropriate history, examination and investigations were completed and standard of care was at the level expected for an emergency department with appropriate level of investigations. I'm not sure what the protocol is for representations to [the] ED but the short period between his discharge from surgery and his representation many EDs would consider that the surgeons would review the patient again immediately without ED initial review unless unstable. Adequate pain relief was prescribed as [Mr A] was documented as comfortable in ED at the time of his observations. As [Mr A] remained pain free in ED and there seemed to be no acute or emergent event [Mr A] was appropriately reviewed by psychiatry.

4th presentation

[Mr A] presented to ED and was seen by ED SMO [Dr H]. [Mr A] was described as having a change in behaviour and voicing 'devils and henchmen'. On review of his abdominal pain he described diarrhoea and intermittent pain while using laxsol. [Dr H] completed

a clinical examination and due to the diarrhoea considered that the laxsol may be resulting in diarrhoea. [Mr A] remained comfortable throughout his ED presentation with minimal analgesic requirement. [Dr H] advised change in the laxsol regime and discharged [Mr A] home. [Mr A] was comfortable at the time of discharge so was clinically considered safe for discharge.

In ED [Mr A] remained comfortable and [Dr H] completed an assessment that was in keeping with a presentation of abdominal pain. [Mr A] was comfortable in ED and thus did not require any further analgesia in keeping with appropriate standard of care.

5th 6th and 7th Presentations

This is the standard of care expected for a patient presenting with acute abdominal pain. Each time the patient presented a full history and examination and blood tests were completed. He was referred to the surgical inpatient team for review. This was at the level expected for an Emergency Department.

Comment on the use of USS in abdominal pain

It is noted that it was the 6th presentation when the abdominal CT was performed. A CT can assist in the diagnosis of undifferentiated abdominal pain and ED can initiate an abdominal CT. CT is the study of choice in the evaluation of undifferentiated abdominal pain. Approximately two-thirds of patients presenting to the ED with acute abdominal pain have a disease that can be diagnosed by CT. A CT would be routinely used in ED for the work up of a differential diagnosis of bowel obstruction/constipation rather than the use of USS in ED. USS may be useful in other presentations of abdominal pain acutely. With the frequency of presentations an earlier CT may have assisted with the diagnostic dilemma with [Mr A].

Summary

[Mr A] was a complicated case due to his concomitant medical history of schizophrenia. His presentations were over a very short period of time 6 weeks. There is no doubt abdominal pain continues to be a diagnostic challenge and a common presentation for emergency clinicians. In many cases, the differential diagnosis is wide, ranging from benign to life-threatening conditions. Associated symptoms often lack specificity and atypical presentations of common diseases are frequent, further complicating matters. Undifferentiated abdominal pain remains the diagnosis for approximately 25 percent of patients discharged from the ED and between 35 and 41 percent for those admitted to the hospital. In abdominal pain ancillary investigation can help but the clinician should not rely on ancillary studies to make a diagnosis but should use them as adjuncts to the clinical exam and history. The use of plain radiographs to assess general abdominal pain is an extremely low-yield practice[2] only a small percentage are abnormal. Plain radiographs can be helpful when a complete bowel obstruction, bowel perforation, or a radiopaque foreign body is suspected, but cannot be relied upon to exclude these disorders. A study shows plain film is helpful in 2%–8% of cases. CT use in abdominal pain is becoming more helpful in diagnosis for abdominal pain. In this case [Mr A] had a narrowing of the large bowel found on CT at the site of the

subsequently diagnosed bowel cancer and thus his pain was intermittent while still allowing wind and bowel motion to pass.

[Mr A] remained pain free in his early presentations to ED with a soft abdomen to examination. Consideration to the differential diagnosis remains easier in retrospect with a change in bowel habit and intermittent severe pain in the setting of a narrowing on CT seen in the large bowel. However, [Mr A] was a difficult historian and all his examination findings on his first 4 presentations were normal. With hindsight an earlier CT could have assisted in the diagnostic workup of [Mr A]; as described earlier a CT is very helpful in the setting of non specific abdominal pain. However, the time period of presentations for the ED was short and 4 of the 7 presentations resulted appropriately in surgical admissions. The diagnosis of constipation made in the early presentations would not require a CT however constipation and a change in bowel habit should be considered as to a cause and in the case of [Mr A] the use of Clozapine was initially considered to be a probable cause of constipation which was not unreasonable.

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