Anaesthetist, Dr B

Obstetrician, Dr C

District Health Board

A Report by the

Health and Disability Commissioner

(Case 13HDC00515)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Table of Contents

Executive summary

1. In 2013, Mrs A was pregnant at term with her first baby when her membranes ruptured and she went into spontaneous labour. She met with her midwife, Ms D, at 9.30am and her cervix was found to be 4cm dilated.

2. At 3.00pm Mrs A met with her midwife again for a further assessment at the delivery unit. As Mrs A was found not to be progressing in labour, locum obstetrician Dr C was asked to review Mrs A. An epidural was inserted for pain relief, and the labour was augmented with Syntocinon.[1]

3. Following a prolonged deceleration of the fetal heart rate, a further vaginal examination at 5.35pm showed no further progress of labour, and the decision was made to deliver the baby by an emergency lower segment Caesarean section (LSCS).

4. At 5.55pm Mrs A was transferred to the operating theatre, where she met anaesthetist Dr B.

5. Dr B was working at the District Health Board (DHB) as an anaesthetist on a locum contract. He told Mrs A that he would top up her epidural, and then top it up throughout the procedure if needed. Mrs A said that Dr B "joked around", and she found it hard to tell when he was being serious. She said he focused in a very detailed manner on the risks of a general anaesthetic (should one be required), including the risk of death.

6. Dr B conducted an "ice test" to check Mrs A's sensation, and she said she could feel that the ice was quite cold. However, Dr B advised Dr C that she could begin the surgery in two minutes' time.

7. Initially, Mrs A could not feel anything; however, when Dr C entered the peritoneal cavity,[2] Mrs A complained of pain. Dr B assured Dr C that she could continue with the surgery.

8. When Dr C attempted to deliver the baby by fundal pressure,[3] Mrs A complained of pain and began lifting both her knees. Dr C then attempted to apply forceps[4] to deliver the baby's head but, because of the very unyielding tissues and the constant movement of Mrs A's legs, she was unable to apply the inferior blade properly and could not lock the blades.

9. Dr C asked the nurses to hold down Mrs A's legs. Mrs A voiced her pain, and Dr B told her that she was not feeling pain, and it was just pressure. He said that Mrs A

[1] Syntocinon is a synthetic version of the naturally occurring hormone oxytocin. It is used to induce or escalate labour.
[2] The gap between the wall of the abdomen and the organs contained within the abdomen.
[3] Manual pressure to the upper parts of the uterus.
[4] Obstetric forceps consist of two branches that are positioned around the fetal head. The branches usually cross at a midpoint, called the articulation. Most forceps have a locking mechanism at the articulation.

could not have any more pain relief unless they "put her under", which would not be good for the baby.

10. Dr C then delivered the baby by internal podalic version[5] and breech extraction.[6]

11. After the delivery, Dr C noticed that there had been an extension of the uterine incision for about 4cm into the upper uterine segment on the left side. She sutured the uterine incision. Mrs A continued to complain of pain.

12. Dr B declined to administer extra pain relief, shrugged his shoulders, and commented, "[I]t will be over soon."

13. At the completion of the procedure, when Mrs A was ready for transfer to recovery, Dr B commented that he was about to become involved in a "real" operation.

Findings

Dr B

14. Dr B's failure to ensure that Mrs A received adequate anaesthesia prior to commencement of the Caesarean section was suboptimal. Accordingly, Dr B failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1)[7] of the Code of Health and Disability Services Consumers' Rights (the Code).

15. Mrs A had the right to be informed about the options available to her, including an assessment of the expected risks, side effects and benefits of each option. Dr B's provision of information to Mrs A fell seriously short of accepted standards. Accordingly, Dr B breached Right 6(1)(b)[8] of the Code.

16. Dr B's actions and failure to ensure that Mrs A received adequate anaesthesia/analgesia during her Caesarean section were suboptimal and a breach of accepted standards. Accordingly, Dr B failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1) of the Code.

17. Dr B's communications with Mrs A displayed a lack of sensitivity, and he treated Mrs A with a striking lack of empathy. Accordingly, Dr B failed to comply with professional standards and breached Right 4(2)[9] of the Code.

[5] To deliver the fetus by inserting a hand into the uterine cavity, grasping one or both of the fetus's feet, and drawing them through the incision.
[6] Baby born feet or buttocks first.
[7] Right 4(1) states: "Every consumer has the right to have services provided with reasonable care and skill."
[8] Right 6(1)(b) states: "1) Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including … b) An explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option."
[9] Right 4(2) states: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

18. Dr B 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.

Dr C

19. Dr C was aware that Mrs A was expressing that she was in pain at a number of points:

- At the point of entry into the peritoneal cavity Dr C believed that Mrs A was complaining of pain, but she was reassured by Dr B that that was not the case and she could continue with the surgery.

- During the delivery Mrs A complained of pain, was unable to lie still, and kept raising her legs. The delivery was difficult, in part because of the movement of Mrs A's legs and the tightness of her abdominal muscles.

- After the delivery, during the closure of the incision, Mrs A continued to complain of pain. When Ms D told Dr C that Mrs A was in pain, Dr C asked her to inform Dr B of Mrs A's pain, but continued to complete the operation.

20. Dr C noted on the operation record that the anaesthesia was suboptimal for lower segment Caesarean section (LSCS) and contributed to the difficulty during the delivery and, the day after the birth, told Mrs A that the pain she had experienced was not normal.

21. Dr C should have spoken and acted with more authority when she thought Mrs A was feeling pain. By continuing to operate on Mrs A after delivery of the baby and after realising that she was in pain, Dr C failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1) of the Code.

The DHB

22. Comment is made about the DHB's staff training, orientation and policies.

Complaint and investigation

23. The Health and Disability Commissioner received a complaint from Mrs A. The following issues were identified for investigation:

- *Whether Dr B provided services of an appropriate standard to Mrs A in February 2013.*
- *Whether Dr C provided services of an appropriate standard to Mrs A in February 2013.*
- *Whether the district health board provided services of an appropriate standard to Mrs A in February 2013.*

24. An investigation was commenced on 23 January 2014. The parties directly involved in the investigation were:

Mrs A	Complainant
Mr A	Complainant's husband
Dr B	Provider/anaesthetist
Dr C	Provider/obstetrician
Ms D	Midwife Lead Maternity Carer
Ms E	Student midwife

25. Information from the District Health Board was also reviewed.

26. Independent expert advice was obtained from anaesthetist Dr Andrew Love (**Appendix A**) and obstetrician and gynaecologist Dr Ian Page (**Appendix B**).

Information gathered during investigation

Background

27. In 2012, Mrs A, aged 26 years, became pregnant with her first child. Mrs A's lead maternity carer (LMC) was registered midwife Ms D, who has been a registered midwife since 2002 and has provided services at the hospital since 2006. She has been self-employed as an LMC since 2009, caring for an average of 55–60 women annually.

28. The progress of Mrs A's pregnancy was unexceptional.

29. At 6.00am, when Mrs A was 39 weeks and 5 days' gestation, her membranes ruptured at home and she went into spontaneous labour. This opinion relates to the care provided to Mrs A during the delivery of her baby.

Admission to delivery unit

30. At 9.30am Mrs A was assessed by Ms D at the public hospital's delivery unit, and a vaginal examination (VE) showed her to be 4cm dilated. Mrs A then went to a friend's house nearby to await stronger contractions.

31. At 3.00pm Mrs A and her husband returned to the delivery unit and met with Ms D again. Ms D assessed Mrs A and recorded that she was contracting strongly, her blood pressure was 125/75mmHg,[10] her pulse was 90 beats per minute (bpm),[11] and the fetal heart rate was 130bpm.[12]

32. Ms D undertook a further VE and found that Mrs A's cervix was still only 3–4cm dilated, was partially effaced, and the membranes were absent.

[10] Normal blood pressure is at or below 120/80mmHg.
[11] A normal resting heart rate for adults ranges from 60–100bpm.
[12] The normal range of a full-term baby's heart rate is between 110 and 160bpm.

33. Cardiotocography (CTG)[13] was commenced at 3.35pm, and Ms D consulted with the obstetrician on call, Dr C, in view of Mrs A's lack of progress since 9.30am.

Dr C

34. Dr C advised HDC that she has been a full-time obstetrician and gynaecologist at a hospital in another region since 2002. She has been doing locums at Mrs A's hospital since 2005, and usually does three to four locums of three days to a week per year.

35. Dr C advised that she has postgraduate qualifications and more than 25 years of experience in obstetrics and gynaecology.

Assessments

36. At 3.40pm Dr C reviewed Mrs A and found that the CTG was reactive and reassuring. The record states: "Advice to keep going with labour and use of strong analgesia or epidural if needed."

37. At 4.35pm, a consultant anaesthetist sited an epidural catheter and administered an initial dose of 10ml 0.75% ropivacaine. He then commenced a continuous infusion of 200ml 0.2% ropivacaine and 2mcg/ml fentanyl at 10ml per hour.

38. At 4.55pm, Dr C returned to review Mrs A and requested Syntocinon augmentation because there had been no further dilation of the cervix between the last two VEs. A Syntocinon infusion was commenced at 2mu per minute.

39. At 5.30pm, a fetal heart rate deceleration to 80bpm for over five minutes was recorded. The Syntocinon was stopped and the fetal heart rate recovered. Dr C conducted a VE and found that the cervix was still only 3–4cm dilated with the vertex (presenting part of the head) at station –3.[14]

40. Dr C said that she discussed the options with Mr and Mrs A, which were either a LSCS or restarting Syntocinon with the understanding that another episode of low fetal heart rate would necessitate a "category one"[15] LSCS. Dr C said that as the episode of low heart rate was prolonged and occurred with the lowest dose of Syntocinon in early labour, she recommended that the safer option would be delivery at that stage by LSCS. Mrs A agreed.

41. At 5.55pm Mrs A was transferred to the operating theatre.

Dr B

42. Dr B was working at the DHB as an anaesthetist on a locum contract. Dr B advised HDC that he had qualified as a consultant anaesthetist overseas in 2000 and had worked as a consultant anaesthetist in New Zealand since 2004.

[13] Electronic monitoring of the fetal heart rate and rhythm, and measurement of the strength and frequency of uterine contractions.
[14] "Station" describes the position of the baby's head in relation to the ischial spines of the mother's pelvis. Station –3 means that the baby's head is 3cm above the ischial spines.
[15] A "category one" LSCS is an emergency Caesarean section performed because of an immediate threat to the life of the mother or fetus.

Anaesthetic consent

43. Mrs A stated:

> "I was moved onto another bed, which I could not help with at all, I still could not feel anything below my bust, and was wheeled through to meet the anaesthetist [Dr B] and his assistant, a blonde female with glasses. [Dr B] introduced himself, and asked me a number of questions around my health and about how I was feeling with my epidural in, which I had had in for a little while at this stage. He let me know that he would top up my epidural instead of giving me another type of medication, and top it up throughout if it was needed."

44. Mrs A stated that Dr B "joked around" and she found it hard to tell when he was being serious. Mrs A said that Dr B focused in a very detailed manner on the risks of the surgery. He said that people die in theatre and discussed the possibility of her having to be "put under". She stated that the discussion was making her feel quite scared, and that Ms D noticed her concern and intervened.

45. Mrs A stated that the discussion about people dying in the operating theatre made her and her husband feel scared, anxious and afraid, so Ms D told her that these were unlikely scenarios, and that Dr B was just letting her know in order to cover all the bases. Mrs A said that Dr B then stated that the risks were very real and not all that unlikely, which made her extremely uneasy. In response to the provisional opinion, Mrs A stated that it seemed to her at the time that "he was almost determined not to administer a GA [general anaesthetic] if there were complications during surgery".

46. Ms D advised HDC that she felt that the emphasis on the risks of general anaesthetic, and particularly the risk of death, was excessive and so she attempted to reassure Mr and Mrs A and introduce some perspective regarding the extremely low risk. Ms D stated: "[Dr B] rejected my comments and reiterated the risk of death under general anaesthetic."

47. Dr B stated that he explained that he was intending to top up the epidural, but also explained the risks and complications associated with a GA, in case there was a need to convert to a GA during the procedure. He said that he explained the complications associated with a GA, including anaphylaxis,[16] aspiration, injury to teeth, vocal cords and larynx,[17] and death. Dr B stated: "I do not believe that I focused on death as a complication but simply mentioned it as a major but rare complication as part of my obtaining her informed consent." Dr B stated: "[I]t was certainly not my intention to cause [Mrs A] or her husband any stress or anxiety."

48. With regard to his manner, Dr B stated:

> "I always approach patients with the respect they deserve. In stressful situations where the patient is very nervous and anxious, I try to lift their spirit a little bit by using words that might ease their mind a little bit."

[16] A serious allergic reaction.
[17] Voice box.

49. Dr B apologised if he created difficulties for Mrs A in determining whether or not he was being serious.

Anaesthesia/analgesia

50. Mrs A stated that once they moved into theatre, Dr B advised her that she would feel pressure during the procedure, but not pain. She stated that, at that time, she asked Dr B to tell the staff to stop pinching her, as they were pinching her stomach to test whether she could feel anything. However, she said that Dr B did not seem worried that she could feel the pinches. In response to the provisional opinion, Mrs A stated that Dr B did not respond to her request, and seemed intent on his task and oblivious to her discomfort.

51. Dr B said that he was concerned about a high block because of the indeterminate amount of local anaesthetic already in the epidural space, and he administered a dose of 10ml of 1% lignocaine plain[18] via the epidural catheter, which he noted was "in addition to the 0.2% [ropivacaine] and 2µg/ml fentanyl which had already been administered earlier to Mrs A". He said that he had regularly administered a similar dose to other patients who had been administered a previous epidural, and was not aware of any issues concerning the effectiveness of such a dose.

52. Dr B stated that his practice is to inform his patients that they will feel a sensation of being touched, but should not experience sharp pains. He stated that Mrs A would have been feeling only the sensation of being touched, and he would not have been worried about the degree of anaesthesia obtained at that point. In response to the provisional opinion, Mrs A said that no one told her that the sensation would feel like being touched.

53. Mrs A said that the next thing that occurred was the "ice test", in which Dr B moved ice from her shoulder down each side of her torso. She stated that on her right side the ice definitely did not feel as cold as it did on her shoulder, but on her left side she could feel it quite well. She stated that the test was done a couple of times, and on the last time she advised Dr B that she could still feel that it was quite cold on her left side.

54. Dr B stated that, although rare, some patients have reported a colder sensation on the skin when the epidural anaesthetic is taking effect, so an important sign to look out for is a change in sensation. In response to the provisional opinion, Dr B submitted: "A patient will feel cold at some point — this is part of the test. Ideally, when undertaking the ice test, the patient feels nothing in the region of the upper thighs and abdomen. A little higher up, she may feel touch, and a little higher up, she will feel cold." He stated that, based on his assessment of Mrs A, he was of the opinion that the block was operative to a T4 level.

55. In response to the provisional opinion, Dr B submitted that he also checked for motor block by assessing whether Mrs A could raise her legs, which she could not do. Dr B advised Dr C that she could begin the surgery in two minutes' time. Mrs A said:

[18] Lignocaine hydrochloride, a common local anaesthetic.

"[T]his concerned me a little bit as I could still feel the ice, but I figured he knew how long the drugs would take to work in my system."

56. Dr B stated that he always informs patients that the important part of the test is a temperature difference between a part of the body where the epidural injection is definitely not working, such as the face or neck, and where it should be working, such as the abdomen up to the chest and the chest up to the level of the breast. He stated that he explains that this difference will indicate that the epidural injection is working and, without such a difference, he would never have started the case.

57. In response to the provisional opinion, Mrs A said that Dr B made no such comments to her. She stated that he asked her only whether she could feel the ice, then told the surgeon to proceed.

Commencement of surgery

58. Mrs A said that she was advised that the surgery had begun, and she "absolutely did not feel anything at this time". She stated that after a while she began to feel the pressure that Dr B had advised her about, and it was quite uncomfortable. Dr C asked her if she worked out a lot, as her muscles were very tight. Mrs A replied that she definitely did not work out, and had never set foot in a gym. In response to the provisional opinion, Dr B stated that he was not aware of Mrs A's tight abdominal muscles until after the surgery and, had he known at the time, he might have changed his management plan.

59. Dr B further submitted: "It appears that [Mrs A], herself, was not certain as to whether the sensations experienced felt like pain (rather than intensified pressure) at this stage." Mrs A stated that about that time she felt "more than pressure, I thought anyway, and in a bit of pain", but Dr B ignored her concerns.

60. Dr C stated in response to the complaint: "After I felt there was adequate room, I entered the peritoneal cavity. [Mrs A] complained of pain but I was assured by [Dr B] that I could continue with the surgery." In response to the expert advice, Dr C stated that she agreed that at the point of entry to the peritoneal cavity "where the pain was noticed", it would have been safe to stop operating while adequate anaesthesia was obtained. She stated: "I did stop and bring this to [Dr B's] attention. I was assured by him that I could continue with surgery." Dr C said that she interpreted his reassurance as indicating the absence of any pain, and so had no reason to discontinue the surgery. Dr C advised:

> "At entry into the abdominal cavity, I noted that her abdominal muscles were very 'tight'. I proceeded to dissect under the rectus sheath superiorly to give me adequate space to deliver the baby safely. After I felt there was adequate room, I entered the peritoneal cavity. [Mrs A] complained of pain but I was assured by [Dr B] that I could continue with the surgery."

61. Dr C stated that she believes it was a reasonable expectation that she could rely on the professional opinion of a consultant anaesthetic colleague regarding the character and level of Mrs A's discomfort. Dr C said that it is common for patients under epidural anaesthesia to report a feeling of pressure, and it was her impression that that was the

type of discomfort Mrs A was feeling. She also said that she was aware that Mrs A was uncomfortable, but did not think she was feeling pain. In response to the provisional opinion, Dr C stated: "[Mrs A] started feeling pain when I started to deliver the baby."

62. Dr C stated that she could not see Mrs A's face, because there was a high screen of theatre drapes to conceal the operating field from the patient and her support person. Dr C believes that, in that situation, it was reasonable for her to seek and rely on the opinion of a senior member of the operating team. In response to the provisional opinion, Mrs A said that it is correct that Dr C could not see her face.

Delivery of baby

63. Dr B said:

> "[Mrs A] reported increased discomfort only minutes before the imminent delivery of her baby and it was therefore my role, as anaesthetist, to determine/assess at that time whether the reported sensation/increased level of discomfort warranted further intervention and/or additional pain relief taking into account timing, risks/complications, the severity of the increased discomfort as reported by the patient, the benefit of further intervention etc."

64. Dr B advised HDC that, based on his conversation with Mrs A, he did not consider that she was experiencing sharp pain at that time but, rather, it was additional pressure.

65. Dr C stated that she then began the process of delivering the baby and, at that point, it became clear that Mrs A was experiencing pain. Dr C said that when she attempted to deliver the baby by fundal pressure, Mrs A complained of pain and started lifting both her knees, the left leg more than the right. In response to the provisional opinion, Mrs A said that the pain was excruciating, and "[i]t felt like [her] ribs were being crushed". As fundal pressure was not resulting in progress of the baby's head through the uterine incision, Dr C attempted to apply forceps to deliver the baby, but said that "[d]ue to very unyielding tissues and the constant movement of [Mrs A's] legs" she was unable to apply the inferior blade properly and could not lock the blades.

66. Mrs A said that Dr C asked her to please stop kicking her, which Mrs A had not realised she was doing until she felt her foot connecting. Mrs A said that she tried to keep down her feet but, in the end, Dr C asked her assistants to hold down Mrs A's legs. Mrs A said that she could feel the nurses' pressure on her legs. Initially, Dr B advised HDC that he had observed patients who were able to wriggle a toe with epidural anaesthesia in place, but he had never observed a patient able to move an entire leg, and that it was so unusual that had it occurred he would have recalled it. In a later response, Dr B told HDC that the movement of Mrs A's legs was "likely to have been caused by stimulation of a nerve distal to the block i.e. an involuntary muscular response in the distribution area of that nerve".

67. Mrs A said that she began to feel quite upset that she was kicking the surgeon, and apologised for doing so, and she was also upset because she was in pain. She said that she voiced her pain and was assured by Dr B that she was not feeling pain and it was

just pressure. Dr B denied that he was aware that Mrs A's legs were moving, or that the theatre staff were holding her legs. In response to the provisional opinion, Mrs A said that both she and her husband heard Dr C ask for her legs to be held and, if Dr B did not hear that or notice her legs kicking, he was not paying sufficient attention to his patient. Mrs A said: "My pain was very real and of a totally unacceptable level during abdominal surgery. To have my complaints downplayed as 'pressure' is unacceptable." She said that her husband could see the faces of the staff and was aware that they were "stressed and panicked" about getting her baby out. She said she could tell things were not going well and felt scared and sad at the thought of what might be going wrong.

68. In response to the provisional opinion, Mrs A said that she complained clearly about the pain, but Dr B persistently ignored her complaints of pain and did not stay at her side. Dr B stated that he discussed conversion to a GA and other options with Mrs A, and his "discussions with [Mrs A] indicated to [him] that she was in discomfort only (and not in pain)", and that Mrs A confirmed that she wished to persist with the delivery without a GA and would advise him if she changed her mind. He stated: "My discussions with [Mrs A] about her levels of discomfort were on-going throughout the procedure." He said he did not deny Mrs A pain relief.

69. In contrast, Mrs A said that these discussions did not occur, and the only conversation she had with Dr B was her telling him she was in pain, and his replying that she was not in pain.

70. Dr B also advised that any further injection of local anaesthetic drug into the epidural catheter could potentially have gone too high and caused weakness in her arms or breathing problems. He also considered that it would be unlikely to result in any change in her abdominal sensations and, if it did improve her analgesia, this would not occur within the space of a few minutes.

71. Dr B said that he considered conversion to a GA, but the risks associated with administering a GA to Mrs A prior to delivery of the baby had to be weighed against the benefit to be attained, given the late stage at which the GA would have been administered. He stated that the risks to the mother associated with conversion to a GA are highest at that stage of the procedure. He said he advised Mrs A that if he were to convert to a GA, the effect would be felt only after the baby's arrival, and she replied that she would persist with a delivery without GA.

72. Dr B also stated that had the epidural block worn off at an earlier stage of the surgery, he would have administered a second epidural dose if there had been enough time available to do so, or he would have converted to a GA. Dr B further stated that, in his view, inhalational anaesthesia was not an ideal alternative form of analgesia, as it could have increased the risk of an air embolism and potentially reduced the content of oxygen in Mrs A's lungs. Dr B said that the use of inhalational anaesthesia could have put Mrs A through an "excitation phase" with major risks for aspiration and uncontrollable involuntary movement of her whole body. In his view, the risks in administering inhalational anaesthesia at that late stage outweighed the benefits.

73. Dr B stated that he discussed the potential effects of intravenous medications on the baby. However, there is no record of those considerations or any discussions. In response to the provisional opinion, Mrs A said that there was no "discussion", as Dr B said only that a GA would harm the baby.

74. Mrs A recalls Ms D questioning her blood pressure and asking Dr B whether more pain relief was needed, as she (Mrs A) was pale and her lips were blue. Mrs A said she heard Dr B say that she could not have any more pain relief unless they "put her under", which would not be good for the baby.

75. Mrs A said that that made her "feel bad" about voicing her pain, as she felt that by asking for help she was actually ready to hurt her baby, which made her more upset. She stated that her husband also expressed concern to Dr B, saying that he thought his wife was definitely in pain. Mrs A said that Dr B replied that she would be in a lot more pain if she had the baby naturally, and "discussed again that giving [me] more medication would harm the baby and we didn't want that did we?".

76. Dr C said that she decided to proceed with delivery by internal podalic version (IPV) and breech extraction. She stated that the procedure was difficult as there was minimal liquor (because the membranes had been ruptured for over 12 hours).

77. Dr C said that she asked for GTN[19] spray, but it was not readily available. However, it was located in the operating theatre and given to Mrs A. After the GTN spray was given, the baby was delivered by breech extraction at 6.44pm, six minutes after the skin incision. The umbilical cord was short (30cm), which Dr C said could have explained the difficulty experienced at IPV.

78. Dr C stated:

> "During my entire attempt at delivery, I could hear [Mrs A] complaining of pain. She was repeatedly bending her knees which [was] impeding my access to [the] peritoneal and uterine cavity. I recall asking the nurses to try and keep her legs down. The theatre circulating nurse held [Mrs A's] ankles underneath the drapes in an attempt to restrict her leg movement and aid in the process of delivery."

79. Dr B, in his response to HDC, stated that the delivery was the most uncomfortable part of the procedure as it involved the surgeon placing a hand or forceps into the uterus to locate and deliver the baby's head and pressing firmly on the dome of the uterus to help "squeeze" the baby out. Dr B noted the difficulty Dr C had in delivering the baby, and that Mrs A had referred to two people pushing down on her stomach, which had hurt more than anything up to that point. Dr B noted that this would have exacerbated the sensation of pressure being experienced by Mrs A at the time.

Birth

80. The baby was born at 6.44pm. He was given to the paediatrician who took him to the resuscitaire, suctioned his airways, and gave him oxygen. Initially the baby was pale,

[19] Glyceryl trinitrate, a short-acting sublingual spray sometimes utilised for uterine relaxation to facilitate difficult LSCS deliveries.

but he "pinked up" well. His Apgars[20] were recorded as 5 at one minute and 10 at five minutes.

Following delivery of baby

81. Dr C stated that immediately after the delivery she noticed that there had been an extension of the uterine incision for about 4cm into the upper uterine segment on the left side. She noted that the extension was bleeding heavily and that she needed to act quickly to achieve adequate haemostasis.[21]

82. Mrs A stated that her husband brought the baby over to her, but she could barely look at him because she was exhausted, crying, and in a lot of pain as they tried to get out the placenta and suture the incision. She stated:

> "Being stitched up felt as though it lasted forever, I felt as though I was going to pass out, my husband was talking to me and so were the midwives and I found it difficult to concentrate on what they were saying. My midwives [Ms D] and [Ms E] took it in turn holding my left hand as my husband was on my right but rightfully focusing on our son as I was in no position to. Both women let me know I was holding their hands very tightly, causing them pain which let them know how much pain I was in."

83. Ms D stated that during closure of Mrs A's incision, she asked Dr B for more pain relief for Mrs A, as she could see that the level of discomfort Mrs A was experiencing was excessive. Ms D stated that Dr B declined to administer extra pain relief at her request, shrugged his shoulders and commented, "It will be over soon." In response to the provisional opinion, Dr B stated that he is "absolutely sure" he would not have acted in the manner suggested.

84. Dr C stated that Mrs A continued to complain of pain during the closure and repeatedly apologised for complaining. Dr C said that at one stage Ms D made eye contact with her and told her that Mrs A was in pain. Dr C said that she asked Ms D to inform Dr B about the pain because, although he was in the theatre, he was not beside Mrs A.

85. Dr B stated that after the baby was delivered he reviewed Mrs A's discomfort levels with a view to assessing the need to convert to a GA or offer an alternate form of analgesia. He stated that he discussed the "discomfort/pain levels and options/risks" with Mrs A and advised her that the closure of her abdomen might take up to 30 minutes or more. There are no discussions documented and, in response to the provisional opinion, Mrs A said that discussion never occurred.

86. In his response to HDC, Dr B stated:

[20] The Apgar score is determined by evaluating the newborn baby on five criteria on a scale from zero to two, then summing up the five values obtained. The resulting Apgar score ranges from zero to 10. Scores 7 and above are generally normal, 4 to 6 fairly low, and 3 and below are generally regarded as critically low.
[21] The stopping of bleeding or haemorrhage.

> "Had my discussion with [Mrs A] led me to believe that she would have benefited from a conversion to general anaesthetic or an alternative form of analgesia (oral analgesia or an epidural top up) at this stage then I would have proceeded with the conversion (as I have done many times in the past) or the alternative form of analgesia. I am not cruel. I do not wish any patient to be put through unnecessary pain. Throughout my assessment of the risks/benefits, I sought to act in the best interests of [Mrs A] and her baby."

87. Dr C stated that although Mrs A was complaining of pain during the closure of the uterus, Dr B did not seem concerned about her complaints. Dr C stated:

> "I clearly recall at one point once bleeding was better under control, I halted the procedure, raised myself up on my toes so I could see [Dr B] who was sitting in the far corner of the operating theatre to mention that [Mrs A] seemed to be in a lot of pain. I was reassured by [Dr B] that she was fine and she was feeling pressure. This reassurance to me and [Mrs A] continued throughout this stage of the surgery."

88. Dr C told HDC that she thought it was in Mrs A's best interests to complete the procedure as quickly as possible, as the alternative would have been a potential confrontation with Dr B, which would have prolonged the surgery and Mrs A's pain. In response to the provisional opinion, Dr C further submitted that she could not have obtained better analgesia for Mrs A without resorting to confrontation, and she believes it would have amounted to professional misconduct if she had confronted Dr B. She stated that it would have made Mr and Mrs A feel insecure if health professionals had argued in the theatre, and also noted that out of hours she did not have the option of seeking opinion or input from another anaesthetic colleague. The DHB agreed that no other anaesthetist was available at that time.

89. Dr B advised HDC that he does not recall Dr C making any specific reference to the level of Mrs A's discomfort or pain during the surgery. In addition, he noted that post surgery Mrs A was comfortable and not requiring any additional pain relief which, in his view, suggests that the epidural was still effective. In response to the provisional opinion, Mrs A said that Dr B could not have assessed that she was comfortable, as he was seated on the other side of the room. Mrs A said that Dr B did not appear to be monitoring her pain levels closely at any stage, and that the pain relief wore off early on, but that that was ignored.

Conclusion of surgery

90. After the surgery was concluded, Dr C wrote on the operation record: "[A]naesthesia was sub optimal for LSCS, contributed to difficulty at delivery of VX, was bending her legs & very uncomfortable. Difficult IPV as no liquor & short cord."

91. Ms D stated that at the completion of the operation when Mrs A was ready for transfer to recovery, Dr B commented that he was now about to be involved in a "real" operation. Mrs A also stated that Dr B discussed that he had "real surgery" after this one, and that she responded, "This feels pretty damn real to me." Mrs A said she felt as though Dr B was belittling the surgery she was having.

92. Mrs A said that she was moved onto another bed and taken towards the theatre exit, where the "team of assistants and midwives" were going to take out the lines in her back. She said that Dr B told them to leave the lines in and to wheel her away.

93. Mrs A stated: "I felt like he couldn't get me out of there fast enough so he could start his real surgery. I heard the midwives and assistants explaining to him that they needed to take the lines out while we were still in theatre, and [Dr B] did not seem happy about this."

94. In response to the provisional opinion, Dr B said he does not recall referring to real surgery, and cannot think of a situation where he would make such a comment. He stated that if a working epidural catheter is in place, he always leaves it in as he considers this provides much better analgesia following surgery than giving intravenous or oral opioids.[22] He also stated: "I therefore leave it up to the midwives to make the decision about removal of the epidural as they are the ones who will be providing ongoing care to the patient."

Recovery

95. Dr C said that she saw Mr and Mrs A in recovery, and that Mrs A again apologised for complaining about her pain during the LSCS. Dr C said she told Mrs A that if she was feeling pain she was right to voice it, and it did not require an apology. Dr C stated that she congratulated the couple on the birth of their baby and informed them that she would meet with them the following morning to discuss the sequence of events and provide advice for further pregnancies.

96. Dr B stated that he last saw Mrs A in the delivery room and, as she and her baby were fine, he wished them all the best and left. In response to the provisional opinion, Mrs A said that this conversation did not take place, as he left immediately after the argument in theatre about the epidural being left in her back.

97. Dr B stated that that was the last time he saw Mrs A or heard anything about her until he became aware of her complaint.

Follow-up

98. Dr C said that she met Mr and Mrs A, Ms D and student midwife Ms E the following morning. Mrs A was well. Dr C said that she discussed the sequence of events leading up to the LSCS and the difficulty with delivering the baby. She advised Mrs A that owing to the extension of the uterine incision into the upper uterine segment, she would need to be delivered by way of elective LSCS for all future pregnancies.

99. Dr C said that Mrs A shared her concerns and dissatisfaction with the anaesthesia, and asked whether it was normal for women to experience that level of pain during surgery. Dr C replied that the pain was not normal, and advised Mrs A that she was within her rights to complain in writing.

100. Dr C said that she did not see Mrs A subsequently, but did contact Ms D on 16 February 2013 and was advised that Mrs A was recovering well.

[22] Analgesics used to manage moderate pain.

Subsequent events

101. Mrs A was discharged home on 19 February 2013. She advised that in the weeks following her LSCS, she required much assistance and experienced a lot of pain. She stated that she feels robbed of her son's arrival because of the pain she experienced, and is upset that if she has another child it has to be by Caesarean section due in part to the extended uterine incision. In response to the provisional opinion, she said that for months after the birth she had nightmares, and is terrified of having another child. She has been seeing a counsellor to try to overcome her fear of childbirth.

102. Mrs A further stated that she wants to be sure that Dr B does not make other patients feel belittled and unimportant. In response to the provisional opinion, Mrs A said that Dr B showed her no respect, empathy or understanding.

103. At the time of events, the DHB and Dr B were not made aware of Mrs A's concerns. Mrs A stated that she was advised by the health professionals involved to contact HDC directly.

Further information — Dr B

104. Dr B noted that it was regrettable that he was not made aware of Mrs A's concerns and given the opportunity to discuss these with her at an early stage, as he would have welcomed the opportunity to provide her with a more comprehensive explanation of the decisions made concerning her anaesthesia.

105. Dr B stated that he has always sought to communicate with patients with respect, empathy and understanding, and tries to place patients at ease by explaining their options and what is involved. Dr B apologised to Mrs A if he had said anything that led her to believe he was not completely focused on her care. He advised that he has reflected on Mrs A's comments and will make a more concerted effort to improve his communication with patients.

106. Dr B stated that he was not aware that Dr C intended to make a larger incision than usual to deliver the baby. He said he became aware of that only when he read the surgical notes afterwards, and said: "Had I known that this was the intention at the time then I may well have changed my management plan."

107. In relation to documentation, Dr B said that he now makes it his practice to document conversations held with patients concerning any increased levels of discomfort or pain and discussions about alternative forms of analgesia. Dr B said that in Mrs A's case he decided that the risks associated with conversion to a GA outweighed the potential benefits. He stated: "I accept that another anaesthetist might have taken a different decision if faced with a similar set of circumstances."

108. Dr B also advised that he has noted the comments of HDC's expert anaesthetist advisor, Dr Love, with regard to the recommended dose of lignocaine, and has adopted his recommendation.

Further information — Dr C

109. Dr C advised that if she found herself in a similar situation in the future she would certainly be more assertive and explicit of her expectation of every member of the surgical team, and might specifically request a GA or other intervention in order to avoid any ambiguity. She stated that if operating in a unit where she could request involvement of another anaesthetic colleague, she would do so. In addition, she said that in future if a patient voices concern about another colleague or health personnel she would, with the patient's consent, inform the colleague of the concerns and give the colleague the opportunity to address them with the patient directly.

The DHB

110. The DHB advised that this complaint has highlighted "the need for locums and independent midwifes to receive more in depth training on the DHB's process for reporting incidents as part of their orientation".

111. The DHB was asked about its recommended dosage for lignocaine when administered for epidural use and top-ups. The DHB advised that the head of the department of anaesthesia, has stated: "I personally, and most of my colleagues in [the] Hospital do not use Lignocaine top-ups for epidurals, so there is no written protocol of this kind of top-up."

112. The DHB advised that a specialist anaesthetist will be working with the DHB anaesthetists to review all policies and protocols for epidural anaesthesia, and the DHB plans to promote the Obstetric Registrar Manual of another DHB, as a resource book for their anaesthetists.

113. The DHB provided a report from the specialist anaesthetist and a DHB obstetrician, which includes the following comments:

- "Death in association with caesarean section for a fit and healthy woman is very rare but not unknown, in New Zealand, and often the decision to include this in the discussion will be informed by the patient's and their family's reaction to the earlier parts of the consent discussion."

- "[L]ight-hearted discussion whilst attending to the clinical necessities … must be finely judged and can be misunderstood. … Some of [Dr B's] comments … may have been ill-judged in the circumstances."

- "[I]t can be difficult to differentiate between an excessive reaction to pressure with an adequate regional block or pain due to an inadequate one. This distinction is somewhat arbitrary. … It appears incontestable that the patient was distressed with pain in this case and that this contributed to some of the difficulties encountered during the procedure and thus the subsequent complications."

- "If the woman is experiencing obvious pain and obstetric urgency exists, prompt conversion to a GA is appropriate. [However], other strategies that may be used if the mother is agreeable and sufficiently well informed are: adding nitrous oxide, epidural top-up, epidural opioid, intravenous opioid if the baby is already

delivered, direct infiltration of the peritoneum with local anaesthesia by the obstetrician, or intravenous ketamine."

- "On reading the clinical notes, there was no obvious contraindication to general anaesthesia."
- "[I]t is surprising that additional measures were not taken (after the delivery)."
- "Maybe the [o]bstetrician should have been more strident in requesting improved analgesia, but ultimately that remains the responsibility and decision of the anaesthetist."

114. The DHB stated that from the records it appears that Mrs A's pain commenced prior to the uterine incision and continued after delivery and, at those times, it is possible to offer GA safely if it becomes apparent that the epidural is not completely effective.

Responses to provisional opinion

115. Responses were received from Mrs A, Dr B, Dr C and the DHB. These have been incorporated above as appropriate. In addition, the following submissions were made.

Dr B

116. Dr B stated that he has "canvassed the views of fellow anaesthetists who have confirmed that they too have faced situations where they have had to coax a patient through temporary discomfort (but on other occasions, subject to obtaining the patient's consent, they might have converted to a GA and/or provided alternative analgesia/pain relief)".

117. Dr B said that it was a high pressure situation in light of the deceleration of the fetal heart rate, and he "had to weigh up the level of discomfort being experienced by [Mrs A], the options available, the effect of those options on the timeliness of the surgery, the risks associated with those options and to take account of [Mrs A's] wishes".

118. Dr B said that unfortunately there is no one method to test effectiveness of an epidural block that is 100% accurate, and epidural blocks almost always work slightly better on one side than the other. Dr B also said: "[I]t is evident that the block was effective after surgery had commenced. [Mrs A] reported not feeling anything at this stage."

119. Dr B also submitted that Dr C did not bring Mrs A's tight abdominal muscles to his attention until after the surgery, and failed to bring to his attention her concern that the block was wearing off.

120. Dr B further submitted that if the DHB had had appropriate written protocols for lignocaine when administered for epidural use and top-ups, then he might have administered an increased dose of lignocaine in light of the protocols.

Dr C

121. Dr C submitted that she is being unfairly censured as a consequence of another clinician's conduct, which put her in an unfamiliar and uncomfortable position.

The DHB

122. The DHB submitted that Dr C and Dr B were very familiar with the staff and facilities at the hospital, having provided locum services since 2003 and 2011 respectively. It has no record of the orientation provided to Dr C and Dr B, but believes they would have been orientated by a senior doctor in their specialties and would have been made aware of DHB policies and practices specific to the hospital.

123. The DHB accepts the recommendations in this opinion and expressed regret that Mrs A had a distressing and painful experience while in its care.

Opinion: Dr B

Introduction

124. In 2013, Mrs A was about to undergo an emergency LSCS. She was understandably anxious about the surgery and concerned about the welfare of her baby.

125. I am concerned about the care provided by Dr B, and also his manner towards Mrs A. I note that the Australian & New Zealand College of Anaesthetists' (ANZCA) publication *Code of Professional Conduct*[23] provides:

> "• An anaesthetist should take all reasonable steps to manage pain and suffering as promptly and as effectively as possible.
>
> …
>
> • Good patient care requires a range of clinical, interpersonal and management skills. The nature of the anaesthetist–patient relationship is critical to quality of care and to the outcome of anaesthesia. Anaesthetists should pay attention to all aspects of this relationship."

126. The *Code of Professional Conduct* also states that "[c]ommunication begins with listening to and respecting the views of others. Communication involves empathy, honesty and respect."[24] This Code also requires that anaesthetists act collaboratively and cooperatively with integrity, honesty and respect, without prejudice, in a spirit of cooperation with all those involved in the provision of optimal patient care.

127. In my view, Dr B let down Mrs A in a number of respects, as follows.

Preoperative contact — Adverse comment

128. When Dr B met Mrs A, he enquired about her relevant medical and family history and discussed anaesthetic options, and associated risks and complications. He explained that he was intending to top up the epidural that had been inserted previously, and Mrs A agreed to that plan.

[23] ANZCA, *Code of Professional Conduct*, October 2007. Available from www.anzca.org.nz.
[24] As above.

129. Dr B then explained the risks and complications associated with a GA in case there was a need to convert to a GA during the procedure. He stated that he explained the complications, including: anaphylaxis, aspiration, injury to teeth, vocal cords and larynx, and death. Dr B stated that he did not believe that he focused on death as a complication, but simply mentioned it as a major but rare complication, as part of obtaining Mrs A's informed consent.

130. Mrs A stated that the discussion about people dying in the operating theatre made her feel anxious and afraid, so Ms D told her that these were unlikely scenarios and that Dr B was just letting her know in order to cover all bases. Mrs A said that Dr B then stated that the risks were very real, and not all that unlikely, which made her extremely uneasy.

131. Ms D supported Mrs A's account and stated that she felt Dr B's emphasis on death was excessive and, when she tried to introduce some perspective regarding the extremely low risk, Dr B rejected her comments and reiterated the risk of death under a GA.

132. My expert advisor, anaesthetist Dr Love, advised me:

> "It is unusual in New Zealand practice for death to be mentioned as a possible complication of anaesthesia for a healthy woman having an emergency caesarean section."

133. I accept that death in association with a LSCS for a fit and healthy woman is very rare, but not unknown, and that it may be appropriate, as part of a discussion of the risks and benefits of the procedure, to mention the possibility of death. However, I note that Mrs A's anxiety and distress were recognised by Ms D, who attempted to reassure her. In my view, it was ill-judged of Dr B to then reiterate the risk of death under GA. I consider that this action was insensitive and increased Mrs A's anxiety about the surgery.

Effectiveness of anaesthesia — Breach

134. Dr B advised that he topped up the epidural catheter with 10ml of lignocaine 1%, which he considered would guarantee a sufficient block.

135. Dr Love advised that in these circumstances lignocaine is usually administered as a 2% solution with adrenaline, at a dose of 10–20ml depending on patient size and the current quality of the block. He noted that giving lignocaine without adrenaline limits the dose to 3mg/kg, while with adrenaline the maximum dose is 7mg/kg. He advised that the alternatives are ropivacaine 0.75% or bupivacaine 0.5%. Dr Love stated that the dose of anaesthetic that Dr B administered was low, and that this view is supported by the medical literature.

136. Mrs A stated that she advised Dr B that she could feel the staff pinching her stomach and, when he conducted the ice test, she advised him that she could still feel the cold on her left side. Despite this, Dr B advised Dr C to begin the surgery in two minutes' time.

137. Dr B stated that, although rare, some patients have reported a colder sensation on the skin when the epidural catheter is taking effect, so an important sign to look out for is a change in sensation. He stated that, based on his assessment of Mrs A, he was of the opinion that the block was operative to a T4 level, and noted that when the surgery first began, Mrs A did not feel anything. He stated that that factor demonstrates that the block was effective at that time.

138. In response to the provisional opinion, Dr B said that there was no one method to test effectiveness of an epidural block that is 100% accurate, and epidural blocks almost always work slightly better on one side than the other. Dr B also said: "[I]t is evident that the block was effective after surgery had commenced. Mrs A reported not feeling anything at this stage."

139. However, Dr Love advised that Mrs A's comment that she could not move herself onto the operating table suggests a relatively dense block, but this appears to have been one sided, as she could still feel the ice on her left side and could feel the staff pinching her. He advised that it would be unusual for a patient with an adequate anaesthetic block to feel those sensations, which suggests that Dr B's assessment of the block as being to T4 bilaterally was incorrect.

140. I note that it would have been possible to assess the effectiveness of the analgesia and discuss the options with Mrs A prior to surgery commencing. In my view, as Mrs A had said that she could feel the staff pinching her, and could feel cold on her left side, the operation should not have proceeded without ensuring that adequate anaesthesia had been achieved. Dr Love advised that the options at that stage were:

- The epidural catheter could have been examined and, if more than 3–4cm was in the epidural space, it could have been withdrawn slightly, and a further dose of local anaesthetic given. The second dose could have been given with Mrs A lying in the lateral position on her inadequately blocked side.
- The epidural catheter could have been removed and a spinal anaesthetic administered.
- Mrs A could have been offered a GA, which would have caused a delay of 3–5 minutes and would have posed a very small risk to her and the baby.

141. Dr Love advised that the dose of local anaesthetic was not adequate for the Caesarean section, and strategies to correct the situation were not employed. In his view, this was a high moderate to low severe departure from accepted standards.

142. In my view, the failure to ensure adequate anaesthesia prior to the operation commencing was suboptimal. Accordingly, I find that Dr B failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1) of the Code.

Anaesthesia/analgesia during surgery — Breach

Prior to delivery of baby

143. Dr C said that, at the point of entry to the peritoneal cavity, Mrs A complained of pain, and that it would have been safe for her to stop operating until Dr B provided adequate analgesia. She stated: "I did stop and bring [the pain] to [Dr B's] attention. I

was assured by him that I could continue with sugery." Dr C said that she interpreted his reassurance as indicating the absence of any pain.

144. Dr C stated that she relied on the professional opinion of a consultant anaesthetic colleague and his judgement of the level of Mrs A's discomfort.

145. I accept the accounts of Dr C and Mrs A that Dr C asked Mrs A whether she worked out a lot, as her muscles were very tight, and that Mrs A replied that she did not work out. I am concerned that Dr B did not hear this exchange as, in response to the provisional opinion, he stated that he was not aware of Mrs A's tight abdominal muscles until after the surgery and that, had he known at the time, he might have changed his management plan.

146. Dr Love advised that the fact that Mrs A's abdominal muscles were tight suggests that the "motor blockade" provided by the initial dose of ropivacaine had partially worn off. He also advised that the block height appears to have been inadequate, as a block to T4 would have prevented pain when Dr C dissected superiorly under the rectus sheath.

147. Dr Love stated that the options at that stage included:

- For Dr B to ask Dr C to infiltrate local anaesthetic in the area where pain was being felt. That would require a surgeon who was familiar with the technique, and the dose of local anaesthetic would be limited by the amount already given, as too large a total dose of local would risk a toxic reaction.

- If Mrs A wanted to remain awake for the birth of her baby, to offer her analgesia either in the form of self-administered nitrous oxide 50% in oxygen, or small amounts of a short-acting opioid intravenously. However, intravenous opioids would be relatively contraindicated if no paediatrician was available to resuscitate the baby.[25]

- For Dr B to offer Mrs A a GA. If that was accepted, Dr C could have ceased further surgery until the anaesthesia was induced, the effect of which would have been felt almost immediately. Once surgery stopped, the pain would have reduced and the delay would have been for only a few minutes.

- To ask Dr C to cease operating and provide another dose of epidural local anaesthetic. Dr Love stated that it was unlikely that a very high block would have resulted, given the reported muscle tone and pain level.

148. Dr Love advised that the best choice would have been to convert to a GA if Mrs A agreed as, in his view, there is no evidence that a GA would have been more risky to her and her baby at this time than a GA at the commencement of the procedure. He advised that the reasons given by Dr B for not converting to a GA are not reasonable, because the delay would have been brief, and an anaesthetist should be prepared to convert to a GA during every Caesarean section.

[25] A paediatrician was available at that time.

149. Dr Love advised that to fail to inform Mrs A of the available options and take appropriate steps to alleviate her pain was a high moderate to low severe departure from accepted standards.

150. Dr C continued with the surgery. Both Mrs A and Dr C stated that once Dr C incised the uterus and attempted to deliver the baby, Mrs A complained further of pain and started lifting both her legs. I accept the evidence that Mrs A was moving her legs and complaining of pain.

151. Dr Love stated that the movement of Mrs A's legs suggests that the block was inadequate. He considers that Dr B's reasons for not taking action to alleviate Mrs A's pain are not correct and, although a woman can sometimes move her toes, she should experience no pain. Dr Love said that, at that stage, Mrs A should have been offered a GA or, if she refused a GA, inhalation analgesia or IV opioids, and that Dr B's failure to do so was close to a severe departure from accepted standards.

152. I note that the DHB also stated that if a woman is experiencing obvious pain and obstetric urgency exists, prompt conversion to a GA is appropriate although, if the mother is agreeable and sufficiently well informed, other strategies such as adding nitrous oxide, epidural top-up or epidural opioid may be used.

153. Dr Love advised that there were no indications in Mrs A's history or from her examination that there were concerns with regard to the safety of a GA, and he considered that most anaesthetists would have offered conversion to GA or a further epidural dose of local anaesthetic agent.

154. Dr B stated that he did not consider that Mrs A was in any significant discomfort or was experiencing any sharp pain prior to the incision in the uterus. He stated that by the time Mrs A was reporting increased discomfort, just prior to delivery of the baby, an epidural top-up would have taken too long to become effective. In response to the provisional opinion, Dr B stated that he discussed conversion to a GA and other options with Mrs A at that time. However, there is no record of such a discussion, and Mrs A said that there was no "discussion", as Dr B said only that a GA would harm the baby.

155. Mrs A said that Dr B told her that she was not feeling pain but, rather, she was feeling pressure, and that a GA would not be good for the baby. She heard Dr B say that she would be in a lot more pain if she had the baby naturally, and that any more medication would harm the baby.

156. I agree with Dr Love's observation that it appears that Dr B did not accept Mrs A's experience of pain. In my view, once Mrs A expressed her pain, Dr B should have offered her either a conversion to GA or a further epidural dose of local anaesthetic agent. I also accept Dr Love's advice that it would have been appropriate to improve the pain relief at each stage during the surgery.

Post delivery of baby

157. Mrs A advised that she was in a lot of pain as the placenta was delivered and the incision sutured. She said that the process felt as if it lasted forever. Mrs A advised Dr

C, Ms D and Ms E of the extent of her pain. Ms D said that she asked Dr B for more pain relief for Mrs A during the closure of her incision, as she could see that the level of discomfort Mrs A was experiencing was excessive. Ms D stated that Dr B declined to administer extra pain relief, shrugged his shoulders, and commented, "It will be over soon." In response to the provisional opinion, Dr B stated that he is "absolutely sure" he would not have acted in the manner suggested.

158. Dr C also stated that Dr B did not seem concerned about Mrs A's complaints of pain. Dr C said that at one point she halted the procedure, raised herself on her toes so she could see Dr B, who was sitting in the far corner of the operating theatre, and mentioned that Mrs A seemed to be in a lot of pain. Dr B reassured her by saying that Mrs A was "fine and she was feeling pressure". Dr C advised that she decided that it was in Mrs A's best interests to complete the procedure as quickly as possible, as the alternative would have been a potential confrontation with Dr B, which would have prolonged the surgery and Mrs A's pain.

159. The DHB advised that it was surprising that additional means were not taken after delivery to relieve Mrs A's pain. The DHB noted that an intravenous opioid, direct infiltration of the peritoneum with local anaesthetic by the obstetrician, and intravenous ketamine were further options available post delivery of the baby, along with conversion to GA and epidural top-up.

160. I accept the evidence of Mrs A, Ms D and Dr C that Mrs A was in pain during the procedures after the birth of her baby. I also find it surprising that Dr B did not take additional measures to relieve Mrs A's pain. In my view, this was completely unsatisfactory and, as stated by Dr Love, once Mrs A indicated that she was in pain, "[most] anaesthetists would have offered conversion to general anaesthesia, or a further epidural dose of local anaesthetic agent".

161. Dr Love stated that it is not correct to say that it was risky to give Mrs A a GA at that stage, as there were no longer any concerns about the risk to the baby, and that Dr B could have given Mrs A IV opioids for pain, and IV midazolam or diazepam to relieve her anxiety. Dr Love advised that the GA could have been administered while the surgeon continued operating so that there would be no delay, and that to fail to take appropriate steps or to inform Mrs A of the available options was a high moderate to low severe departure from accepted standards.

162. Dr B stated that had his discussion with Mrs A led him to believe that she would have benefited from a conversion to GA or an alternative form of analgesia, he would have proceeded with the conversion. Mrs A recalls that Dr B told her that a conversion to GA or any further medication would harm the baby, and that an epidural top-up would have taken too long to be effective. In my view, the discussion with Mrs A in regard to her pain was limited and inadequate.

163. It is clear that Dr B failed to respond appropriately to the concerns expressed by Mr and Mrs A, Ms D and Dr C. He seriously underestimated the extent of Mrs A's pain. I find his actions following delivery of the baby to be seriously suboptimal. I accept Dr Love's assessment that "[Dr B] failed at every step and did not take the steps that other anaesthetists would take".

Conclusion

164. Mrs A had the right to be informed about the options available to her, including an assessment of the expected risks, side effects and benefits of each option. Dr B's provision of information to Mrs A fell seriously short of accepted standards. Accordingly, I find that Dr B breached Right 6(1)(b) of the Code.

165. Dr B's failures to improve the anaesthesia/analgesia provided to Mrs A throughout the surgery were also seriously suboptimal and a departure from accepted standards. By failing to provide sufficient anaesthesia/analgesia to Mrs A during the delivery of the baby and during the suturing of the abdominal incision Dr B failed to provide services to her with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Manner — Breach

166. In my view, Dr B demonstrated a lack of respect for Mrs A a number of times during his contact with her. Mrs A stated that prior to the surgery, Dr B "joked around" and she found it hard to tell when he was being serious.

167. Dr B stated: "I always approach patients with the respect they deserve. In stressful situations where the patient is very nervous and anxious, I try to lift their spirit a little bit by using words that might ease their mind a little bit."

168. Mr A expressed concern to Dr B that his wife was in pain. Mrs A said that Dr B replied that she would be in a lot more pain if she had the baby naturally, and "discussed again that giving [me] more medication would harm the baby and we didn't want that did we?". Mrs A said Dr B made her "feel bad" about voicing her pain, as she felt that by asking for help she was actually ready to hurt her baby, which made her more upset.

169. When Mrs A was upset because she was in pain, Dr B said that she was not feeling pain and it was just pressure. I accept Ms D's evidence that she asked Dr B for more pain relief for Mrs A during the closure of her incision, as she could see that the level of discomfort Mrs A was experiencing was excessive, but Dr B declined to administer extra pain relief, shrugged his shoulders, and commented, "It will be over soon."

170. Ms D stated that at the completion of the operation when Mrs A was ready for transfer to recovery, Dr B commented that he was now about to be involved in a "real" operation. Mrs A confirmed that Dr B discussed that he had "real surgery" after this one. Mrs A said she felt as though Dr B was belittling the surgery she had undergone. I accept the evidence that Dr B referred to subsequent "real" surgery. Dr Love advised that in his view such comments are inappropriate.

171. As stated, the ANZCA's *Code of Professional Conduct* states that "[c]ommunication begins with listening to and respecting the views of others. Communication involves empathy, honesty and respect." In my view, Dr B's communication with Mrs A displayed a lack of sensitivity, and he treated Mrs A with a striking lack of empathy. Accordingly, I find that Dr B failed to comply with professional standards and, accordingly, breached Right 4(2) of the Code.

Summary

172. It was ill-judged of Dr B to reiterate the risk of death under a GA. The repetition of the risk of death was insensitive and increased Mrs A's anxiety about the LSCS.

173. Dr B's failure to ensure that the anaesthesia was sufficient prior to the LSCS operation commencing was suboptimal and, accordingly, Dr B failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1) of the Code.

174. Mrs A had the right to be informed about the options available to her, including an assessment of the expected risks, side effects and benefits of each option. Dr B's provision of information to Mrs A fell seriously short of accepted standards. Accordingly, I find that Dr B breached Right 6(1)(b) of the Code.

175. Dr B's actions and failures to ensure that the anaesthesia/analgesia was adequate during the delivery of the baby, and during the suturing of the abdominal incision, were suboptimal and a breach of accepted standards. Accordingly, Dr B again failed to provide services to Mrs A with reasonable care and skill and breached Right 4(1) of the Code.

176. Dr B's communications with Mrs A displayed a lack of sensitivity, and he treated Mrs A with a striking lack of empathy. Accordingly, I find that Dr B failed to comply with professional standards and breached Right 4(2) of the Code.

Opinion: Dr C

177. Mrs A was admitted to hospital in spontaneous labour. Her progress in labour was slow, so her LMC, Ms D, discussed her management with Dr C. A plan was made for epidural analgesia and Syntocinon augmentation of the labour. At that time, the fetal CTG was recorded to be normal.

178. An epidural anaesthetic was duly arranged and the Syntocinon augmentation began at 4.37pm. At 5.30pm there was a fetal heart rate deceleration to below 80bpm, which continued for over five minutes. Dr C examined Mrs A and recommended an emergency LSCS. My expert obstetrics and gynaecology advisor, Dr Ian Page, informed me that the decision to advise an LSCS at that time was appropriate.

LSCS

179. The operation began and, initially, Mrs A did not feel any pain. Dr C has provided conflicting accounts of when Mrs A started feeling pain. Dr C stated in response to the complaint: "After I felt there was adequate room, I entered the peritoneal cavity. [Mrs A] complained of pain but I was assured by [Dr B] that I could continue with the surgery." In response to the expert advice, Dr C stated that she agreed with Dr Page that at the point of entry to the peritoneal cavity "where the pain was noticed" it would have been safe to stop operating while adequate anaesthesia was obtained. She stated: "I did stop and bring this to [Dr B's] attention. I was assured by him that I

could continue with surgery." Dr C said that she interpreted his reassurance as indicating the absence of any pain, and so had no reason to discontinue the surgery.

180. Mrs A stated that she felt more than pressure and thought she felt pain, but Dr B ignored her concerns.

181. Dr Page advised:

> "At the point in the procedure (entry to the peritoneal cavity) where the pain was noticed it would have been safe for [Dr C] to stop operating and ask [Dr B] to ensure adequate anaesthesia was obtained."

182. Dr Page viewed the failure to stop operating and ensure adequate anaesthesia was obtained as a departure from accepted standards. However, I accept that Dr C was reassured by Dr B's response that she could continue with the surgery.

183. Dr C continued with the operation. Mrs A was unable to lie still because of the pain, and kept raising her legs. The theatre staff restrained Mrs A's legs to allow Dr C to proceed and complete delivery of the baby.

184. Dr Page noted that the delivery was difficult owing to a number of factors, including Mrs A's abdominal muscles being tight and her being unable to lie still, and that, throughout the process, Mrs A complained of pain. Dr Page advised that once the uterus was opened, it was not appropriate to stop, and so Dr C was correct to carry on despite it being very painful for Mrs A. Dr Page advised: "Clearly (from [Mrs A's] complaint and [Dr C's] observations) the analgesia for surgery was not adequate here."

185. Dr Page advised that the extension of the uterine incision into the upper segment of the uterus was not caused by Dr C's lack of skill or technique.

Post-birth procedure

186. After the baby was born, Dr C completed the operation, but noted that Mrs A continued to complain of pain. Dr C stated that, at one stage, Ms D made eye contact with her and told her that Mrs A was in pain, so Dr C asked Ms D to inform Dr B, who was in theatre but not beside Mrs A, of the pain.

187. In response to the provisional opinion, Dr C stated that she found herself in a difficult situation. She said her key objective was to stop undue blood loss, and she "did not have sufficient time to devote towards convincing an obstructive colleague to heed the requests of a patient who was in pain". She said she believes her actions minimised the blood loss experienced by Mrs A.

188. Dr Page advised that the decision to complete the operation despite inadequate analgesia for Mrs A would be viewed with mild to moderate disapproval. He stated:

> "[A]t that point there was no need to avoid administering suitable analgesic drugs to [Mrs A], including a general anaesthetic if necessary. In addition, I think [Dr C]

should have communicated her concerns about the inadequate level of analgesia for [Mrs A] directly to [Dr B], rather than asking the midwife to do so."

189. After having seen Dr Page's advice, Dr C stated that she clearly recalls that at one point she halted the procedure, raised herself on her toes so she could see Dr B, who was sitting at the far corner of the operating theatre, and mentioned that Mrs A seemed to be in a lot of pain. She stated that she was reassured by Dr B that Mrs A was "fine and she was feeling pressure".

190. Dr C wrote on the operation record: "[A]naesthesia was sub optimal for LSCS, contributed to difficulty at delivery of VX, was bending her legs & very uncomfortable. Difficult IPV as no liquor & short cord." The day after the birth, Dr C told Mrs A that the pain she had experienced was not normal.

191. In my view, it was not acceptable to continue to complete the surgery while Mrs A was in significant pain. Dr C was the responsible clinician during this surgery and, once she was aware of Mrs A's pain, she should have ensured that appropriate analgesia was obtained. However, I note Dr Love's advice that surgeons and anaesthetists are each responsible for their own area, and that a surgeon could make suggestions but could not instruct the anaesthetist. Dr Love also commented that Dr C could have asked a staff member present to call in another anaesthetist. However, Dr C and the DHB both stated that no alternative anaesthetist was available as it was after hours.

192. Dr C said that she thought it was in Mrs A's best interests to complete the procedure as quickly as possible, as the alternative would have been a potential confrontation with Dr B, which would have prolonged the surgery and Mrs A's pain. In response to the provisional opinion, Dr C submitted that it would have amounted to professional misconduct if she had confronted Dr B, and it would have made Mr and Mrs A feel insecure if health professionals had argued in the theatre.

193. I disagree. The patient comes first. Dr C knew her patient to be in pain. As a responsible clinician, she should have spoken and acted with more authority. I note that Dr C intends to be more assertive and explicit should a similar situation arise in the future.

194. I appreciate that Dr B and Dr C were both locums with a limited professional relationship. However, I have previously commented on the need for clinicians to advocate on behalf of patients,[26] and for institutional providers to normalise a culture where such actions are accepted and expected.

195. I note that Dr C advised that if she found herself in a similar situation in the future she would be more assertive and explicit about her expectation of every member of the surgical team, and she might specifically request a GA or other intervention in order to avoid any ambiguity. She stated that if operating in a unit where she could request involvement of another anaesthetic colleague, she would do so.

[26] Opinion 09HDC01592 (31 January 2012), available at www.hdc.org.nz.

196. I am concerned that Dr C was aware that Mrs A was expressing that she was in pain at a number of points:

- At the point of entry into the peritoneal cavity Dr C believed that Mrs A was complaining of pain, but she was reassured by Dr B that this was not the case and she could continue with the surgery.

- During the delivery Mrs A complained of pain, was unable to lie still and kept raising her legs. The delivery was difficult, in part, because of the movement of Mrs A's legs and the tightness of her abdominal muscles.

- After the delivery, during the closure of the incision, Mrs A continued to complain of pain. When Ms D told Dr C that Mrs A was in pain, Dr C asked her to inform Dr B of Mrs A's pain but continued to complete the operation.

197. I further note that Dr C noted on the operation record that the anaesthesia was suboptimal for LSCS and contributed to the difficulty during the delivery and, the day after the birth, Dr C told Mrs A that the pain she had experienced was not normal.

198. In my view, Dr C should have spoken and acted with more authority when she thought Mrs A was feeling pain and, by continuing to operate on Mrs A after delivery of the baby and after realising that she was in pain, Dr C failed to provide services to Mrs A with reasonable care and skill. Accordingly, I find that Dr C breached Right 4(1) of the Code.

The District Health Board — Other comment

199. A hospital should have effective systems in place, and ensure that its staff are aware of the systems and adequately trained and supported to comply with them. Both Dr C and Dr B were working as locums. As such, they did not have an established relationship with one another and with the team.

200. DHBs need to ensure the effective orientation of locums. As I have stated previously:[27]

> "It is important to ensure that new locum doctors are informed of practice processes they are likely to be unfamiliar with, specific to that rural area. This should occur before they are expected to work in an emergency or after-hours setting."

201. The DHB submitted that Dr C and Dr B were very familiar with the staff and facilities at the hospital. It has no record of the orientation provided to Dr C and Dr B, but believes they would have been orientated by a senior doctor in their specialties.

[27] Opinion 10HDC01344 (20 June 2013), available at www.hdc.org.nz.

202. The DHB and Dr B were not made aware of Mrs A's concerns at the time. Dr Love noted that there was no attempt to arrange a meeting between Dr B and Mrs A after the event, and that such a meeting may have assisted her with her distress. Dr C said that in future if a patient expresses concern about another clinician she will, with the patient's consent, inform the colleague of the concerns and give the colleague the opportunity to address them with the patient directly.

203. The DHB advised that this complaint has highlighted the need for locums and independent midwives to receive more in-depth training on the DHB's complaint process as part of their orientation. I agree that all staff should be aware of complaint processes and the benefits such processes may have for patients and clinicians in obtaining early resolution of complaints.

204. The DHB advised that as most anaesthetists at the hospital do not use lignocaine top-ups for epidurals, there is no written protocol for that type of top-up anaesthetic. There is no policy or protocol for epidural anaesthesia directed to anaesthetists.

205. However, I note that the DHB intends to review all policies and protocols for epidural anaesthesia, and plans to promote another DHB's Obstetric Manual as a resource book for their anaesthetists.

206. Furthermore, Dr C advised that when she requested the use of GTN spray there was a delay while the spray was located in the theatre. In my view, this was unsatisfactory. I accept that locum staff may not have been aware of the layout of the theatre; however, the nursing staff present should have known where the GTN spray was located.

207. I consider that the DHB should ensure that all staff, including locums and self-employed midwives, are adequately trained and oriented to the DHB's policies and processes, and that adequate policies are in place.

Recommendations

208. Dr C has provided an apology to Mrs A. I recommend that the DHB and Dr B each provide an apology to Mrs A. The apologies are to be sent to this Office within three weeks of this report being issued, for forwarding to Mrs A.

209. I recommend that the Medical Council of New Zealand consider carrying out a competence review of Dr B.

210. I recommend that the DHB undertake the following:

- Review the orientation of locum staff.
- Report on its review of the policies and protocols for epidural anaesthesia.
- Audit the implementation and effectiveness of the policies and protocols for epidural anaesthesia and orientation of locum staff.

- Include in its training and induction for all staff, information that the practice of asking questions and reporting of concerns is expected and accepted from all members of the multidisciplinary team.
- Supply to HDC a copy of the training and induction material, and report on the steps taken to ensure there is a culture that encourages the behaviours these materials prescribe.
- Report to HDC the outcomes of these recommendations, within six months of the date of issue of this report.

Follow-up actions

211.
- Dr B 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.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Medical Council of New Zealand, and it will be advised of the names of Dr B and Dr C.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Australian and New Zealand College of Anaesthetists, and it will be advised of Dr B's name.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be sent to the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, and it will be advised of Dr C's name.
- A copy of this report with details identifying the parties removed, except the experts who advised on this case, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Addendum

212. The Director of Proceedings brought disciplinary proceedings against Dr B in the Health Practitioners Disciplinary Tribunal which resulted in the charge of professional misconduct being dismissed. The Director appealed the Tribunal's decision to dismiss the charge in the High Court. The High Court allowed the appeal and found the charge of professional misconduct established. Dr B applied for leave to appeal the High Court's decision in the Court of Appeal but his application was declined. The Director did not take HRRT proceedings against Dr B.

Appendix A — Independent anaesthetic advice to the Commissioner

The following expert advice was obtained from anaesthetist Dr Andrew Love:

"Thank you for asking me to comment on this case.

I understand that this is a preliminary report and that you will make a decision in due course as to whether the matter needs further inquiry.

I believe it does require further inquiry.

Sequence of events.

[Mrs A] is a 26 year old lady who lives in [town].

She was admitted to [the] Hospital on [date] in spontaneous labour.

At 16h30 an epidural was placed which provided excellent analgesia.

At 17h35, [Mrs A] was seen by the Obstetrician, [Dr C], after a prolonged deceleration of the foetal heart rate to 80 bpm. [Dr C] decided to proceed to caesarean section because of the slowing of the foetal heart rate.

[Dr B] was called to the operating theatre. He saw [Mrs A], took a history, examined her and provided information for consent.

[Dr B] gave a dose of 10ml of 1% lignocaine plain via the epidural catheter.

He then tested the efficacy of the epidural by moving ice along the sides of her torso.

In his report he notes [Mrs A] could not feel cold up to just below her breasts, approximately the fourth thoracic dermatome (T4 level) on both sides of her body.

[Mrs A] remembers that while she could not feel the cold on the right side, she could still feel cold on her left side just before the start of surgery.

This would suggest that the level of anaesthesia provided by the epidural was less than [Dr B] believed.

After incision [Mrs A] initially felt no pain. Once the peritoneal cavity was entered, she complained of significant pain. This was observed by both the surgeon and the midwife.

The surgeon also noted both [Mrs A's] knees were lifting involuntarily, the left more than the right.

[Mrs A] continued to complain of significant pain until her baby was delivered, and during closure of the incision.

From his letter, and the notes, it appears [Dr B] did not accept her experience of pain. He also noted that, because on his assessment [Mrs A] was insensitive to cold to the T4 level, it would be unsafe to offer additional epidural local anaesthetic, and that conversion to general anaesthesia would take too long.

Post operatively, [Dr C] and [Ms D] met with [Mrs A] to discuss her concerns with regard to the pain she experienced during the caesarean, and the reasons for the caesarean section.

You have asked three questions:

1. **Was it normal for [Mrs A] to experience the pain she did during the procedure?** — It was not normal for her to experience the degree of pain reported by [Mrs A], [Dr C] and [Ms D].
2. **Did [Dr B] respond appropriately to Mrs A's concerns of pain?** — I believe not. The options of conversion to general anaesthesia, a second epidural dose of local anaesthetic, or the use of inhalational analgesia appear not to have been offered to [Mrs A]. In my opinion these would have been appropriate options to offer.
3. **Did [Dr B] appropriately address the risks of the procedure to [Mrs A]?** — It would appear that both from [Mrs A's] and [Ms D's] description, the risk of death was over emphasised. It is unusual in New Zealand practice for death to be mentioned as a possible complication of anaesthesia for a healthy woman having an emergency caesarean section.

A few further points of concern:

1. There is no record that [Dr B] was informed the following day of the patient's concerns. It may have been helpful for the patient if [Dr B] had been informed the following day by the surgeon or the midwife about [Mrs A's] concerns about her experience, as he may have been able to visit her and explain the sequence of events.
2. The dose of lignocaine chosen for the epidural top up. Most anaesthetists who use Lignocaine, use a 2% solution with adrenaline in a dose of 10ml to 20ml, depending on patient size and the current quality of the block.(1,3)
3. The failure to offer conversion to general anaesthesia, or offer other modalities of analgesia. There are no indications in [Mrs A's] history or examination that there were concerns with regard to the safety of general anaesthesia in this case, and most anaesthetists would have offered conversion to general anaesthesia, or a further epidural dose of local anaesthetic agent. (2)

I would regard this as a moderate departure from normal practice.

I am happy to discuss the matter further.

Yours sincerely,

A J LOVE MB, BCh, FFA (SA), FANZCA
Specialist Anaesthetist, Waitemata District Health Board

References

1. Risk factors for failed conversion of labor epidural analgesia to cesarean delivery anesthesia a systematic review and meta-analysis of trials. International Journal of Obstetric Anesthesia. 2012; 21: 294–309.

2. Mechanisms and management of an incomplete epidural block for cesarean section Anesthesiology Clinics of North America 2003; 21: 39–57.

3. A randomised comparison of 0.5 percent bupivacaine with a lidocaine epinephrine fentanyl for epidural top-up for emergency caesarean section. International Journal of Obstetric Anesthesia, 2006; 15: 109–114."

Further expert advice

"Please review your preliminary advice based on this further information provided to you and comment generally on the standard and appropriateness of the care that [Dr B] provided to [Mrs A]. Please also comment specifically on the following matters using the four headings below:

Prior to surgery commencing

Prior to surgery [Dr B] advised that he topped up the epidural catheter with 10mls of lignocaine 1%.

Please advise if this was an adequate dose of anaesthetic in the circumstances of the amount of anaesthetic given previously and the type of surgery to be carried out.

[Mrs A] said she still felt sensation prior to surgery commencing. Please comment on the matters raised by [Dr B] in his response to that specific issue and whether it was reasonable in your view for [Dr B] to consider that the block was adequate for surgery to commence.

Please make any further comment on the care provided by [Dr B] prior to surgery commencing which you consider to be relevant.

Epidural administration of local anaesthetic drugs during labour is aimed at providing analgesia (relief of pain) rather than anaesthesia (total loss of sensation) which is required for surgery. The degree of anaesthesia present at the time of the arrival in theatre (5.55 pm) provided by the initial dose of local anaesthetic, and the constant infusion, would depend on the initial dose of local anaesthetic given (the volume and concentration) and the dose given by infusion, and any adjuvant drugs, such as fentanyl, given. This would be modified by the time elapsed from the administration of the original dose, and the duration of the infusion. The initial dose listed in the 'information gathered' was 10ml of 0.75% Ropivacaine. This would have provided a dense sensory and motor block.

It is not clear when the infusion was started, but it appears to have been running for about 1 hour by the time [Mrs A] arrived in theatre.

[Mrs A's] comment that she could not move herself onto the operating table suggests a relatively dense block, but this appears to have been one sided, as she could still feel

the ice on her left side, and she could feel the staff pinching her. Feeling these sensations would be unusual with an adequate anaesthetic block. This would suggest that [Dr B's] assessment of the block as being to T4 bilaterally was incorrect.

The dose of local anaesthetic [Dr B] administered was low and that view is supported by the papers I provided with my original opinion. Lignocaine is usually administered as a 2% solution, with adrenaline, in these circumstances. Giving lignocaine without adrenaline limits the dose to 3mg/kg, while with adrenaline the maximum dose is 7mg/kg.

Alternatives are Ropivacaine 0.75% or Bupivacaine 0.5%.

If there was concern about the development of a high block related to the previous doses of local anaesthetic, the dose could have been fractionated by giving a smaller initial dose, testing the block after 10 to 20 minutes, and then giving a second dose.

If a block was unilateral, as it appears to have been, a number of strategies could have been employed.

The epidural catheter entrance site could have been examined, and if more than 3 to 4 cm of the catheter was in the epidural space, it could have been withdrawn slightly, and a further dose of local anaesthetic given.

The second dose could have been given with the patient in the lateral position with the inadequately blocked side down.

A second option would be to remove the epidural catheter and administer a spinal anaesthetic.

A third option would be to offer [Mrs A] a general anaesthetic. That would have caused a delay of 3–5 minutes and would pose a very small risk to the baby and mother, unless there were maternal medical or anatomical abnormalities not mentioned in the report.

The decision on the best option would be based both on the surgeon's view of the urgency of the delivery of the foetus, and on the patient's preferences. The options should have been discussed with the mother and the surgeon. Some women will tolerate discomfort or even pain in order to be awake when their baby is born, but the options and the risks and benefits should have been discussed with her.

In the circumstances, the dose of local anaesthetic was not adequate for the Caesarean section, and strategies to correct the situation were not employed. This was a high moderate to low severe departure from accepted standards.

During surgery but prior to entry into the peritoneal cavity
[Mrs A] complained of discomfort/pain at the point of entry into the peritoneal cavity. Please advise in your view what action, if any, was appropriate at this point.
The surgeon commented that the abdominal muscles were tight, which suggests that the motor blockade provided by the initial dose of Ropivacaine had partially worn off. The block height also appears to have been inadequate as a block to T4 would have prevented pain when the surgeon dissected superiorly under the rectus sheath.

There was no mention in the surgeon's comments of any great urgency to deliver the foetus, and so I have presumed that surgery could have been delayed for a brief while to allow the patient's pain to be managed.

Options would include

a. Request the surgeon to infiltrate local anaesthetic in the area where pain was being felt. This would require a surgeon who was familiar with the technique, and the dose of local anaesthetic would be limited by the amount already given as too large a total dose of local anaesthetic would risk a toxic reaction.
b. If the patient wanted to remain awake for the birth of her child, offer analgesia either in the form of self administered nitrous oxide 50% in 50% oxygen, or small amounts of a short acting opioid intravenously. Intravenous opioids would be relatively contraindicated if there was no paediatrician available to resuscitate the baby.
c. Offer the patient a general anaesthetic. If this was accepted, the surgeon could cease further surgery until anaesthesia was induced, the effect of which would be felt almost immediately. Once surgery stopped the pain would reduce and the delay would only be for a few minutes. The reasons given by [Dr B] for not converting to a GA are not reasonable because the delay would be brief and an anaesthetist should be prepared to convert to a GA during every Caesarean section under regional anaesthesia.
d. Ask the surgeon to cease operating, and administer another dose of epidural local anaesthetic. I think it unlikely that a very high block would have resulted, given the muscle tone and pain reported.

The optimal choice would have been to convert to GA if the mother agreed. There is no evidence that this option would be more risky to mother and baby than a GA at the commencement of the procedure.

Again to fail to take appropriate steps and inform the mother of the available options was a high moderate to low severe departure from accepted standards.

Please provide your view of [Dr B's] reasons for not converting to a GA, topping up the epidural, providing inhalational analgesia or intravenous analgesia at this time.

The movement of the mother's legs suggests the block was inadequate. As above I consider the reasons given for not taking action to alleviate the woman's pain are not correct. Sometimes a woman can move her toes but should experience no pain. At that stage she should have been offered a GA or, if she refused a GA, inhalation analgesia or IV opioids.

I consider this is close to a severe departure from accepted standards.

After entry into the peritoneal cavity/uterus but prior to delivery of the baby

[Mrs A] complained of increased discomfort/pain and began moving her legs after entry into the peritoneal cavity. Please advise in your view what action by [Dr B], if any, would have been appropriate at this point.

I think at this stage the approaches listed above (with the exception of local infiltration) would still have been appropriate.

Please advise whether the effectiveness of the anaesthesia would have had any bearing on [Mrs A's] 'tight' abdominal muscles (as referred to by the obstetrician).

I consider the lack of an effective epidural block could cause the tight abdominal muscles. The GTN spray would only relax the uterine muscle not the abdominal wall.

During suturing following delivery of the baby
[Mrs A] continued to complain of discomfort/pain following delivery of the baby during suturing of the incision. Please advise if it was reasonable in the circumstances for [Dr B] to consider that she would not have benefited from a conversion to a GA or an alternative form of analgesia at this stage. If not reasonable please advise what action would have been appropriate at this time.

[Dr B] should have offered to convert to a GA, or offered inhalation or intravenous analgesia as mentioned above.

It is not correct to say it was risky to give the mother a GA at that stage. A GA could have been administered while the surgeon continued operating if there was a need to control bleeding, so there would be no delay.

If [Mrs A] did not want a GA, at this stage there were no longer any concerns about the risks of drug effects on the baby so she could have been given IV opioids for pain, and IV midazolam or diazepam to relieve her anxiety.

Again to fail to take appropriate steps and inform the mother of the available options was a high moderate to low severe departure from accepted standards.

Please make any further comment on the care provided by [Dr B] which you consider to be relevant.

General comments:

- There was no fentanyl in the epidural which is good practice as it helps reduce visceral pain. The focus should be on making the delivery a good experience for the woman.
- Comments such as now doing 'real surgery' are inappropriate.
- There was no attempt to arrange a meeting between the anaesthetist and the mother after the event. Such a meeting may have assisted [Mrs A] with her distress.
- Surgeons and anaesthetists are each responsible for their own area of expertise. The surgeon could make suggestions and express concerns, but cannot instruct the anaesthetist. The surgeon could have asked a staff member present to call another anaesthetist for a second opinion on options to manage the patient's concerns, although this may not have been immediately possible in a small hospital.
- [Dr B] failed at each step and did not take the steps that other anaesthetists would take."

Appendix B — Independent obstetric advice to the Commissioner

The following expert advice was obtained from consultant obstetrician and gynaecologist Dr Ian Page:

"Thank you for your letter of 21 October, and the enclosed documents, requesting preliminary expert advice to the Commissioner regarding [Mrs A's] complaint about the obstetric care she received from [Dr C].

For your records, I am a practising obstetrician & gynaecologist and have been a consultant for over 20 years. I have been employed for the past 13 years by Northland DHB.

I believe the overall standard of care provided to [Mrs A] by [Dr C] was not completely consistent with expected standards.

In reaching this conclusion I have read:

- Copy of [Mrs A's] complaint dated [date]
- Copy of [Mrs A's] relevant clinical notes from the DHB
- Copy of [Dr B's] response to [Mrs A's] complaint dated 23 May 2013
- Copy of [Dr C's] response to [Mrs A's] complaint dated 4 June 2013

Advice Requested
You have asked me whether I consider the standard of care provided to [Mrs A] by [Dr C] was reasonable in the circumstances. You have also asked me to comment specifically on:

1. The delivery

2. Whether [Dr C's] actions in respect of the anaesthetist were appropriate, and why.

Summary of the Case
[Mrs A] was admitted to [the] Hospital in spontaneous [labour] at term [in] 2013. As her progress in labour was slow her LMC discussed her management with the on-call obstetrician [Dr C], and a plan was made for epidural analgesia and Syntocinon augmentation of the labour. At this time the fetal CTG was recorded to be reactive (=normal).

An epidural anaesthetic was duly arranged, and then Syntocinon augmentation commenced. 25 minutes later the notes record that the fetal heart rate had fallen to 80bpm, where it stayed for >5 minutes. The Syntocinon was discontinued and [Mrs A] was reviewed by [Dr C]. [Dr C] advised that proceeding to caesarean section (LSCS) in a controlled manner at that stage was recommended, rather than trying to continue with the labour and possibly having a more urgent LSCS. [Mrs A] agreed with that plan, and signed the consent form.

After transfer to the operating theatre [Mrs A] was seen by the anaesthetist ([Dr B]). After taking her history and making her aware of the potential risks of anaesthesia for surgery, including the fact that she would be aware of sensation

but not pain, he topped up her epidural anaesthetic and then checked that it was working adequately for surgery.

The operation began and initially [Mrs A] did not feel any pain. However once the peritoneal cavity was entered [Mrs A] felt pain, and she complained of this. [Dr B] was made aware of this, but assured [Dr C] that she could continue with the surgery.

[Dr C] continued with the operation but [Mrs A] was unable to lie still due to the pain, and kept raising her legs. The theatre staff had to restrain them to allow [Dr C] to proceed and complete the delivery of the baby. The delivery itself was difficult, due to a number of factors, including [Mrs A's] abdominal muscles being 'tight' and [Mrs A] being unable to lie still. Delivery of the baby was affected by a mixture of internal version and breech extraction, after the use of GTN spray to help relax the uterus. Throughout the process [Mrs A] complained of pain.

[Dr C] duly completed the operation, but noted that [Mrs A] continued to complain of pain whilst doing so. She did not talk to [Dr B] directly about this, but asked the midwife (Ms D) to tell him.

After the operation [Dr C] saw [Mrs A] and her husband in the recovery area, and then saw them again the next morning. She explained the reason for the caesarean section, the difficulties with the operation (including sub-optimal anaesthesia) and the fact that the extension of the incision into the upper segment meant that future pregnancies should be delivered by elective caesarean section.

My Assessment

1. I think that [Dr C's] decision to advise LSCS when she did was appropriate.

2. I do not think her conduct of the delivery was totally consistent with expected standards. It is not for the anaesthetist to determine what degree of pain [Mrs A] was suffering, or whether it is acceptable to carry on operating. At the point in the procedure (entry to the peritoneal cavity) where the pain was noticed it would have been safe for [Dr C] to stop operating and ask [Dr B] to ensure adequate anaesthesia was obtained. Had the pain only been a problem at the time when the uterus was being opened that would have been different, as there is then a need to continue without delay. However at the point in question a short delay would have been acceptable. I view this as a mild departure from accepted standards.

3. Once the uterus has been opened it is not appropriate to stop, and so [Dr C] was correct to carry on despite it being very uncomfortable/painful for [Mrs A]. Many women find the fundal pressure to deliver the baby to be quite uncomfortable, even though the analgesia for the surgery is (in itself) adequate. Clearly (from [Mrs A's] complaint and [Dr C's] observations) the analgesia for surgery was not adequate here.

4. I view the decision to continue to complete the operation despite inadequate analgesia for [Mrs A] with mild to moderate disapproval. At that point there was no need to avoid administering suitable analgesic drugs to [Mrs A], including a general anaesthetic if necessary. In addition I think [Dr C] should have

communicated her concerns about the inadequate level of anaesthesia for [Mrs A] directly to [Dr B], rather than asking the midwife to do so.

5. Extension of the uterine incision into the upper segment of the uterus is unpredictable, and cannot be attributed to the skill or technique of the operator. Whilst it is disappointing for [Mrs A] to be advised to have future babies delivered by caesarean section I do not think this has arisen from any failings by [Dr C].

So, in summary, I believe that the care provided to [Mrs A] by [Dr C] did not always meet expected standards.

I do not have any personal or professional conflict of interest to declare with regard to this case.

If you require any further comment or clarification please let me know.

Yours sincerely,

Dr Ian Page MB BS, FRCOG, FRANZCOG
Consultant Obstetrician & Gynaecologist

Whangarei Hospital"