Dentist, Dr B

Chris Wong Dental Ltd

A Report by the

Deputy Health and Disability Commissioner

(Case 12HDC00550)

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Executive summary

1. On 19 October 2010, Mrs A saw Dr B for the treatment of a broken crown at tooth 21.

2. Following an assessment, Dr B advised Mrs A that he would need to remove what was left of the tooth. He discussed replacement options with her, which included either a Maryland bridge or a 3-unit bridge. Dr B said that because Mrs A also wanted the 1.5–2mm gap between her teeth 21 and 11 closed at the same time, the treatment options available were limited.

3. Because Mrs A believed that the insertion of a Maryland bridge would not alter any of her other teeth, she chose this option. On 21 October 2010, Dr B began preparation for the Maryland bridge by extracting the broken tooth and preparing the surfaces of the adjacent teeth (teeth 11 and 22). He then put in place a temporary Maryland bridge.

4. Dr B advised that he was "unimpressed" with the colour match of the crown and felt that the design of the bridge was "outdated". However, on 3 November 2010, Dr B removed the temporary Maryland bridge and inserted the permanent Maryland bridge.

5. On 4 November 2010, Mrs A saw Dr B to discuss ongoing treatment, as she stated that she was upset about the look and feel of the bridge. During this appointment, Mrs A asked Dr B about the option of an implant, but Dr B told her that this was not a suitable option for her because of the difficulty in maintaining it. Dr B agreed to redo the Maryland bridge.

6. On 15 November 2010, Dr B removed the original Maryland bridge and put in place a temporary bridge. Dr B also prepared tooth 11 in order to close the gap between the two front teeth. During this process tooth 11 was chipped.

7. On 6 December 2010, Dr B inserted the second permanent Maryland bridge. Dr B advised HDC that the new crown was a slightly lighter shade and, as a result, made Mrs A's teeth look more yellow. However, Dr B considered that this could be addressed by performing a custom whitening of her teeth.

8. During this appointment, Mrs A advised Dr B that she had been experiencing pain in tooth 11. Dr B took X–rays, which revealed nothing. Dr B then prescribed Mrs A with an analgesic and an antibiotic "for infection in case a near-mechanical exposure" was causing the pain.

9. On 8 December 2010, Mrs A went to a different dentist for a second opinion. This dentist told her that a Maryland bridge was the wrong choice in her circumstances, and recommended an implant. She was also told that during the preparation for insertion of the Maryland bridge, Dr B had removed more tooth structure than was necessary.

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Decision

10. For failing to provide Mrs A with information that a reasonable consumer would require in her situation, that is, adequate information about all the options available, including the risks, benefits and costs of those options, Dr B breached Right 6(1)(b) of the Code of Health and Disability Services Consumers' Rights (the Code).[1] Without this information, Mrs A was not in a position to make an informed choice and provide informed consent for the proposed treatment. It follows that Dr B breached Right 7(1) of the Code[2] for failing to obtain Mrs A's informed consent for the proposed treatment.

11. For failing to exercise reasonable care and skill by inserting the first Maryland bridge when he was unhappy with its finish, and by damaging tooth 11 during the preparation for the closure of the gap between the two front teeth, Dr B breached Right 4(1)[3] of the Code.

12. In failing to maintain adequate documentation, Dr B failed to comply with the relevant professional standards and also breached Right 4(2)[4] of the Code.

13. For failing to have sufficient policies and guidelines in place at the time of this incident, I conclude that Chris Wong Dental Ltd is vicariously liable for Dr B's breaches of the Code.

Complaint and investigation

14. The Commissioner received a complaint from Mrs A about the services provided to her. The following issues were identified for investigation:

- *Whether Dr B provided Mrs A with adequate information about her condition, treatment and options, and whether Dr B obtained Mrs A's informed consent prior to proceeding with treatment.*

- *The appropriateness of the care provided to Mrs A by Dr B between 19 October and 7 December 2010.*

[1] Right 6(1)(b) of the Code states: "Every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive, including an explanation of the options available, including an assessment of the expected risks, side effects, benefits, and costs of each option."
[2] Right 7(1) of the Code states: "Services may be provided to a consumer only if that consumer makes an informed choice, and gives informed consent, except where any enactment, or the common law, or any other provision of this Code provides otherwise."
[3] Right 4(1) of the Code states: "Every consumer has the right to have services provided with reasonable care and skill."
[4] Right 4(2) of the Code states: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

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- *The appropriateness of the care provided to Mrs A by Chris Wong Dental Ltd between 19 October and 7 December 2010.*

15. An investigation was commenced on 8 April 2013.

16. This report is the opinion of Ms Theo Baker, Deputy Commissioner, and is made in accordance with the power delegated to her by the Commissioner.

17. The parties directly involved in the investigation were:

Mrs A	Consumer/complainant
Dr B	Provider, dentist
Chris Wong Dental Ltd	Provider

18. Independent expert advice was obtained from dentist Dr Susan Gorrie (**Appendix A**).

Information gathered during investigation

Background

19. Mrs A first presented to Dr B[5] at his dental practice on 19 October 2010, because an existing crown[6] had broken off at tooth 21[7] while she was eating.

Initial assessment — 19 October 2010, decision to have a Maryland bridge

20. Following his initial assessment, Dr B noted that the crown at tooth 21 had broken off below the gingival crest of the bone (ie, below the gum margin), that the tissues around the root were inflamed, and that the root appeared infected.

21. In his statement to HDC, Dr B advised that he recalls that Mrs A's X-ray showed the beginnings of an abscess on the root of tooth 21.

Discussion of options

22. In her complaint to HDC, Mrs A said that Dr B told her that he would need to remove what was left of the tooth. He discussed replacement options with her, which included a Maryland bridge[8] with either a plastic or porcelain tooth, or a 3-unit bridge.[9] He

[5] Dr B is a dentist with a general scope of practice. At the time of these events, Dr B worked as a self-employed independent contractor at the dental practice.

[6] A type of dental restoration involving a section of tooth being replaced with a restorative material.

[7] This is the front upper left tooth. The tooth numbering system used in New Zealand divides the mouth into quadrants, represented by the first digit, with the upper right quadrant being 1, the upper left 2, the lower left 3, and the lower right 4. The second digit represents the position in the mouth from the centre. Therefore tooth 11 is the upper right centre tooth, and tooth 18 is the upper right wisdom, or back, tooth.

[8] A Maryland bridge is a false tooth, which is bonded to metal wings on either side of the tooth. The wings are bonded to the adjacent healthy teeth to hold the false tooth in place.

[9] Three crowns held together in one unit/bridge.

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advised her that the Maryland bridge would mean there would be very little, or no, alteration of the adjacent teeth. However, other than this and advising her of the costs of each of these options, Mrs A does not recall him discussing the benefits or risks of each of the options.

23. Mrs A said that she chose to have a Maryland bridge with a plastic tooth because she did not want any of her other teeth altered.

24. Dr B advised HDC that he discussed all available options with Mrs A, and that Mrs A chose a Maryland bridge. He said that because Mrs A also wanted the 1.5–2mm gap between her teeth 21 and 11[10] closed at the same time, the treatment options available were limited.

25. Dr B stated:

> "During the consultation, I customarily suggested all removable and fixed options for the replacement of her broken tooth. She rejected all options stating that she didn't want any of her teeth altered for treatment. I explained to her that closing the diastema[11] to provide a high level of aesthetics without altering the adjacent teeth would limit the treatment options available to her."

26. In response to my provisional opinion, Mrs A said that, while she agrees that during the initial consultation she did ask whether it would be possible to close the gap between teeth 11 and 21, "it was never a priority for me to close this gap". Mrs A said that Dr B never advised her that closing the gap would limit the options available.

Implant or 3-unit bridge

27. Dr B advised that he recommended "an all-ceramic 3-unit bridge placed between teeth #11 and #22 where both #11 and #21 would be symmetrically widened to close the diastema and where the porcelain could best imitate the natural shade of her teeth". Therefore, the gap created at the 21 space by the removal of this tooth would be fitted with the bridge, with the artificial 21 tooth being wider than the original tooth, and the original tooth 11 also being widened to close the gap between the two front central teeth. Dr B stated that Mrs A rejected this option because it would involve altering the adjacent teeth, and asked whether the tooth could be replaced with an implant. Dr B advised HDC that he did not recommend an implant for Mrs A. He stated: "[G]iven the condition of her gingiva [gum] around the tooth and her history of scaling and polishing and the need for oral hygiene instruction, I told her that an implant was not indicated because they are very difficult to maintain."

28. Furthermore, Dr B advised that, in his opinion, using an extra-wide crown on the implant in order to close the gap as requested by Mrs A would not be aesthetically pleasing, nor would it last very long because of the loads placed on it.

[10] The two front teeth (the central upper incisors).
[11] Gap.

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29. Dr B said: "I explained to [Mrs A] that I could not provide a replacement tooth with an aesthetically-pleasing closed diastema without altering the adjacent teeth." He said that he advised Mrs A that she could seek a second opinion if she wished.

30. In contrast, Mrs A is clear that the option of an implant was not discussed during this appointment. Mrs A said that this was not discussed until after the Maryland bridge had been inserted, at which time Dr B told her that he never recommends implants "because you have to clean them a hundred times a day".

31. The patient notes from the initial consultation state:

> "Consult for MB [Maryland bridge] on 21."

Maryland bridge

32. Because Mrs A rejected his recommendation for a 3-unit bridge, and in light of Mrs A's requests, Dr B said he recommended what he considered to be the next-best option, a Maryland bridge, as that would require minimal alteration of the adjacent teeth. Dr B stated:

> "I offered a next-best recommendation to [Mrs A] of placing a Maryland bridge where only the palatal surfaces[12] of the adjacent teeth would be prepared to retain the bridge and where a small amount of mesio-incisal[13] bevelling on tooth #11 would be done to symmetrically widen the two upper central incisors and to blend the natural shape of her teeth with the replacement tooth of the Maryland bridge."

33. In response to my provisional opinion, Dr B added that at no time did he alter the labial[14] surfaces, "so the teeth appeared intact".

34. Mrs A said in response to my provisional opinion that Dr B never explained to her that bevelling needed to be carried out in order to widen her front teeth. She stated that, had he told her this, she would never have consented to treatment. She reiterated that she told Dr B that she "did not want teeth 11 and 22 reshaped in any way". Mrs A said that Dr B reassured her that only a very small amount of tooth would be removed from the back of the teeth.

Tooth whitening

35. Dr B said that Mrs A also indicated that she might have her teeth whitened later. He said that he recommended to her that she undergo the tooth whitening prior to the colour match being done for the replacement tooth, but Mrs A said that she would make the decision at a later date.

[12] Inside surface.
[13] The area between the middle and biting surfaces.
[14] The lip side of the tooth.

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Temporary bridge

36. On 21 October 2010, Dr B began preparation for the Maryland bridge by extracting the remaining part of the broken tooth 21 and preparing the surfaces of teeth 11 and 22. He then put in place a temporary bridge and crown.

37. In his statement to HDC, Dr B explained that the teeth were prepared to ensure that a minimal amount of the bridgework showed through the adjacent teeth. Furthermore, in order to ensure that he had the best colour match of the crown, Dr B referred Mrs A to the dental laboratory technician for custom shading.

38. The patient records state:

> "Prepped 11 and 22 for MB [Maryland bridge]. Placed and adjusted temp. Patient referred to DT [dental technician] for shade."

39. In her complaint, Mrs A stated that after the temporary crown had been attached she noticed that there was a hole above it where you could clearly see through into her mouth. Mrs A said she called to talk to Dr B about this, but was advised that she needed to book an appointment, which subsequently she did.

27 October 2010

40. On 27 October 2010, Mrs A saw Dr B in relation to the gap above the temporary crown.

41. In his statement to HDC, Dr B explained that the attachment surface of the temporary bridge was left open in order to "ease" healing, and that the opening was visible only if you lifted Mrs A's lip. He said that it was not visible to anyone looking at her teeth. Dr B also commented that the shade match of the temporary crown was "excellent".

42. In contrast, in response to my provisional opinion, Mrs A said that the gap above the crown was "highly visible".

43. During this appointment, Dr B added to the crown to reduce the gap between the temporary crown and the extraction site. He also reinforced the wings of the bridge to help stabilise the attachment to tooth 22. The patient records state: "Added to labial of 21 at gingival. Reinforced lingual[15] wings on temp."

3 November 2010

44. On 3 November 2010, Dr B removed the temporary Maryland bridge, cleaned the bonding surfaces and cemented the permanent Maryland bridge in place.

45. Mrs A recalls that, following the treatment, Dr B told her that he was not happy with the colour match of the new permanent bridge. Mrs A said that as soon as she looked in the mirror she noticed that the metal framework of the bridge was visible through the adjacent teeth, and that the colour of the bridge did not match her natural tooth colour. She also immediately noticed that the bridge felt uncomfortable, and she could

[15] The tongue side of the tooth.

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feel a ridge of metal. Mrs A said that Dr B advised her that he could file back some of the metal at the next appointment, which would make it feel more comfortable and make the metal less visible.

46. When Mrs A returned home and the anaesthetic had worn off, she noticed that she was unable to bite together properly. She tried to call Dr B a number of times, but the receptionist would not put her through, telling her that she would need to come in for an assessment.

47. Dr B advised that when the Maryland bridge came back from the dental laboratory he was "unimpressed" with the colour of the crown. He said that the shade was within normal limits but was slightly more yellow than normal, and that it also appeared darker because you could see the metal framework through it. In addition, Dr B stated that the abutment wings of the bridge were "full-coverage" wings, which is an "outdated design" and made it more difficult to get a perfect colour match. Dr B stated:

> "At this point, I felt it best to make adjustments myself to get the aesthetic result desired."

48. Dr B explained that during the 3 November appointment the bridge was cemented in place using translucent cement. In addition, a dental composite[16] was bonded to the surface of tooth 11 over the Maryland bridge framework in order to blend the colour and mask the metal framework of the bridge. In response to the provisional opinion, Dr B added:

> "Based on the wing design I prescribed, no additional preparation would have been necessary. With the extended wings … extending to the incisal edges of the teeth, necessary masking and colour blending had to be done."

49. Dr B said that once the Maryland bridge was in place he checked and adjusted the occlusion[17] between the upper and lower teeth.

50. Dr B advised that at the time the bridge was fitted, Mrs A said that the occlusion felt good, but he advised her that if she noticed a difference as the anaesthetic wore off he would adjust it further.

51. The patient records from this visit state:

> "Removed temp and cleaned bonding surfaces. Cemented MB [Maryland bridge] on 11. … Shade is too opaque. Will try to mask by removing lingual metal and moulding to labials of 11–22."

[16] An adhesive resin.
[17] The bite contact between teeth.

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4 November 2010

52. On 4 November 2010, Mrs A saw Dr B to discuss her ongoing treatment. Mrs A said that by this time she was quite upset about the look and feel of the bridge. Mrs A's husband also attended this appointment.[18]

53. Mrs A said that Dr B told her that the laboratory technician was at fault because the colour shade was incorrect. Dr B recommended that the Maryland bridge be replaced using a 3-unit bridge. Mrs A responded that she did not want her adjacent teeth filed down, and asked about the option of an implant.

54. The patient records state:

> "[C]onsult for removing MB [Maryland bridge] [and] switching to conventional … Bridge."

55. Dr B stated that at this appointment they discussed redoing the Maryland bridge using a more opaque cement to mask the metalwork of the bridge.

56. Dr B agreed that Mrs A raised the option of an implant at this consultation. However, he recommended replacing the bridge with an all-ceramic 3-unit bridge, as aesthetically that would close the diastema and optimise the colour shade aesthetics of the front teeth. Dr B said that he did not consider an implant to be a good option for Mrs A.

57. The decision was made for the Maryland bridge to be redone and for Mrs A to return to the laboratory technician to re-match the crown colour.

10 November 2010

58. On 10 November, Mrs A saw the laboratory technician, who told her that he felt that the colour match was good, and that the problem related to the metal showing through the teeth.

11 November 2010

59. Mrs A attempted to contact Dr B by telephone, but on two occasions the receptionist refused to put her through to speak to him. On the third attempt she was put through and, during that conversation, Dr B again recommended a 3-unit bridge. However, Mrs A refused that option because she did not want the adjacent teeth altered.

60. In his statement to HDC, Dr B agreed that both Mrs A and her husband tried calling him on a number of occasions, and that they were repeatedly advised that Mrs A's circumstances could not be assessed over the telephone, and that she needed to come in for assessment.

[18] In her complaint, Mrs A advised that this discussion occurred on 8 November. However, the patient records support Dr B's advice that the discussion occurred on 4 November.

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15 November 2010

61. On 15 November 2010, Dr B removed the old Maryland bridge. He took impressions of Mrs A's teeth in preparation for a new Maryland bridge to be made, and cleaned the bonding surfaces of the adjacent teeth. Dr B then put in place a new temporary bridge.

62. Mrs A recalls that during the treatment Dr B did a lot of drilling of her teeth. As soon as she got home, she noted that one of her front teeth had been chipped, and that it was noticeably different. Mrs A's husband then called the dental practice and demanded to talk to Dr B. Eventually, Mr A was put through to Dr B, who said that he "had to remove some tissue" in order to fit the new Maryland bridge. Dr B also told Mr A that, while fitting the bridge, he had noticed that Mrs A had a fissure[19] in the tooth that had been chipped, and said that he could fill in the chip. Mrs A said that previously she had never noticed a fissure.

63. Dr B agreed that "a small mesio-incisinal enamel chip … occurred while augmenting tooth #11". In response to my provisional opinion, Dr B explained that the chip occurred "when pre-existing microcracks in the tooth's incisial enamel caused a very small chip to break away". Further to this, Dr B reiterated that bevelling was carried out on the palatal surface of the tooth only, not the labial surface. He explained that bevelling was done in order to achieve a "virtually invisible border" between the tooth and the filling.

16 November 2010

64. On 16 November 2010, Mrs A returned to see the laboratory technician. During that consultation, the technician decided on a new colour shade for the crown. After she explained to him the problems they had had with the previous bridge, he told her that he would make the wings of the new bridge smaller in order to help address the issue of the metal showing through.

18 November 2010

65. On 18 November 2010, Dr B took further impressions of Mrs A's teeth. He stated that this was at the request of the laboratory technician because of issues with the quality of the previous impressions. In order to take the impressions he had to remove the temporary Maryland bridge and all the cement. He then took the impressions and re-cemented another temporary Maryland bridge in place.

66. Mrs A said that during this appointment she questioned Dr B further about the chip to her tooth, and Dr B told her that it was caused by the bevelling he had had to do after the first Maryland bridge was inserted. Mrs A stated:

> "[Dr B] said [it] had to do [with] something called 'beveling' after the bridge was inserted. I said that I had understood that by choosing the [M]aryland bridge that would mean my other teeth were not altered. [Dr B] said he had to alter them a bit to make it look natural. [Dr B] reassured me it would all look fine on completion

[19] A fissure is a deep groove on the tooth surface.

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of the job. I asked [Dr B] not to alter, grind back or reshape my teeth in any way without discussing it with me first. I repeated this several times so that [Dr B] would be clear as to my wishes."

67. Mrs A said that during this consultation, after he had given her two injections and had begun drilling, Dr B asked her if she could feel any pain. She said that she could. Mrs A recalls that Dr B then gave her a further injection and continued to drill. Mrs A said that the pain continued after the anaesthetic wore off, but then improved over the next week. However, the pain then returned the following weekend and, on the Sunday (5 December), Mrs A had to take regular painkillers to cope with the pain.

68. Dr B said that the treatment was carried out under anaesthesia, but that Mrs A complained of some pain during the treatment. Dr B stated that he checked the tooth, but there was no evidence that the pulp[20] had been exposed, which he considered could have been the cause of the pain.

6 December 2010

69. Dr B advised that when Mrs A presented for treatment on 6 December she was still complaining of pain in tooth 11. Dr B took an X-ray, which revealed no abnormality. Mrs A recalls Dr B telling her that the pain was probably caused by a hole that was "leaking".

70. Dr B then removed the temporary Maryland bridge in order to place the new Maryland bridge. He said that the new Maryland bridge, which had been re-made by the laboratory technician, was a lighter shade than previously, which made Mrs A's natural teeth look yellower. Dr B said that the composite used to fix the chip on tooth 11 was also a "slightly light shade", but that since Mrs A had planned to have her teeth whitened, this shade would have been fine. Dr B stated:

> "Custom whitening of her teeth to match her Maryland bridge would have produced an excellent result."

71. In her complaint, Mrs A said that when Dr B held the new Maryland bridge in place, both Dr B and her husband told her that it was too white. Mrs A said that she did not notice the colour difference when she looked in the mirror because of the shadows. She recalls that Dr B told her that he thought he "could make it work".

72. In response to the provisional opinion, Mrs A said that the bridge and the opaque adhesive made teeth 11 and 21 look yellower than the rest of her teeth. In addition, she said that the composite Dr B used to fix the chip on tooth 11 did not match her natural tooth colour. Mrs A disagreed that whitening would have addressed the problem of the colour difference.

73. Dr B then prepared the surfaces of the abutment teeth and inserted the new Maryland bridge. He also built up part of tooth 11, in order to close the diastema. He then checked and adjusted the occlusion.

[20] The centre of the tooth made up of blood vessels, nerves and connective tissue.

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74. Mrs A advised that after Dr B had completed the treatment she noticed the colour difference between the crown and her natural teeth. She also noticed that a large area of one of the abutment teeth was missing. Dr B explained that a large area had snapped off while preparing the tooth for the Maryland bridge. Mrs A said that she could see clearly that Dr B had tried to fill in the fractured part of the tooth, and she could see the colour difference between the filling material and the rest of the tooth. Mrs A said that Dr B told her to come back in a few days' time and he would remove some more of the front tooth to disguise the mismatch in colour better, and he could also do some whitening of the teeth to address the colour shading differences.

75. In response to the provisional opinion, Dr B stated that the piece of tooth that Mrs A said had come off was part of the composite filling used to close the gap between teeth 11 and 21.

Ongoing pain

76. Following the treatment, Mrs A continued to experience intense pain. Her husband called Dr B on 7 December to advise of her ongoing pain, and Dr B prescribed analgesia and antibiotics.

77. Dr B advised that he prescribed Mrs A analgesia for the pain she had noted in tooth 11, and an antibiotic "for infection in case a near-mechanical exposure had caused the pain".[21] The patient records document that on 7 December Dr B prescribed Mrs A paracetamol and amoxicillin for "infection".

78. Mrs A said that because of the pain she was experiencing, she decided not to return for teeth whitening, as she thought that it might irritate the tooth further.

79. Mrs A advised that on 8 December 2010 she went to a different dentist for another opinion. She advised that he told her that the Maryland bridge was the wrong choice, both aesthetically as well as having a limited lifespan, and recommended an implant.

Complaint

80. Mrs A wrote to Dr B on 7 June 2011 complaining about her treatment. Mrs A's primary concerns related to appropriateness of a Maryland bridge in her case, and the standard of care provided during the treatment for the Maryland bridge. Mrs A stated that she has since been advised that an implant would have been a more appropriate option, and she is now suffering ongoing stress and pain as a result of the care Dr B provided. Mrs A stated:

> "I have suffered a huge amount of stress and pain as a result of the treatment you gave me. I expressed my concerns to you and your staff throughout the treatment period and was constantly told that I was worrying unnecessarily and the end result would be fine. It is not. I now not only have a missing tooth, but I also have two more damaged teeth that were previously healthy. These teeth are also highly visible, making the damage to them more upsetting."

[21] A near-mechanical exposure is when a dental instrument removes dental tissue very near to the dental pulp.

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81. Mrs A requested financial compensation for the "increased costs [she] now face[s]".

82. On 2 July, Dr B responded to Mrs A requesting that she provide "a written copy of [her] current general and specialist dentists' opinions regarding the dental work performed". Dr B advised HDC that he responded in this way because he interpreted Mrs A's letter of complaint as implying that he had prevented her from seeking a second opinion. Dr B thought that Mrs A may have provided her new dentist with limited information about her original request to him and, as such, he asked for information about what opinions she had been provided in order for him to respond to the treatment he had provided.

83. On 19 April 2012, Mrs A responded to Dr B's request for this information, stating that she refused to provide it, and again requested his response to her concerns, and again asked for financial compensation for the treatment he had provided.

84. On 25 April, Dr B responded to Mrs A stating that he stood by his original recommendations.

85. In her complaint to HDC, Mrs A stated:

> "I am concerned that [Dr B] did not give me the option of a dental implant. When I inquired about this option, he said it was not an option. Instead he gave me the options of either a [M]aryland bridge or a three-crown bridge. I chose a [M]aryland bridge, with the understanding that my two adjacent teeth would not be altered, or only very minimally. According to my current dentist, [Dr B] then removed far more tooth structure than was necessary to fit a [M]aryland bridge. The dental implant has been successful, but I am now worried about the health of my two adjacent teeth (both highly visible teeth), which were healthy teeth before I went to see [Dr B]. The standard of care I received from [Dr B] does not seem to meet the standard of care that is acceptable in New Zealand."

Policies and procedures

86. Chris Wong Dental Ltd advised that at the time of these events it did not have any written standard operating procedures. However, it has since adopted a dental practice manual to act as its standard operating procedures.

87. In response to the provisional opinion, Chris Wong Dental Ltd advised that it is currently in the process of reviewing its standard operating procedures to ensure that they are consistent with the issues raised in this report.

88. Chris Wong Dental Ltd advised that all staff have been made aware of its standard operating procedures, and that it has introduced a monthly staff meeting during which time is allocated to familiarising staff with the standard operating procedures. Chris Wong Dental Ltd also advised that it is currently in the process of amending the individual employment agreements to include a specific obligation on employees to comply with them.

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89. In addition, Chris Wong Dental Ltd advised that it is also reviewing its independent contractor agreements to ensure that any practitioner engaged as a contractor is also aware of the requirement to familiarise themself, and comply with, these standard operating procedures.

Response to provisional opinion

90. Responses were received from Mrs A, Dr B and Chris Wong Dental Ltd. These have been included in the "information gathered" section of the report where appropriate. In addition, the following submissions were received.

Mrs A

91. Mrs A said that at no point was she told that her case was difficult or that the outcome might be less than perfect. She also said that Dr B used complicated technical words when explaining the treatments.

Dr B

92. Dr B accepted that he should not have permanently cemented the first Maryland bridge. He also accepts that his documentation was inadequate. However, he reiterated his opinion that an implant was not an appropriate option for Mrs A.

Opinion: Dr B

Information and informed consent — Breach

Discussion of options available

93. Mrs A went to see Dr B because an existing crown had broken off her front left tooth, tooth 21, while she was eating. Following his examination, Dr B noted that the tooth had broken off below the gingival crest of the bone (ie, below the gum margin), that the tissues around the root were inflamed, and that the root appeared infected. Dr B then discussed the options available to treat Mrs A's tooth.

94. In his statement to HDC, Dr B said that he provided Mrs A with information on "all removable and fixed options", and that he expressed his preference for an all ceramic 3-unit bridge, but that Mrs A rejected this option because it would alter the adjacent teeth.

95. Dr B said that Mrs A specifically asked about the option of an implant during this appointment, but that he did not recommend this because "they are very difficult to maintain".

96. Dr B further stated that there were a number of complicating factors in Mrs A's case, which restricted the options available to her. Specifically, Dr B said that Mrs A had also requested that the gap between her front teeth be closed at the same time as the crown was being fixed, and that she did not want any of her adjacent teeth altered during treatment.

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97. Dr B said that he explained to Mrs A that closing the gap between her front teeth without altering the adjacent teeth would limit the treatment options available.

98. Dr B advised that he did discuss the option of an implant during this initial consultation, but he did not recommend it as an option in Mrs A's case, "given the condition of her gingiva around the tooth and her history of scaling and polishing and the need for oral hygiene instruction".

99. Furthermore, Dr B advised that in his opinion, using an extra-wide crown on an implant in order to close the diastema as requested by Mrs A would not be aesthetically pleasing, nor would it last very long because of the loads placed on it.

100. Dr B said that, in the circumstances, his recommendation was a ceramic 3-unit bridge but, in light of Mrs A's instruction that she did not want any of her other teeth altered, the next best option was a Maryland bridge. Dr B said that he explained to Mrs A that the insertion of a Maryland bridge required preparation of the adjacent teeth, and a small amount of bevelling to the edge of tooth 11 in order to widen the two front teeth.

101. In contrast, Mrs A advised that during her initial appointment, Dr B provided her with the options of either an all ceramic 3-unit bridge or a Maryland bridge. She recalls being told of the costs for each option but not the risks and benefits of each.

102. Mrs A said that Dr B did not discuss the option of an implant during this initial consultation, and she did not question Dr B about whether this was an option until after the Maryland bridge had been inserted.

103. My expert advisor, dentist Dr Susan Gorrie, advised that the options available to Dr B to treat Mrs A's missing tooth included a denture of some sort, an implant, or a bridge. In Dr Gorrie's opinion, a 3-unit bridge would not be the preferred choice for a missing central incisor such as Mrs A had. Dr Gorrie advised that in Mrs A's circumstances, a "Maryland bridge [was] an appropriate, but not the only, treatment option". Dr Gorrie advised that one of the advantages of a Maryland bridge is the minimal tooth preparation required, but explained that nonetheless, some of the adjacent teeth do have to be cut away. Dr Gorrie also advised that a disadvantage of the Maryland bridge is that "natural teeth are translucent, therefore the metal bonded on to the adjacent teeth will cause these teeth to darken slightly and there will be a discrepancy of colour unless this is taken into account".

104. In Dr Gorrie's view, an implant would have been an appropriate treatment option in the circumstances. Dr Gorrie stated:

> "An implant may be contraindicated in some situations for example if the patient is a smoker or there is insufficient space for it to be placed. Implants are as subject to gum disease as natural teeth. … Implants are contraindicated if the patient has periodontal disease, but a reasonable standard of care will maintain them as the natural dentation."

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105. Furthermore, Dr Gorrie advised that if Mrs A's desire to have her diastema closed was an issue, this could have been addressed using the same technique Dr B was proposing for the Maryland bridge, by bonding to the adjacent tooth to widen it and by having the implant slightly wider.

106. Right 6(1)(b) of the Code provides that before making a choice and giving consent, every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, would expect to receive. This includes information about the proposed treatment and all the options available, including the risks, side effects, benefits, and costs of each option. This requirement is also in accordance with the Dental Council of New Zealand *Code of Practice: Informed Consent (2004)*, which states:

> "Information to be given … All relevant management options/alternatives with their probable effects and outcomes."

107. Specifically, Mrs A's circumstances were that she required a solution for her missing front tooth 21, and she also wanted the gap between her two front teeth, 11 and 21, to be closed. In addition, she wanted minimal alteration to her adjacent teeth. Each of the available options carried advantages and disadvantages.

108. I accept that there are many variables involved in choosing the best option for a patient, and different dentists will have varying views. It was Dr B's opinion that in Mrs A's circumstances, a Maryland bridge was the most appropriate option.

109. It is agreed that prior to commencing treatment, Dr B did discuss at least two possible options, an all ceramic 3-unit bridge and a Maryland bridge. However, Dr B's assertion that he discussed "all removable and fixed options for replacement" is not supported by the clinical records or Mrs A's account of events.

110. Another option available was an implant. While I note that Dr B advised that he did discuss this option during the initial appointment, Mrs A stated that the only options discussed were a 3-unit bridge or a Maryland bridge. I note that the records in relation to this initial consultation refer only to the Maryland bridge. Therefore, I find it more likely than not that the option of an implant was not discussed prior to the insertion of the original Maryland bridge.

111. Dr B should also have clearly explained the risks and benefits of each option, and the process required for each option. I note that Dr B states that he advised Mrs A that some tooth preparation would be required for the Maryland bridge. However, the details of what was discussed are not documented. While I accept that some discussion did occur, it appears that the extent of this was not explained clearly to Mrs A.

Conclusion

112. In my view, in the circumstances, Dr B should have provided Mrs A with information on the risks and benefits of all available options, and should have included an implant

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as an option, allowing her to make an informed decision about which option she wanted to pursue.

113. I conclude that by failing to provide Mrs A with information that a reasonable consumer would require in her situation, including an explanation of the options available, Dr B breached Right 6(1)(b) of the Code. Without this information, Mrs A was not in a position to make an informed choice and provide informed consent for the proposed treatment. It follows that Dr B breached Right 7(1) of the Code.

Standard of care

Temporary bridge — No breach

114. Mrs A complained that after the temporary bridge was inserted there was a visible hole above the tooth. Dr B agreed that there was a gap above the tooth, but said that this was visible only if Mrs A's lip was lifted.

115. I note Dr Gorrie's advice that a gap would be normal during the insertion of a temporary crown. She advised:

> "The temporary prosthesis should be kept away from the wound so as not to interfere with healing and to allow cleaning of the area."

116. I am satisfied that the standard of care in relation to the temporary bridge was appropriate.

Insertion of the first permanent bridge — Breach

117. There is no dispute that there was a disappointing aesthetic result following the insertion of the first Maryland bridge on 3 November 2010. Dr B advised that this was the result of a poor colour match of the crown and an "out-dated design" of the bridge itself, which resulted in the metal framework being visible through the adjacent teeth. Dr B advised that he attempted to address these issues by using a dental composite to mask the framework and altering the metal framework to make the abutment wings more aesthetically pleasing.

118. Mrs A advised that she was also unhappy with her bite following the treatment. Dr B said that he was aware of this as a potential issue and advised Mrs A that she might become aware of it once the anaesthetic wore off, and that he could adjust the bite further.

119. I note Dr Gorrie's advice that, as Dr B was unhappy with the colour match of the crown and believed that the design was "out-dated", it was inappropriate for Dr B to proceed with cementing the bridge in place. Dr Gorrie advised:

> "It is standard practice for the dentist to prescribe the design to the technician and the dentist must take the ultimate responsibility for the shade."

120. In my view, while the standard of insertion of the bridge was satisfactory, it was inappropriate for Dr B to cement the first Maryland bridge in place given the unsatisfactory design and colour.

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Damage to tooth 11 — Breach

121. Because the first Maryland bridge was unsatisfactory, Dr B removed it on 15 November 2010. He then prepared the bonding surfaces of the adjacent teeth and took further impressions for a new bridge to be made. Dr B advised that in order to insert the Maryland bridge, preparation of the adjacent teeth was required. In addition, in order to widen the two front teeth to close the diastema, a small amount of bevelling to the palatial edge of tooth 11 was required. During this process tooth 11 was chipped.

122. I note Dr Gorrie's advice that she is unable to comment on the overall standard of care in relation to the insertion of the second Maryland bridge. However, in relation to the damage to tooth 11, Dr Gorrie advised that "[t]he advantage of a bonding procedure to close a diastema is that it is fully retrievable. If the patient does not like the result it can be removed and the tooth is no worse off." Dr B explained that the bevelling was done in order to achieve a "virtually invisible border" between the tooth and the filling. However, I accept Dr Gorrie's view that "[d]amage should not have occurred to tooth 11 in the preparation for diastema closure".

Management of pain — Adverse comment

123. When Mrs A presented for the insertion of the second Maryland bridge on 6 December, she advised Dr B that she was experiencing pain in tooth 11. Dr B took an X-ray, which revealed no abnormality. The following day, he prescribed Mrs A with pain relief and an antibiotic. He told HDC that this was for infection in case a near-mechanical exposure had caused the pain. Dr Gorrie advised that Mrs A's pain could have had a number of causes, not just near-mechanical exposure and, in fact, that near-mechanical exposure would be unlikely given that a Maryland bridge requires minimal tooth preparation. Therefore, although prescription of an antibiotic for infection was appropriate, I query Dr B's assessment of the possible cause of the pain.

Conclusion

124. The standard of care provided by Dr B in preparing and inserting the first Maryland bridge was reasonable in the circumstances. However, as Dr B was unhappy with the finish in terms of colour shade and design of the bridge, he should not have cemented the bridge in place at that time.

125. The standard of care Dr B provided in relation to the preparation of the teeth to close the gap between teeth 11 and 21 was suboptimal. I accept Dr Gorrie's advice that damage to tooth 11 should not have occurred. Therefore, I conclude that the bevelling Dr B carried out on tooth 11 that resulted in chipping the tooth was inappropriate.

126. I find that by failing to exercise reasonable care and skill by inserting the first Maryland bridge when the finish was unsatisfactory, and by damaging tooth 11 during the preparation for the closure of the gap between the two front teeth, Dr B failed to provide services to Mrs A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

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127. I am critical of Dr B's decision to prescribe antibiotics for the management of Mrs A's pain given that, while prescription of an antibiotic for an infection is appropriate, it appears unlikely that this is what caused Mrs A's pain in the circumstances.

Documentation — Breach

128. Health professionals are required to keep accurate, clear, legible and contemporaneous clinical records. They are a record of the care provided to the patient and clinical decisions made, and enable other health professionals to provide coordinated care. Furthermore, as demonstrated in this case, records are important in verifying facts once a complaint has been made.

129. The Dental Council's *New Zealand Code of Practice: Patient Information and Records (2006)* outlines the importance of recording a patient's treatment. It states:

> "1.1 The patient's treatment record is legally regarded as 'health information' and is an integral part of the provision of dental care. A record of each encounter with a patient will improve diagnosis and treatment planning and will also assist with efficient, safe and complete delivery of care considering the often chronic nature of dental disease. The treatment record will also assist another clinician in assuming that patient's care.
>
> 1.2 The treatment record may also form the basis of self protection in the event of a dispute associated with any treatment provided and it may also form the basis for some types of self monitoring or audit systems used in quality review systems."

130. I agree with Dr Gorrie that Dr B's clinical notes are "inadequate". Dr B's records are brief and in particular do not record the details of the treatment options he said he discussed with Mrs A. As noted by Dr Gorrie, Dr B's statement that the rationale for a Maryland bridge related to Mrs A's desire to have a diastema closed, and the possibility of tooth whitening, are not mentioned in the clinical records. Furthermore, there is no reference to Dr B's justification for prescribing antibiotics on 6 December.

131. By failing to maintain adequate documentation, Dr B failed to comply with the relevant professional standards and, accordingly, breached Right 4(2) of the Code.

Opinion: Chris Wong Dental Ltd — Breach

132. Dr B was a self-employed dentist contracting to Chris Wong Dental Ltd to provide services. As such, Dr B was an agent of Chris Wong Dental Ltd, and Chris Wong Dental Ltd was an employing authority for the purposes of the Health and Disability Commissioner Act 1994 (the HDC Act).

133. Under Section 72(3) of the HDC Act, employing authorities are vicariously liable for any breach of the Code by an agent. Under section 72(5) of the HDC Act, it is a

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defence for an employing authority to prove that it took such steps as were reasonably practical to prevent the act or omission that breached the Code.[22]

134. Chris Wong Dental Ltd advised that at the time of these events, it did not have any written policies and procedures in place. Chris Wong Dental Ltd advised HDC that every practitioner working at the dental practice had their own individual responsibility to ensure their practice was in accordance with professional practice requirements. I do not accept this argument. In my view, there is also a responsibility on any employing authority to ensure that its staff provide appropriate care.

135. It is not enough for an employing authority to rely on the individual practitioner to provide care of an appropriate standard; it also needs to provide clear written guidance to its staff. While Dr B had an individual professional responsibility, Chris Wong Dental Ltd also had a responsibility to ensure that its staff were adequately supported and guided. I am concerned about Chris Wong Dental Ltd's lack of any written procedures or guidelines, especially with regard to appropriate treatment planning for patients and informed consent, including information sheets to be provided to consumers. Such resources can be valuable in setting out the minimum requirements for a dentist to assist a practice to ensure the safe and effective provision of care, and to ensure consumers receive sufficient information about their condition and treatment options.

136. For failing to have sufficient policies and guidelines in place at the time of this incident, I conclude that Chris Wong Dental Ltd is vicariously liable for Dr B's breaches of the Code.

137. I note that Chris Wong Dental Ltd has since adopted a dental practice manual to act as its standard operating procedures.

Recommendations

Dr B

138. I recommend that Dr B undergo a competency review by the Dental Council of New Zealand.

139. I recommend that Dr B provide a letter of apology for Mrs A, to be sent to this Office within one month of the date of this report, for forwarding to Mrs A.

140. I also recommend that Dr B undertake further training with regard to communication with patients. Dr B should provide a report to this Office, within three months of issue of this report, confirming his attendance or enrolment at a relevant upcoming workshop or training seminar.

[22] While the defence set out in section 72(5) refers to "employees", it is generally considered to be available in respect of agents (see *Totalisator Agency Board v Gruschow* [1998] NZAR 528).

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Chris Wong Dental Ltd

141. Chris Wong Dental Ltd has agreed to comply with the recommendation to organise for an audit of staff compliance with its new standard operating procedures. Chris Wong Dental Ltd should report back to this Office on the outcome of this audit within three months of the date of this report.

Follow-up actions

142.
- A copy of this report with details identifying the parties removed, except the expert who advised on this case and Chris Wong Dental Ltd, will be sent to the Dental Council of New Zealand, and it will be advised of Dr B's name.
- A copy of this report with details identifying the parties removed, except the expert who advised on this case and Chris Wong Dental Ltd, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A — Independent advice to the Commissioner

The following expert advice was obtained from Dr Susan Gorrie:

"I have been asked to provide a report to the Commissioner on case number 12HDC00550.

I have read and agree to follow the Commissioner's guidelines for independent advisors.

I am a general dental practitioner in Christchurch. I have been in private practice for thirty years. I completed my BDS at Otago in 1981 and a postgraduate diploma in restorative dentistry in 1991. I am a fellow of the International College of Dentists. I have an interest in Restorative Dentistry.

I have been asked the following:

1. Please comment generally on the standard of care provided to [Mrs A] by [Dr B].

2. What standards apply in this case?

3. Were those standards complied with?

If not answered above, please comment on the following, giving reasons for your view.

In the situation that there are two versions of the facts, please provide advice in each situation.

4. The appropriateness and adequacy of the advice [Dr B] provided [Mrs A] in relation to her treatment options.

5. Was the recommendation of a Maryland bridge appropriate in the circumstances?

6. Comment on [Dr B's] advice in relation to the inappropriateness of recommending an implant.

7. The adequacy of the treatment provided. In particular please include comment on:

   a. The standard of treatment in relation to the Maryland bridge.

   b. The appropriateness of [Dr B] inserting the Maryland bridge given that there appear to have been issues with the colour match and design.

   c. The damage that occurred to the #11.

   d. The management of [Mrs A's] reported pain on 18 November and 6 December.

8. Any other comment you wish to make.

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If, in answering any of the above questions, you believe that [Dr B] did not provide an appropriate standard of care, please indicate the severity of his departure from that standard.

To assist you on this last point, I note that some experts approach the question by considering whether the providers' peers would view the conduct with mild, moderate, or severe disapproval.

I have reviewed the information provided to me.

- [Dr B's] statement dated 5 May 2013.
- [Dr B's] statement dated 12 July 2012.
- Statement from Chris Wong Dental dated 21 August2013.
- Statement from Chris Wong Dental dated 12 July 2013.
- Statement from Chris Wong Dental dated 17 April 2013.
- Copy of original complaint.
- Copy of radiograph images.

I have not been provided with any models or photos.

[Mrs A] first presented to [Dr B] on 19 October 2010, with a broken crown at tooth #21.

[Dr B] advised HDC that he advised [Mrs A] of 'all removable and fixed options for the replacement of her broken tooth', his preference being an all-ceramic 3-unit bridge between tooth #11 and #22. [Dr B] advised that [Mrs A] rejected all treatment options because she did not want any of her teeth to be altered. She also wanted a diastema to be closed and asked if she could have an implant [Dr B] advised that an implant was not indicated in this case due to need for a high level of oral hygiene, coupled with the problems associated with an extra-wide replacement crown to close the diastema. However, [Dr B] advised HDC that he did tell [Mrs A] to seek a second opinion if she wanted in relation to this. [Dr B] advised HDC that he then presented [Mrs A] with what he considered to be the next best option that would meet [Mrs A] requirements, a Maryland bridge.

In contrast, [Mrs A] advised that the options she was presented with included a Maryland bridge or a three crown bridge but that [Dr B] did not discuss the pros and cons of each option. [Mrs A] chose a Maryland bridge.

On 21 and 27 October 2010, the teeth were prepared and a temporary bridge put in place while a permanent Maryland bridge was being made.

[Dr B] advised that because he was 'unimpressed' with the custom shade of the bridge and considered the design outdated, he made further adjustments himself. The bridge was then put into place on 3 November.

[Mrs A] was unhappy with the result and returned to talk to [Dr B] about the treatment and options available. At this time [Dr B] advised HDC that [Mrs A] asked again about an implant but that he again recommended an all-ceramic 3-unit bridge.

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On 15 November, [Dr B] removed the original Maryland bridge and the teeth and surfaces [were] cleaned and prepared. A small enamel chip occurred during this process. A temporary bridge was put in place.

On 18 November, further impressions were taken, the temporary Maryland bridge removed. A further, temporary Maryland bridge was then put back in place.

On 6 December, the new Maryland bridge was put in place. [Dr B] advised HDC that the colour match of the new bridge was a slightly lighter shade and made her natural teeth look yellower. However, because [Mrs A] had talked about having her teeth whitened [Dr B] advised HDC that he considered the colour match was fine. [Dr B] prescribed an analgesic to treat [Mrs A's] pain and an antibiotic for infection in case a near mechanical exposure had caused the pain.

1) [Mrs A] presented with a broken front tooth, number 21. The crown had snapped off at gum level. There is no previous history with this tooth. There is no mention in the records of the vitality or presenting condition of the adjacent teeth. Healthy teeth do not snap off at gum level while eating. The radiograph taken on 19/10/10 of tooth 21 shows a large periapical radiolucency indicative of infection. Certainly extraction of the root of tooth 21 was the only option for this tooth. [Dr B] mentions the presence of a diastema (a gap) between the front teeth and [Mrs A's] desire to close that with the treatment proposed. [Mrs A] makes no mention of that. The radiograph indicates there may have been a diastema but I have no way of confirming that without photos and models.

2) The NZDA leaflet (enclosed) 'Filling The Gap' details the treatment options for a missing tooth. They fall into the following categories:

- Removable — a denture of some sort
- Fixed — implant or bridge.

[Mrs A] should have been offered all of these options. There is no mention in the clinical notes of what was discussed. There is no record of an informed consent process. There is no standard of care in the choice of restoration. The treatment plan will be patient specific with the risks and benefits of each treatment option, costs and time involved discussed. A complicating factor is the aesthetic problem of a missing front tooth and a number of temporary options may be offered while a decision is made on a definitive treatment plan. There is a standard of care in providing an acceptable result that all are happy with.

3) The standard of informed consent and achieving an acceptable result do not, in my opinion, appear to have been complied with.

4) The clinical notes of 19/10/10 state 'consult for MB on 21' where I presume MB to stand for Maryland bridge. There is no mention of any other treatments being discussed.

[Mrs A] says she was offered a Maryland or a three crown bridge. A three unit bridge involves tooth preparation of the two teeth adjacent to the missing tooth. Not ideal if these teeth are intact and unfilled. A lateral incisor is not a strong tooth to be an abutment for a three unit bridge. An advantage of the Maryland Bridge over a conventional bridge is that failure is likely to be by debonding of the

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retainer. In a conventional bridge failure is likely to be by fracture of an abutment tooth especially a lateral. A three unit bridge would not be my preferred choice of treatment for a missing central incisor.

5) A Maryland bridge is an appropriate, but not the only, treatment option. A Maryland Bridge is a false tooth glued by way of wings on to adjacent teeth. The advantage of a Maryland bridge is that there is minimal tooth preparation. However, a margin has to be cut in the tooth to allow positive seating of the bridge. Sometimes existing restorations are removed to be replaced by the bridge structure. The metal wings of the structure must be sufficiently thick and large to be rigid. An aesthetic problem with a Maryland Bridge is that natural teeth are translucent, therefore the metal bonded on to the adjacent teeth will cause these teeth to darken slightly and there will be a discrepancy in colour unless this is taken into account. There must be sufficient room in the bite for the thickness of the metal, an anterior open bite is ideal. The bite cannot he checked prior to cementation. The bridge may have one or two wings both are acceptable. A Maryland Bridge is not regarded as a treatment for life but a good minimally invasive procedure in the right conditions. Case selection is very important.

6) I do not agree with [Dr B's] advice in relation to the inappropriateness of recommending an implant.

An implant is also an appropriate treatment. It must be noted however that the radiograph of [Mrs A's] tooth 21 showed a large periapical radiolucency indicative [of] infection. An implant cannot be placed into an area of infection. If infection is present the standard practice is to extract the tooth and wait three months for healing and then place the implant. The literature is now supporting a shorter stand down time of 6–8 weeks. A temporary partial denture is worn during this time and while the implant osseointegrates (knits into the bone) before the crown is made. An implant would be my first treatment of choice in this situation. Not necessarily the standard of care as there are too many variables in the treatment planning process. However, it should be offered and if not a procedure carried out by the dentist concerned then a referral made, especially if requested. An implant may be contraindicated in some situations for example if the patient is a smoker or there is insufficient space for it to be placed. Implants are as subject to gum disease as natural teeth, in this case called peri-implantitis. Implants are contraindicated if the patient has periodontal disease, but a reasonable standard of care will maintain them as the natural dentition. They do not require cleaning a hundred times a day as [Mrs A] states she was told by [Dr B].

There is no mention in the notes that [Mrs A] suffered from periodontal disease. If a diastema was an issue it could be closed by the same technique [Dr B] was proposing with the Maryland Bridge, ie bonding to the adjacent tooth to widen that a little and having the implant tooth slightly wider as well.

[Dr B] comments that [Mrs A] did not want any of her other teeth altered during the treatment, in which case an implant is the best treatment.

7) On 3/11/10 the first bridge was inserted. There was a disappointing aesthetic result. It would be standard practice to use an opaquing cement to mask show through of the metal wings. It is difficult to have the patient check the appearance

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and the bite cannot be checked until cemented. However, it would be usual to have a try in to best ability and get the patient's approval before cementing the bridge.

The standard of treatment in relation to the Maryland Bridge provided to this stage appears acceptable.

[Dr B] comments he 'was unimpressed with the shade of the bridge and the design was outdated'.

In which case I think it inappropriate to have cemented the bridge. It is standard practice for the dentist to prescribe the design to the technician and the dentist must take the ultimate responsibility for the shade.

Difficulties seem to have arisen when replacing the Maryland Bridge. The metal wings of a Maryland Bridge are very hard and difficult to cut through. This would have taken some time. During this process a tooth was damaged and an ACC claim for treatment injury was subsequently accepted.

There should be no 'near mechanical exposure' in the provision of a Maryland bridge. A Maryland bridge's advantage is the minimal tooth preparation. You don't need a near mechanical exposure of the pulp to get pain in a tooth. Overheating or previous accidents may be responsible. The pain may or may not be related to the current treatment. There is no mention in the clinical record of a diagnosis being made as to the cause of the pain [Mrs A] was now suffering, are the adjacent teeth vital? Were they vital at the start of treatment? I have no information on this. It is my opinion and I would think that of my peers, that antibiotics should not be prescribed without first obtaining a diagnosis. I would regard this as a moderate departure from accepted standard of care.

Damage should not have occurred to tooth 11 in the preparation for diastema closure. The advantage of a bonding procedure to close a diastema is that it is fully retrievable. If the patient does not like the result it can be removed and the tooth is no worse off.

There is no one treatment fits all in a case such as this. The risks and benefits of all treatments must he discussed with the patient to result in informed consent for any procedure. In my opinion this informed consent process has not been achieved and would be regarded as a severe departure from standard.

A number of errors and mishaps have occurred along the way. Was the care reasonable in the circumstances, I think not and would be regarded with moderate disapproval from peers."

Further advice

Dr Gorrie was provided with copies of a periapical X-ray and a photograph of the metal wings of the Maryland bridge taken by a second dentist when he first saw her in December 2010. Dr Gorrie was asked if, in light of this information, she could provide comment on the standard of care provided in relation to the insertion of the second Maryland bridge. Having reviewed these, Dr Gorrie provided the following advice:

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"Thank you for providing the photo and X-rays of [Mrs A's] anterior teeth. While the X-rays were difficult to read, seeing the originals would provide no further information. An X-ray is a two dimensional representation of a three dimensional object and as such does not show the depth of the metal wings from the Maryland Bridge. They did show that there is no periapical infection associated with the roots of the teeth adjacent to the implant (ie the two teeth with the metal wings).

Similarly the photo does not show the depth of the metal wings. They would have to be removed to ascertain their depth."

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