Scottish Parliament Region: Lothian

Case 200503203: A Dental Practice, Lothian NHS Board

Summary of Investigation

Category

Health: Family Health Services; Dental treatment

Overview

The complainants (Mr and Mrs C) raised concerns regarding dental treatment received by their daughter (Miss A) at a General Dental Practice (the Practice). They consider this treatment to have caused one of Miss A's teeth to become non-vital (see Annex 2) and they believe that they should have been warned of this risk in advance. They were also dissatisfied with the alignment of Miss A's teeth following the treatment.

Specific complaints and conclusions

The complaints which have been investigated are that:

(a) after dental correction with braces, Miss A had a non-vital front upper tooth which may require expensive treatment in the future (*not upheld*);

(b) the risk of the tooth becoming non-vital should have been pointed out to Mr and Mrs C prior to treatment commencing (*not upheld*); and

(c) following treatment, the centre lines of the top and bottom teeth did not match (*not upheld*).

Redress and recommendations

The Ombudsman has no recommendations to make.

Main Investigation Report

Introduction

1. On 9 March 2006, the Ombudsman received a complaint from a man and woman (referred to in this report as Mr and Mrs C) regarding treatment received by their daughter (Miss A) at a General Dental Practice (the Practice). They have raised concerns regarding the outcome of the treatment and the lack of prior explanation of the risks of this outcome occurring.

2. The complaints from Mr and Mrs C which I have investigated are that:

(a) after dental correction with braces, Miss A had a non-vital front upper tooth which may require expensive treatment in the future;

(b) the risk of the tooth becoming non-vital should have been pointed out to Mr and Mrs C prior to treatment commencing; and

(c) following treatment, the centre lines of the top and bottom teeth did not match.

3. With regards to Mr and Mrs C's concerns that the risks were not pointed out, they believed that both the General Dental Practitioner (the Dentist) and the specialist in orthodontics (the Orthodontist) should have been responsible for this. However, I have focused my investigation on the role of the Dentist as I have established that the Orthodontist merely examined Miss A at the Dentist's request and provided him with a possible treatment plan. I have, therefore, judged that any responsibility in this regard would have been wholly that of the Dentist and the Ombudsman's dental adviser (the Adviser) has deemed this approach to be appropriate.

Investigation

4. In writing this report I have had access to Miss A's dental records and the complaints correspondence with the Practice. In addition, I obtained advice from the Adviser.

5. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. Mr and Mrs C and the Practice were given an opportunity to comment on a draft of this report.

(a) After dental correction with braces, Miss A had a non-vital front upper tooth which may require expensive treatment in the future

6. On 8 December 2005, Mr C wrote to the Dentist and the Orthodontist regarding treatment provided to Miss A. He advised that the treatment coincided with one of Miss A's upper middle front teeth being found to have a dead nerve and he wished to raise some questions regarding this.

7. Firstly, Mr C enquired into how the case was managed between the Dentist and the Orthodontist and he asked whether a treatment plan was established. Secondly, he asked how the treatment could have caused the dead nerve despite Miss A having been very careful in caring for her teeth and he advised of his concern that future costly treatment may now be required.

8. The Dentist responded to Mr C on 13 December 2005 and he advised that the Orthodontist met with Miss A on 13 August 2004 and constructed a treatment plan, which was sent to the Health Board for approval. He stated that the plan was subsequently approved and treatment began on 1 October 2004. After this time, he advised that he would only have liaised with the Orthodontist if he had encountered problems during treatment, however, this did not apply in Miss A's case.

9. The Dentist stated that it was impossible for him to say for certain what caused Miss A's upper right central incisor (see Annex 2) to become non-vital. He acknowledged the Orthodontist's advice that orthodontic treatment could be a cause of teeth becoming non-vital, however, he stated that this is only common in cases where the teeth are being moved a long way from their starting position.

10. In his response, the Dentist then advised that a far more common cause of non-vitality is dental trauma (see Annex 2) and that, in his opinion, the amount of required trauma would not have to have been significant at Miss A's age and stage of development. He confirmed that Miss A had not given him any history of trauma.

11. Finally, the Dentist confirmed that he had now successfully root treated the tooth and achieved a very satisfactory result and he would not expect Miss A to have any future problems, provided she maintained her high standard of oral hygiene. He advised that he also planned to bleach the tooth to help restore it

to its original shade and that this would be provided free of charge on the NHS and would be unlikely to need redoing in future.

12. The Orthodontist responded to Mr C on 7 March 2006 and confirmed that, as a registered orthodontic specialist, he examined patients at the Dentist's request and provided him with a possible treatment approach. He received a small remuneration from the Dentist for this service and the Dentist was then free to accept or amend the advice, prior to submitting a treatment plan for approval by the Dental Practice Division of the NHS. He advised that the Dentist was then responsible for the care and treatment once the plan had been approved.

13. With regards to Miss A's tooth becoming non-vital, the Orthodontist advised that orthodontic tooth movement, in itself, does not usually cause a nerve to die. He stated that his comments in the telephone conversation with Mr C on 4 November 2005 conveyed that an apparently clinically sound tooth may have a pulp (see Annex 2) whose vitality has been reduced prior to the commencement of orthodontic treatment. He further advised that, with such a tooth, it was impossible to gauge whether orthodontic treatment contributed to the progression from a reduced to a completely non-vital pulp.

14. It was the Orthodontist's view that the principal cause of reduced vitality was trauma and he also advised that another possible cause was breaches in the enamel which would allow the entry of bacteria.

15. Finally, the Orthodontist suggested that Miss A may not require any future treatment beyond bleaching although he did advise that, ultimately, a veneer could be fitted. He confirmed that this would be available free of charge under NHS regulations, if it were to be carried out before Miss A turned 19 years of age.

16. On 10 March 2006, Mr and Mrs C submitted their concerns to the Ombudsman and they reiterated their main points of complaint. In doing so, they advised that independent dental advice had informed their opinion that expensive treatment may be required in future. They also advised that root treatment and bleaching had now been carried out to a visually good standard.

17. At the time of submitting their complaint, they had yet to receive the Orthodontist's reply, however, they received this the following day and

submitted a further letter, received by the Ombudsman on 14 March 2006. In response to the Orthodontist's inference that trauma or cracks may have caused the tooth to become non-vital, they advised that they had no recollection of the tooth being knocked or injured in any way.

18. With regards to the possibility of the vitality of the tooth having been reduced prior to the commencement of treatment, Mr and Mrs C questioned why this would not have been picked up during the prior examination, which included an x-ray.

19. During our earlier enquiries, Mr and Mrs C were asked if the independent dental advice, to which they referred, was in written form and, in their response letter of 4 June 2006, Mr and Mrs C confirmed that it was not. Mr C stated that he had spoken to his dentist, who works in a different practice, and she was very surprised that Miss A's treatment was carried out by the Dentist himself and not the Orthodontist, since it required a lot of expertise and experience. She advised Mr C that, in her practice, such treatment is always referred to an orthodontist.

20. Mr and Mrs C also advised that they had spoken to a dental adviser at the Primary Care Trust who had informed them that, in Lothian, they were fortunate to have a number of orthodontists available to carry out this kind of work. Mr and Mrs C also added that, after speaking to many parents of children who had braces fitted, the general consensus was that it was always a qualified orthodontist who carried out the fitting and adjusting of the braces.

21. In a letter to the Dentist from the Medical and Dental Defence Union of Scotland dated 27 July 2006, his dento-legal adviser agreed to the release of Miss A's records and study models to the Ombudsman. In the same letter, he agreed with the Dentist's view that the non-vitality of the tooth did not appear to have been caused by orthodontic treatment and that some separate trauma appeared to have been the most likely cause.

22. The Adviser reviewed the records and confirmed that the braces may have caused one of the upper teeth to become non-vital and that the greater the distance the teeth are moved, the greater the risk was of this occurring. However, he confirmed that Miss A's case would not have been considered complex and she would not have been viewed as a high risk of non-vitality. He also advised that duration of treatment could have an impact, however, he

observed that Miss A appeared to have had a fixed brace in the upper jaw for approximately 12 months and he stated that this duration would rarely cause a tooth to become non-vital.

23. The Adviser further stated that it is common for a patient not to have recorded an episode of trauma either prior to or during treatment and he believed this to have been a more likely cause of Miss A's tooth becoming non-vital. He concluded by supporting the views expressed by the Dentist in his letter of 13 December 2005 and he advised that he did not believe that the care offered was below a standard that should have been expected.

(a) Conclusion

24. The advice which I have received and accept indicates that the orthodontic treatment could possibly have caused Miss A's tooth to become non-vital, however, there is no conclusive proof that this was the case and other factors, such as trauma, cannot be ruled out as potential causes. I have found no evidence to indicate that the treatment provided to Miss A was inappropriate and I, therefore, do not uphold this complaint.

(b) The risk of the tooth becoming non-vital should have been pointed out to Mr and Mrs C prior to treatment commencing

25. In his letter of 8 December 2005, Mr C stated that the Orthodontist had informed him, in a telephone conversation on 4 November 2005, that the treatment provided could cause the nerve to die off and that patients should maybe be made aware of this risk prior to treatment beginning. Mr C stated that, had they been made aware of the risk, they may have decided not to go ahead with the treatment.

26. As outlined in paragraph 9, the Dentist's letter of 13 December 2005 acknowledged that orthodontic treatment can be a cause of teeth becoming non-vital but advised that this is only common in cases where the teeth are being moved a long way. The Dentist confirmed that this kind of movement was not carried out during Miss A's treatment and he, therefore, saw no reason to pre-warn Mr and Mrs C of this risk prior to treatment.

27. On 3 September 2007 the Orthodontist provided us with the radiographs from his assessment of Miss A. In his accompanying letter, he advised that, in his opinion, there was no evidence of pathological change in Miss A's pre-

treatment radiograph, which would have highlighted a need to warn Mr and Mrs C of a potential loss of vitality.

28. As outlined in paragraph 22, the Adviser confirmed that neither the complexity nor duration of Miss A's treatment would have been considered as presenting a high risk of her tooth becoming non-vital. He stated that the risk was so minimal that there should not have been a need to warn Miss A or Mr and Mrs C.

29. The Adviser did state that, in line with the 'Informed Consent' process, it would be good practice to advise patients of the possible risks in tooth movement with fixed braces. However, he confirmed that there is no evidence of this having been discussed and, as he was not witness to any of the patient consultations, he could not comment further.

(b) Conclusion

30. As the Adviser has observed, there is no evidence of a discussion taking place regarding the risks involved and it is difficult to comment further without having been party to any of the discussions. It is noted that the Dentist does not claim to have provided any warning of the potential for Miss A's tooth becoming non-vital.

31. It would be good practice for the dentist to document his discussions with patients, particularly when important information or warnings are being conveyed, however, in this instance I accept the advice that the risk was too small to warrant a specific warning. I, therefore, do not uphold this complaint.

(c) Following treatment, the centre lines of the top and bottom teeth did not match

32. In his letter of 8 December 2005, Mr C stated that it was clear, during treatment, that the middle lines between Miss A's top and bottom teeth were not meeting and that the Dentist had advised them that this was due to a metal bracket not being fitted at the precise angle. He advised that corrective treatment was later carried out, however, he stated that this left Miss A in considerable pain and that, afterwards, there remained more of a gap on one side than the other.

33. Mr C also advised that the casting of the impression of Miss A's bottom teeth, which would have shown her teeth to be meeting prior to treatment, could not be found in the practice.

34. In his response of 13 December 2005, the Dentist stated that the adjusting of brackets is a routine practice in orthodontics as, once the teeth have been roughly aligned, any minor discrepancies in the placement of brackets become more pronounced and in need of correction. He advised that this was carried out in Miss A's case and that some discomfort would have been expected. He further advised that the fact that the centre lines did not match was incidental as the upper teeth were aligned to the centre of Miss A's face and also because a brace was not fitted to her lower teeth.

35. With regards to the study model of Miss A's teeth not being available, the Dentist confirmed that this was due to the lack of space in the practice. He advised that they cannot keep all models for all patients in the practice and they, therefore, keep them in storage. The model was sent to me on 3 May 2007 and was subsequently examined by the Adviser.

36. In his response of 7 March 2006, the Orthodontist advised that he had not had the opportunity to see the final results and could not, therefore, comment on the centre line.

37. The Adviser stated that fixed appliances were only fitted on the upper teeth and that it would be difficult to anticipate any correction of centre line with only upper appliances. In addition, he confirmed that many patients did not have coincidental centre lines of their upper and lower teeth and that this was not detrimental to the health of the teeth or jaws. He further stated that centre line correction could be notoriously difficult to maintain and that, once corrected, it could often slip back to where it was before treatment. He was of the opinion that most patients have a minor degree of asymmetry which is too minimal to justify treatment.

38. After consulting Miss A's notes, the Adviser confirmed that there was nothing to indicate that her teeth were significantly out of line. He advised that the study models indicated a reasonable alignment that would be expected with upper fixed appliances only.

(c) Conclusion

39. I accept the advice I have received and I can find no evidence of an unacceptable outcome with regards to the position of Miss A's teeth. As there is no indication of the treatment provided being inappropriate, I do not uphold this complaint.

Annex 1

Explanation of abbreviations used

Mr and Mrs C	The complainants (Miss A's father and mother)
Miss A	The aggrieved
The Practice	The dental practice where Miss A received treatment
The Dentist	The general dental practitioner who treated Miss A
The Orthodontist	The orthodontics specialist who assisted the Dentist
The Adviser	The dental adviser to the Ombudsman

Annex 2

Glossary of terms

Dental pulp	Part of the centre of a tooth made up of living soft tissue
Dental trauma	Injury to the mouth, including teeth, lips, gums, tongue, and jawbones
Incisor	Central or lateral front tooth with cutting edges
Non-vital tooth	Tooth with necrotic pulp (dead tissue)