Scottish Parliament Region: North East Scotland

Case 200900692: Tayside NHS Board

Summary of Investigation

Category

Health: Diagnosis; clinical treatment

Overview

The complainant (Mr C) contacted the Ombudsman about multiple concerns relating to the post-operative care he received following the extraction of a wisdom tooth at Dundee Dental Hospital. Mr C believes that, given his past medical history, his care was substandard and that Tayside NHS Board (the Board) failed to consider his symptoms adequately, resulting in him being admitted to Ninewells Hospital for nine days.

Specific complaints and conclusions

The complaint which has been investigated is that the Board failed to diagnose and treat Mr C's haematoma adequately, resulting in a prolonged hospital admittance (*not upheld).*

Redress and recommendations

The Ombudsman recommends that the Board:	*Completion date*
(i) review the pre-operative planning for dental patients with pre-existing disease and/or drug history to ensure that effective treatment plans are available in the event of post-operative complications. This should include a review of their post-operative information packs given to patients to ensure that they provide detailed instructions to patients on Warfarin therapy; and	15 December 2010
(ii) apologise to Mr C for their failure to carry out effective pain control.	15 December 2010

The Board have accepted the recommendations and will act on them accordingly.

Main Investigation Report

Introduction

1. On 17 June 2009 the Ombudsman received a complaint from Mr C relating to concerns he had regarding post-operative treatment he received at Dundee Dental Hospital (Hospital 1). Mr C had a wisdom tooth extracted under local anaesthetic on 5 November 2008. The operation appeared to have gone well. At the time he was on Warfarin therapy, having undergone a heart valve replacement in 2006.

2. However, later in the evening of 5 November 2008, Mr C became increasingly concerned with what he considered to be abnormal swelling and discomfort around his cheek. The following morning he felt it necessary to return to Hospital 1, comparing the swelling to the size of a 'grapefruit'. He was reviewed as an emergency patient and examined at the walk-in clinic, initially by a dental student and then by the supervising member of staff. He was reassured and provided with a review date one week later. However, on 8 November 2008 Mr C was so concerned, as the pain and swelling had not subsided, that he telephoned his chemist for advice and was provided with pain killers. This did not successfully address his discomfort and at 06:30 on 9 November 2008 Mr C telephoned NHS 24 to ask for assistance. He was provided with an appointment at King's Cross Hospital in Dundee (Hospital 2). He attended at 09:40 and was examined by the rostered general dental practitioner.

3. It was not considered at this stage that Mr C required further investigation and he was treated conservatively. He was prescribed antibiotics and a mouthwash. By 11 November 2008 Mr C's discomfort had become very extreme. His wife telephoned NHS 24 a number of times to try and obtain the services of a dentist but there was no dentist available. He eventually managed to obtain an appointment to see a doctor at Arbroath Infirmary (Hospital 3) where he attended at 22:10. The doctor who reviewed him gave him an immediate referral to Ninewells Hospital (Hospital 4), where he was admitted at around midnight.

4. Following admission, it was discovered that Mr C was suffering from an infected haematoma. He required an emergency operation under general anaesthetic and spent some time in the Intensive Therapy Unit.

5. The complaint from Mr C which I have investigated is that Tayside NHS Board (the Board) failed to diagnose and treat Mr C's haematoma adequately, resulting in a prolonged hospital admittance.

Investigation

6. Investigation of this complaint involved obtaining and conducting a detailed review of the clinical records and complaints files relating to Mr C's complaints. I have also obtained the advice of three clinical advisers to the Ombudsman, the head of oral and maxillofacial surgery at a major hospital (Adviser 1), a general dental practitioner (Adviser 2) and a general medical practitioner (Adviser 3). They have reviewed the clinical background to this case.

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

Complaint: The Board failed to diagnose and treat Mr C's haematoma adequately, resulting in a prolonged hospital admittance

8. Mr C was referred by his Dental Practitioner to Hospital 1 on 2 October 2008. His Dental Practitioner had requested the removal of a grossly decayed lower left wisdom tooth which was noted to be impacted. There was a clear record of the full medical history which noted that the patient had undergone a heart valve replacement in 2006, was hypertensive and was taking Warfarin.

9. Following surgery to remove his wisdom tooth earlier in the day, Mr C was discharged from Hospital 1 on 5 November 2008. It was some time later that day that he became concerned over what he thought was abnormal swelling and discomfort around his cheek. Prior to receiving the surgery, at the assessment appointment, the procedure and possible side effects were discussed with Mr C. A standard patient information leaflet was provided at this time. This leaflet explains that a patient must expect some degree of swelling and pain for some days after an operation to remove wisdom teeth.

10. Adviser 1 has reviewed the case and has explained that from the operative note it appeared that the operation carried out on 5 November 2008 was uneventful. Following surgery, post-operative instructions were given and the patient was discharged back to his own Dental Practitioner.

11. As a result of the continued swelling and pain Mr C returned to Hospital 1 to the 'walk-in' clinic. Here he was initially reviewed by a dental student and then by a supervising member of staff. Following this, he was given reassurance that this was normal post-operative swelling and given a review appointment for one week's time.

12. Mr C has explained that he is of the view that there was evidence of the haematoma at that stage and that this should have been picked up by clinicians at this visit.

13. In response to this point, the Board have explained that when he attended Hospital 1 the swelling was assessed as being within the limits expected at that stage following surgery. They went on to explain that there was no sign of bleeding in Mr C's mouth or any suspicion of internal bleeding at the time. They have stated that it would not be normal practice to open up a wound to investigate whether internal bleeding had taken place as this could cause significant problems.

14. Adviser 1 has explained that the records of the visit to Hospital 1 on 6 November 2008 show that the swelling was noted not to be fluctuant (fluid filled), was not overly painful to the patient and showed no evidence of active infection.

15. Adviser 1 is of the opinion that in the early post-operative period where patients are expected to be swollen and uncomfortable, the comments made by the Board about the visit of 6 November 2008 seem to be reasonable for this post-operative period.

16. The following day Mr C telephoned his general practitioner and was given reassurance that the swelling he was experiencing was normal. On 8 November 2008 he telephoned a pharmacy and obtained emergency painkillers.

17. As his pain and discomfort continued to get worse, Mr C telephoned NHS 24 and was advised to attend Hospital 2. He was reviewed by the rostered general dental practitioner.

18. Mr C has explained that he is of the view that the dentist on duty did not appreciate the seriousness of his problem and made no mention of a haematoma. He did explain that at least he received some antibiotics and a mouthwash at this visit.

19. The Board have explained that the conservative treatment offered was consistent with that which would be recommended for a patient so soon after extractions. However, they go on to accept that he should have been advised to see his own dentist for further investigations if there was no evidence of improvement in his symptoms within 48 hours of commencing antibiotic therapy.

20. Adviser 1 has stated:

'It is rather difficult to work out exactly when things actually started going wrong. At what point they went from being a normal post-operative recovery to being complicated by the issue around the bleeding and the infection, certainly by the time he was admitted to hospital (12/11/08) … By this stage the diagnosis was quite clear but quite what the situation was earlier than this is much harder to elucidate.'

21. He goes on to say:

'It is rather unfortunate that most of these events took place over a weekend on the Friday, Saturday and Sunday the 7th, 8th and 9th when Mr C was seen by several people but none with any great experience in diagnosing this kind of condition. I suspect that if he had presented to an Accident and Emergency Department over the weekend he might have been admitted a little sooner though quite how this would have influenced the outcome I am unclear.'

22. He goes on to state:

'If there was any opportunity to intervene a little earlier then I would have to say that access to emergency services over the weekend would be the point at which this gentleman's care could be criticised. I do not think that a patient on antibiotics taking Warfarin with a history of prosthetic heart valve is the usual kind of individual whose problems could be dealt with by an emergency dental service.'

Warfarin

23. Warfarin is an anticoagulant medication used to prevent blood clotting, especially in heart patients. Warfarin interacts frequently with other medication

and its ability to change the time taken for blood to clot is often affected by the co-administration of other drugs. To monitor the effectiveness of Warfarin a blood test is used which measures the blood's Internationalised Normalised Ratio (INR), to ensure that any adverse effects are within acceptable limits.

24. The INR should be checked regularly, especially when drugs known to interact with Warfarin have been prescribed. Antibiotics and non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin and ibuprofen can alter the effectiveness of Warfarin. Any impact on the clotting characteristics of the blood should be monitored regularly by testing the patient's INR.

25. In addition to its possible impact on the clotting ability of the blood, NSAIDs also can have the side effect of causing gastric ulceration and bleeding. Their prescription with Warfarin, especially when other drugs which interact with Warfarin are also being prescribed, can be especially risky.

26. From the time Mr C was discharged from Hospital 1 following his surgery until his review by the out-of-hours GP at Hospital 3, there is no evidence to show that clinicians considered the impact of antibiotic therapy or the prescribing of NSAIDs to Mr C's INR levels. The Board has explained that it appeared that the rostered general dental practitioner who reviewed Mr C at Hospital 2 initially considered prescribing Metronidazole but scored through this entry and reconsidered this medication due to its possible effect on Warfarin. Rather than prescribing this antibiotic she prescribed Amoxicillin. However, this can also have an impact on patients undergoing Warfarin therapy.

27. By the time Mr C was settled into the ward after admission to Hospital 4 his INR level had increased to 6.2 and it later reached 7.5 before it was brought under control. This was significantly higher than the recent guidelines which suggest that it is safe to carry out a local anaesthetic procedure as long as the INR levels are below 3.5. Patients can suffer serious events, such as stroke, in cases where there is a substantially raised INR level.

Pre-operative planning

28. Prior to the operation to remove Mr C's wisdom tooth on 5 November 2008, the clinical records show that his INR was checked and recorded as being 2.4. This was within the accepted limits for carrying out the operation.

29. The operation and its potential side effects were discussed with Mr C prior to the operation taking place. In addition, he was provided with the standard patient information leaflet which explained the procedure and possible after effects of the surgery. Immediately prior to surgery, the Board have explained that Mr C was given post-operative instructions verbally, which were supported by a written fact sheet. This fact sheet explained what to do in the event of the tooth socket continuing to bleed after the procedure and included contact instructions for Hospital 1 and NHS 24.

30. The Ombudsman's advisers have agreed that this was an unusual set of circumstances for typical out-of-hours rostered general dental practitioners to deal with.

31. Because of the unusual circumstances, it was important to ensure that the patient was fully aware of the possible problems which could arise as a result of his operation and also of what steps he should take in the event of post-operative problems. It would also be important for the clinicians carrying out the procedure to ensure that there were appropriate measures in place to deal with any complications which may arise from the procedure.

32. However, in this case, Mr C was presented with the standard information about what to do in the event of post-operative swelling and bleeding. This advice did not specifically take into account his Warfarin therapy and, in this instance, was ineffective.

33. The Warfarin therapy increased the probability of post-operative problems and also, and perhaps more importantly, it made treating these post-operative problems more difficult. For this reason, the pre-operative information and advice given to Mr C was not sufficient to alert him and the clinicians he later attended to any special steps which should be taken under his particular set of circumstances.

34. Greater emphasis should have been placed on pre-operative planning and post-operative advice. This should have highlighted to Mr C who to contact, and who not to contact, in the event of post-operative problems. The planning should also have included information to be passed to any clinician who reviewed Mr C which would highlight the Warfarin therapy, the possible contraindications with NSAIDs and antibiotics and the importance of monitoring

Mr C's INR levels. Had this taken place, it may have resulted in Mr C being directed to the appropriate emergency treatment at an earlier stage.

Ineffective pain relief

35. From the correspondence received from Mr C it was clear that, from the time the swelling began after the extraction of his wisdom teeth, he was suffering increasing levels of pain. With the exception of the morning of 11 November 2008, where he suggested that the levels of pain decreased slightly for a period, he endured significant pain over this period.

36. Mr C was provided with a non-steroidal anti-inflammatory (ibuprofen) by his pharmacist and again by the rostered general dental practitioner on 9 November 2008.

37. Both Adviser 1 and Adviser 2 have explained that it was clear that the analgesics prescribed were inadequate for Mr C's pain relief.

Conclusion

38. From the review of the information provided by Mr C, it is very clear that the post-operative impact of the removal of his wisdom tooth was a very distressing and painful experience. Once the infected haematoma had been diagnosed and treated, it was some time before Mr C recovered.

39. By the time Mr C was reviewed by the out-of-hours general practitioner on 11 November 2008, it was clear that he was suffering from an infected haematoma and he was admitted to Hospital 4 via the Accident and Emergency Department. From the information provided by Mr C and the Board, as well as the clinical records, it is not possible to establish whether clinicians should have diagnosed a haematoma at an earlier stage.

40. It is likely that when Mr C visited Hospital 1 on 6 November 2008 it was not possible to distinguish any normal post-operative swelling and pain from that caused by a haematoma. For this reason, it is my view that the actions of the dentist at this stage were reasonable. In addition, although it was more likely that there would be signs of haematoma at the visit to Hospital 2 on 9 November 2009, I do not have sufficient evidence to support a view that the diagnosis was missed at this stage.

41. As there is insufficient evidence to allow me to establish whether, on balance, clinicians should have reached a diagnosis of haematoma earlier, I do not uphold the complaint.

42. It is unclear from the records what, if any, discussions had taken place between Mr C and the clinicians who reviewed him throughout this episode, to establish that he was on Warfarin for a pre-existing condition. Although alluded to by the rostered general dental practitioner at Hospital 2, it is not clear that sufficient consideration was given to the Warfarin therapy and its implications for post-operative treatment.

43. Although it has not been possible to say whether, on balance, it was reasonable to expect clinicians to have diagnosed the haematoma at an earlier stage, it is possible to be critical of the Board for their failure to ensure adequate pre-operative planning, post-operative guidance and the failure of clinicians to ensure for adequate pain control.

Recommendations

44. I recommend that the Board:	*Completion date*
(i) review the pre-operative planning for dental patients with pre-existing disease and/or drug history to ensure that effective treatment plans are available in the event of post-operative complications. This should include a review of their post-operative information packs given to patients to ensure that they provide detailed instructions to patients on Warfarin therapy; and	15 December 2010
(ii) apologise to Mr C for their failure to carry out effective pain control.	15 December 2010

45. The Board have accepted the recommendations and will act on them accordingly. The Ombudsman asks that the Board notify him when the recommendations have been implemented.

Annex 1

Explanation of abbreviations used

Mr C	The complainant
Hospital 1	Dundee Dental Hospital
Hospital 2	Kings Cross Hospital, Dundee
Hospital 3	Arbroath Infirmary
Hospital 4	Ninewells Hospital
The Board	Tayside NHS Board
Adviser 1	Clinical adviser to the Ombudsman, head of oral and maxillofacial surgery at a major hospital
Adviser 2	Clinical adviser to the Ombudsman, a general dental practitioner
Adviser 3	Clinical adviser to the Ombudsman, a general medical practitioner
INR	Internationalised Normalised Ratio
NSAID	Non-steroidal anti-inflammatory medication

Annex 2

Glossary of terms

Amoxicillin	An antibiotic
Haematoma	Localised collection of blood within tissue
Metronidazole	An antibiotic
Warfarin	An anticoagulant