Scottish Parliament Region: Glasgow

Case 201002636: Greater Glasgow and Clyde NHS Board - Acute Services Division

Summary of Investigation

Category

Health: Hospitals; orthopaedics; clinical treatment; diagnosis

Overview

The complainant (Mrs C) raised concerns on behalf of her mother (Mrs A) regarding the treatment that she received from Greater Glasgow and Clyde NHS Board (the Board). Mrs A attended Victoria Hospital (the Hospital) after breaking her ankle. She was treated for this but subsequently experienced severe pain and blistering around the ankle. Mrs A was later found to have a second fracture, which had previously been undetected. Mrs C complained about the Board's failure to diagnose the second fracture and about the initial treatment that Mrs A received, which she believed caused her blistering.

Specific complaints and conclusions

The complaints which have been investigated are that:

(a) the Board failed to diagnose Mrs A's os calcis fracture in good time *(upheld)*;

(b) the Board's treatment of Mrs A's broken ankle was inappropriate (*upheld*); and

(c) the Board's complaint handling was poor *(upheld)*.

Redress and recommendations

The Ombudsman recommends that the Board:	*Completion date*
(i) present Mrs A's case and this report's findings to Orthopaedic, A&E and complaint handling staff at a suitable staff forum, such as a mortality and morbidity meeting;	30 December 2011
(ii) review their procedures for assessing patients' suitability for discharge to ensure that social and medical considerations are given the appropriate consideration; and	30 December 2011

(iii)	consider providing further training to staff on patient discharge eligibility assessment.	30 December 2011

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

Main Investigation Report

Introduction

1. After a fall in September 2009, Mrs A, a 66-year-old woman, was taken by ambulance to the Accident and Emergency department (A&E) at the Victoria Infirmary (the Hospital). She was x-rayed and was found to have broken her right ankle. Mrs A was fitted with an air cast, provided with crutches, and discharged home.

2. At home, Mrs A was reportedly in great pain. She found that the air cast was very tight and painful and she could feel that blisters had formed under the cast. Mrs C advised Mrs A to call the out-of-hours doctor. He visited her at home and after examining Mrs A's ankle called for an ambulance to take her back to the Hospital. Mrs A's air cast was removed at the Hospital and she was admitted as an in-patient. Mrs A was fitted with a back-slab cast (a plaster cast which has no plaster at the front of the cast) and her blisters were dressed. She was kept in hospital for a week, during which time her ankle continued to be swollen and new blisters formed. During the weeks following discharge, Mrs A was collected by ambulance and returned to the Hospital so that her progress could be monitored. Although her cast was removed in November 2009, Mrs A continued to experience pain and swelling. Mrs C complained to Greater Glasgow and Clyde NHS Board (the Board) in November 2009, noting that 11 weeks had passed and her mother remained unable to leave her home due to the problems with her ankle.

3. While the Board were investigating Mrs C's complaint, Mrs A underwent a further x-ray on her ankle. This showed that she, in fact, also had a fractured os calcis (heel bone) as well as the previously diagnosed fractured ankle. Mrs C raised a further complaint about the Board's failure to diagnose this second fracture earlier.

4. Mrs C was dissatisfied with the responses that she received to her complaints from the Board. She found that they contained a number of inaccuracies. She brought her complaint to the Ombudsman in September 2010.

5. The complaints from Mrs C which I have investigated are that:

(a) the Board failed to diagnose Mrs A's os calcis fracture in good time;

(b) the Board's treatment of Mrs A's broken ankle was inappropriate; and

(c) the Board's complaint handling was poor.

Investigation

6. In order to investigate this complaint my complaints reviewer reviewed all of the correspondence between Mrs C and the Board, as well as Mrs A's clinical records. He also sought further information from the Board and the opinion of my professional medical advisers. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. Mrs C and the Board were given an opportunity to comment on a draft of this report.

Background

7. On 12 September 2009, Mrs A fell down stairs outside her home. She was taken to the Hospital's A&E by ambulance complaining of an ankle injury. Her ankle was examined by a relatively senior trainee (Registrar 1), who recorded that there was 'dramatic swelling' of the outer aspect of the ankle and that Mrs A was unable to weight-bear. He ordered an x-ray. The x-ray showed that Mrs A had a large flake fracture of the lower pole of fibula (the outer bone of her ankle). Registrar 1 noted that Mrs A should be fitted with a back-slab plaster cast. She was to be given crutches and was to be reviewed after four weeks, however, she was to return the following Friday for her cast to be completed. It was noted that Mrs A lived in a top-floor flat and that her son would be away until Monday (this was Saturday). Registrar 1 wrote that Mrs A would manage with crutches.

8. Mrs C said that Mrs A was fitted with an inflatable air cast, rather than the back-slab cast mentioned in Registrar 1's records. Mrs A was discharged home around 18:00 on 12 September 2009. The ambulance crew took Mrs A home and helped her into her flat as she was unable to negotiate the stairs herself.

9. Upon returning home, Mrs A telephoned Mrs C, who lived in England and was unable to visit until the following morning. She reportedly told Mrs C that she was in a great deal of pain, worse than she could remember experiencing with other broken bones. Around 21:00 the same evening, Mrs A telephoned Mrs C again. Mrs C said that she was in a hysterical state as the air cast was extremely tight and restricting her leg. She could feel blisters forming on her skin under the cast. Mrs C advised Mrs A to telephone the out-of-hours doctor. The doctor went to Mrs A's home and examined her leg. He immediately called an ambulance to take Mrs A back to the Hospital.

10. Mrs A was collected by ambulance and returned to the Hospital around 03:00 on 13 September 2009. She was seen by a triage nurse shortly after arrival and given pain killers. She was seen by another trainee doctor (Registrar 2) around 03:40. Registrar 2 recorded Mrs A's history, including her ankle fracture and the fact she had been treated with a 'boot'. He noted that she had a 'grossly swollen lower right leg' with 'multiple superficial fluid filled blisters associated with swelling'. Registrar 2 arranged for Mrs A to be seen by the Orthopaedic team and requested further x-rays of her ankle.

11. A Junior Trainee Orthopaedic doctor (Registrar 3) saw Mrs A around 05:00. He noted that she had a history of claudication (leg pain on walking, which can be suggestive of reduced arterial blood supply to the legs). He also recorded that she had been treated with a 'POP' (plaster of Paris cast) and was provided with crutches following her fall. Mrs A was admitted to Ward 4 as an in-patient, further x-rays and a back-slab plaster cast were ordered.

12. Mrs A's condition was monitored during daily ward rounds between 13 and 18 September 2009. Mrs A continued to experience significant pain, bruising and swelling, however, she was noted as being comfortable in the back-slab cast. The Consultant Orthopaedic Surgeon who examined her each day (Consultant 1) ordered repeat x-rays on 16 September 2009 to check that there were no other issues contributing to her swelling and pain. Mrs A's lower leg was x-rayed with her cast in place. On 17 September 2009 Consultant 1 noted that Mrs A had been admitted with what appeared to be a 'very minor' fracture. He said, however, that there had been 'really quite a surprising amount of bruising and blistering around the ankle and she has been having a lot of pain …'.

13. Mrs A was discharged from the Hospital on 19 September 2009. The discharge letter stated that her blistering was probably related to PVD (peripheral vascular disease – obstruction of the arteries, restricting blood flow to the legs). She attended the fracture clinic at the Hospital regularly and was reviewed by another Consultant Orthopaedic Surgeon (Consultant 2). Mrs A's blisters gradually reduced; however, she continued to experience pain in her foot and ankle. On 27 October 2009, Consultant 2 reviewed Mrs A at the fracture clinic. In a letter to Mrs A's GP, he noted that her blisters had 'more or less' healed but that she was still very sore and would find it difficult to weight-bear without a plaster cast for support. Consultant 2 commented that he had

14. On 2 December 2009, Mrs A's GP re-referred her to Consultant 2's clinic, explaining that she was complaining of increased swelling and pain. Consultant 2 saw Mrs A on 8 December 2009. In a letter to her GP following the consultation, he commented that Mrs A was in more pain than he would expect at that stage and noted that her pain was increasing rather than resolving. He suspected that Mrs A may have chronic regional pain syndrome (long-term, severe, localised pain). Mrs A underwent a bone scan and MRI scan. The MRI report, issued on 9 March 2010, stated:

> 'I note the original plain film imaging from 12.9.09 where there was a relatively unremarkable fracture of the lateral malleolar tip [ankle bone] but a more concerning impacted fracture of the mid and anterior body of the calcaneum [heel bone] … The main MR finding really related to the calcaneum which shows comminuted [broken into small pieces] impacted fracture and still evidence of MR high signal around some of the fracture lines indicating as yet no complete bony union …'

15. On 6 May 2010, Consultant 2 referred Mrs A to a foot and ankle specialist (Consultant 3). In his referral letter, Consultant 2 noted that his x-rays of 27 October 2009 highlighted that Mrs A had a likely os calcis fracture which had not been identified on the original x-rays.

16. Consultant 3 saw Mrs A on 16 July 2010. He noted that Mrs A was initially treated only for her ankle fracture and not the os calcis fracture, which he felt was clearly evident on the x-rays. He further noted that Mrs A's MRI scan showed that, whilst her ankle fracture was healing, there was also significant damage to her subtalar joint (a joint in the foot, above the heel bone) and some damage to her talus (the bone in the foot above the heel bone). Consultant 3 explained to Mrs A that, whilst it was unfortunate that her os calcis fracture was not picked up earlier, he did not believe that this would have had an adverse effect on the long-term outcome. He suggested surgery to fuse the subtalar joint and correct her foot position, but recommended that this not go ahead for at least 12 to 18 months to allow her fractures to heal fully.

(a) The Board failed to diagnose Mrs A's os calcis fracture in good time

17. During correspondence with Mrs C regarding her complaints, the Board commented on the fact that Mrs A's os calcis fracture was missed when her fractured ankle was diagnosed. They stated:

> 'whilst an os calcis fracture can be easily overlooked in such circumstances, it was clearly the cause of your mother's extensive soft tissue injury … it would appear that the os calcis fracture was visible on the initial x-ray taken on 12 September although formal views of the os calcis were only taken some time afterwards as an out-patient on or about 27 October 2009. This diagnosis was confirmed during your mother's out-patient attendances.'

18. Mrs C did not accept the Board's response. She said that she was 'shocked and upset' that Mrs A's os calcis fracture was not diagnosed from the original x-ray taken on 12 September 2009 and found it unacceptable that the fracture could be 'easily overlooked'. She also disagreed that the fracture was identified around 27 October 2009, as she and her brother had discussed x-rays with Consultant 2 after this and were advised that everything was fine. Mrs C said that she and Mrs A were first told of the os calcis fracture by Consultant 2 in March 2010.

19. In a letter to Mrs C dated 14 June 2010, the Board accepted Mrs C's recollection of events. They said that Consultant 2 gave consideration at an out-patient appointment on 4 March 2010 to the possibility that Mrs A may have had an undisplaced os calcis fracture. The Board offered their unreserved apologies that the os calcis fracture was not diagnosed earlier. However, they assured Mrs C that Mrs A received appropriate treatment for her injuries regardless of the fact that the second fracture was not identified.

20. My complaints reviewer sought the opinion of two of my professional medical advisers (Adviser 1 and Adviser 2). Adviser 1 noted that the x-ray report for the 12 September 2009 x-rays stated 'mildly displaced fracture of the lateral aspect of the lateral malleoulus' with 'marked associated soft tissue oedema'. He was surprised to find no comments regarding the os calcis. He found that subtle abnormalities were visible on one view of the ankle (lateral). Had these abnormalities been recognised, they should have led to further x-rays for a specific view of the os calcis. Adviser 1 highlighted that the x-rays taken on 13 September 2009 included a view of the os calcis. Again, subtle abnormalities were visible, however, the x-ray report did not mention them.

Adviser 1 said that, given the other more obvious fracture on the x-rays, the subtle abnormalities in Mrs A's os calcis would be easily missed. That said, he would have expected Registrar 1 (the more senior trainee) to have identified the fracture. He did not necessarily expect Registrar 3 to identify the fracture when reviewing the x-rays on 13 September 2009.

21. Adviser 2 noted that os calcis fractures are typically caused by a fall from height, which was not consistent with Mrs A's 'stumbling whilst going downstairs'. As such, the examining clinicians may not have suspected an os calcis injury. Adviser 2 also identified the os calcis fracture from the 12 September 2009 x-rays. She noted that it is unusual to find an os calcis fracture at the same time as a malleoulus fracture, however, when reviewing a malleoulus fracture it is important to thoroughly examine the lateral radiograph and careful viewing by an orthopaedic surgeon may have led to diagnosis of the os calcis fracture. Adviser 2 felt that it was 'understandable, but disappointing' that the fracture was not spotted by Registrar 1 or Registrar 2.

22. Adviser 2 noted that Consultant 1 ordered further x-rays on 16 September 2009. She found that these showed the os calcis fracture, partially obscured by the plaster cast. Adviser 2 said that the records showed that Consultant 1 ordered the x-rays on the suspicion that there may have been a further injury; however, there is no record of the x-rays being critically reviewed. If they were, then it would appear that the diagnosis was missed. Furthermore, the original x-rays were reported by the Radiology Department on 23 September 2009. Again, the os calcis fracture was not identified.

23. My complaints reviewer asked Adviser 2 whether Mrs A's treatment would have been different had the second fracture been diagnosed earlier. Adviser 2 explained that, had the fracture been identified in A&E on 12 September 2009, then a member of the Orthopaedic team would almost certainly have reviewed her and would have ordered an x-ray of the os calcis. Adviser 2 considered that Mrs A would either have been admitted to the Hospital for splintage, elevation of her leg, and analgesia, or discharged home with a back-slab cast or removable air cast, as happened. Given that Mrs A lived alone, Adviser 2 said that there was a judgement call to be made as to whether she should be admitted or discharged with crutches. She considered that, had the os calcis fracture been diagnosed initially, she most likely would have been admitted to the Hospital, avoiding the issues that she faced upon returning home (see complaint (b) of this report).

(a) Conclusion

24. Comments from Consultant 2 and Consultant 3 indicate that Mrs A's os calcis fracture was the source of the severe pain that she continued to experience many months after her accident. Consultant 3 considered that surgery may be required to resolve her pain and that this should not be undertaken for 12 to 18 months. It is, therefore, unlikely that earlier diagnosis would have eliminated her pain; however, it is undoubtedly reassuring for patients just to know that the true source of the problem has been diagnosed and is being appropriately treated.

25. The Board have accepted, and the advisers have confirmed, that Mrs A's os calcis fracture was visible, albeit subtly, in the initial x-rays taken on 12 September 2009. Whilst there was, therefore, clearly an opportunity at that point to diagnose the fracture, I accept the various comments indicating that it was 'easily missed'. This, however, should not detract from the fact that a visible fracture was missed by a number of different staff members reviewing the x-rays over a period of weeks.

26. I was particularly concerned to note that Consultant 2 arranged further x-rays on 27 October 2009 having specifically noted following his examination of Mrs A that she may have an undisplaced os calcis fracture. Upon confirming the second fracture, Consultant 2 does not appear to have taken further action until his referral to Consultant 3 in May 2010. The x-ray results were known prior to Mrs A's re-referral to Consultant 2 in December 2009, however, a diagnosis of chronic regional pain syndrome continued to be investigated for a number of months.

27. I am satisfied that the failure to diagnose Mrs A's os calcis fracture would have had little impact on her overall prognosis, as she would still be required to wait 12 to 18 months before being considered for surgery. Similarly, the treatment that she received for her broken ankle was appropriate for treatment of a broken heel bone. That said, the evidence that I have seen clearly indicates that the Board failed to diagnose the fracture in the immediate aftermath of her fall and missed a number of opportunities in the following weeks to identify the injury. I also consider that her referral to Consultant 3 could have been made significantly sooner. As such, I uphold this complaint.

(a) Recommendation

28. I recommend that the Board:	*Completion date*
(i) present Mrs A's case and this report's findings to Orthopaedic, A&E and complaint handling staff at a suitable staff forum, such as a mortality and morbidity meeting.	30 December 2011

(b) The Board's treatment of Mrs A's broken ankle was inappropriate

29. Mrs C complained about the treatment that Mrs A received at the Hospital. She was particularly concerned that Mrs A had been fitted with an air cast initially. Mrs A had been given the cast and a small pump to adjust the pressure. Mrs C said that Mrs A was shown how to use the pump, but told the nursing staff that she did not understand and would not be able to use it herself. Despite this, Mrs A was discharged home. Mrs C found it inappropriate for Mrs A to be discharged home, given that she lived alone and was unsure how to use the pump for her air cast. She also felt that Mrs A should not have been left to mobilise with crutches given the bruising and pain from her fall just a few hours previously. She noted that Mrs A had no support at home and was unable to get to the kitchen or bathroom unaided following her accident. She did not consider there to have been a proper evaluation of Mrs A's ability to cope at home alone.

30. Mrs C felt that the air cast, and the fact that Mrs A found it to be too tight, caused the blistering on her leg. Based on the clinical records, the Board commented in correspondence with her that Mrs A had been provided with a back-slab cast (see complaint (c) of this report). Mrs C highlighted that the air cast had in fact been used and questioned whether the correct type of cast was used.

31. The Board said that nursing staff considered Mrs A's personal circumstances prior to discharging her and ensured that she was able to mobilise with crutches. Mrs C challenged this, stating that Mrs A was unable to use the crutches and did not have any support at home. The Board later accepted that, in retrospect, it would have been better if Mrs A was admitted to the Hospital on 12 September 2009. They apologised if their staff did not fully appreciate the difficulties that Mrs A would experience at home alone or her lack of understanding of the air cast and pump.

32. The Board were satisfied that, whilst the full extent of her injuries was not initially appreciated, Mrs A had received appropriate treatment for her fractures. They did not consider it likely that the air cast would have caused her blistering. They explained that this was fracture blistering, most likely caused as a result of Mrs A's PVD, which restricts blood supply to the legs.

33. Adviser 2 commented on the use of an air cast. She said that, whilst back-slab casts are more commonly used for ankle fractures such as Mrs A's, it is perfectly acceptable to use an air cast. Their use is also appropriate for os calcis fractures.

34. With regard to Mrs A's blistering, Adviser 2 said that this is a reasonably common occurrence following foot or ankle fractures. The cause of such blistering is a matter of debate; however, the damage is thought to occur at the time of injury, rather than following the injury. Blistering can occur in cases where no cast is used. Adviser 2 felt that it was extremely unlikely that the air cast contributed to Mrs A's blistering and considered that her PVD was the most likely cause.

(b) Conclusion

35. I accept the Board's and Adviser 2's comments regarding the likely cause of Mrs A's blistering and do not consider the use of an air cast to have been inappropriate.

36. Mrs C's other complaints about the treatment that Mrs A received centre around the events of 12 to 13 September 2009, when she was discharged home from A&E. Her treatment at this time was partly affected by the fact that her os calcis fracture was initially undiagnosed.

37. As I mentioned in paragraph 23 of this report, Adviser 2 considered that, had Mrs A's os calcis fracture been diagnosed on 12 September 2009, she most likely would not have been discharged home. Rather, she would have been admitted to the ward, her foot elevated and her condition monitored. As such, the pain and distress that she experienced upon returning home and then returning to the Hospital could have been avoided.

38. The decision to discharge Mrs A should have been taken following consideration of her ability to cope at home. As Adviser 2 noted, a judgement call had to be made in this regard and, at the time, the full extent of her injuries

was not known. Whilst I acknowledge the Board's comments regarding the nurses' assessment of Mrs A's mobility and ability to use her pump, there is little in the way of objective evidence available to assess the reasonableness of the decision reached at that time. The Board have, however, accepted that their staff may not have fully appreciated Mrs A's home circumstances and concede that she probably should have been admitted to the Hospital, rather than discharged home. Had Mrs A been admitted, the issues that Mrs C complained about would not have arisen. As such, I uphold this complaint.

(b) Recommendations

39. I recommend that the Board:	*Completion date*
(i) review their procedures for assessing patients' suitability for discharge to ensure that social and medical considerations are given the appropriate consideration; and	30 December 2011
(ii) consider providing further training to staff on patient discharge eligibility assessment.	30 December 2011

(c) The Board's complaint handling was poor

40. The Board's complaints procedure states that they will respond to complaints within 20 working days. Should they be unable to do so, they will write to the complainant providing an explanation for the delay.

41. Mrs C raised a formal complaint with the Board on 30 November 2009. The Board acknowledged her complaint on 7 December 2009. They sent a 'holding letter' on 26 January 2010, explaining that their investigation was not yet complete as they were awaiting further comments from staff. Mrs C wrote a second letter to the Board on 29 January 2010 and the Board acknowledged it on 4 February 2010, advising that they would respond to both of her letters at the same time. The Board responded to Mrs C's formal complaint on 25 February 2010.

42. On 10 March 2010, Mrs C wrote a further complaint to the Board. She was dissatisfied with their response to her initial complaint. Specifically, the Board had stated that Mrs A was fitted with a back-slab cast in A&E on 12 September 2009. Mrs C pointed out that this was inaccurate. Furthermore, the Board had stated that Mrs A had been keen to be discharged home after her cast was fitted. Mrs C again said this was incorrect, as Mrs A had told her that she had made it clear to staff at the Hospital that she did not feel that she

was in a position to go home alone. Mrs C also felt that the Board had trivialised the extent of the blistering that Mrs A experienced.

43. The Board responded to Mrs C on 12 April 2010. They accepted that Mrs A had in fact been given an air cast and apologised for the error in their previous letter. They noted that the clinical records incorrectly stated that a back-slab cast was to be used and this informed their response. The Board also accepted that their staff had failed to register that Mrs A was not confident using the air cast's pump and had misinterpreted her enthusiasm for returning home from the Hospital.

44. On 17 May 2010, Mrs C responded to the Board, acknowledging their apologies and the action that they had taken as a result of her complaints. However, she remained dissatisfied with the Board's treatment of Mrs A and highlighted further inaccuracies in their latest letter in relation to the timing of their diagnosis of Mrs A's os calcis fracture. Again, when responding to Mrs C's letter on 14 June 2010, the Board accepted that her recollection of events was accurate.

45. Mrs C brought her complaint to the Ombudsman in October 2010. She complained about the inconsistencies in the correspondence that she received from the Board and the length of time taken to respond on each occasion.

(c) Conclusion

46. The Board's response to Mrs C's initial complaint was certainly delayed, taking around 55 working days from receipt. I acknowledge that some of that delay would be attributable to the Christmas holiday period and the fact that staff may have been unavailable. The points raised in Mrs C's further letter of 29 January 2010 would also have to be investigated, leading to further delay. That said, the overall time taken to respond was poor. Mrs C's other correspondence was responded to reasonably timeously.

47. When reviewing the progression of Mrs C's complaint to the Board, I was concerned by the number of inaccuracies in the Board's responses. After their initial response of 25 February 2010, each of the Board's subsequent letters contained apologies for comments made that did not accurately reflect the events being complained about. The first such apology related to the confusion over whether Mrs A was fitted with an air cast on 12 September 2009. The Board's response was informed by the clinical records which indicate that a

back-slab cast was used. This is a matter of poor record-keeping, rather than poor complaint handling, however, further inaccuracies were put forward as fact in subsequent correspondence from the Board. Given that the records had been found to be inaccurate after Mrs C's first letter, I would have expected the Board to take extra care to ensure the accuracy of any further responses.

48. Mrs C already had doubts about the Board's competence when she raised her complaint in November 2009 and I doubt that the subsequent investigation and response would have done much to restore her faith in their abilities. Her complaint could have been resolved far more quickly had accurate and timely responses been provided. In light of all of the above, I uphold this complaint.

(c) Recommendations

49. I have no recommendations to make.

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

Annex 1

Explanation of abbreviations used

Mrs A	The complainant's mother
A&E	Accident and Emergency
The Hospital	The Victoria Infirmary
Mrs C	The complainant
The Board	Greater Glasgow and Clyde NHS Board
Registrar 1	A senior trainee consultant at the Hospital
Registrar 2	A trainee doctor at the Hospital
Registrar 3	A junior trainee orthopaedic consultant at the Hospital
POP	Plaster of Paris
Consultant 1	A Consultant Orthopaedic Surgeon for the Board
PVD	Peripheral vascular disease
Consultant 2	A Consultant Orthopaedic Surgeon for the Board
Consultant 3	A Specialist Foot and Ankle Surgeon for the Board
Adviser 1	A professional medical adviser to the Ombudsman

Adviser 2	A professional medical adviser to the Ombudsman

Annex 2

Glossary of Terms

Chronic regional pain syndrome	Long-term localised pain
Claudication	Leg pain on walking, which can be suggestive of reduced arterial blood supply to the legs
Lower pole of fibula/malleoulus	The outer ankle bone
Os calcis/calcaneum	The heel bone
Subtalar joint	A joint in the foot above the heel bone
Talus	The bone above the heel bone