Scottish Parliament Region: Glasgow

Case 200802662: Greater Glasgow and Clyde NHS Board

Summary of Investigation

Category

Health: Hospital

Overview

The complainant (Mrs C) raised concerns regarding the care and treatment received by her daughter (Miss A) when she attended the Royal Alexandra Hospital with back pain. Miss A was initially treated for a chest infection and referred for physiotherapy in respect of her back pain, however, she was subsequently diagnosed with a spinal infection and Mrs C complained that this was not diagnosed earlier. In addition, Mrs C raised her concerns that Miss A's anti-coagulant medication prevented surgical treatment of Miss A's infection.

Specific complaints and conclusions

The complaints which have been investigated are that:

(a) there was a delay in referring Miss A for a Magnetic Resonance Imaging scan and, consequently, in diagnosing her spinal infection (*upheld*); and

(b) the provision of anti-coagulant medication to Miss A prevented the possibility of surgical treatment of her spinal infection and a potentially more positive outcome (*not upheld*).

Redress and recommendations

The Ombudsman recommends that the Board:

(i) apologise to Miss A for the delay in diagnosing her spinal infection;

(ii) review their process in respect of identifying 'red flag' features in patients and taking relevant action upon identification of these; and

(iii) ensure that complaints officers accurately reflect clinicians' feedback in their response to complaints.

Main Investigation Report

Introduction

1. On 11 August 2008, Mrs C complained to Greater Glasgow and Clyde NHS Board (the Board) regarding her daughter (Miss A)'s care and treatment at the Royal Alexandra Hospital (Hospital 1). Miss A first attended Accident and Emergency (A&E) in April 2008, however, her spinal infection was not diagnosed until August 2008, some four months later, and Mrs C complained that, in the intervening period, Miss A had been in severe pain and had very limited mobility at home.

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

(a) there was a delay in referring Miss A for a Magnetic Resonance Imaging (MRI) scan and, consequently, in diagnosing her spinal infection; and

(b) the provision of anti-coagulant medication to Miss A prevented the possibility of surgical treatment of her spinal infection and a potentially more positive outcome.

Investigation

3. In writing this report I have had access to Miss A's medical records and Mrs C's complaints correspondence with the Board. In addition, I obtained advice from one of the Ombudsman's orthopaedic advisers (the Adviser).

4. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. An explanation of the abbreviations used in this report is contained in Annex 1 and a glossary of terms is at Annex 2. Mrs C and the Board were given an opportunity to comment on a draft of this report.

Background

5. Miss A, aged 36 at the time, attended A&E on 15 April 2008 complaining of back pain which had been going on for one week. She had also had a cough producing green sputum for a week. It was noted that she was on a methadone programme having been a previous intravenous drug abuser and she had a previous left leg deep vein thrombosis (DVT). She was diagnosed with a lower respiratory chest infection and was started on an antibiotic and also given some painkilling medication. She re-attended A&E the next day as her symptoms had not improved, however, she was again discharged and referred back to her GP. In addition, some out-patient physiotherapy was arranged for her back pain.

6. On 8 May 2008, Miss A was seen in the physiotherapy department for her back pain and it was noted that she had a swollen right leg. It was felt that she had probably developed a further blood clot in view of her previous history of DVT, so she was referred back to A&E. She was then seen by the haematology department who confirmed the diagnosis of blood clot and admitted her for treatment with anti-coagulant (blood thinning) medication. During this time, abdominal and pelvic ultrasound scans and an x-ray of her lumbar spine were performed and the results were reported normal. She was discharged on 19 May 2008 to stay with her mother who undertook to supervise her anti-coagulation treatment.

7. On 31 July 2008, Miss A again attended A&E complaining of severe pain in the lower left part of her abdomen. A possible diagnosis of a prolapsed disc was made and an MRI scan of her lumbar spine was arranged. The scan could not be done that day because the severity of Miss A's pain prevented her from lying flat. After painkilling medication, the scan was done the next day and it showed an infection of Miss A's spine. Blood tests were carried out which confirmed the presence of the infection and Miss A was referred to the Institute of Neurological Sciences at the Southern General Hospital (Hospital 2) for a decision on whether to treat the infection operatively or non-operatively. The neurosurgeons decided against operative treatment and Miss A was subsequently treated with intravenous antibiotics. Her condition was noted to have gradually improved and she was discharged to Merchiston Hospital on 22 August 2008 for rehabilitation.

(a) There was a delay in referring Miss A for an MRI scan and, consequently, in diagnosing her spinal infection

8. The Board responded to Mrs C's complaint on 11 November 2008 and stated that, on Miss A's initial presentation, there were no signs of any serious pathology affecting her lower back and they indicated that the only abnormal physical finding was a raised temperature. They advised that a diagnosis was, therefore, made of 'lower back pain secondary to respiratory tract infection' and Miss A was commenced on oral antibiotics and advised to attend her GP within the next three to four days for review. They stated that, when Miss A presented again the following day, her raised temperature had settled and it was, therefore, felt again that there was no serious underlying cause for her back pain. They advised that Miss A's analgesia was altered and that further review following this had suggested that her pain had improved. They confirmed that

Miss A was provided with a zimmer to help with mobility and arrangements were made for a physiotherapist to review her. She was referred back to her GP for review and further follow-up.

9. In their response, the Board explained that clinicians taking a patient's history should examine for certain 'red flags' which may be indicative of serious spinal pathology. They provided a list of these 'red flags' which included factors such as a weight loss, drug abuse, persistent fever, and structural deformity. However, they said that Miss A had not exhibited any of these 'red flag' features and an MRI scan was, therefore, not performed earlier. They confirmed that further imaging would only be considered when some of these 'red flags' were present and that, when there were no indications of such, it was standard practice to advise mobilisation and regular analgesia.

10. The Board advised that Miss A attended physiotherapy on 8 May 2008 when it was noticed that she had a sign of DVT in her right leg and she was consequently admitted to Hospital 1 via A&E. They confirmed that she subsequently continued to attend physiotherapy and, on 16 June 2008, an MRI scan was requested for consideration of possible disc pathology. They advised that this was scheduled for 31 July 2008 but that it was postponed until 1 August 2008 as Miss A was initially unable to tolerate the scan due to the pain she was experiencing. The Board indicated that the scan revealed infection of an intervertebral disc which had spread to form an abscess in the epidural space. In light of this, they advised that Miss A was referred to neurosurgeons who treated the infection with antibiotics for a total of 12 weeks.

11. When formulating their response to Mrs C, the Board received comments from the consultant orthopaedic surgeon who had been involved with Miss A's care (the Consultant). He advised that the doctors who saw Miss A in the early part of her illness were faced with a difficult situation as an ordinary disc prolapse could be extremely painful. However, he stated that, in his view, the new onset of back pain in a patient with a history of intravenous drug use 'should have engendered a high index of suspicion for infection and a more urgent request for MRI'. He acknowledged that earlier diagnosis would not have altered the treatment, which would still have consisted of a 12 week course of antibiotics, however, he stated that earlier treatment might have prevented the infection spreading to the epidural space. These comments were not reflected in the Board's response.

12. Mrs C wrote to the Board again on 17 November 2008 as she was not satisfied that her concerns had been addressed and the Board subsequently met with her and Miss A on 3 December 2008. During the meeting, Mrs C advised of the pain Miss A had been in and reiterated her belief that an earlier diagnosis should have been made. The Board re-stated that there had not been any presenting problems, such as those highlighted in their 'red flag' system. Mrs C responded to this by indicating that Miss A did have 'red flags' present as she had lost weight (two stone) and she had a structural deformity as she was walking to one side. The Board advised Mrs C that Miss A had not lost weight until after she attended Hospital 1 and they stated that the term 'structural deformity' was used to describe an actual physical deformity, which they did not consider Miss A had due to the fact that she was able to weight bear.

13. At the meeting, Mrs C also said that she felt Miss A should have been x-rayed and admitted when she first attended Hospital 1. The Board advised that they see a lot of patients in A&E with back pain and that they would normally only be admitted if they presented with any of the 'red flag' indicators. They noted that an x-ray would not have been helpful at that time as Miss A's condition lay in the soft tissue between her bones and would not have shown up on an x-ray. The Board then followed this up in a letter of 24 December 2008 in which they advised that, prior to Miss A's discharge from Hospital 1 on 19 May 2008, a plain x-ray of her lumbar spine was reported as being normal. They acknowledged that an earlier MRI scan may have picked up Miss A's spinal infection, however, they reiterated that an MRI scan was not felt necessary given her clinical features when she presented to the A&E department. They indicated that it was not common practice to carry out MRI scans on all patients with back pain.

14. Mrs C complained to the Ombudsman on 18 January 2009 and she reiterated her concerns that the Board failed on more than one occasion to diagnose Miss A's spinal infection and that, until the diagnosis was eventually made, she had suffered a prolonged period of pain and disability.

Adviser's comments

15. I asked the Adviser to comment on the timing of Miss A's diagnosis. He observed that her assessment on 15 April 2008 resulted in a diagnosis of a chest infection with incidental back pain and he indicated that this, on the face of it, was not an unreasonable diagnosis as both conditions are common.

However, he advised that the examination of the chest had not revealed any clinical findings of a chest infection and that no chest x-ray was performed to attempt to confirm this diagnosis. In addition, he noted that there was no sputum obtained and he advised that this suggested that she did not actually have a productive cough. He informed me that, if a chest infection is suspected on the basis of a cough producing sputum, a sputum sample would normally be obtained and sent for bacteriological analysis.

16. The Adviser also noted that there were factors that probably should have raised the suspicion of spinal infection, namely the fact that Miss A had a history of intravenous drug abuse along with her raised temperature combined with her complaint of back pain. He observed, however, that Miss A did not have any spinal tenderness which, he advised, was one of the typical features of spinal infection. In the absence of tenderness, the Adviser stated that it would have been interpreted as making a diagnosis of spinal infection unlikely.

17. When Miss A attended A&E again the next day, the Adviser noted that her clinical findings were the same except that her temperature had reduced to nearly normal. He observed that the record of her pain at this time did not suggest that the pain was severe, however, he acknowledged Mrs C's indication that the pain had been very severe.

18. In the Adviser's opinion, it was understandable, given the atypical clinical presentation, that a junior doctor might have missed the spinal infection on Miss A's first presentation. However, he stated that the use of the 'red flag' system should have prevented this error. In his view, when Miss A presented with the same complaint the next day, she should have been seen by a more senior clinician, probably an orthopaedic surgeon with experience of diagnosing back complaints. If this had happened, he considered it likely that the diagnosis would have been made more quickly. Given that the Adviser highlighted the grade of doctor as a factor, I reviewed the records to establish the grade of doctors who had treated Miss A. The records confirmed that Miss A was seen by a junior doctor on 15 April 2008, however, the grade of the doctor who saw her when she presented the next day was not apparent, although it was not a consultant. The Adviser confirmed his view that Miss A did have two 'red flag' features, namely a history of intravenous drug abuse and a persistent fever (although her temperature had decreased when she presented to A&E again on 16 April 2008, it was still higher than normal).

19. I also asked the Adviser to comment on the Consultant's comments (paragraph 11). He said that it did appear that the Board had ignored the Consultant's opinion that suspicions of infection should have been raised and that this would have resulted in a more urgent request for an MRI. He noted that, at the time of providing his comments, the Consultant did not have access to the medical notes relating to Miss A's two attendances at A&E. He advised that the Consultant was commenting on information from the physiotherapy record and that no mention of Miss A having had a fever was contained in this record. The Adviser stated that the Consultant was, therefore, inferring his opinion that, if Miss A had a temperature, this would have added further weight to the possibility of spinal infection. He informed me that the A&E notes confirmed that she did in fact have a raised temperature and he stated that this also appeared to have been disregarded by the Board.

20. The Adviser concluded that, in his opinion, the diagnosis of spinal infection should have been made at an earlier stage. He noted that, whilst spinal infection is uncommon and Miss A did not have all the clinical features, she did, in his view, have enough 'red flag' features to have led to the correct diagnosis being made either on the first or second attendance at A&E. If she had been seen by a senior clinician at either of these two visits, the Adviser considered that the diagnosis would probably have been made at that stage. He advised that this would have prevented Miss A suffering four months of severe pain and disability while the infection was active.

21. In commenting on the draft report, the Board stated that they did not consider intravenous drug use as a life time risk and they only viewed it as a risk factor when it was current or recent. As they were informed that it was not recent in Miss A's case, they felt it was correctly decided that she was not high risk. With regards to Miss A's raised temperature, the Board noted that it had settled by her second presentation and, as she had a cough and green spit, they considered it reasonable to assume that her initial fever was related to that.

22. The Board confirmed that, on her second A&E attendance, Miss A was seen by a trainee doctor in third year of specialist training (ST3) in Emergency Medicine. They informed me that, at this level of training, a doctor will have completed a postgraduate exam in Emergency Medicine and have at least two years experience of working in an Emergency Department, along with experience of other acute specialities. They stated that this grade of doctor would be competent to work without direct supervision ie as the most senior

doctor in A&E overnight, with a consultant on-call from home. The Board advised that they have a policy that all unplanned returns to A&E (as Miss A was on 16 April 2008) are reviewed by a doctor of ST3 or above and they confirmed that this policy was followed in Miss A's case. They stated that they would not routinely refer such cases to an orthopaedic consultant.

23. The Board also apologised for not including the comments from the Consultant in their response to Miss A's complaint. However, they advised that this was due to the fact that two senior, highly experienced, A&E consultants had also reviewed her care and reached a conclusion that her treatment had been of a satisfactory standard.

24. Further to the Board's comments, I went back to the Adviser to obtain his view and he said he would contend that any history of intravenous drug abuse raised the likelihood of a number of illnesses, particularly those of an infective nature. In addition, he advised that Miss A's raised temperature may have settled because she was started on Amoxicillin.

25. With regard to the doctor grades, the Adviser noted that it was fairly standard to have a policy that patients presenting with the same complaint for a second time are seen by an ST3 or above. He said that, to a large extent, accepted standards reflected what services were available and, in his view, if an orthopaedic on-call service was available, most hospitals would normally have referred a case such as Miss A's to that service. The Adviser reiterated his belief that a consultant orthopaedic surgeon would have had a high index of suspicion that a patient presenting with back pain sufficiently severe to cause her to present to A&E twice on successive days, along with a raised temperature and past history of intravenous drug abuse, had a spinal infection and would have investigated accordingly.

(a) Conclusion

26. The advice which I have received, and accept, indicates that there were sufficient clinical indicators to raise suspicions of a spinal infection at an earlier stage. I, therefore, conclude that there was a delay in diagnosing Miss A's condition and I uphold this complaint.

27. In addition, I am critical of the Board's failure to fully reflect the Consultant's comments in their response letter to the complaint. The Consultant's comments expressed in paragraph 11 are similar to the concerns

raised by the Adviser and an acknowledgement of these, and earlier recognition of the delay in diagnosing Miss A's infection, could possibly have prevented the complaint being escalated.

(a) Recommendations

28. The Ombudsman recommends that the Board:

(i) apologise to Miss A for the delay in diagnosing her spinal infection;

(ii) review their process in respect of identifying 'red flag' features in patients and taking relevant action upon identification of these; and

(iii) ensure that complaints officers accurately reflect clinicians' feedback in their response to complaints.

(b) The provision of anti-coagulant medication to Miss A prevented the possibility of surgical treatment of her spinal infection and a potentially more positive outcome

29. In her initial letter of complaint, Mrs C stated that Miss A had been referred to Hospital 2 for a possible operation but that the surgeon did not operate as Hospital 1 had given her Clexane (an anti-coagulant).

30. In the Board's response, they confirmed that the neurosurgeons had decided against an operation in view of Miss A's anti-coagulant medication for her previous DVTs as well as the fact that the nerve function to her lower limbs had not deteriorated.

31. At the meeting with the Board on 3 December 2008, Mrs C stated that she had been advised by Hospital 2 that they had been prepared to treat Miss A's infection operatively when she arrived but that this had not gone ahead due to the fact that Hospital 1 had given her anti-coagulant medication. Mrs C expressed her feeling that, had they been able to operate that night, the outcome may have been different for Miss A, although it is not clear from the minutes how she felt the outcome may have differed.

32. In the Board's letter of 24 December 2008, they said that, when a patient was confined to bed due to spinal problems, the risk of DVT leading to pulmonary embolus was high. They explained that their protocols, therefore, dictated that everyone who was confined to a bed was given Clexane, which is a short-acting anti-coagulant and should not lead to a delay in surgery of more than 12 hours. They stated that the neurosurgeons would have made a

decision as to whether, and when, to perform surgery and the administration of Clexane was only one factor among many which influenced their decision.

33. I asked the Adviser to comment on this matter and he advised that the initial treatment of spinal infection was nearly always with antibiotic treatment alone. He informed me that the main reason for surgical treatment would be when the infection had progressed to the point of forming an abscess causing pressure on the spinal cord and/or nerve roots needing surgical removal to relieve this pressure. He confirmed that this was not the case with Miss A.

34. The Adviser stated that, if surgery had been contemplated, it would have been more hazardous with Miss A being on anti-coagulant treatment. However, he also noted that stopping the anti-coagulant treatment would have posed a substantial risk of Miss A developing further DVT in her legs. He, therefore, concluded that antibiotic treatment was the correct management of Miss A's condition and he acknowledged that her subsequent good response to this treatment confirmed this.

(b) Conclusion

35. The advice I have received indicates that antibiotic treatment was the most appropriate treatment for Miss A's spinal infection and she was not, therefore, disadvantaged by the provision of anti-coagulant medication. In the circumstances, I do not uphold this complaint.

36. The Ombudsman asks that the Board notify him when the recommendations have been implemented.

Annex 1

Explanation of abbreviations used

Mrs C	The complainant
The Board	Greater Glasgow and Clyde NHS Board
Miss A	The aggrieved (Mrs C's daughter)
Hospital 1	The Royal Alexandra Hospital
A&E	Accident and Emergency
The Adviser	The orthopaedic adviser to the Ombudsman
MRI	Magnetic Resonance Imaging
DVT	Deep Vein Thrombosis
Hospital 2	The Southern General Hospital
The Consultant	The orthopaedic consultant involved in Miss A's care
ST3	A trainee doctor in third year of specialist training

Annex 2

Glossary of terms

Amoxicillin	An antibiotic used to treat bacteria and bacterial infections
Anti-coagulant	Blood thinning medication
Clexane	An anti-coagulation medication
DVT	Blood clotting in the veins of the inner thigh or leg
Epidural space	The outermost part of the spinal canal
Intervertebral	Situated between two adjacent vertebrae
MRI scan	Imaging technique used to view internal structures of the body, particularly the soft tissues
Pulmonary embolus	A blockage in one of the blood vessels in the lungs
Sputum	Matter ejected from the lungs, bronchi and trachea, through the mouth