Scottish Parliament Region: Mid Scotland and Fife

Case 200702892: Forth Valley NHS Board

Summary of Investigation

Category

Health: Hospital; Accident and Emergency

Overview

The complainant (Mr C) raised a number of concerns about the treatment he received when he attended the Accident and Emergency Department at Stirling Royal Infirmary (the Hospital) on 24 June 2007, following a road traffic accident.

Specific complaint and conclusions

The complaint which has been investigated is that Mr C received inadequate treatment when he attended the Accident and Emergency Department at the Hospital on two occasions on 24 June 2007, following a road traffic accident (*upheld*).

Redress and recommendations

The Ombudsman recommends that Forth Valley NHS Board (the Board):

(i) apologise to Mr C for the failings identified in this report;

(ii) share this report with the Senior House Officer so that she can reflect on her actions; and

(iii) consider using the circumstances of this complaint in an anonymised form as a learning tool for junior staff working in Accident and Emergency.

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

Main Investigation Report

Introduction

1. On 15 February 2008 the Ombudsman received a complaint from Mr C about the treatment he received when he attended the Accident and Emergency Department at Stirling Royal Infirmary (the Hospital) on 24 June 2007, following a road traffic accident. Mr C complained to Forth Valley NHS Board (the Board) but remained dissatisfied with their responses and subsequently complained to the Ombudsman.

2. The complaint from Mr C which I have investigated is that Mr C received inadequate treatment when he attended the Accident and Emergency Department at the Hospital on two occasions on 24 June 2007, following a road traffic accident.

Investigation

3. In writing this report I have had access to Mr C's clinical records and the complaints correspondence from the Board. I made a written enquiry of the Board. I obtained advice from one of the Ombudsman's professional medical advisers (the Adviser), who is an Accident and Emergency Consultant, regarding the clinical aspects of the complaint.

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. A glossary of the medical terms used in this report can be found at Annex 2. Mr C and the Board were given an opportunity to comment on a draft of this report.

Complaint: Mr C received inadequate treatment when he attended the Accident and Emergency Department at the Hospital on two occasions on 24 June 2007, following a road traffic accident

5. Mr C complained to the Board on 16 October 2007. He explained that on 24 June 2007 he was a passenger in a car, which was travelling at high speed, which swerved off the road and rolled 360 degrees down an embankment before coming to rest in a ditch. Mr C managed to walk home in excruciating pain and after being interviewed by the police he attended the Accident and Emergency Department at the Hospital, accompanied by his mother (Mrs B). Mr C said he was triaged by a nurse and then he saw a female doctor (the SHO). He told her that the pain he was suffering in his neck was excruciating

and he described the circumstances of the car crash in some detail. He said that Mrs B also told the SHO that the car was compared to a 'crisp packet' so that the SHO was given a clear idea of the forces involved in the accident. Mr C said the SHO proceeded to tap the back and sides of his neck and asked him to move his head. He said the movement was extremely painful and was significantly restricted. Mr C said the SHO diagnosed whiplash and sent him home with ibuprofen and co-codamol and an exercise leaflet for patients suffering from acute neck strain. At no point was an x-ray suggested and Mr C assumed that the SHO had concluded he had not sustained a more serious injury. Mr C said the whole examination took less than three minutes but he was extremely relieved that nothing more serious had been found.

6. Later that day Mrs B was applying ibuprofen gel to the back of Mr C's neck when he experienced intense pain and fainted and fell to the ground unconscious. Paramedics attended his house and they advised him to return to the Hospital. On arrival at the Hospital, Mr C was directed to a waiting room. After 30 minutes, Mr C said he could not cope with the pain and Mrs B approached a nurse, who gave him two paracetamol tablets. After a further 30 minutes, Mr C's father (Mr B) spoke to a nurse to challenge Mr C's triage priority level and Mr C was eventually seen by the SHO who had seen him earlier. A nurse measured Mr C's blood pressure while standing and also attempted to measure the supine pressure but Mr C was unable to lie flat, due to the intense pain in his neck. The SHO checked the blood pressure measurement and then reconfirmed her original diagnosis. Mr C said that, once again, no mention was made of the possibility of a more significant injury than whiplash, nor was there any consultation with a senior practitioner nor was an x-ray considered. Mr C was discharged with a stronger form of co-codamol.

7. Over the following weeks Mr C said he continued to have intense pain and attended his GP and an osteopath. The osteopath was concerned about Mr C and wrote to the GP to request that Mr C have an x-ray immediately. Mr C was x-rayed on 16 August 2007 and the radiologist told him that he had broken his neck and arranged an emergency CT scan. The radiologist requested that an orthopaedic surgeon see Mr C urgently and the surgeon set up an appointment for Mr C to have a MRI scan. Mr C was then fitted with a temporary neck brace (soft collar) with an appointment for rigid collar on 21 August 2007. When Mr C attended the appointment he also saw the orthopaedic consultant, who said he did not have the results of the MRI scan yet and he could not give a conclusive prognosis.

8. When Mr C received the result of the MRI scan on 23 August 2007 he attended the orthopaedic department the following day, without an appointment, to speak to a consultant. He saw another consultant who said Mr C had sustained a serious neck injury and the options were to do nothing and that he could lead a relatively, all be it inactive, normal life; or to have an operation which carried significant risks. Mr C was referred urgently to the neurological ward at another hospital. Mr C underwent an operation on 5 September 2007 where metal pins and bolts were inserted into his neck, as well as bone grafted from his hip. Mr C said he was told he had to refrain from contact sport for a year, which was depressing as one of his subjects at university was sports science.

9. Mr C believed that, on 24 June 2007, the SHO should have arranged an x-ray or CT scan and that his neck should have been immobilised until the injury was cleared by a senior member of the medical staff. He also believed that the second examination was cursory and it would have been impossible to rule out that he had suffered a significant head injury.

10. On 7 December 2007 the Board's Director of Nursing (the Director) responded to Mr C's complaint. She apologised for the concerns which the missed diagnosis had caused. The SHO who saw Mr C twice on 24 June 2007 no longer worked for the Board, therefore, comments were obtained from her colleagues. It was agreed that there was a missed opportunity at the second attendance to carry out a diagnostic x-ray to exclude any potential bony injury. The Director advised that, following the complaint, measures had been taken in the Accident and Emergency Department in relation to neck injuries and to strengthen guidance in their management. In relation to the complaint, the Director explained that Mr C was seen by the SHO, who was experienced in Accident and Emergency treatment, and gave a history of being a front seat passenger in a car which crashed in the early hours while travelling at 40-50 mph. The car rolled but Mr C managed to get out of the vehicle. On arrival at the Hospital, Mr C reported gradual increasing pain in the neck since the accident. Examination revealed a superficial laceration to the middle of the forehead and the neck was tender but no bony tenderness. As full flexion extension of the neck was noted, with pain on lateral rotation of the neck, the SHO thought Mr C had sustained a neck sprain and he was discharged into the care of his mother.

11. The Director continued that it was recorded that Mr C re-attended Accident and Emergency later that afternoon with a history of gradual neck pain and stiffness since the accident. Paracetamol and Brufen had been taken first thing that morning and that Mr C had lost consciousness while his mother was applying gel into his neck. There was no seizure and Mr C regained consciousness quickly, although the neck pain remained. The SHO examined Mr C and recorded that he had normal observations, with a small drop in systolic blood pressure on standing. It was recorded that the neck was tender generally but there was no bony tenderness. In addition, although it was painful, there was full range of movement in the neck. The clinical impression was that a faint had occurred. Mr C was then discharged with co-codomal with the same advice as before. The Director said that, given the history, it appeared that the SHO followed the Canadian C spine rule for guidance and advice on whether an x-ray was required. The rule advises not to x-ray in situations where the onset of pain is delayed and worsening with time. The Director said that the SHO might have been influenced by the fact Mr C managed to walk home after the accident and did not present to the Hospital until some time later. In regard to the second attendance, the Director said that the diagnosis of a simple faint was a logical conclusion.

12. The Adviser told me that it was later established that Mr C had sustained a very serious neck fracture at C2 level in a road accident on 24 June 2007. However, this injury was not picked up when he attended the Accident and Emergency Department that day and it was only discovered after a further eight weeks, when an osteopath pushed Mr C's GP to arrange an x-ray.

13. The Adviser reviewed Mr C's clinical records for 24 June 2007 and noted that the triage record timed at 07:45 recorded that, two hours earlier, Mr C had been a front seat passenger in a car involved in a road traffic accident. The car had spun and rolled over twice. Mr C was complaining of neck injury and his pain score was 5/10. Mr C may have lost consciousness but had no spinal tenderness. Mr C was allocated a triage category 3 (to be seen within one hour). Mr C was then seen by the SHO at 09:10 and it was recorded that the car speed was 40-50 mph and that the car had rolled into a verge. The SHO also recorded that there was gradually increasing stiffness and Mr C's neck was noted to be generally tender but 'no bony tenderness' flexion and extension was said to be full but lateral rotation was painful.

14. The next entry in the records was at 14:24, when it was recorded at triage that Mr C had returned to the Hospital following a loss of consciousness and he was seen again by the SHO at 15:35. Gradually increasing neck pain and stiffness were recorded. Again Mr C was noted to have generalised neck tenderness but no bony tenderness. It was, however, noted to be maximally tender at the insertion of the trapezius to the occiput (at the very top of the neck). Range of movement was said to be full.

15. The Adviser told me that he felt the SHO's questioning on 24 June 2007 was inadequate. There was a clear history of rollover recorded at triage and this was 'diluted' to 'rolled into a verge' which presumably was taken to be a lesser impact. The Adviser noted the speed of the vehicle was quite fast and yet it appeared the SHO failed to appreciate the implications of this or to understand properly the mechanism of the accident or to take note of the history taken at triage. The Adviser felt the SHO had wrongly applied the Canadian C spine rule, which specify that (regardless of all else) if a 'dangerous mechanism' was involved an x-ray should be performed. (Note: according to the Canadian C spine rule, a rollover is deemed to be a dangerous mechanism.)

16. The Adviser said that the second SHO assessment again failed to revisit the mechanism of the injury and, therefore, compounded the original mistake. The Adviser continued that the examination findings on both occasions were unremarkable apart from some pain; some loss of movement; and some tenderness, all of which are non specific. However, the Adviser said that the type of injury sustained would not be expected to necessarily cause any identifiable physical signs. It was the mechanism of injury, in conjunction with those non specific signs, which should have alerted the SHO to the need for an x-ray. In summary, the Adviser felt the SHO failed to take a detailed enough history or to read the triage note and so probably misunderstood the magnitude of the accident and based her application of the rule on incomplete facts.

Conclusion

17. Mr C believed that the treatment which he received at the Hospital on 24 June 2007 was inadequate and that the SHO should have arranged an x-ray or sought advice from a senior member of staff. The advice which I have received and accept is that, from the presenting symptoms and history provided by Mr C, it would have been appropriate for the SHO to have arranged for Mr C to have an x-ray. The SHO failed to establish that Mr C had sustained a serious injury and as a result he suffered pain for the following weeks and it was

fortunate that the injury was stable. I am concerned that the Board have said that the SHO would have followed the Canadian C spine rule and this would have guided her to conclude that an x-ray was not required. However, as the Adviser has pointed out, the fact that the triage history mentions that the car rolled over then, according to the Canadian C spine rule, a x-ray was appropriate. I am also conscious that the Adviser has concerns about the SHO's standard of record-keeping, in that the history obtained was inadequate. In the circumstances, I have decided to uphold the complaint that the treatment which Mr C received on 24 June 2007 was inadequate and fell below the standards required.

Recommendations

18. The Ombudsman recommends that the Board

(i) apologise to Mr C for the failings identified in this report;

(ii) share this report with the SHO so that she can reflect on her actions; and

(iii) consider using the circumstances of this complaint in an anonymised form as a learning tool for junior staff working in Accident and Emergency.

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

Annex 1

Explanation of abbreviations used

Mr C	The complainant
The Hospital	Stirling Royal Infirmary
The Board	Forth Valley NHS Board
The Adviser	The Ombudsman's professional medical adviser
Mrs B	Mr C's mother
The SHO	The Senior House Officer who examined Mr C twice on 24 June 2007
Mr B	Mr C's father
The Director	The Board's Director of Nursing

Annex 2

Glossary of medical terms used

Canadian C spine rule	Guidance for clinicians on whether to carry out a x-ray
Co-codamol	Analgesic medication
CT scan	Computed Tomography Scan: pictures of structures within the body, created by a computer, which takes the data from multiple x-ray images and turns them into pictures
C2 neck bone	The second bone in the neck which forms a joint at the base of the skull which enables movement of the head on the neck
Ibuprofen (brufen)	Anti-inflammatory medication
MRI Scan	Magnetic Resonance Imaging: scan showing body organ images without the use or radiation or x-rays
Paracetamol	Analgesic medication
Systolic	Blood pressure reading taken while the heart is contracting
Triage	Initial brief assessment where patients are allocated a clinical priority for treatment