Scottish Parliament Region: North East Scotland

Case 200603211: Tayside NHS Board

Summary of Investigation

Category

Health: Hospital: General care

Overview

The complainant (Ms C) raised a number of complaints against Tayside NHS Board (the Board) about the care and treatment of her late brother (Mr A) in Ninewells Hospital (the Hospital).

Specific complaints and conclusions

The complaints which have been investigated are that:

(a) Mr A was administered laxatives inappropriately and at the incorrect dose (*not upheld*);

(b) Mr A developed gastroenteritis which was not treated appropriately (*not upheld*);

(c) the Board failed to properly monitor Mr A's fluid levels and administer his intravenous drip on 25 and 26 April 2006 (*upheld*);

(d) the result of the post-mortem examination of Mr A's heart is at odds with his previous cardiac examinations at the Hospital (*not upheld*);

(e) the Board used insensitive language to describe the events leading to Mr A's death (*not upheld*);

(f) Mr A was inappropriately taken for an x-ray shortly before his death (*not upheld*); and

(g) nursing staff failed to appropriately monitor Mr A (*not upheld*).

Redress and recommendation

The Ombudsman recommends that the Board apologise to Ms C for their failure to properly monitor Mr A's fluid levels on 25 April 2006 and to properly administer his intravenous drip on 26 April 2006.

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

Main Investigation Report

Introduction

1. The aggrieved (Mr A) was a 79-year-old man who died suddenly in Ninewells Hospital (the Hospital) whilst recovering from a knee replacement operation.

2. Mr A was admitted for surgery on 20 April 2006 and a left total knee replacement was performed the following day. Following an initial reasonably uneventful post-operative recovery from surgery, Mr A suffered episodes of diarrhoea and vomiting. Mr A later suffered a cardiac arrest and died on 26 April 2006.

3. Mr A's sister (Ms C) complained to Tayside NHS Board (the Board) on 8 September 2006 raising concerns about various aspects of Mr A's care. The Board responded to her on 9 January 2007 and Ms C complained to the Ombudsman on 12 January 2007.

4. The complaints from Ms C which I have investigated are that:

(a) Mr A was administered laxatives inappropriately and at the incorrect dose;

(b) Mr A developed gastroenteritis which was not treated appropriately;

(c) the Board failed to properly monitor Mr A's fluid levels and administer his intravenous drip on 25 and 26 April 2006;

(d) the result of the post-mortem examination of Mr A's heart is at odds with his previous cardiac examinations at the Hospital;

(e) the Board used insensitive language to describe the events leading to Mr A's death;

(f) Mr A was inappropriately taken for an x-ray shortly before his death; and

(g) nursing staff failed to appropriately monitor Mr A.

Investigation

5. During my investigation of this complaint, I considered background documentation provided by Ms C; the Board's complaints file on this matter; and Mr A's relevant clinical records. I obtained advice on this complaint from the Ombudsman's nursing adviser (the Nursing Adviser) and the Ombudsman's medical adviser (the Medical Adviser).

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

(a) Mr A was administered laxatives inappropriately and at the incorrect dose

7. Ms C raised concerns that all of the patients in Mr A's ward were given the same dose of laxatives and that this was inappropriate as each patient needed to be assessed individually. She stated that Mr A should have been given a lower dose of laxatives because his age meant that his body could not cope with such a high dose.

8. Ms C stated that, following administration of the laxative, Mr A had an explosive and completely liquid bowel movement on 23 April 2006.

9. The Board responded that the laxatives were administered appropriately and that they were withheld when Mr A's bowel movements became such that he did not require them.

10. The Medical Adviser informed me that it is good practice to routinely prescribe laxatives to elderly patients undergoing major surgery. The reason for this is that the opiate painkiller tablets which they take, together with change of diet, environment and fasting for anaesthesia all combine to make troublesome constipation a real issue.

11. The Medical Adviser, having reviewed Mr A's medical records, advised that the dose of laxatives Mr A was prescribed was the correct dose for a man of his age and weight. He notes that the laxatives were discontinued once Mr A developed loose stools. The Medical Adviser concluded that the prescription and dosage of laxatives were reasonable in this case.

(a) Conclusion

12. The Medical Adviser stated that it is good practice to routinely prescribe laxatives to elderly patients undergoing major surgery and that the dose of laxatives prescribed to Mr A was appropriate. I accept this advice and I do not uphold this complaint.

(b) Mr A developed gastroenteritis which was not treated appropriately

13. On the third day after surgery, Mr A developed diarrhoea and vomiting as well as a high temperature. A stool sample was taken for analysis on 25 April 2006 and this showed that Mr A had a Norovirus infection. The results of this analysis only became available on 26 April 2006, after Mr A's death; however, prior to the results becoming available, staff had determined that Mr A had a viral infection.

14. Ms C complained that the medication given to Mr A was only for his vomiting but not for his diarrhoea. She also questioned why the post-mortem found no evidence of infection or inflammation in Mr A's bowels.

15. The Medical Adviser informed me that viral gastroenteritis is a common problem on all medical wards in the Western world and is recognised by the pattern of spread from patient to patient and to members of staff within a fixed environment. He explained that the main symptoms are nausea, vomiting and diarrhoea and that its management is expectant (ie definitive anti-viral drugs are not given and, in particular, antibiotics are contra indicated). He stated that fluids are given intravenously if necessary but that it is not recommended to prescribe anti diarrhoeal medication as this prevents natural elimination of the infective material from the gut. He explained that the illness is usually self-limiting. He advised that, as the stool cultures proved positive for Norovirus, the management of Mr A's diarrhoea was reasonable.

16. The Medical Adviser explained that it would not be uncommon for a transient resolving viral gastroenteritis to show minimal or no changes on simple inspection of the bowel at a post-mortem examination, as in this case.

(b) Conclusion

17. Clinical staff proceeded on the basis of a diagnosis of viral infection, which was later confirmed by the results of stool culture tests. Mr A was not given anti diarrhoeal medication and this was appropriate as it would not be recommended for cases of Norovirus. The Medical Adviser stated that management of Mr A's diarrhoea was reasonable. I accept his advice and I do not uphold this complaint.

(c) The Board failed to properly monitor Mr A's fluid levels and administer his intravenous drip on 25 and 26 April 2006

18. Ms C complained that Mr A had become over hydrated through the administration of an intravenous drip. She states that a consultant (the Consultant) had ordered a diuretic drip and catheter for Mr A and that this was evidence of his over hydration.

19. In his response to this complaint, the Consultant stated that he asked ward staff to monitor Mr A's fluid input and output more carefully to ensure that he was not given a fluid overload against the risk of him becoming dehydrated.

20. There are two un-timed entries in Mr A's notes dated 26 April 2006 stating 'IVI to continue' and 'continue with IVI and keep accurate fluid balance'. He was reviewed at 17:00 by the Consultant and was given frusemide in view of possible fluid overload; a urinary catheter was inserted. A chest x-ray was ordered at 19:00 to exclude pulmonary oedema and was carried out later that evening. Ms C's recollection is that the Consultant did not review Mr A until 19:15 and that frusemide was not given until shortly before 20:00.

21. The Medical Adviser explained that intravenous fluid management in an elderly man with lose stools needs to be carefully controlled as it would be relatively easy to over hydrate such a patient and difficult to recognise which end of the hydration spectrum was causing problems. The Medical Adviser stated that the dose (volume and rate) of intravenous fluids prescribed to Mr A was reasonable for a dehydrated man. Furthermore, when there was a clinical suspicion of overload, Mr A was properly treated with intravenous frusemide. Mr A was maintained on a fluid chart and was catheterised to more carefully assess his hourly fluid balance. The Medical Adviser advised the medical care was reasonable.

22. The Nursing Adviser noted that there are fluid charts dated 21 April 2006 and 22 April 2006 which relate to immediate post-operative care and which are appropriately completed for intake and output including intravenous fluid and wound output measurement. There are also two intravenous fluid prescription charts, one of which relates to the period of care in question on the day Mr A died.

23. The Nursing Adviser explained that the prescription chart for 26 April 2006 indicates that the first bag of fluid was administered accurately and that the

length of time Mr A was without an infusion is not recorded. The second bag of fluid was administered more rapidly than the prescription ordered and the third bag of fluid was discontinued after 40 minutes when the Consultant visited Mr A.

24. The Nursing Adviser stated that there was a failure on the part of nursing staff to record Mr A's fluid intake and output on 25 April 2006 when he was recommenced on intravenous fluids. However, there was reasonable accuracy in charting the same on 26 April 2006. A medical entry made on the morning of 26 April 2006 states 'IVI to continue fluid 6-8 hours'. The Nursing Adviser stated that she was critical of nursing staff failing to monitor the rate of flow of fluid during the afternoon of 26 April 2006, particularly the second bag of fluid. She commented that it would appear that 100mls of fluid was already infused from the third bag when it was stopped at 17:10 and that this would also have been much more rapid than was prescribed.

25. The Board have informed me that a recent audit was completed within the Orthopaedic Unit to identify staff competency and to indicate if further education is required to assess and manage patients' fluid balance. The Board stated that there was no guidance or protocol to indicate when a patient had to be commenced on a fluid balance chart and that discussions were being held with the Practice Development Team about the issue. The Board have developed a quality improvement plan to allow appropriate action and have devised a guidance document which is being trialled to determine its efficiency.

(c) Conclusion

26. The advice which I have received indicates that nursing staff failed to record fluid intake and output on 25 April 2006 and failed to accurately control the flow of intravenous fluid as per the prescription chart for 26 April 2006. I accept this advice and I uphold this complaint.

(c) Recommendation

27. The Ombudsman welcomes the steps taken by the Board and described at paragraph 25. She recommends that the Board apologise to Ms C for their failure to properly monitor Mr A's fluid levels on 25 April 2006 and to properly administer his intravenous drip on 26 April 2006.

(d) The result of the post-mortem examination of Mr A's heart is at odds with his previous cardiac examinations at the Hospital

28. Mr A's post-mortem report found that he had significant heart disease. Ms C stated that Mr A had an electrocardiogram in August 2005 and was told that his heart condition was not bad enough to warrant a return visit. Ms C questioned how Mr A could have progressed to having significant heart disease by April 2006.

29. The Medical Adviser stated that a cardiac out-patient investigation report dated 17 August 2005 revealed a broadly normal echocardiogram and no significant structural abnormality of the heart, in particular that there was no evidence of hypertensive cardiac disease. He stated that the post-mortem examination revealed structural changes in the heart consistent with high blood pressure but no obvious cause of death. The hypertensive changes did not show up on the pre-operative echocardiogram. The Medical Adviser explained that an echocardiogram scan report is more subjective than a visual examination of the heart at post-mortem.

(d) Conclusion

30. The results of the post-mortem examination of Mr A's heart were different from the results of his echocardiogram carried out on 17 August 2005. The Medical Adviser explained that this was because the echocardiogram examination is more subjective than the examination of the heart at post-mortem. I accept this advice and do not find any clinical failing in this fact. I, therefore, do not uphold this complaint.

(d) Other

31. The Medical Adviser commented that there was no record of any information exchange between the clinical team and the Procurator Fiscal and, in particular, that the x-ray showing free gas under Mr A's diaphragm immediately prior to death does not appear to have been referred to the pathologist.

32. The free gas under Mr A's diaphragm indicates the perforation of a peptic ulcer which may have been the cause of his death. This is accepted by both the Medical Adviser and the Board.

33. The Board accept that the pathologist may have benefited from knowing there was free gas under Mr A's diaphragm. They stated that the fact that there

was no reference to a perforation was possibly an omission and accept that, had medical staff had time to recognise the perforation, bearing in mind that Mr A died very shortly after the x-ray, it may have influenced his post-mortem.

(e) The Board used insensitive language to describe the events leading to Mr A's death

34. In the Board's response to Ms C's complaint, the Board stated that 'at 21:00 Mr A suffered another event and [the Consultant] suspected [Mr A] was having a major cardiac event by that time'.

35. Ms C complained that she considered the use of the expression 'cardiac event' was insensitive.

36. I discussed the meaning of the expression 'cardiac event' with the Nursing Adviser. She explained that this is a normal clinical expression used to refer to a number of cardiac complications or occurrences, especially in circumstances where the specific cause of the occurrence is unknown. The Nursing Adviser did not consider that the tone of the Board's response or the use of the expression 'cardiac event' was insensitive. I agree with the Nursing Adviser.

(e) Conclusion

37. I accept that Ms C found the Board's language upsetting. However, I do not consider that the Board used insensitive language to describe the events leading to Mr A's death and I do not uphold this complaint. However, the Board may wish to consider using less clinical language in their response to complaints.

(f) Mr A was inappropriately taken for an x-ray shortly before his death

38. Ms C was of the understanding that Mr A required an x-ray of his stomach to determine whether there was any bleeding. She complained that Mr A was awakened for an unnecessary x-ray. In his response to this complaint, the Consultant stated that the x-ray was taken of Mr A's chest.

39. When Mr A was reviewed by the Consultant on 26 April 2006, the Consultant considered that Mr A may be suffering from fluid overload. At 19:00 a chest x-ray was ordered to exclude pulmonary oedema and this took place sometime after 20:00. In the case notes, the x-ray is said to show free gas under the diaphragm.

40. The Medical Adviser stated that the free gas under the diaphragm indicated a possible perforation of a peptic ulcer but that there was no explanation of the free gas in Mr A's medical records.

(f) Conclusion

41. Mr A required a chest x-ray to exclude pulmonary oedema. This was appropriate and I do not uphold this complaint.

(g) Nursing staff failed to appropriately monitor Mr A

42. Ms C raised concerns that Mr A had been forgotten about by staff after he was moved into a side room. She does not consider that nursing staff checked on Mr A sufficiently regularly. She recalls that on April 26 2006, nursing staff did not check on her brother between 15:00 and 20:00 when she was visiting him.

43. The Nursing Adviser stated that, from the time of admission, there were regular entries in the Early Warning Score System (SEWS) chart. She stated that the entries made for 26 April 2006 were consistent with the recording of events in the clinical records. She concluded that, on the day Mr A died, regular observations of his condition were made and charted, there were several discussions with medical staff and these were recorded in the multi-professional clinical notes.

44. The Nursing Adviser commented that Mr A's notes did not record the reasons for Mr A's transfer to a side room, or that Ms C had been informed of the reasons for the transfer. She also noted that nursing staff had not filled in all of the necessary patient details on the SEWS chart. The Board accept that Mr A's notes should record the reasons for transferring him to the side room and all discussions with next of kin. The Board have reminded staff of the importance of recording these matters in the notes.

(g) Conclusion

45. Mr A's clinical records show that he was frequently observed after his transfer to the single side room. I do not uphold this complaint.

46. 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 A	The aggrieved, Ms C's brother
The Hospital	Ninewells Hospital
Ms C	The complainant, Mr A's sister
The Board	Tayside NHS Board
The Nursing Adviser	The Ombudsman's nursing adviser
The Medical Adviser	The Ombudsman's medical adviser
The Consultant	A consultant at the Hospital
IVI	Intravenous infusion
SEWS	Early Warning Score System

Annex 2

Glossary of terms

Term	Definition
Diuretic	Diuretic medicine increases the production and flow of urine from the body, used to remove excess fluid from the body
Electrocardiogram	A test that measures electrical activity in the heart, and is used to identify heart problems
Frusemide	A diuretic drug
Gastroenteritis	A common infectious illness involving diarrhoea and vomiting. It is usually caused by a viral infection
Hypertensive cardiac disease	A term applied generally to heart diseases caused by direct or indirect effects of elevated blood pressure
Peptic ulcer	Collective name for ulcers in the stomach and upper part of the small intestine
Perforation	When a small hole forms in the wall of the stomach
Pulmonary oedema	The accumulation of fluid in the air spaces of the lungs
Norovirus	A group of viruses which are the most common cause of gastroenteritis