

## Scottish Parliament Region: South of Scotland

Case 200500050: Borders NHS Board

### Summary

#### **Category:**

Health: Hospitals; Oncology; Clinical treatment/diagnosis

#### **Overview:**

The complaint concerned the treatment provided to a patient both pre and post-operatively when she became nauseated and in pain and her condition started to deteriorate.

#### **Subjects and conclusions:**

The complaints which have been investigated are:

- (a) that staff failed to take action pre-operatively when the patient became nauseated and in pain (*upheld*); and
- (b) that staff failed to take prompt action post-operatively when it was noted the patient's condition had started to deteriorate (*upheld*).

#### **Redress and Recommendations:**

The Ombudsman recommends that:

- (i) Borders NHS Board (the Board) consider a mechanism for explaining to patients and relatives the rationale for the use of heparin or antiembolic stockings to prevent pulmonary embolus or deep vein thrombosis;
- (ii) the Board provide a specific action plan to monitor the standard of nursing documentation on the surgical wards;
- (iii) the Board devise a protocol for the administration of oxygen therapy; and
- (iv) the Board consider the need for a training requirement in communications between nursing and medical staff.

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

## **Main Investigation Report**

### **Introduction**

1. On 30 June 2005 the Ombudsman received a complaint from a woman (referred to in this report as Mrs C) about failures in the treatment and care that her 78 year-old mother (Mrs A) received at the Borders General Hospital (BGH) in July 2004 which led to her death.

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

- (a) that staff failed to take action pre-operatively when Mrs A became nauseated and in pain; and
- (b) that staff failed to take prompt action post-operatively when it was noted Mrs A's condition had started to deteriorate.

### **Investigation**

3. The investigation of this complaint involved obtaining and reading all the relevant documentation, medical records and complaint files. I obtained advice from both medical and nursing advisers to the Ombudsman. I made a written enquiry to the Board. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. A list of abbreviations and a glossary of medical terms are set out in annexes at the end of this report. Mrs C and the Board have been given an opportunity to comment on the draft of the report.

4. Mrs A was admitted to ward 7 at BGH on 27 June 2004 for elective surgery to her colon for the removal of a cancer. Mrs A had an anterior resection on 28 June 2004. Post-operatively she was nursed in the Intensive Therapy Unit (ITU) until 30 June 2004 when she was transferred back to ward 7. After an initial improvement, Mrs A's condition deteriorated and she was transferred back to ITU on 7 July 2004. Her condition continued to deteriorate with the development of a heart arrhythmia and a pneumothorax and Mrs A died on 11 July 2004.

#### **(a) That staff failed to take action pre-operatively when Mrs A was known to be nauseated and in pain**

5. Mrs C first brought her concerns to the attention of the Board in a letter dated 9 August 2004. She said that, on admission to ward 7, Mrs A had been given two

doses of Picolax to empty her bowel prior to surgery but they were not successful. Mrs A was very sick and nauseous throughout the day and that night although medication had been given to help. Mrs C visited Mrs A on the morning of the operation and noticed she looked very ill due to the sickness and lack of sleep. A member of staff asked Mrs C if her mother was alright and Mrs C said no. The staff seemed unconcerned about Mrs A's condition. Mrs A was taken to ITU after the surgery and staff were pleased with her progress. Mrs A was seen by a physiotherapist and following her visit Mrs A told Mrs C that she had a pain across her abdomen/lower chest area on taking a deep breath. On 2 July 2004, Mrs A became sick and dizzy while nurses tried to mobilise her to take a bath and she had to be put back to bed. Mrs A received oxygen via a nasal tube to help keep her oxygen levels up although she was unsure when she had to use it because of conflicting information from staff. Mrs C noted on 1 July 2004 that Mrs A was also suffering from oedema at this time.

6. Mrs C noticed a deterioration in Mrs A's condition on 2 July 2004, in that she was so breathless that she had to stop talking for a time to catch her breath. Over the next couple of days Mrs C saw that Mrs A continued to be breathless; still had pain on taking a deep breath; was thirsty; and was unable to eat or drink. A nurse had told Mrs C that Mrs A had had soup and jelly but Mrs C said that Mrs A had told her she had only managed two spoonfuls of soup and could not swallow the jelly. Although staff had put cups of water in front of Mrs A, she did not drink them and Mrs C felt that her fluid intake should have been measured. Mrs A was also told to drink a contrast before a CT scan could take place on 6 July 2004 and that she had to drink 100 mls every five minutes. Mrs A could not manage 100 mls of water in the previous three hours, which was an indication that the staff were not monitoring her fluid intake. Prior to receiving a barium enema, Mrs A was told by a doctor that she had slight pneumonia and was prescribed antibiotics. After the procedure had been completed, she was told nothing conclusive was found and doctors were looking at the possibility that the internal operation site wound was leaking.

7. On 7 July 2004, Mrs A was transferred back to ITU as she was very dehydrated and suffering from pitting oedema and acidosis. Mrs C believed that Mrs A would finally receive appropriate care, that her fluid intake would be measured and that she would be put on a drip for feeding. Mrs A was put on a

ventilator to help her breathe. Initially Mrs A's condition improved, in that her temperature and white blood count levels had fallen and she was stable. Her oxygen intake had been reduced and a diagnosis of a heart attack had been ruled out. Sputum and urine tests also proved negative which the family felt were a good sign until Mrs C said a doctor told them to expect the worst and hope for the best as medical staff were looking for signs of improvement. Mrs C received a telephone call from the hospital on 11 July 2004 to say that Mrs A's temperature had risen; that her heart was erratic and that the family should attend the hospital. Mrs A died later that evening.

8. In her formal complaint to the Board, Mrs C said that Mrs A's symptoms following surgery of not eating; not drinking; not mobilising; not sleeping; chest pain on taking a deep breath; oedema; and breathlessness should have alerted the doctors and nurses that there was cause for concern and that action should have been taken long before she was readmitted to ITU. Mrs C attended two meetings with Board staff to discuss her concerns and raised other issues such as why Mrs A had not been provided with antiembolic stockings prior to the operation; the failure by medical staff to review Mrs A following the operation and failure to monitor Mrs A's fluid intake. Mrs C was not satisfied with the responses she received from the Board to her concerns and complained to the Ombudsman.

9. The Ombudsman's medical and nursing advisers reviewed Mrs A's clinical records and papers regarding the complaint. The advisers felt that the Board had not addressed Mrs C's concerns adequately in areas such as Mrs A's aversion to Picolax; the use of preoperative antiembolic stockings; inadequate documentation in the clinical and nursing records; advice on the use of oxygen; and action taken by staff when Mrs A's condition deteriorated postoperatively. The investigation, therefore, focuses on these areas of care.

10. The Board said that operating theatre staff had been informed that Mrs A was not responding to the Picolax and that she was nauseous and had vomited. She had been prescribed both anti-spasmodics and anti-emetics and was commenced on intravenous fluids. They also said that nausea and abdominal cramps are common side effects of Picolax.

11. Both the medical and nursing advisers commented that the Board have

explained what staff did when Mrs A's symptoms were exhibited but they failed to explain whether staff considered offering an alternative to Picolax. While the prescribing of anti-emetics or anti-spasmodics was appropriate, there was no indication that staff gave thought to a deeper consideration of underlying causation and alternative management. It appeared that the staff viewed Mrs A's symptoms as being a routine side effect of Picolax and failed to make an adequate individual assessment.

12. The nursing adviser commented that the quality and information contained in the nursing records was variable. The initial admission pages were sparsely documented and, as such, omit to inform the reader of the overall status of Mrs A at the time of her admission for surgery. The nursing assessment and activities for daily living page (a measure of evaluating the function and performance holistically of the individual) had not been documented in a way that would suggest and reflect time had been given to a patient who was about to undergo major abdominal surgery. There was, however, an indication that Mrs A had good mobility, low dependency and waterlow score was also completed with good outcome. Picolax was given on the morning of 27 June 2004, which requires drinking a large quantity of fluid (up to two litres) in two separate amounts for it to be effective. At 17:00 hours it was noted that Mrs A was nauseated and complaining of pain. Medication was given but there is no written evidence of the outcome of the medication or whether a medical opinion had been sought. This would be expected considering Mrs A was unwell, had failed to respond to the preparation and was due to undergo surgery the following day. On 28 June 2004, Mrs A had not responded to the bowel preparation but theatre staff were made aware and surgery went ahead as planned.

13. The medical adviser said that he believed preoperatively the medical staff did not recognise that Mrs A was not well, in that she had nausea and vomiting the night before her operation. There is no record of medical staff having been told about Mrs A's adverse reaction to Picolax and no record of her low level of serum albumen being recognised as a possible risk factor in postoperative recovery.

14. The Board said that the surgical protocol within BGH for deep vein thrombosis and pulmonary embolus prophylaxis specifies early mobilisation for low risk patients and the administration of heparin for medium to high risk patients. Mrs A

would have fallen into the high risk category. Antiembolic stockings may be used in addition to heparin, particularly if the patient has a previous history of pulmonary embolism or deep vein thrombosis. Each patient is assessed by their consultant and treated appropriately.

15. The nursing adviser commented that, although there is research which shows that antiembolic stockings are effective, it is not as strong as that for the use of heparin. Only in patients with additional risk factors would the guideline recommend both heparin and stockings. The adviser felt that, although the Board had responded to Mrs C on this question on a number of occasions, their response lacked clarity and there was no evidence in the clinical notes that the rationale for the use of heparin or the non-use of antiembolic stockings was discussed. In managing the risks to Mrs A, the staff were following a local policy which was based on national guidelines using the best current evidence. It was quite reasonable for the family to have questioned the non-use of antiembolic stockings, since this is such a common and widely understood measure to prevent pulmonary embolism or deep vein thrombosis. The adviser recommended that the Board develop a clearer mechanism to explain to patients and their relatives the rationale for this decision-making process. There are a number of ways this could be achieved, such as a patient information leaflet, explicit explanations in the nursing care plans or information given at the consent process.

*(a) Conclusions*

16. The advisers have said that the Board provided an explanation of what staff did when they were advised of Mrs A's symptoms and that it was appropriate that they prescribed anti-emetics and anti-spasmodics to combat the nausea and pain Mrs A was suffering. However, there is no indication that staff gave consideration to the underlying causation of Mrs A's symptoms, other than they were a routine side effect of Picolax. They have advised that staff failed to make an adequate assessment of Mrs A's condition or consider an alternative management process.

17. I have considered all the evidence which has been provided and I fully accept the advisers' comments that, although staff took action to deal with Mrs A's sickness and nausea, they failed to give consideration to the actual cause of her symptoms or prompt further investigations. Therefore, I uphold this aspect of the

complaint. The Ombudsman has no specific recommendation to make but would draw the Board's attention to the advisers' comments in this regard.

18. The advisers have also commented on the lack of a documented rationale for the use of heparin or non-use of antiembolic stockings. In this regard they have indicated that the issues relating to the pre-operative use of antiembolic stockings and heparin injections is an example where the actions of the staff were appropriate, yet the rationale for their actions was not properly explained. The Ombudsman recommends that the Board consider a mechanism for explaining to patients and relatives the rationale for the use of heparin or antiembolic stockings to prevent pulmonary embolus or deep vein thrombosis.

**(b) That staff failed to take prompt action post-operatively when it was noted that Mrs A's condition had started to deteriorate**

19. The Board explained that in general the nursing documentation in Mrs A's case appeared to be factual, consistent, consecutive, written clearly and entries detailed and signed, although some do not give a precise time. However, the Board accepted that the standard documentation for the period fell below that set in the NMC Guideline of Record Keeping and provided me with details of this. The Board also accepted that the care plan dated 30 June 2004 was incomplete and had not been updated to reflect the changes in Mrs A's condition. They produced details of an audit carried out in October/ November 2005 with the specific aim of targeting improvement in the quality of care planning. Of the 30 cases examined, all but one contained a care plan but areas for improvement were highlighted regarding individualising, updating and evaluating care plans. They advised that work was currently ongoing to address these areas.

20. The medical adviser commented that, while he was pleased to see that the Board had undertaken audits of nursing documentation, he noted issues such as communication with the patient, interaction with the family and discharge planning scored poorly and that additional work was required. The nursing adviser noted that the Board had accepted that the standard of record keeping was less than satisfactory. The audit carried out in November 2005 relating to ward 7 was very useful. It illustrated that key weaknesses in the nursing documentation related to ongoing assessment and adaptation according to the evaluation. These were issues highlighted in Mrs A's care as problematic. Firstly, although nurses carried

out an initial assessment of Mrs A, there was no actual review that anticipated her post-operative needs or documented her actual needs on her return to the ward from ITU on 30 June 2004. Since there was no post-operative care plan, the adviser concluded that the nursing staff failed to document guidance for Mrs A's care in this period. This was despite recording in the progress notes evidence of changes in her clinical condition. The adviser commented that this was a serious shortcoming in nursing care and, although the Board have indicated that there is ongoing work in this area, they have provided little detailed evidence on the nature of this work. The audit was not authored and the recommendations contained no specific dates for implementing improvements. The nursing adviser recommended that the Board should provide a specific action plan indicating how and when they plan to make improvements in the areas they have highlighted as substandard.

21. The Board said that they currently do not have a protocol for oxygen therapy. Oxygen is administered if patients are short of breath, have low oxygen saturation levels, are in respiratory failure or are generally unwell. Surgical nurses are trained in both airway management and oxygen therapy as part of their internal high dependency nursing skills course. Both nursing and medical staff would have explained when and how to use the oxygen mask to Mrs A and they would have ensured that oxygen was administered when required.

22. The medical and nursing advisers have commented that the rationale for being on oxygen or air was not clear. The observations charts provide a reasonable record of oxygen administered, and respiratory assessment in the form of respiration rate and oxygen saturations. However, it is less clear what the plan for oxygen therapy was, for example were staff using the results of oxygen saturations to determine the amount of oxygen to be administered and what were the criteria for being off oxygen. The evidence suggests that this was not clear to Mrs A or her relatives. The nursing adviser said that oxygen has to be prescribed by a medical practitioner and its administration needs to be governed by clear guidelines in relation to the clinical signs that would indicate recommencing of therapy. The adviser recommended that the Board develop a clear protocol for the administration of oxygen therapy for the surgical unit and that details are incorporated into the documentation.

23. The Board said that it was not noted in the nursing records that Mrs A's



condition had deteriorated on 5 July 2004. There was an entry from the colorectal nurse specialist that Mrs A appeared pale and lethargic that day but that she would review her later in the week. Other nursing entries stated that Mrs A continued to suffer from nausea, that she had anti-emetics administered to alleviate this and that she had no complaints of pain. Mrs A was also reviewed on the medical ward round on this date and medical staff also recorded her continuing nausea. The Board further explained that Mrs A's leg oedema was noted by nursing staff on 4 July 2004 and by the physiotherapist on 5 July 2004, who recommended progressive mobilisation. Medical staff were also aware of her swollen legs but the general surgical consultant (the consultant) felt the most likely cause was hypoalbuminaemia and dependency oedema. Mrs A had only started a light diet on 2 July 2004 and it was considered that it would take some time for her albumin level to rise with diet. The consultant did not consider it appropriate, at that stage, to initiate an investigation for deep vein thrombosis as Mrs A had been receiving Calciparine 500iu/l subcutaneously on a twice-daily basis since 28 June 2004, nor did he think that Total Parental Nutrition was appropriate at that time.

24. The Board said the symptoms presented by Mrs A following surgery were difficult to pinpoint to a precise diagnosis and they noted that a chest x-ray reported on 6 July 2004 showed there was an excess of air subdiaphragmatically. The most likely cause of this would be a leak from the anastomosis. This was excluded the same day by a CT scan, which was arranged by the duty radiology consultant as soon as the consultant became aware of the chest x-ray findings. The consultant was reassured that he could exclude an anastomosis leak, however he was unable to make a further more accurate diagnosis as Mrs A's symptoms were of a general nature, which were typically seen in elderly patients following major surgery. Mrs A had had periods of progress and periods when progress was not apparent. The Board accepted that there were areas of omission in the medical records but stated that the consultant had confirmed that Mrs A did receive regular medical reviews.

25. The nursing adviser said that the nursing records for 4 July 2004 stated that Mrs A was pain free but had swollen legs; trying food but appetite poor; and there was reference to a possible low albumin but no evidence of action taken. The absence of this information being documented in the clinical notes may have indicated that ward staff had failed to recognise the significance or the relevance or to communicate it to medical staff. It was at this time Mrs C noticed that her

mother was breathless and unable to talk without frequent rest. On 5 July 2004, the nursing records stated Mrs A was pain free but complaining of nausea and vomiting, for which she was given appropriate medication. She was pale and lethargic. Although she had been seen by the medical team on the ward round that day, there was no reference in the medical notes to her current status. The advice I have received is that a further request for a medical opinion may have been appropriate at this time.

26. The nursing adviser said that Mrs A's vital signs were recorded post-operatively, which indicated regular intervention with the patient, but that little action appeared to have been taken as a result of the observations. She advised that Mrs A required oxygen and was not mobilising from 30 June 2004 to 6 July 2004 and this should have alerted the nurses that progress and recovery was not being made at a reasonable level. Mrs A's pulse was steadily rising from 80 bpm to 120 bpm, remaining in a constant state from the evening of 6 July 2004. In addition she had bouts of nausea, pain, lack of appetite, lethargy, breathlessness and immobility. This should have alerted staff to the possibility of a problem and that action was required. The nursing adviser felt the Board had failed to give a reasonable account of the documentation and communication issues. The responses to the change in Mrs A's condition were slow and there were clear differences in perceptions between the recordings in the nursing progress notes and Mrs C's descriptions of Mrs A's pain and other symptoms during this period. This indicated poor communication between the nursing staff and the relatives. Although the risks and problems had been identified, there were no clear plans on how to manage the problems.

27. The medical adviser commented that, although the nursing and medical staff recorded Mrs A's adverse symptoms, there appeared to have been no reaction to find out why she was still so unwell on the fifth/sixth post-operative day. The consultant only later rationalised Mrs A's condition but did not clarify at the time what was in his mind or what his management plan might be. The medical adviser commented that the lack of documentation over this period indicated a possible lack of focus on Mrs A's condition, despite the consultant's later contention that Mrs A received regular medical reviews.

28. The medical adviser said that post-operatively the staff failed to react

appropriately to the fact that Mrs A was very different on 5 July 2004 to how she had been in the previous few days. Her breathlessness, pain and nausea were signs of something more serious and abnormal for day seven in the post-operative period. The management of her condition following this was acceptable, although it is surprising that pulmonary embolisation was not recorded as one of the possible diagnoses. Mrs C made justified criticisms of the poor recording and delayed management of Mrs A's deterioration on 5 July 2004. The paucity of medical records from 30 June 2004 to 6 July 2004 indicated a lack of medical supervision and this may explain the delay in recognition of Mrs A's symptoms on 5 July 2004 as being significant. The nursing adviser recommended that the Board develop some joint training for medical and nursing staff in relation to the recognition of deterioration and communication of information between professionals.

*(b) Conclusions*

29. Mrs C felt that Mrs A's symptoms following the operation should have alerted staff that there was cause for concern and they should have taken action to establish the cause sooner. She was also dissatisfied with the way the Board had responded to her complaints about the care Mrs A received and that they had failed to provide her with appropriate explanations.

30. The advisers carried out a full review of Mrs A's clinical records and it was their opinion that the Board had addressed some issues of Mrs C's complaint. However, there were areas where the Board had not provided adequate explanations and the advisers have provided this additional information.

31. The standard of the clinical documentation was another area where the advisers found it necessary to comment. The Board have accepted that the documentation fell below the accepted standard and produced details of an audit carried out. However, the advisers commented that further action is needed. They have recommended that the Board should provide a specific action plan indicating how they plan to make improvements in the areas they have highlighted as substandard. The Ombudsman too recommends that the Board provide a specific action plan relating to the clinical documentation.

32. The advisers have also commented on the confusion over the use of oxygen and recommend that the Board develops a clear protocol for the administration of oxygen therapy for the surgical unit. The Ombudsman echoes the advisers' recommendation in this regard.

33. The advisers have closely looked at the nursing and medical documentation following Mrs A's operation on 28 June 2004. They found that, while the nursing and medical staff were aware and recorded Mrs A's adverse symptoms, there appeared to be no action to find out why she was so unwell on the fifth/sixth post-operative day. There was also nothing recorded at the time which set out what was in the consultant's mind or what his management plan might be. The nursing adviser recommended that the Board develop some joint training for medical and nursing staff in relation to the recognition of deterioration and communication of information between professionals. The Ombudsman also recommends that the Board consider the need for a training requirement in communications between medical and nursing staff regarding communication issues.

34. In view of the advice I have received I have concluded that, although medical and nursing staff were aware of the symptoms presented by Mrs A, they failed to take prompt action to establish the cause of the symptoms. Accordingly, I uphold this aspect of the complaint.

26 September 2006

**Explanation of abbreviations used**

Mrs C	The complainant
Mrs A	The complainant's mother
BGH	Borders General Hospital
The Board	Borders NHS Board
ITU	Intensive Therapy Unit

**Glossary of terms**

Acidosis	Too much acid in the body
Anastomosis	A connection of two separate parts within the body
Anterior resection	Bowel operation
Antiembolic stockings	High stockings which put pressure on the leg to prevent blood clots
Anti-spasmodics	Medication to relieve spasms
Anti-emetics	Medication to prevent nausea or vomiting
Barium enema	x-ray test used to define the anatomy of the large intestine and the rectum
Calciparine	Brand name heparin medication
Contrast	x-ray dye which is drunk by the patient prior to the x-ray
CT Scan	Computerised Tomography scan – computer that takes data from numerous x-ray images and turns them into a picture
Deep vein thrombosis	A blood clot in a deep vein in the thigh or leg
Heart arrhythmia	Irregular heartbeat
Heparin	Medication which prevents blood clotting

NMC guidelines	Nursing and Midwifery Council – Regulatory Body for Nurses and Midwives
Oedema	Swelling
Picolax	Laxative used to clear the bowel prior to surgery
Pneumothorax	Free air in the chest outside the lung
Pulmonary embolus Prophylaxis	Treatment to prevent a blood clot in the lung
Septicaemia	Blood poisoning
Subdiaphragmatically	The area below the lung
Total parenteral nutrition	Intravenous feeding when the patient is unable feed themselves by mouth
Waterlow score	Pressure sore risk prevention score – to aid nurses in prevention