SURGICAL SAFETY UPDATE

Cases from the Confidential Reporting System for Surgery (CORESS)

Missed sepsis post-laparoscopic cholecystectomy

A patient was readmitted for pain control five days after a difficult elective laparoscopic cholecystectomy. Ultrasound was difficult because of patient habitus, but unremarkable. On the following morning the patient still had a tender abdomen and guarding, but no rebound, with normal bowel sounds. Blood pressure and pulse were normal. Blood tests revealed an inflammatory response and after consultant review the plan was for supportive therapy and repeat assessment over the weekend. The patient was handed over to the night on-call team for review.

On the following morning, a Saturday, the night registrar noted the patient wasn't on the list for ward review (in our hospital inpatients are placed on a different list from post-take patients and are reviewed by a separate surgical team) and the FY1 was informed. The FY1 did not include the patient on his list and therefore the patient was not reviewed subsequently on that day by the locum registrar who was covering the wards. The ward nurses responsible for the patient did not alert the surgical team to the fact that she had not been seen.

On the Sunday morning, the night on-call registrar, who knew the patient, reviewed all the blood tests from the Saturday and noted a soaring inflammatory response. The surgical team went back to review the patient and found her septic and with frank peritonitis. The patient underwent urgent surgical exploration during which a subhepatic collection of old blood, bile and fibrin was washed out, and a drain placed. The patient eventually made a good recovery.

CORESS comments

As with many cases a number of separate factors lined up to produce the adverse incident described here. The key underlying problem was poor communication between the different teams of staff responsible for the patient's care. The fact that sick inpatients and post-take patients were on separate lists for review reflected a problem with the system. The FY1 forgot to include the patient on a list for review, the locum may not have been aware of hospital procedures, and the nursing staff didn't remind the on-call team that the patient needed review.

The ASiT member of the Advisory Board commented that this was a 'failure to rescue'[1], and introduced the Board to the useful metric: 'Recognise; Relay; React'[1]. It was noted that having an early warning system or escalation protocols might have prompted an earlier review of the patient.

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Reference
1. Burke JR, Downey CA, Almoudaris AM. Failure to rescue deteriorating patients: a systematic review of root causes and improvement strategies. *J Patient Saf*. 2020 May 21. doi: 10.1097/PTS.0000000000000720. Epub ahead of print. PMID: 32453105.

Late diagnosis of ruptured ectopic pregnancy

As the general surgery SpR, I was called to the emergency department by the on-call locum core trainee covering urology and gynaecology to see a 38-year-old woman with a positive pregnancy test and right-sided lower abdominal pain. I was told that the patient was haemodynamically stable. The core trainee had discussed the patient with the on-call gynaecology consultant who had requested surgical review to rule out appendicitis before seeing the patient.

When I saw the patient at 2.30am, she was in a side room in the minors section of the emergency department with a blood pressure of 50/38. She had no IV access and was pale and dizzy, having been admitted at 9pm. Since admission she had experienced lower abdominal pain, distention and a number of syncopal episodes. I transferred her to the resuscitation bay, gained IV access, administered fluids, cross-matched four units of blood and inserted a catheter. Her systolic blood pressure transiently recovered to 117mmHg before falling to around 70mmHg, with a tachycardia of 90–150bpm. I contacted the gynaecology specialist trainee and asked him to see the patient and to discuss her with his consultant.

The gynaecology consultant eventually attended and obtained consent from the patient for emergency laparotomy, subsequently undertaking a right salpingectomy for ruptured ectopic pregnancy. The patient had 5 litres of blood in her pelvis. Postoperatively she made an uncomplicated recovery.

Reporter's comments

The covering core trainee had not been trained in cross-specialty cover and failed to recognise a critically unwell patient with clinical signs of a classic gynaecological emergency. ED staff also neglected to flag up grossly abnormal observations to other medical staff. Trainees covering specialties other than their own, in an on-call capacity, should be given adequate training in advance.

CORESS comments

This is a similar case to that described above, in which hierarchy, in addition to poor communication, may have played a role. In a young woman with a positive pregnancy test and abdominal pain, the gynaecology team should have been involved early on and senior review indicated if there was diagnostic doubt. An early ultrasound scan may have resolved the diagnostic dilemma and prompted earlier intervention.

Mismanagement of nasogastric tube

CORESS was alerted to the following case, in the public domain, by the Department of Health and Social Care and the Association of Surgeons of Great Britain. The case was the subject of a coroner's report with the aim of prevention of future deaths. Details of the case and Trust involved have been anonymised in this CORESS report.

A 60-year-old woman was admitted to hospital with a 48-hour history of cramping abdominal pain, vomiting and constipation. The patient had previously required colectomy for complications of inflammatory bowel disease. The patient had a distended abdomen with tinkling bowel sounds and examination confirmed the scar of a previous laparotomy. Abdominal X-rays demonstrated distended loops of small bowel with multiple fluid levels and a diagnosis of subacute small bowel obstruction was made.

The patient was placed nil-by-mouth, an IV line was set up, she was catheterised and admitted to the ward for nasogastric tube placement, with an oral request that the tube be aspirated at two- to three-hourly intervals. A request was made for a CT scan and, during this, the nasogastric tube was clamped to facilitate imaging. The patient returned to the ward late in the evening when the ward was staffed by agency staff with no experience of management of nasogastric tubes. No instructions were written in the notes to indicate that the tube should either have been left on free drainage or aspirated. During the night the patient developed severe respiratory distress secondary to aspiration of gastric contents, and despite transfer to the ITU and respiratory intervention, succumbed to an aspiration pneumonia.

Reporter's comments

The Trust investigated this incident and put the following remedial actions in place:

- In response to concerns about communications of clinical instructions, a structured ward round template was introduced.
- A specific teaching session for ward staff in areas managing nasogastric tubes was prepared for delivery at regular intervals.
- A consultant surgeon of the week model, with a single consultant providing ward cover Monday to Friday, and another covering the weekend, was introduced.
- The Trust induction policy was amended to ensure that temporary agency staff were competent to carry out care for patients allocated to them on a particular shift.

CORESS comments

Continuity of care and communication were the key issues here. A checklist protocol for management of nasogastric tubes and a formal handover to ward staff on return from radiology would have been useful. It was noted that similar problems have been reported with chest and spinal drains. A flag placed on the tube with specific instructions would also have been helpful.

We are grateful to those who have provided the material for these reports.

The online reporting form is on our website, coress.org.uk, which also includes previous Feedback Reports.

Published cases will be acknowledged by a Certificate of Contribution, which may be included in the contributor's record of continuing professional development.

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