

# coress feedback

This edition of CORESS Feedback illustrates adverse incidents and near misses that have occurred owing to technical and systems errors and poor communications. As increasing specialisation and centralisation takes place, driven by improved outcomes in high volume centres, communication and handover mechanisms must improve. Working in a large team does not diminish the individual surgeon's responsibility for patient safety.

We are grateful to those who have provided the material for these reports. The online reporting form is on our website ([www.coress.org.uk](http://www.coress.org.uk)), which also includes all 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.

## Complication of gastric bypass (Ref 185)

I undertook a gastric bypass on a 45-year-old type 2 diabetic patient with morbid obesity (body mass index 45kg/m<sup>2</sup>). The patient had hypertension and was a smoker. During laparoscopic bypass, the patient was noted to have a paraumbilical hernia measuring approximately 5cm at the neck and containing a plug of omentum. As part of the procedure, the omental plug was reduced to facilitate access to the duodenojejunal flexure. The gastric bypass was performed uneventfully. A decision was made not to repair the hernia at the time of surgery because of the risks of recurrence and because the open lumen bowel surgery would have increased the risk of mesh infection.

Four days postoperatively, the patient was admitted with bowel obstruction secondary to small bowel incarceration in the paraumbilical hernia. This had caused local bowel perforation and faecal peritonitis. Despite laparotomy and washout, the patient became critically ill and developed a cascade of complications requiring repeated bowel resections and laparostomy. The patient died two months later from multiorgan failure.

## Reporter's comments

The patient's risks of complications arising from paraumbilical hernia repair were increased because of obesity and co-morbid conditions. Hernia repair was therefore deferred. In the event, the patient developed incarceration, leading to bowel perforation and peritonitis. In future, I would be more likely to perform sleeve gastrectomy than gastric bypass in a patient with a controlled ventral wall hernia as the former procedure does not require mobilisation and dissection of the omentum.

## CORESS comments

The CORESS Advisory Committee accepted the reporter's decision not to fix the hernia and also noted that it might have been difficult to detect the hernia on examination preoperatively because of the patient's obesity. An option, however, was to obliterate the potential space laparoscopically, with an omental plug. Use of biological meshes may reduce the risk implications of mesh infection.

## Wrong eye drops administered (Ref 186)

While on call, I was treating a patient who presented with angle closure glaucoma. I had to go to the ophthalmic ward to obtain some pilocarpine and put the minim packet into my pocket. Earlier, I had also collected some atropine. When I came back to instil this medication to the patient, I administered atropine by mistake. I realised the error straight away. I washed the eye with saline and then administered pilocarpine. I explained to the patient what had happened. Subsequently, peripheral iridotomies were performed on the patient with senior support. The patient did not come to any harm.

## Reporter's comments

I was distracted by having to leave the patient to get the pilocarpine. The packaging of the atropine and pilocarpine was similar, and I failed to check the medication before I administered it.

## CORESS comments

This case illustrates a number of sources of potential risk. Systems errors occurred in that the drugs required to treat the patient were not available in the patient's location and were contained in similar packaging. Moreover, the reporter was carrying two different types of drug, increasing the potential for confusion. CORESS has published details of a number of similar cases in different clinical situations. The bottom line, in all of these cases, is that it is *always* the duty of the treating clinician to ensure that he or she has physically checked the drug before administering it to the patient.

## A fatal twist (Ref 187)

A normally fit and well patient presented with relatively low rectal cancer. Staging imaging showed no metastases and clear margins. Following multidisciplinary team discussion, the patient was admitted for laparoscopic low anterior resection.

Intraoperative findings revealed a floppy sigmoid colon. The cancer was below the peritoneal reflection. A standard medial to lateral approach was performed, with high ligation of the inferior mesenteric artery and inferior mesenteric vein. There appeared to be adequate length for the anastomosis so the splenic flexure was not mobilised. The rectum was cross-stapled at the pelvic floor. The patient was then placed flat.

A small midline extraction incision was made at the umbilicus. A wound protector was placed in the incision, and the specimen extracted and excised. The anvil of a CDH circular stapler (Ethicon, Somerville, NJ, US) was secured with a Prolene® purse string suture (Ethicon) and an intracorporeal anastomosis was created. Prior to firing the gun, a visual check of the orientation of the afferent limb of the anastomosis was performed, tracing the cut edge of the mesentery and also the colon itself, to exclude a twist. As the anastomosis was coloanal, a loop ileostomy was formed in the right iliac fossa.

Postoperative recovery was slow at the outset with an ileus. Computed tomography (CT) excluded a leak, and the patient recovered and was discharged home. The patient was subsequently readmitted with renal impairment due to a high output stoma, which responded quickly to intravenous fluids. Pathology confirmed Dukes' A cancer. Given the problems with the stoma, it was decided to reverse this early. The patient was admitted for a routine ileostomy closure. The following day, the patient looked well; plans were made for fluid and diet, and discharge within a day or two.

Over the next few days, the patient developed abdominal distension, pain, melaena and a fever. Blood tests showed an elevated C-reactive protein level and white cell count. The patient was found to be a *Clostridium difficile* carrier (but toxin negative). Antibiotics and intravenous fluids were started on the third postoperative day.

CT was performed on the fourth postoperative day. Originally, this was reported as showing large bowel obstruction but when reviewed by the surgeon with the radiologists, a twist in the descending colon was identified with proximal obstruction. Following resuscitation, the patient was taken to theatre where a necrotic colon was excised and an end ileostomy formed. Postoperatively, the patient was nursed on the intensive care unit but unfortunately became more septic and unwell, dying the following day.

A thorough review of the circumstances was undertaken. The surgeon routinely checked the orientation of the colon prior to the anastomosis by identifying the cut edge of the mesentery and also by following the bowel up the left paracolic gutter. An orientating stitch was also used in the anvil of the gun. All of these precautions were found to be satisfactory in this case. At the subsequent laparotomy, the twist was abrupt and occurred just below the splenic flexure, the view of which was likely to have been obscured by omentum and small bowel loops.

Review of the imaging showed the twist on the 'ileus' CT but it was not picked up at the time. The results of a Gastrografin® enema (Bracco, Princeton, NJ, US) were

normal with no twist seen to the mid-descending colon. The final CT was not reported as showing the twist until the swirl of the mesentery and vessels was noted by the operating surgeon and confirmed by the radiologists.

### Reporter's comments

Have a high index of suspicion when patients do not progress as you expect them to postoperatively. Do not withhold antibiotics if a patient has a clinical picture that cannot be explained by abnormal stool results such as initial tests for *C difficile*. The trust is now changing to more reliable and rapid tests, which should eliminate this problem.

Imaging in such patients should be reviewed by both radiologists and surgeons as there may be aspects of the surgery that the radiologist does not appreciate, and pathology may be missed.

Be aware of the risk of rare complications such as twisting of the afferent limb of the colonic anastomosis, and ensure clear and careful checks are carried out prior to firing the stapler. This surgeon now keeps the patient's head down when performing the extraction and excision, and checks orientation immediately after extraction as well as after replacement of the conduit following excision and anvil placement.

### CORESS comments

The Advisory Committee agreed with the reporter's comments.

### Handover blues

(Ref 188)

A patient was kept in hospital for pain control after a difficult elective laparoscopic cholecystectomy. On the following morning, a Friday, the patient had an unusual amount of pain but with normal observations and a tender but non-peritonitic abdomen. Blood tests revealed an unusually high inflammatory response and supportive therapy was organised, with repeat assessment over the weekend. The patient was handed over to the night on-call team for review.

On Saturday morning, the night registrar noted the patient was not 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.) The F1 trainee was informed and asked to place the patient's name on the review list. For whatever reason, the patient's name was not included on this list and as a result, the patient was not reviewed that day by the locum registrar covering the wards. The ward nurses responsible for the patient did not alert the surgical team.

On Sunday morning, the night on-call registrar, who knew the patient, coincidentally reviewed the blood test results from the previous day and noted a soaring inflammatory response. The on-call team reviewed the patient and found him septic and with peritonitis. The patient underwent urgent laparotomy, and a subhepatic collection of old blood, bile and fibrin was washed out. The patient eventually made a satisfactory recovery.

### Reporter's comments

The handover system relied exclusively on information typed manually by the most junior member of different teams and there was no provision in place to cross-check information on the handover list with the electronic patient records our hospital uses.

### CORESS comments

With the move towards increased teamwork and shift systems, there is a real risk of loss of patient 'ownership' and

diminished individual clinician responsibility for patient care. Previous CORESS cases have already illustrated similar problems in communication, particularly during handovers from one shift to the next. Medical staff should review all ward-based surgical patients every day. A standardised early warning system or score, employed by the trust, might have flagged up that this patient was at increased risk.