CoReSS Feedback March 2012

This issue highlights the importance of anatomical orientation, which can sometimes be difficult during bowel anastomosis and stoma formation. Surgical equipment servicing schedules should be adhered to, as should cleaning protocols, to reduce risk of malfunction causing injury.

We are grateful to the clinicians who have provided the material for these reports. The on-line reporting form is on our website www.coress.org.uk which also includes all previous Feedback Reports. Published contributions will be acknowledged by a “Certificate of Contribution” which may be included in the contributor’s record of continuing professional development.

Tail End Note: Early Passage of Stool...

My consultant and I performed an anterior resection for rectal cancer, with the patient in a Lloyd-Davies position. After mobilising the rectum, I moved to the tail end to insert the endocircular stapler for a stapled anastomosis. The patient had a tight anus, so I sat down on a stool to use an introducer for the stapler. After introducing the stapler, I stood up to fire the staples. Unknown to me, the consultant had moved the stool back to give me space. Because I was concentrating on the staple gun, I wasn’t aware of this. After firing the staples I sat down to take the stapler out. With less than graceful elegance, I fell to the floor. Fortunately, I let go of the stapler and didn’t pull it back with me. No significant harm was sustained by patient or surgeon (except to my pride). An air-leak test was satisfactory. The patient made a routine recovery and was discharged home.

CoReSS Comments:

There are elements of crew resource management to this tale. Whilst it is vital that a surgeon focuses on the procedure in hand, a degree of situational awareness is also called for. Theatre staff should have alerted the operating surgeon to his potential predicament, but may have been reluctant to intervene in communications between the two surgeons. Fortunately, in this case, neither the patient nor the operator was hurt.

Retropertioneal Laparoscopic Port Injury

I undertook a laparoscopic cholecystectomy in an obese 37 year-old female. I made a sub-umbilical skin incision, and placed the primary port, without prior pneumoperitoneum. This was a 12mm diameter optical entry port, through which a 10mm diameter, 30 degree telescope was introduced. Laparoscopy after port placement revealed an injury to the omentum without obvious bleeding. However, an enlarging haematoma was identified in the paracolic gutter, making me immediately suspicious of retropertional injury. I converted to an upper midline laparotomy. Further retropertional bleeding was apparent. I compressed the site of injury to the retroperitoneum and called for the assistance of a vascular surgeon who was operating in a nearby theatre. A retropertional dissection ensued, and a puncture of the infrarenal inferior vena cava was identified. Compression of the IVC proximal and distal to the injury, with swabs on sticks, allowed direct repair, with a running 4.0 Prolene suture. The patient made an otherwise uneventful recovery after (open) cholecystectomy was completed.

CoReSS Comments:

This is yet another in a series of reports about laparoscopic injuries. The Advisory Board were surprised that this port had not been placed using an open technique, in the absence of pneumoperitoneum. “Blunt”, bladeless, radially-expanding, separator, laparoscopic trocars appear to be the safest on the market and are recommended by the Association of Laparoscopic Surgeons (ALS). It should be recognised that placement of all ports carries some risk. However, a Cochrane Review of 17 randomised controlled trials concerning 3,040 individuals undergoing laparoscopy found no evidence of advantage using any single technique in terms of preventing major complications. [Laparoscopic Entry Techniques. Ahmad G, Duffy JMN, Phillips K, Watson A. Cochrane Menstrual Disorders and Subfertility Group. Published Online: 21 Jan 2009]

In this case, the operator recognised the problem when it occurred and made timely and appropriate corrective decisions.
A 73 year-old man presented with a one-year history of a change in bowel habit. He underwent a colonoscopy, undertaken by a nurse endoscopist, where a very large polyp, which could not be negotiated, was found in the recto-sigmoid colon. Biopsies confirmed a tubulovillous adenoma (TVA) with high grade dysplasia. CT scan demonstrated a 6cm mass in the recto-sigmoid, but with no sign of invasion or metastatic disease.

The MDT decided that further endoscopy should be undertaken by a consultant to determine: a) if the lesion was truly malignant, b) its height, and c) if it was removable endoscopically. The lesion was not resectable endoscopically, and was intussuscepting so that the height could not be accurately determined. A second set of biopsies again showed high grade dysplasia in a TVA. The patient was counselled and scheduled for resection. Before the operation could be undertaken, however, the patient became unwell with signs and symptoms of large bowel obstruction.

The patient was admitted from clinic and resuscitated. The next day it was decided that he should undergo defunctioning colostomy as an emergency, to prevent perforation and should undergo EUA to determine the height of the lesion in case radiotherapy should be required. The patient was marked for a transverse loop colostomy by the stoma nurses to allow full colonic decompression and to avoid the obstructing lesion.

As it was a weekend, I discussed this with the GI consultant on-call and arranged that this would be done on the emergency list under his care. The operation was carried out by an experienced trainee with an interest in colorectal surgery. The consultant was not present in the operating theatre, but was on-site and readily available if needed.

The operation appeared to proceed without problem. I saw the patient 48hrs after the operation. He was well and had a pink healthy stoma, with a bridge, in the right upper quadrant. He was reviewed daily. 72 hours post-operatively, he developed a cardiac arrhythmia and was transferred to the CCU. This was thought to be due to magnesium depletion (not uncommon following obstruction and a large TVA). He required magnesium infusion and, at one stage, cardioversion. Shortly afterwards, the stoma developed a high output (2.3 litres/24hr) and skin excoriation. I realised that something was “wrong”, though I was not sure what it was and arranged for contrast to be instilled down each limb of the stoma via Foley catheters. The subsequent x-ray suggested that one catheter was in the stomach and the other in the duodenum. This was confirmed by CT, which demonstrated that the distal stomach had been brought out and fashioned into a loop stoma.

I was dismayed, and discussed the safest way forward with my consultant colleagues. We undertook urgent laparotomy as a two-consultant procedure, closing the gastric stoma around a Foley catheter (as we were concerned about healing), placed a feeding jejunostomy and undertook a Hartmann’s procedure, as when the intussuscepted sigmoid polyp was reduced this resulted in an intra-intussusception perforation. I had a very difficult conversation with the patient and family explaining what had happened. I made an unreserved apology for the error and promised a full inquiry. Following this, the patient made a slow but steady recovery and was eventually discharged home. Final histology showed no evidence of invasion. A hospital serious untoward incident inquiry was held.

**DRILL BURN**

I was undertaking the surgical removal of an impacted wisdom tooth, under local anaesthetic and sedation. A previous operation had been done on the same side, but I was not sure what it was and the drill hand-piece had been overheating. I applied steroid ointment to the wound, informed the patient about what had happened and apologised. When I reviewed the patient a week later, there was just a faint area of erythema, but no residual tissue damage. The drill was sent away for repair, and it was alleged by the manufacturer that the approved cleaning and sterilisation protocol had not been followed by CSSD, leading to the bearings becoming clogged with debris.

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