

cores

feedback

Surgical Safety Update: Cases from the Confidential Reporting System for Surgery

CORESS Feedback: Cases from the Confidential Reporting System for Surgery

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The series of cases in this edition of Surgical Life illustrates adverse incidents arising out of technical errors, and kit problems and emphasises the importance of the “duty of candour”. Poor communication contributes to many adverse incidents or near misses. These cases have occurred in a number of specialties, emphasising the need for good communication as a central theme across surgical practice in general.

We are grateful to those who have provided the material for these reports. The online reporting form is on the website (www.cores.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, or may form part of appraisal or annual review of competence progression (ARCP) portfolio documentation. Trainee contributions are particularly welcome.

CORESS would also welcome any reports which may have arisen as consequences of the COVID pandemic.

Professor Frank CT Smith
Programme Director,
On behalf of the CORESS Advisory Board

Tunnelling device mishap

(Case ref: 287)

A 68-year old man underwent an obturator bypass for critical limb ischaemia, to avoid a groin scarred by chronic infection from previous surgery. This involved retroperitoneal exposure and placement of a tunnelled prosthetic graft from the iliac artery, through the obturator foramen to the medial thigh, with distal anastomosis to the superficial femoral artery. A standard tunnelling device was used with a “screw-in” blunt olive, matched to the Dacron graft 8mm diameter. As the tunneller was introduced through the obturator foramen of the pelvis, from the thigh, the olive tip of the tunnelling trocar became unscrewed and disconnected from the rod of the trocar, ending up lodged and inaccessible somewhere in the deep pelvic tissues.

After numerous attempts to retrieve the 1cm long bullet-shaped olive, and despite on-table imaging to confirm its position, it was deemed too potentially disruptive to attempt to extract the tip. The operation was completed using a second tunneller, and the metallic olive left in-situ when the incisions were closed. Postoperatively, a full explanation with diagrams was provided to the patient by the operating surgeon. No complaint arose and at 6 months follow-up the graft was patent with no complications.

Reporter's comments:

With this particular tunnelling device, the correctly-sized olive had to be selected and screwed into the trocar rod. This was undertaken by the scrub nurse whilst the surgeons prepared the operative field. It is possible this was not done correctly or that the olive was mis-threaded. Nonetheless this should have been checked by the surgeon prior to use. In the event of the olive dislodgement, a team decision was eventually made to abandon attempts at retrieval because of the risk of causing injury. A full and honest explanation to the patient helped to defuse any potential complaint.

CORESS comments:

Unfortunately, kit failures do occasionally occur across all surgical specialties and it is sometimes in the patient's interests to refrain from retrieving an inaccessible foreign object if it is deemed that the risk of leaving this in place is significantly less than further, potentially injurious, surgical exploration. Key points related to this case are the importance of checking all surgical equipment before introducing this into the patient. In the event such an incident there is a duty of candour to provide a full and frank explanation to the patient. The patient should also be warned of implications of retained metallic objects with respect to potential future MRI scans.



CT Angiogram right obturator bypass

Retained tip of vein hook

(Case ref: 288)

The 38-year old wife of a local GP underwent bilateral radiofrequency ablation of incompetent varicose great saphenous veins, with concomitant phlebectomies, at a local private hospital.

The procedure was carried out under general anaesthesia at her request. Phlebectomies were undertaken via small stab incisions in skin creases using a Size 1 (larger) Oesch-style vein hook.

During the phlebectomies on the second limb, whilst removing a large anterior thigh vein varicosity, the vein hook snapped at approximately 1cm from its tip, leaving the tip embedded in the thigh tissues. Attempts to locate the hook tip with a fine arterial clip were unsuccessful and despite undertaking image intensification, using crossed 21g hypodermic needles to triangulate the hook's position, it proved impossible to remove the hook tip without potentially significantly enlarging the incision. The decision was taken to complete the procedure without retrieving the hook tip. This was done without further incident.

An explanation was provided to the patient who made a good cosmetic recovery.

Reporter's comments:

On completion of the operation the set of vein hooks were inspected, and it became apparent that all had been bent through usage and probably re-bent into shape, representing wear and tear of usage. The fracture of the hook tip had probably occurred as a result of metal fatigue, rather than the use of inadvertent force.

CORESS comments:

As in the previous case a careful check of the equipment prior to use may have revealed a potential problem. Where kit is obviously worn this should be withdrawn from use and replaced as necessary.



Vein hook

Missed anal carcinoma

(Case ref: 289)

A 62-year old woman was referred to the colorectal team with a generic GP letter describing altered bowel habit, occasional rectal bleeding and "nasty piles". She was booked for fast track flexible sigmoidoscopy before being seen, with a view to an outpatient appointment after the test.

A flexible sigmoidoscopy was performed by an experienced Nurse Practitioner and reported as normal. As a result, a routine outpatient appointment was made, which the patient attended 16 weeks after the test. At the outpatients it became evident that the "nasty piles" was an anal carcinoma.

Reporters comments:

This case demonstrates the potential danger of a fast track policy in which the patient may not have been seen by a clinician with colorectal experience before the investigation. The description of "nasty piles" should have flagged up the possibility of anal or perianal pathology.

CORESS comments:

This case begs the question as to whether the patient was examined thoroughly prior to referral to the fast track colorectal clinic. Anal examination should be undertaken before any colorectal endoscopy, but if the endoscopist is uncertain of the clinical implications of abnormal appearances a second opinion should be sought.

Missed sepsis post-laparoscopic cholecystectomy

(Case ref: 290)

A patient was re-admitted 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, in-patients 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 Saturday and noted a soaring inflammatory response. The surgical team went back to review the patient and found her septic, and now, 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 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 in-patients and post-take patients were on separate lists for review, reflected a problem with the system. The F1 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 existence of an Early Warning System (EWS), or escalation protocols might have prompted earlier review of the patient.

1. Burke JR, Downey C, 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

(Case ref: 291)

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 02.30, 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 21.00. Since admission she had experienced lower abdominal pain, distention and a number of syncopal episodes. I immediately transferred her to the resuscitation bay, gained IV access, administered fluids, cross-matched 4 units of blood and inserted a catheter. Her systolic blood pressure transiently recovered to 117mmHg before falling to around 70mmHg, with a tachycardia of 90-150 bpm. 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.

Reporters 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 classical 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 was indicated if there was diagnostic doubt. An early ultrasound scan may have resolved the diagnostic dilemma and prompted earlier intervention.



Aspiration of gastric contents due to mismanagement of nasogastric tube

(Case ref: 292)

CORESS was alerted to the following case, in the public domain, by the Department of Health and Social Care and ASGBI. 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 sub-acute small bowel obstruction was made.

The patient was placed nil-by-mouth, an i.v. 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 regularly at 2-3 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.

Reporters 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 the care for the patients they have been allocated to on a particular shift.

CORESS comments:

Continuity of care and communication were the key issues here. A checklist protocol for management of NG 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.