

coress feedback

This issue of CORESS Feedback describes two cases in which failure to make a correct diagnosis resulted in a delay in appropriate treatment for patients with acute surgical emergencies. Problems arising from inexperience when cross-covering other specialties are also highlighted. All efforts should be made by trusts to ensure that when necessary owing to staffing considerations, those undertaking cross-cover across specialties are adequately trained, competent to do so and appropriately supervised.

We are grateful to the clinicians who have provided the material for these reports. The online 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.

Late diagnosis of ruptured ectopic pregnancy

(Ref 153)

As the general surgery registrar, I was called to the emergency department by the on-call orthopaedic senior house officer (SHO) covering gynaecology and orthopaedics, to see a 38 year-old woman with a positive pregnancy test and lower abdominal pain. I was told that the patient was haemodynamically stable. The SHO 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 50/38mmHg. She had no intravenous access, and was pale and dizzy, having been admitted at 9pm. Since admission, she had experienced lower abdominal pain, distension and a number of syncopal episodes. I transferred her immediately to the resuscitation bay, gained intravenous access, administered fluids, cross-matched four units of blood and inserted a catheter. Her blood pressure recovered transiently to a systolic pressure of 117mmHg before falling to around 70mmHg, with a tachycardia of 90–150bpm.

I contacted the gynaecology SHO, asking him to see the patient and to discuss her with his consultant. The gynaecology consultant eventually attended and obtained consent from the patient for an emergency laparotomy, subsequently undertaking a right salpingectomy for ruptured ectopic pregnancy. The patient had five litres of blood in her pelvis. Following surgery, she made an uncomplicated recovery.

Reporter's comments

The covering SHO had not been trained in cross-specialty cover and failed to recognise a critically unwell patient with clinical signs of a classical gynaecological emergency. Emergency department 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

With the introduction of shift systems, inadequate exposure of trainees to emergency cases and reduced staffing at nights, specialty cross-cover in hospitals may become dysfunctional. The patient in this case presented with classical progressive signs of hypovolaemic shock and symptoms that should have alerted admitting clinicians to the possible diagnosis of ruptured ectopic pregnancy. A concomitant feature of this report is the element of patient 'ping pong', in which no senior clinician, including emergency department staff, appeared to take responsibility for the patient until she had deteriorated significantly. Adequate training and induction for trainees cross-covering other specialties should be provided by trusts, together with clear mechanisms of expediting senior review for prioritised cases. The Association of Surgeons in Training has published consensus recommendations on emergency cross-cover of surgical specialties¹ and reports significant demand for their recently convened courses on cross-cover emergencies (<http://www.asit.org/events/courses/ECC>).

Reference

1. Wild JR, Lambert G, Hornby S, Fitzgerald JE. Emergency cross-cover of surgical specialties: consensus recommendations by the Association of Surgeons in Training. *Int J Surg* 2013; **11**: 584–588.

Missed ureteric

(Ref 155)

A 25-year-old man was admitted with right iliac fossa pain, associated fever and vomiting. He had a family history of renal calculi. On examination, he was tender in the right iliac fossa and right loin. Urinalysis was strongly positive for microscopic haematuria. The C-reactive protein level was normal but the serum creatinine was 111–mol/l and the full blood count showed leucocytosis. No stones were visible on x-ray of the kidneys, ureters and bladder (KUB). Ultrasonography of the abdomen and pelvis was performed on day 3 'to exclude appendicitis or renal pathology'.

Kidneys were of normal size and appearance bilaterally, with no comment about the ureters. Free fluid was seen in the pelvis.

The patient was listed for an appendicectomy on day 4 as his fever and pain persisted. Prior to surgery, however, the anaesthetist raised concerns that the creatinine was now 140–mol/l despite appropriate fluid administration and that computed tomography (CT) KUB had not been performed. Surgery was postponed and CT KUB was undertaken, which showed a 5.5mm calculus in the proximal right ureter, causing obstruction and hydronephrosis. The patient was transferred urgently to the local urology services for stenting. He was discharged the following day with improved renal function.

Reporter's comments

A strong history and findings suggestive of renal tract pathology were not acted on and timely appropriate investigations were not performed. The ultrasonography report did not comment on the ureters despite mention of haematuria on the request form.

CORESS comments

This case describes a failure to diagnose ureteric obstruction. The diagnosis of appendicitis was flawed. The patient exhibited a number of symptoms that should have prompted clinicians to carry out CT KUB, the 'gold standard' investigation for renal tract stones, within 24 hours of admission. Patients with haematuria and abdominal pain should be investigated appropriately for renal stones. Worsening renal function despite adequate fluid intake should increase suspicion of underlying renal tract pathology.

'Bear trap' bites back

(Ref 182)

A young woman was admitted electively for endoscopy and fitting of an 'over-the-scope' clip (OTSC) to manage a leaking percutaneous gastrostomy site, under the care of a gastroenterology team. An experienced registrar performed the procedure and the clip was deployed under direct vision. However, on trying to remove the endoscope, it became stuck, seemingly at the upper oesophagus. The endoscope was advanced into the stomach again and it was noted that the clip had deployed on to the scope rather than in a forward direction on to the percutaneous endoscopic gastrostomy site as intended.

A consultant took over the procedure but was unable to dislodge the clip from the endoscope or to remove the endoscope. A second endoscope was passed and the complication was confirmed. The general surgeon on-call was summoned and performed an upper midline laparotomy to remove the clip. The endoscope could only be removed by cutting off the end with a hacksaw and cutters. The ear, nose and throat surgeon on call attended to assess the oesophagus and found a deep laceration in the cricopharyngeus muscle. The oesophageal laceration was managed conservatively and the patient recovered after an extended hospital stay.

Reporter's comments

This was an equipment malfunction. None of the team had encountered this complication previously. In using OTSCs for the management of enterocutaneous fistulas, the complication of deployment on to the endoscope can occur.

CORESS comments

The OTSC is a clip made of a shape-memory nitinol alloy used to close fistulas, perforations, and anastomotic leaks, and to seal bleeding gastrointestinal tract vessels.^{1,2} The clip is mounted on to a silicone cap (similar to a band ligation device), placed on to the tip of an endoscope and applied by stretching a wire with a handwheel installed on the entrance of the endoscopic working channel. When the clip is released from the applicator, it closes because of the shape-memory effect and the high elasticity of the nitinol alloy, occluding the defect. This is similar to a 'bear trap' closure mechanism and applies a permanent force to the tissues. During introduction of the scope, migration (retraction) of the hood can occur.¹ The operator should ensure that appropriate deployment and visualisation of the clip has taken place before the endoscope is withdrawn.

References

1. Jayaraman V, Hammerle C, Lo SK *et al.* Clinical application and outcomes of over the scope clip device: initial US experience in humans. *Diagn Ther Endosc* 2013; 381873.
2. Toshniwal J, Fry L, Vormbrock K *et al.* 'Bear-claw' or over-the-scope-clip system (OTSC): a breakthrough, surgery sparing, endoscopic device. *Gut* 2013; 62: A145.

Things can go wrong when a patient says 'yes'

(Ref 172)

During an ophthalmology outpatient laser clinic, another patient came to my clinic room instead of the patient I had actually called. I think she must have misheard the name that I called out. We discussed the scheduled treatment (laser iridotomy), she signed a consent form with the other patient's sticker at the top and I performed yttrium aluminium garnet laser iridotomies on her. Unfortunately, the patient I treated had been listed for selective laser trabeculoplasty and so she ended up having the wrong laser procedure.

I did not check the patient's date of birth and she had answered 'yes' when I asked her whether she was Mrs X. Soon afterwards, I realised what I had done. I immediately told her what had happened and notified this event to my trust as a serious untoward incident. Thankfully, no harm was done.

CORESS comments

This case illustrates the dangers of 'passive' identification of patients. It is easy for a patient to mishear a question and then agree inadvertently with the clinician. This problem would not have occurred if the clinician had actively

followed the principles of the World Health Organization's surgical safety checklist. The patient should be asked 'Please tell me your name', with similar open questions asking them to state his or her date of birth, address, planned procedure and side to be treated.

This principle applies to many other situations in medicine and surgery. Positive identification of patient, procedure and side to be operated on is also vital in many other situations, including ordering and interpretation of tests.