

cores feedback

This issue of CORESS Feedback includes two conditions (testicular torsion and necrotising fasciitis) that both demand an urgent surgical response. Two further cases highlight problems in team communication and the CORESS Advisory Committee makes recommendations with respect to pooled operating lists.

Attention is drawn to publication of the NHS England's surgical never events taskforce report at: www.england.nhs.uk/ourwork/patientsafety/never-events/surgical/

We are grateful to the clinicians who have provided the material for these reports. The online reporting form is on our website (www.cores.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.

Missed testicular torsion (Ref 170)

A 13-year-old boy developed acute testicular pain at bedtime and presented to the local accident and emergency department at around 4am. He was referred to the local children's hospital where he was seen by a registrar trainee at 6.30am. The registrar felt the patient had epididymo-orchitis and ultrasonography was booked. The case was not discussed with the consultant on call. Handover to the daytime registrar followed and the boy was reviewed again at 9am.

No diagnosis other than epididymo-orchitis was considered. When performed at 11.30am, the ultrasonography failed to demonstrate blood flow to the testis. No attempt was made by the reporting radiologist to contact a surgeon. The child was seen routinely by the on-call consultant at 1.30pm and the ultrasonography report was reviewed. Urgent testicular exploration was arranged, confirming torsion, but the testis had infarcted and orchidectomy, with fixation of the contralateral testis, was undertaken.

Reporter's comments

The first registrar failed to consider the correct diagnosis and the second registrar, trusting the first registrar's diagnosis, did not think to question this or to re-examine the patient. Never assume that testicular pain in a young male patient is due to epididymo-orchitis. Surgical exploration remains the mainstay of management and the registrar should have discussed the case with the consultant.

CORESS comments

This is a perennial misdiagnosis in a classic surgical case where timely intervention is essential. Acute onset of testicular pain in a young male patient should always be considered

to be due to testicular torsion until proven otherwise. While ultrasonography can be a helpful adjunct in genuinely equivocal diagnoses, it can also be misleading, occasionally demonstrating flow in the presence of torsion. Waiting for this investigation contributes to delay. Urgent exploration is indicated, based on the findings at clinical examination. Contralateral orchidopexy should always be undertaken.

Delayed intervention for necrotising fasciitis (Ref 173)

A 32-year-old man presented with a 3-day history of high grade pyrexia, sweating and palpitations. He also had perianal discharge. He was seen by the foundation doctor and registrar, who noted a history of previous perianal sepsis and drainage. On examination, he was tachycardic, and had multiple perineal sinuses with cellulitis and intervening areas of black skin. Blood tests revealed an extremely high white cell count.

The opinion of a consultant intensive care anaesthetist was sought and it was considered unsafe to undertake surgery at this point. The patient was commenced on antibiotics and fluid resuscitation, and was observed overnight. The following morning he was inadvertently given oral fluids so surgery was delayed until 3pm. At surgery, he was found to have extensive perineal necrotising fasciitis, extending to both buttocks, to the base of the scrotum and to the natal cleft, requiring extensive debridement. He was admitted to the intensive care unit and developed multiorgan failure, requiring prolonged ventilation and inotropic support.

Reporter's comments

There was a delay in diagnosis, compromising patient outcome. The patient was not reviewed by the consultant on call.

CORESS comments

The foundation doctor may never have seen a case of necrotising fasciitis. Nevertheless, admission of a sick patient mandates early senior review and decision making. There was a failure of communication when the consultant was not alerted to the admission. Necrotising fasciitis is a surgical emergency demanding early intervention.

A stent too far: perils of pooled lists (Ref 171)

A young child underwent reimplantation of left duplex ureters. Two JJ stents were placed, one in each of the reimplanted left ureters. The patient was subsequently admitted

as a day case on a pooled list and was consented for cystoscopy and 'removal of stent'. The procedure was completed by a registrar although the consultant was present in theatre. Only one of the two stents was removed. The child attended a clinic appointment eight weeks later and routine postoperative ultrasonography identified the retained stent. The patient was readmitted for removal of the second stent several weeks later.

Reporter's comments

The patient was listed for 'removal of stent' with no alert to the fact that there were two stents in situ. On the day of admission for stent removal, the previous operation note was not reviewed. There was no 'second look' into the bladder after removal of the first stent.

CORESS comments

This is a case in which various system errors occurred. The consultant did not know the patient and the previous operation note was not reviewed. When listing patients for surgery, the precise procedure and side to be operated on should be listed. The unusual occurrence of there being two stents for removal should have been flagged up on the admission booking form and theatre list. For any patient attending for follow-up surgery, the original surgical note and case records should be reviewed. A second look into the bladder, after stent removal, should be routine.

The CORESS Advisory Committee had the following comments with respect to pooled lists:

- > There should be local standardised operating procedures for pooled lists.
- > Patient selection should be appropriate for a pooled list.
- > The operating surgeon must see and examine the patient.
- > All notes and investigations, including imaging, should be available.
- > If revision surgery is being undertaken, the operating surgeon should review previous operative records.
- > It should be agreed in advance of surgery as to who will be responsible for follow-up care.

Communications breakdown (Ref 160)

As a core trainee (CT2), I performed an open appendicectomy on a 45-year-old woman, supervised by the middle grade registrar. The patient had a nasty appendicitis with retrocaecal perforation and I found it difficult to mobilise the appendix, which was undertaken by my colleague, who then took over the procedure, completing this from the patient's left side. We resected the appendix and secured the necrotic stump. On completion, I thought that I had seen a bleeding vessel spurting at the base of the appendiceal stump and mentioned this to the registrar but I was not sure that he heard me. He closed the abdomen rapidly so that we could get on with the next case.

Postoperatively, the patient became tachycardic and her blood pressure dropped. An intravenous fluid challenge was administered but her pressure dropped again and she was taken back to theatre by the on-call registrar during the night. At reoperation, a bleeding mesenteric vessel was found at the base of the appendix stump. This was oversewn and a pelvic haematoma was drained. The patient recovered uneventfully.

Reporter's comments

The anatomy was difficult to identify and access was difficult. Enlarging the incision and improving lighting might have helped to detect any residual bleeding. The supervising surgeon should have responded to the concerns expressed by the assistant. The junior surgeon failed to communicate concerns effectively and to emphasise these prior to closing the wound.

CORESS comments

This is a case of poor communication and it is an issue in what the aviation industry would term 'crew resource management'. The team brief has been introduced to empower all members of the team to speak out on issues with respect to patient safety. While the senior surgeon carries responsibility for the case, it is also the duty of the assistant to draw the attention of the team to any circumstance that he or she believes may be detrimental to the patient. The CORESS Advisory Committee recommended that it is good practice for the principal operator to formally check that all members of the theatre team are satisfied before wound closure.

Surgical never events

A new report by the NHS England surgical never events taskforce (on which CORESS was represented) has made a series of recommendations for new standards and systems to further improve the safety of surgery in English hospitals. Never events are events that should never happen because there is sufficient guidance to prevent them. The taskforce found that the 255 incidences of wrong site surgery, wrong implant or prosthesis used, or objects being mistakenly left inside patients that were reported in 2012–2013 were caused by a combination of factors. In the context of the 4.6 million hospital admissions that lead to surgical care each year in England, these incidents are rare. However, each and every never event is one too many.

In its report, the taskforce has recommended much greater consistency between different hospitals in all areas of the country, focusing on three themes:

- > **Standardise** – Development of high level national standards of operating department practice that will support all providers of NHS funded care to develop and maintain their own more detailed standardised local procedures. The report also recommends the establishment of an independent surgical incident investigation panel to externally review selected serious incidents.

- > **Educate** – Consistency in training and education of all staff in the operating theatres, development of a range of multimedia tools to support implementation of standards and support for surgical safety training including human factors.
- > **Harmonise** – Consistency in reporting and publishing of data on serious incidents, dissemination of learning from serious incidents, and concordance with local and national standards taken into account through regulation.

The full report, *Standardise, Educate, Harmonise: Commissioning the Conditions for Safer Surgery*, and a summary can be downloaded at:

www.england.nhs.uk/ourwork/patientsafety/never-events/surgical/