

## CORESS Feedback

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*This edition includes, for the first time, a section dealing with correspondence from both reporters and readers of the Feedback. For reasons of both confidentiality and space, letters will be reviewed by the CORESS Advisory Committee and only a summary of important points will be published. The number of reports received by CORESS is steadily increasing and we are most grateful to those who take the trouble to let the surgical community know about their experiences. The on-line reporting form is on our website <www.coress.org.uk> which also includes all previous Feedback Reports. Finally, the CORESS Board is very grateful to our most recent donor, the BJS Society, who has given £1000 in support of the CORESS system.*

## And then they were gone!

(Ref. 26)

An elderly man was admitted to our accident and emergency department with severe abdominal pain. He was triaged by a nurse specialist and initial observations showed him to be in a stable condition. No i.v. fluids were given. Shortly after his arrival, a trauma call required the attention of all available resident medical staff. My patient was eventually seen by a surgical SHO 4 h after his arrival when a diagnosis of peritonitis was made and appropriate resuscitative measures commenced. Two hours later, he was seen by a surgical registrar and he finally reached the operating theatre more than 9 h after arrival at the hospital. At laparotomy, I found a perforated volvulus of the sigmoid colon and he had a very stormy postoperative course. He eventually left hospital with a colostomy 8 weeks after admission.

*Reporter's comments*

This relatively high-risk patient came to the accident and emergency department in a stable condition. The trauma call removed all available

resident medical staff and the likely diagnosis and need for urgent resuscitation and treatment was not appreciated. As a result, my patient was seen by no doctor for many hours and I, as the on call consultant, was not informed until he was taken to theatre.

*CORESS Expert's comments*

This report well illustrates that delays in the accident and emergency department do, and will, occur and it is essential to set up systems to compensate for this. It is now usual for a named nurse to be in charge of a specified area in the accident and emergency department and to stay there. Many hospitals also have an emergency response team (or ITU outreach team) whose attendance is triggered by changes in vital signs according to agreed criteria. Unfortunately, not all such teams are available out of working hours or in the accident and emergency department. Surgeons might consider it sensible to make inquiries locally in this respect.

## Time passes

(Ref. 28)

An elderly man with mild Alzheimer's disease was admitted to hospital, under a medical team, for investigation of diarrhoea and a left iliac fossa mass. Initial investigations showed him to be anaemic with a raised white cell count and an in-patient colonoscopy was arranged. Before this could be done, the patient suddenly became hypotensive and pyrexial. Despite adequate intravenous fluids and broad spectrum antibiotics over the next 2 days, he remained very unwell

with persistent oliguria. At this point, he was transferred to the intensive therapy unit and I was asked to see him. An immediate CT scan showed clear evidence of pericolic sepsis. At laparotomy shortly afterwards, I found severe pelvic peritonitis from a mobile diverticular mass which I resected with restoration of continuity. After initial improvement, the patient once more became persistently acidotic, hypoxic and oliguric. I re-explored the abdomen but found the anastomosis intact and no

## Time passes

(Ref. 28)

evidence of persistent sepsis. Shortly afterwards, his ECG showed gross ischaemic changes and he died on the second postoperative day.

**Reporter's comments**

The admitting team clearly did not appreciate the significance of the presenting features of this case. Had they done so, there would not have been the significant delay in referral to a surgical team. The result was that the necessary laparotomy was too late to save him. Abdominal sepsis should be investigated and treated urgently, preferably by a surgical team.

**CORESS Expert's comments**

The Committee agrees with the reporter that delay in the management of abdominal sepsis can be fatal. The potential value of an emergency response team in avoiding delay has already been referred to and might have overcome the reluctance to seek a surgical opinion. The Committee also felt that a CT scan was a better diagnostic investigation in these circumstances and can be done more quickly in most hospitals. Staff working in some hospitals have written criteria available to guide them in requesting urgent consultant referrals. This approach might be more generally useful.

## Too much on my plate

(Ref. 29)

One evening recently, a surgical registrar telephoned to inform me that a man had been admitted with lower abdominal pain and hypotension. There was no evidence of sepsis, plain abdominal and chest X-rays showed no pneumoperitoneum and the hypotension responded to intravenous fluids. As the registrar was experienced and confident that there was no evidence of perforation, I agreed that supportive measures, including intravenous antibiotics, should be continued overnight. A large number of patients were admitted that night and although I began my post-take ward round at 07:30, it was not until nearly mid-day that I reached this man who was temporarily accommodated on an outlying neurology ward. I found him in the day room watching television and, although he did not look well, his biochemistry was normal. Examination revealed a distended abdomen but it was soft and only slightly tender. Two wards, including ITU were closed that week due to MRSA and I had to spend over an hour persuading management that this patient needed urgent transfer to a surgical ward. Later that afternoon, an experienced radiologist reported that the abdominal CT scan had shown extensive intraperitoneal free fluid but no gas. There were inflammatory changes around the right colon and the possibility of Crohn's disease was raised. When I reviewed the

patient later that evening, he remained stable and so I decided to continue conservative measures but avoiding steroids until he had been seen by the gastroenterologists the next day. At this point, I was summoned urgently to another hospital site to see a patient with haematemesis. On the way back to the main site several hours later, I was informed that my patient with abdominal pain had arrested and died. A coroner's post mortem showed that the patient had died from a perforated posterior gastric ulcer with general peritonitis. With hindsight, on review of the CT scan, the radiologist found a tiny bubble of air in the lesser sac.

**Reporter's comments**

I believe that I placed too much reliance on the CT scan and perhaps on the opinion of the very experienced radiologist. As a result, I was concerned that a negative laparotomy would exacerbate the problem of the presumed Crohn's disease. There were also too many distracting issues (many patients on different wards, sick patient on a different hospital site, lack of beds) for me to concentrate on a case that was not straight forward. In future, I will occasionally have to go with my 'gut instinct' despite the radiological findings and accept that I will have negative laparotomies.

## Too much on my plate

(Ref. 29)

**CORESS Expert's comments**

This is a complex case and the Advisory Committee was grateful for this honest and timely report. It illustrates two very important issues. First, as the reporter notes, it is dangerous to place too much reliance on imaging which can lead to unnecessary operations as well as a missed diagnosis. In particular, CT scans are now so easily available that

we may be tempted to rely on them to confirm a trainee's diagnosis rather than make a clinical assessment ourselves. Second, this case vividly illustrates the dangers of an excessive workload – well known to cause adverse incidents in other high-risk occupations. There is a very good case for surgeons on call to be free of other duties and it is not always desirable to cover more than one site.

## Central venous lines

(Ref. 30)

Over the course of 13 years, at different hospitals, I was involved with three cases which illustrate the uncommon, but potentially serious, risks when inserting central venous lines. Three different surgeons were involved, only one of whom was a trainee. In the first case, a Seldinger wire was inserted about 10 cm into the right jugular vein. The dilator was passed to the junction with the subclavian and it then penetrated the vein wall into the chest. When the dilator was removed there was no back bleeding until the sheath was withdrawn when the patient collapsed with major haemorrhage into the right chest. In the second case, the right internal jugular was approached using a closed technique with duplex ultrasound control. A guide wire was passed into the superior vena cava and, after the dilator had been inserted to its full extent, it was found that the guide wire would not withdraw and a chest X-ray showed that it was coiled in the upper chest. The neck was explored and it was found that the dilator had passed through the posterior wall of the internal jugular vein into the upper mediastinum. The last case involved a closed approach from the left subclavian vein in a relatively small patient. The guide wire and dilator were inserted without difficulty but when the guide wire was removed, leaving the dilator and sheath in place, the patient collapsed. The chest was opened and it was found that the dilator had sprung out through the superior vena cava when the guide wire had been removed.

**Reporter's comments**

Technical error, when inserting these lines, can have disastrous consequences. The guide wire should always be passed as far as the superior vena cava which is about 30 cm from the surface. Even with the guide wire in the right place, it is possible to push the dilator through the wall of a major vein. The direction the dilator is pushed and the force exerted is important. It should not be inserted to its full length and should always be withdrawn before the guide wire to stop it springing, especially in small people. Even if you think you know it all, you can still come unstuck and proper guidelines should always be followed even by experienced operators.

**CORESS Expert's comments**

The Committee thanks the reporter for these cases which well illustrate the need for these lines to be inserted by someone suitably trained who is following an established protocol. Many hospitals now have a pool of staff with the expertise to provide a line service. Ultrasound control is now mandatory in anaesthetic practice. An image intensifier should also be used if there is any doubt (for instance if the guide wire does not move freely within the dilator) and particularly if approaching the left side where the azygos vein is at risk.

## Hanging on

(Ref. 27)

During the course of a Wertheim's hysterectomy for carcinoma of the cervix, I identified the right ureter and dissected it away from the pelvic wall in order to remove some suspicious lymph nodes. As has been my practice for some years, I passed a tape around the ureter to enable my assistant to hold it away from the operative field. I did not notice that the tape had become tethered to the drapes with a Dunhill forceps and when the anaesthetist needed to attend to venous access at the wrist, the tape was pulled and the ureter badly damaged. Fortunately, a urologist was available to repair the damage.

**Reporter's comments**

The use of tapes or slings around the ureters should best be avoided unless absolutely necessary. If

needed, a rubber sling can be placed around it rather than a firm nylon tape to minimise any damage which may occur.

**CORESS Expert's comments**

The Committee agrees with the reporter that tapes are probably best avoided in these circumstances. If a tape is used, it should not be attached to drapes or held by an assistant who might pull on it. Perhaps a small artery forcep is least hazardous. If a ureter is damaged, it is vital to notice the fact and then seek the assistance of a urologist. Ideally, the pelvic surgeon and urologist should have agreed in advance a management plan for this uncommon but inevitable complication. (See CORESS Feedback March 2006)

## Correspondence

**1. 'Fair Trial' (Number 22) December 2005**

This case dealt with damage to an intercostal vessel when exploring the internal mammary lymph nodes as part of a trial. A reader, who is an acknowledged expert in this field, points out that there is no current trial requiring this technique and that surgeons may be uncomfortable doing internal mammary node biopsy since it has not been routine for many years. The technique should have a very low complication rate if performed correctly by a surgeon trained in this procedure.

**CORESS Expert's comments**

Complications will always be with us but familiarity with a procedure minimises the risk.

**2. Authorship of a report**

A reporter asked that he or she be acknowledged as author of a report in a recent Feedback.

**CORESS Expert's comments**

To acknowledge authorship of a report breaks the fundamental rule that all CORESS Feedback must be anonymous. It is recognised that some reporters might wish to have evidence that they have made a contribution to patient safety. This issue has been considered at length by both the Advisory Committee who review reports and the Board who are responsible for governance of the system. There appears to be no workable suggestion that does not compromise confidentiality.

## Finally

**Tip Off!**

There have been a number of reports of catheter tips breaking on removal, often requiring interventional surgery for retrieval. Always (visually) check tips of intravascular devices, including catheters, guide

wires, introducers, *etc.* after removal, to ensure the tip is intact.

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