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coress Feedback

CONFIDENTIAL REPORTING SYSTEM IN SURGERY

This edition of ***CORESS*** Feedback includes three cases illustrating situations that are familiar to all of us, but which continue to cause difficulties. As always, we are grateful for the honest reports from surgeons who have told us about the cases and the lessons they have learnt from them. If you have found this Feedback useful please contribute a case. It will not take long. The on-line reporting form is on our website which also includes all previous Feedback Reports.

BAD LINE-OUT

(Ref: 021)

A man was admitted following a RTA and underwent emergency surgery for a lacerated liver. Shortly after discharge he was readmitted with peritonitis and, at a further laparotomy, I removed a strangulated and ischaemic loop of small bowel. A week later, after removal of a central line, he suddenly became confused and complained that his left hand would not work properly. I arranged for a neurologist to see him but she could not identify a focal lesion and could offer no convincing explanation. A CT scan of the brain showed no abnormality and, some days later, he was discharged. When he came to the clinic he was making a good recovery from his abdominal condition but complained that he still had not the full control of his fingers that he had pre-operatively and he had become severely depressed because of his functional problems.

Reporter's Comments:
I made enquiries with regard to the existence of a ward nursing protocol for removal of central lines and found that there was one; that it specified removal with the patient in a head down position, and that this had been done. Diagnostic possibilities include air embolus and patent foramen ovale leading to a cerebral embolus from a dislodged blood clot on removal of his central line. The incidence of such complications is perhaps not widely enough appreciated. We should be aware that central lines are a potential hazard in more ways that just a portal for infection and should not be used unless necessary.

CORESS Expert's Comments:
The diagnosis in this case remains speculative but the Advisory Committee felt that air embolus remained a strong possibility. A correct protocol had apparently been followed but members of the Committee were aware of similar cases where inadequate training had led to poor practice despite adherence to protocol.

Central lines are not without risk but the complications should not be exaggerated. The Advisory Committee agreed with the reporter that these lines should be used with clear clinical indications according to protocol, managed actively, and removed as soon as possible.

FAIR TRIAL?

(Ref: 022)

Recently, I saw a middle aged patient with a carcinoma in the upper outer quadrant of the right breast. Mammograms also showed extensive DCIS and a radio-isotope scan detected both axillary and internal mammary node uptake. I was taking part in a clinical trial at the time and discussed the options in detail with the patient. A mastectomy and node biopsy from both the axilla and the internal mammary chain was agreed. A preliminary injection of blue dye allowed identification and removal of the axillary node and I then completed the mastectomy. No dye was seen on inspection of the chest wall and the isotope probe did not demonstrate any uptake in the internal mammary area. I somewhat reluctantly explored the intercostal space according to the trial

protocol. There was no obvious node and during the dissection an intercostal vessel was inadvertently damaged leading to a large postoperative haematoma for which the patient had to be returned to theatre.

Reporter's Comments:
In retrospect, I wonder if I should have explored the internal mammary nodes in this situation - after all, if it hadn't been part of a research protocol I would not have done so. The absence of blue dye and radioisotope uptake made a positive exploration unlikely and I regret adding an unnecessary procedure when there was no strong indication to do so.

CORESS Expert's Comments:
Many of us take part in randomised clinical trials and can find ourselves in difficulties if the principles involved in participation are not fully appreciated. Research protocols are rigorously assessed and participation in a trial carries an obligation to treat according to schedule. However, a surgeon must have equipoise with the trial. If this is not the case then the surgeon should not enter the trial or feel pressured to do so. The surgeon should also have equipoise for the individual patient randomised into a trial. If not, the patient should not be entered or should be withdrawn at any time.

EASIER SAID THAN DONE?

(Ref: 024)

A man with coronary artery disease underwent angiography and stenting via a right groin percutaneous access route. A percutaneous closing device was used to close the femoral artery puncture, but unfortunately he later developed a false femoral artery aneurysm. At this point my vascular surgical team became involved but the recommended duplex ultrasound was undertaken by one of the vascular radiology team. The aneurysm was shown to be 3.5cm in diameter with a small neck, and it was agreed that it should be treated with a direct thrombin injection because the patient was in pain and on both aspirin and clopiderol antiplatelet regimen. The correct dose of thrombin was given and the aneurysm thrombosed. Twelve hours later the patient complained of a swollen tender right calf. A formal duplex scan was undertaken by a vascular technologist and thrombus was confirmed in the femoral vein, although the below knee veins were clear. An arterial like pulse wave form was also noted in the right iliac vein and it became clear that a femoral arterio-venous fistula was present and that this had been missed at the original duplex ultrasound examination. The patient was warfarinised for six months and then his anti platelet medication was reduced. The fistula appears to have closed without surgery.

Reporter's Comments:
By using percutaneous closure devices following endovascular intervention the number of false aneurysms has reduced significantly, but when they do occur they can be more difficult to manage. The use of thrombin like agents to thrombose false aneurysms is an accepted management. It is relatively easy to do and is generally successful but does depend on basic ultrasound skills and specific precautions need to be taken. I do not think it is important who does the procedure (vascular surgeon or radiologist), but if skilled medical staff are not to hand the involvement of a trained vascular technologist is essential.

CORESS Expert's Comments:
Femoral arterio-venous fistula is a not uncommon complication after endovascular intervention and the fistula, if small, may not be apparent clinically. Experienced surgeons are well aware that a technique that is simple in theory may certainly not be so in practice! A reliable source of expertise (in this case a vascular technologist) should always be available before any procedure commences. The necessary skill will not eliminate risk but will certainly make complications less likely.

FINALLY - Down the drain?

There have been several reports of wound drains breaking during removal leaving part of the drain in situ. Surgeons should be aware that a drain may be weakened, and liable to break, if it is partially cut or nicked when sutured in position.

It can happen! - Despite rumour to the contrary, the electromagnetic interference from a mobile phone **can**, under certain circumstances, affect the performance of some devices. **Definite** reports of malfunction of infusion pumps have been reported to the MHRA due to the proximity of a mobile phone. (The Programme Director at coress@btinternet.com would be interested to hear of any experience of the above)

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