

CORESS is a confidential reporting system for surgery. The purpose of CORESS is to promote safety in surgical practice, both within the NHS and in the independent sector.

doi 10.1308/rcsann.2018.0210

# coress feedback

CORESS is an independent charity, supported by the Federation of Surgical Specialty Associations.

This edition of CORESS Feedback contains descriptions of several different adverse incidents. An emerging theme is failure to act on relevant details in the patient history and failure to review requested investigations, which would have influenced intervention. It is important that the operating surgeon has reviewed all relevant patient records prior to embarking on what may be significantly intrusive interventions, particularly as the 'paper-free' patient record becomes more prevalent.

Injury caused by chest drain placement is a well recognised problem. A link is provided to the British Thoracic Society guidelines on the topic. A brief revision is recommended for anyone who has to perform this potentially hazardous procedure.

We are grateful to those who have provided the material for these reports. The online reporting form is on our website (www.coress.org.uk), which also includes previous Feedback reports. Published cases will be acknowledged by a Certificate of Contribution, which the contributor may wish to use as evidence of continuing professional development.

## Missed thrombophilia (Ref 245)

A 62-year-old woman, a known heterozygote for factor V Leiden, was seen in the outpatient clinic with superficial venous incompetence and a small venous ulcer in the medial gaiter area. (Her daughter, a homozygote, had suffered a deep vein thrombosis [DVT]). Duplex imaging revealed recurrent groin incompetence following surgery some years earlier. The clinic letter documented the familial thrombotic tendency and the patient was listed for day-case revision varicose vein surgery.

On admission for surgery, a clerking proforma was completed but details of the family history of DVT were omitted and because of teething problems with the electronic record, which the hospital had recently adopted, the outpatient record was not recovered or referred to. The patient underwent surgery but required overnight stay owing to postoperative nausea. Compression stockings were applied but prophylactic heparin was not prescribed and the patient was discharged the following day. Eight days later, she presented to her general practitioner with a femoral DVT. The trust later settled a medicolegal claim.

#### **CORESS** comments

Patients who are homozygous or heterozygous for factor V Leiden are at increased risk of venous thrombosis and

should be assessed for coverage with prophylactic perioperative subcutaneous heparin. This case was undertaken on a pooled list and the medical records were not available. The World Health Organization's surgical safety check should have confirmed that a venous thromboembolism assessment had been completed and it might have picked up the factor V Leiden had the records been referred to. In some trusts, additional or specific risks are listed on the theatre booking sheet, which might have helped here. Although all CORESS Advisory Committee members had experience of similar cases, surgery should not proceed without the availability of the appropriate and relevant clinical records.

# **Incorrect breast cancer diagnosis** (Ref 246)

A 52-year-old woman, a few months post-partum, presented with a breast lump and was diagnosed with triple negative breast cancer on histology. (The three most common types of receptors known to fuel most breast cancer growth [oestrogen, progesterone and HER2] were not present in the tumour.) She underwent neoadjuvant chemotherapy (NACT) and requested mastectomy with reconstruction. After discussion with her surgeon, who recommended contralateral risk reducing mastectomy, she underwent bilateral mastectomies with reconstructions.

Having received preoperative NACT, operative histology was normal with no evidence of tumour. On review of preoperative slides, there was evidence of florid proliferative changes due to pregnancy, mimicking cancer. The patient therefore underwent treatment with chemotherapy and bilateral mastectomies unnecessarily. The issue was discussed with the patient, the case reported to the patient safety organisation Datix and root cause analysis undertaken.

## **CORESS** comments

Pathology reporting in breast cancer presents some specific problem areas. Young women with hormonally active breasts, those post-parturition and those recommended for neoadjuvant therapy should have a double pathological assessment or should be reviewed in a multidisciplinary team meeting that includes pathologists prior to instigation of definitive treatment.

#### Missed zygomatic arch fracture (Ref 247)

A patient with a fractured mandible as a result of an alleged assault had surgical treatment for their mandible fracture in a regional oral and maxillofacial unit but the concomitant zygomatic arch (cheekbone) fracture went

unnoticed by both emergency department staff and the operating surgeons.

A blow to the side of the face may cause an obvious mandible fracture and a less obvious zygomatic arch fracture, which was what happened in this case. A patient may only remember a single blow (which then concusses the patient) but may have sustained other impacts, either from further blows or from indirect injuries caused by falling.

Computed tomography for head injury almost always irradiates the eyes but stops just before imaging the orbital floors and cheekbones. Radiography for mandible fractures does not always show the zygoma. Isolated fractures of the zygomatic arch may have no symptoms and can only be recognised by feeling the arch for a change in shape.

#### Reporter's comments

In cases where you see a mandibular fracture on a radiograph, you should look for one on the other side. If the patient does have a mandibular fracture (particularly of the ramus or condyle) and you do not palpate the zygomatic arches, you may miss a second fracture.

In this case, there was too much focus on the obvious injury for which the patient was transferred and for which surgery was indicated. This eventually necessitated two operations rather than one.

Head injury computed tomography should include the orbital floors and cheekbones. (The orbits have already been irradiated and the extra time/radiation dose required is negligible.) However, there is a risk of overreliance on imaging rather than clinical examination. A basic focused physical examination might have revealed the zygomatic arch fracture in this case.

When patients have sustained a significant injury to the face (particularly where the history is not clear because of concussion, alcohol or multiple blows), a thorough examination with a high index of suspicion of other injuries is needed.

### **CORESS** comments

CORESS agreed with the detailed specialist advice provided by the reporter. The clinical psychology expert on the Advisory Committee referred to this as 'anchoring' (cognitive bias in which fixation on a primary injury or piece of information results in inadvertent neglect of other potentially significant outcomes).

# Chest drain fatality (Ref 248)

A patient had undergone a left lower lobectomy for lung cancer five days earlier and had a small pleural effusion. It was decided to drain this on the ward. A senior trainee attended the patient and placed a Seldinger-type drain into the chest, anteriorly in the midclavicular line. No ultrasonography was undertaken to mark the location of the effusion. It quickly became apparent that the drain had

been inadvertently placed into the heart. The patient was immediately taken to theatre, where the drain was successfully removed from the left ventricle. Although the patient's initial recovery was good, he subsequently deteriorated on the intensive care unit and died a week later.

#### Reporter's comments

There was failure to use the British Thoracic Society guidelines and to obtain ultrasonography of the chest to localise the effusion. Knowledge of and adherence to use of the triangle of safety when inserting a chest drain might have avoided the adverse outcome in this case.

## **CORESS** comments

The effusion should have been imaged by ultrasonography and marked. After lobectomy, there may be distortion of the normal anatomy with heart shift. The 2010 British Thoracic Society guidelines for chest drain placement can be found at: https://thorax.bmj.com/content/65/Suppl\_2

## Inappropriate oesophagectomy (Ref 249)

A patient with a lower oesophageal lesion, with biopsies suspicious for adenocarcinoma, was referred from a peripheral hospital to the upper gastrointestinal multidisciplinary team (MDT). At MDT review, the term 'suspicious' was omitted from the pathology report.

The patient underwent a second endoscopy and biopsies but was fast tracked for surgery and underwent an oesophagectomy before the biopsies had been reported. The second biopsies, which failed to confirm the presence of carcinoma, were not presented at the MDT meeting prior to the operative procedure.

When the original histology was reviewed, it was recognised that the histological features, originally reported as suspicious, were those of reflux oesophagitis. Major life-changing surgery was therefore carried out unnecessarily.

#### Reporter's comments

This case involved both propagation of false information and proceeding without the correct information.

#### **CORESS** comments

The surgeon based the decision to intervene on the MDT record rather than review of the original notes and pathology. There was an urgency to meet cancer target waiting times, with further pressure because of the tertiary referral. At this point, the clock should have been stopped and relevant results reviewed. If investigations that will inform the process of intervention have been requested, then the results of those investigations must be reviewed prior to intervention. This case illustrates premature closure of thinking and the danger of rigid adherence to targets.