coress Feedback

This issue of Feedback has cases from disparate surgical specialties, but with generic themes. Several of the cases illustrate co-operation with other organisations concerned with surgical safety: NHS England, NCEPOD and MHRA. Sharing and dissemination of knowledge of adverse events underpins the surgical profession's determination to improve safety for our patients.

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 all previous ***Feedback Reports***. Published cases will be acknowledged by a **Certificate of Contribution**, which may be included in the contributor's record of continuing professional development.

Frank C T Smith
Programme Director, on behalf of the CORESS Advisory Board

"SWISS CHEESE EFFECT"

(Ref: 152)

I was called to assist an ENT SpR undertaking a solo list, while his consultant was on leave, who had created a CSF fistula during elective sinus surgery. I reviewed the pre-operative CT scans before scrubbing, and found that the scans showed no evidence of sinus disease. The fistula was repaired intra-operatively and the patient made an uneventful recovery, after spending two nights more in hospital than planned. On investigation as to how the patient, whose complaint was of post-nasal drip, had been listed for surgery in the absence of sinus disease on CT, it became apparent that a different registrar had done this, on the grounds of a radiology report that stated that there was extensive disease. It appears that a radiology transcription error had occurred, which was overlooked as the CT had not been reviewed in the clinic. Furthermore, as the history did not support a diagnosis of chronic sinusitis, the CT scan should not have been requested. The patient underwent unnecessary surgery, resulting in a major complication, with no symptomatic benefit. He has declined the offer of further treatment.

CORESS Expert's Comments:

This case represents a "Never Event" [1] in which a number of circumstances contributed to the adverse outcome – the classical "Swiss Cheese" effect. An initial incorrect clinical diagnosis was made despite the patient's symptoms; there was failure to follow RCR guidelines in requesting CT at the first visit when the only symptom was that of post-nasal drip; a transcription error occurred in the radiology department; the patient was listed for surgery by a surgeon who did not have final responsibility for the operative procedure, on the basis of the incorrect radiology report (in the last issue of ***Feedback***, CORESS drew attention to the perils of pooled lists); the CT scan was not reviewed prior to surgery by the operating surgeon (as recommended in the WHO Check List).

The importance of the operating surgeon checking all of the patient's relevant investigations prior to anaesthetic induction cannot be overemphasised.

[1] The 2014 report of the Surgical Never Events Task Force can be downloaded at: **http://www.england.nhs.uk/wp-content/uploads/2014/02/sur-nev-ev-tf-rep.pdf**

SYSTEMATIC DELAYS RESULT IN ADVERSE OUTCOME *(Ref: 154)*

A 68-year-old man presented to the Emergency Department at 20.00, with an obstructed paraumbilical hernia. Resuscitation was undertaken and the patient was listed for surgery during the afternoon of the following day, because the on-call surgeon was undertaking an elective operating list in the morning. During the afternoon, the operation was postponed until the evening because of the need for extra corporeal membrane oxygenation (ECMO), for concomitant respiratory disease. A new on-call surgeon during the evening hours thought that the patient was now in renal failure, with no urinary output, and transferred the patient to the HDU for further resuscitation, listing him for surgery next morning. I was the surgeon on-call on the following morning and reviewed him, finding him to be in renal failure requiring inotropic support. Although the patient had a metabolic acidosis, black areas had now appeared in the patient's skin overlying the hernia. He was transferred to theatre for laparotomy.

Prior to the surgical procedure, he had three cardiac arrests from which he was successfully revived. At laparotomy, ischaemic perforated bowel with faecal peritonitis was found in a large hernia sac. Small bowel was resected, and an ileostomy and mucus fistula was created. The patient remained septic, anuric and died several hours later.

Reporter's Comments:
There was a delay in recognition of ischaemic bowel and cancellation of the original surgery as a result of ECMO. The on-call surgeon was not available on the morning after the patient's admission because he had not cancelled his elective list.

CORESS Expert's Comments:
This case provides several lessons. An obstructed, potentially strangulated hernia is a clinical indication for urgent surgical intervention. Whilst fluid resuscitation is important, intervention for the underlying cause of the patient's problems should not be delayed. In the current surgical climate, the Advisory Board recommended that an "on-call" surgeon should drop all routine elective commitments during the period of "on-call" and should be available to respond to emergencies promptly. This should be agreed as a governance principle with Trust management. The risks posed by a shift system in which no-one takes ownership for a patient are evident. A named consultant should take responsibility for the patient. Handovers should be comprehensive and should draw attention to clinical problems requiring urgent attention.

The first report (2014) of the National Emergency Laparotomy Audit (NELA), commissioned by the Healthcare Quality Improvement Partnership (HQIP), funded by NHS England and the Welsh Government, can be found at **http://www.nela.org.uk**. The following recommendations for patients requiring emergency laparotomy are made:

- Timely review by a senior surgeon following admission.
- Formal assessment of risk of death.
- Defined pathway of peri-operative care.
- Prompt administration of antibiotics.
- Ready availability of diagnostic investigations.
- Prompt access to an operating theatre.
- Surgery performed under direct care of a consultant surgeon and consultant anaesthetist.
- Admission of high-risk patients to a critical care unit following surgery.
- Structured handover of care is required at all times by all clinicians treating emergency laparotomy patients.

OPAQUE PERSPECTIVE *(Ref: 174)*

Carrying out a laparoscopic cholecystectomy, after initial introduction of the laparoscope, the instrument was withdrawn, cleaned on an antifogging sponge and reinserted. The view was completely obscured and direct inspection of the scope revealed opacification of the lens, apparently within the instrument. A replacement scope was checked by myself (as the first had been), by direct vision, prepared with the anti-fog solution on the sponge and inserted into the abdomen. Again, the view was completely obscured. It was then realised by the scrub nurse that the solution placed on the sponge was not anti-fog solution, but wound glue for the end of the procedure. The telescopes were "repaired" by thorough cleaning, but this took some time. No harm came to the patient but had this happened at a critical stage then the outcome could have been different.

Reporter's Comments:
Both the anti-fog solution and the tissue glue were contained in similar bottles with twist-off caps. The bottles were opened in a theatre environment in which the lights were dimmed.

CORESS Expert's Comments:
It should be policy to check all solutions for use, either in a patient, or on equipment that will come into contact with the patient, while the lights are "up", prior to the procedure. It is the responsibility of the operating surgeon to reassure himself that any fluid potentially coming into contact with the patient is being used appropriately, is of the correct dose, and is not time expired. Where evident similarities in packaging of different substances used in the same context occurs, the procurement team and the manufacturers should be informed.