

# cores

## Feedback

This edition of **Feedback** marks a milestone, the publication of the 200th CORESS report. It is perhaps salutary that case number 200 relates to the most primal of surgical functions – safe handling of sharp instruments. Other cases represent the diversity of specialty contributions to CORESS reports.

We are grateful to those who have provided the material for these reports. The on-line reporting form is on our website [www.coress.org.uk](http://www.coress.org.uk) which also includes 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

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### INADVERTENT DIATHERMY USE DURING COLONOSCOPY

(Ref: 198)

A 70 year-old man, with a family history of bowel cancer, underwent colonoscopy for rectal bleeding. Six adenomatous polyps were found in the distal sigmoid and rectum. The polyps were dealt with by combination of hot biopsy and snare excision. When a 16mm biopsy polyp was being removed by snare excision, cutting diathermy was inadvertently activated, by pressing the foot pedal for three separate bursts of two seconds.

The patient developed a post-polypectomy syndrome (abdominal pain due to inflammation in absence of full thickness burn or perforation) and needed to be admitted to hospital for 48 hours, but subsequently made a full recovery. It was suspected that the inadvertent application of the cutting current was responsible for this problem.

#### **Reporters Comments:**

The two foot-pedals on this machine are identical in size and shape and situated side-by-side within a common canopy. It is difficult to tell which pedal one is pressing without looking at them. The problem is

compounded by the fact that this machine produces a continuous tone for both coagulation and cutting. The tones have only slight variation in pitch. Whilst concentrating on looking at the screen, to localise a polyp during endoscopy, one therefore has to depend entirely on sense of feel to locate the appropriate pedal.

This incident appears to be multifactorial, but risks of using the wrong current could be reduced by separating coagulation and cutting pedals, and designing them to have different shapes, easily distinguished by the foot. Instead of having a tone of two different pitches, the machine could be designed so that a coagulation tone was continuous and a cutting tone, interrupted.

#### **CORESS Comments:**

This is yet another case of inadvertent diathermy activation, a perennial problem. CORESS has collected a series of these cases to pass on to MHRA. A meeting with diathermy manufacturers to look at how diathermy safety may be improved is planned.

## BIOMETRY MISSING PRIOR TO ANAESTHESIA FOR CATARACT

(Ref: 199)

A patient from another hospital attended for cataract surgery under general anaesthesia. Because the patient had come from elsewhere, pre-op measurements for the lens implant (biometry) had not yet been undertaken. It was agreed that the patient should have biometry performed in the eye theatres, before anaesthesia. (Biometry needs to be done with the patient awake, sitting upright). This need was highlighted at pre-operative Team Brief. Unfortunately, despite WHO sign-in check, she was anaesthetised without having had this pre-op test done. Biometry is needed in order to choose the correct strength of lens implant: I did not want to estimate and risk the patient requiring strong glasses for the rest of her life. Therefore, we woke the patient up, explained and apologised, undertook the biometry, and re-anaesthetised her for surgery later the same day.

### Reporters Comments:

Unusual circumstances were involved in this case. The patient attended from another hospital and underwent general anaesthesia.

However, there was no surgeon present during the sign-in. The Royal College of Ophthalmologists recommends that the WHO check for cataract surgery includes questions about the exact type of lens implant needed. The anaesthetist was expecting us to do the 'surgery-specific' part of the WHO check once the patient was asleep. This case shows that it's too late to leave it until then!

### CORESS Comments:

Forthcoming National Safety Standards for Invasive Procedures (NatSSIPs) will expect the surgeon to be present at the sign-in check. For patients requiring general anaesthesia, the routine WHO time-out check is undertaken when the patient has already been anaesthetised, and this occurs past the "point of no return" for any part of the procedure requiring patient cooperation. The team brief is a vital part of maintaining safety standards, but was not acted upon in this instance. Organisational change must embrace allowing time for necessary safety checks to be undertaken.

## SECOND APPENDICECTOMY?

(Ref: 207)

A 32 year-old male patient with right iliac fossa pain was admitted with suspected appendicitis. He had a history of a similar presentation ten years earlier, when he had undergone diagnostic laparoscopy. He was kept under observation. Blood tests and abdominal ultrasound were normal, (the appendix was not visualised). The pain persisted unchanged and remained severe.

On the third day of admission, he was listed for diagnostic laparoscopy by the responsible consultant. However, the consultant wasn't available to supervise the on-call SpR, who was not able to perform the laparoscopic procedure independently. The on-call consultant didn't agree with the plan and wasn't happy to support any operation. The responsible consultant then requested the operation to be changed to an open appendicectomy, which could be undertaken by the on-call SpR.

Open surgery revealed the fact that the patient had, in fact, undergone laparoscopic appendicectomy at his previous admission, and that the history concerning previous procedure of simple

diagnostic laparoscopy, was incorrect. No cause for the pain was found. The patient made an uncomplicated recovery from an unnecessary operation.

### Reporters Comments:

Patients often forget procedural details and may unintentionally provide incorrect information. In this case, simply referring to his GP summary of past medical problems would almost certainly have avoided this unnecessary operation.

### CORESS Comments:

Patient history and accurate medical records are both important adjuncts in obtaining a correct diagnosis. However, this case flags up other important areas of problems in communication. The operation was delegated to a trainee, and a compromise was made in terms of procedure performed, which was not in the patient's best interests. There does not appear to have been any direct communication between the responsible consultant and the on-call consultant. Formal consultant-to-consultant handover and good communication are vital components of a modern safe surgical service.

### BEST FOOT FORWARD

(Ref: 200)

A scalpel, which the surgeon had placed on the patient's draped belly, fell off the table and penetrated the surgeon's foot.

**Reporters Comments:**

Care should be taken when transferring and handling sharps. The scalpel was not placed in a safe receptacle such as a kidney dish.

**CORESS Comments:**

Safe handling of sharps and surgical instruments is an essential competence

in the craft of surgery, and is formally addressed early in training, in the Intercollegiate Basic Surgical Skills Course. Scalpels and sharp instruments should be retained and passed in a receptacle such as a kidney dish. Do not rely on a "magnetic mat" to retain sharp instruments. If passage of a sharp instrument from one member of the team to another is unavoidable, this should be done bunt end first.

### LARYNGEAL MASK MISTAKEN FOR LYMPH NODE DURING BIOPSY

(Ref: 201)

Whilst performing a cervical lymph node biopsy (preoperatively marked) in the neck of a patient, I dissected onto the gel-like non-inflatable cuff of the laryngeal mask in the supraglottic larynx. I was feeling for a rubbery node with my fingers and it transpired that what I ultimately palpated, was the laryngeal mask (soft and rubbery). As the patient was thin, and the "i-gel" LMA was large and bulky, significant distortion of the normal anatomy had occurred.

The mucosal surface of the perforation was repaired, and the outer layers were repaired to the skin. The patient was fed via nasogastric tube until naso-endoscopy and a gastrografin swallow test were normal, two weeks later.

**Reporters Comments:**

I was not prepared for the anatomical distortion caused by the LMA. Deep layers in the neck are compressed and pushed laterally by a large LMA cuff, making them appear more laterally than expected.

**CORESS Comments:**

It is sometimes easy to become disorientated and "goal-focused" when trying to find a lymph node in difficult anatomical territory. If this happens, the surgeon should stop, and try to orientate him/herself with respect to recognised landmarks. No biopsy should be undertaken blind without being aware of surrounding structures.

### THE LAW SAYS YOU SHOULD NOT BE DRIVING!

(Ref: 210)

A 75-year old lady presented to the eye clinic four months after being referred by her own GP, following an incidental finding of left hemianopia at the opticians. By the time the patient arrived in clinic, her visual field loss has worsened, and the patient admitted that she: "can't see a rabbit running across the road until it's too late". She also told me that her car had been written off following an accident, in which she had collided with a stationary car at the side of the road, because she hadn't seen it. The patient lived in a village. She said that she still had good distance vision, so she would be careful, drive slowly and only in the day light. The patient was emphatically informed that the law is clear that she should not be driving. The patient's GP was informed, and the patient was asked to contact the DVLA immediately.

**Reporters Comments:**

This case highlights that doctors, opticians and patients are not aware of visual factors that limit the right to drive. The outcome was exacerbated by delay in the primary referral. Although no harm was done, (except to the

parked car), this report raises a very important safety issue. The situation should have been dealt with much earlier, and the patient asked to contact the DVLA. Awareness of visual driving standards should be raised amongst all involved parties including GPs, opticians and patients themselves. There is a misconception that if you can see well in the distance (a car registration plate at 20 metres), you can drive. Double vision and visual field loss pose serious risks for driving.

**CORESS Comments:**

Although this is a case submitted by an ophthalmic specialist, there are a number of surgical conditions, which place restrictions on driving. Surgeons need to understand their responsibilities, and should familiarise themselves with the conditions common to their specialty, so that they can provide patients with appropriate advice. DVLA advice with respect to specific surgical conditions can be found at:

<https://www.gov.uk/guidance/current-medical-guidelines-dvla-guidance->

## RETAINED CENTRAL LINE

(Ref: 203)

A patient undergoing coronary artery bypass surgery had a multi-lumen central line and 14G single lumen line, both sited in the right internal jugular vein, removed on day two post-op. When the lines were taken out, it was noted that the 13cm 14G line had less than 1cm of remaining tubing attached to the external connector. The line appeared to have been severed, probably during placement of the multi-lumen line, which had been inserted using a Seldinger technique, at the same location as the already-sited 14G line. The introducer needle of the multi-lumen line most likely damaged the line already in place.

On urgent CT scan, around 12cm of freely floating line was found situated in the SVC, and part way into the right atrium. The interventional radiology team eventually retrieved the foreign body. Fortunately, the

patient made a good post-operative recovery and the only additional harm suffered was the necessary IR access.

### **Reporter's Comments:**

This case occurred because of stacking a second line on a previously placed line, at the same site. Reduction of risk of this eventuality could be achieved by improved technique in placing multiple lines, either by using two guidewires, which should both be in place prior to line insertion, or by placing lines at distant points. Use of ultrasound imaging in line placement is recommended. Moreover, adequate preoperative planning of line requirements might have prevented this complication.

### **CORESS Comments:**

The Advisory Board agreed with the reporter's comments.

## EXPLOSIVE GASTROTOMY

(Ref: 206)

I was called by the gynaecologist, who had taken a patient back to theatre with a burst abdomen, five days after caesarean section. The patient had been doing well up to that point. On the day of the burst abdomen she had eaten a large meal at mid-day. The abdomen had become distended and painful following this, and about five hours later the abdominal wound had burst. The gynaecologist was worried as he was not sure what the cause of the distension was. I found that the mid small bowel was moderately distended, but with no obvious cause of obstruction. I extended the lower midline incision superiorly to further assess the abdomen, and found the stomach to be massively distended despite the presence of an 18 G nasogastric tube. I asked for the NG tube to be aspirated without success. I requested the NG tube to be replaced with a larger one. No larger NG tubes were available, so a further 18G tube was inserted. Again it was not possible to aspirate the tube. The tube was removed and found to be blocked by grains of rice. I therefore decided to decompress the stomach via a gastrotomy.

I placed a purse string on the antrum of the stomach and opened the stomach using diathermy. I usually use the diathermy to open the small bowel and stomach, unless bowel obstruction is present, to minimise bleeding. On gaining access to the stomach lumen, there was a loud explosion and the operative field and staff were covered with grains of rice. The distal half of the stomach had a large anterior rent and the rest of the wall was severely contused with a number of

shorter full thickness lacerations. I proceeded to perform a partial gastrectomy with a Bilroth 1 reconstruction. Thankfully, the patient has made a good recovery from her surgery.

### **Reporters Comments:**

A combination of rice and gastric acid led to fermentation. As a trainee I had been taught not to use diathermy to open dilated bowel, because of the risk of gaseous explosion, but had never previously encountered this. I performed the gastrotomy with diathermy, without relating the gross gastric dilatation to risk of production of explosive gases. Explosive gases are produced in the stomach, and can occur even without bowel obstruction.

### **CORESS Comments:**

*CORESS was grateful for this reporter's interesting and honest contribution, and includes their further comments below:*

I would like to use this event to help my colleagues and I to develop a more open and educational system for reporting and learning from adverse events. I am Head of Surgery at a major government hospital in a developing country. I have previously worked in the UK. I have informally reported this case to our Hospital Superintendent, but currently we do not have a system for reporting or educating staff in preventing or dealing with adverse events and near misses. Currently, most adverse events are not reported. I see this case as an opportunity to show staff that being open and discussing problems can lead to improvements in care, and can be dealt with in a blame-free manner.

### NEEDLESTICK LESSON

(Ref: 205)

I sustained a needle stick injury during closure of the abdomen. I was using a straight hand needle, and was hurrying to complete closure so we could get the next case on table. I became momentarily distracted when the scrub nurse asked for a second swab count. I should have been using forceps to retrieve the needle after each bite, but wasn't. I didn't know the needlestick protocol, but sought advice and do now!

**Reporters Comments:**

Know the needle stick protocol. Immediately stop operating, de-scrub and wash the wound. Your blood should be taken, and occupational health informed.

Someone else should inform the patient and obtain consent for a blood sample to be taken for testing for HIV; Hepatitis B; and Hepatitis C.

**CORESS Comments:**

Despite universal precautions and safe practice, needlestick injuries will occur. All surgeons should be aware of the procedures to be followed in the event of a needlestick injury and of the protocols in their own unit. Useful guidance can be found in Section 2 (Managing Exposure) of the following NHS document:

[www.nhsemployers.org/~media/Employers/Publications/Needlestick%20injury.pdf](http://www.nhsemployers.org/~media/Employers/Publications/Needlestick%20injury.pdf)

### A MATTER OF CONSENT

(Ref: 208)

A patient of mine, admitted as a day case for repair of a para-umbilical hernia, was taken to theatre and given a general anaesthetic, before I had seen her pre-operatively. It is my practice to see all my patients pre-operatively, mark the surgical site appropriately, and sign and date confirmation of consent on the consent form. However, it is also normal practice at my institution for a senior ward nurse to undertake and document patient consent. In this case, the theatre staff noted that the consent form had been signed by the ward nurse and assumed that I had also seen the patient. The patient was therefore taken to theatre and given a general anaesthetic, without me being informed. Luckily, the hernial defect was still palpable after anaesthesia, so I repaired it. The patient had an uncomplicated recovery, and was discharged home later that day.

**Reporters Comments:**

This was a problem with a system, which allowed consent to be undertaken by someone other than a member of the surgical team, in order to increase speed and efficiency. In the event, it did not achieve the latter. There was failure of communication. All patients admitted for a procedure under GA or regional anaesthesia should be seen by the operating surgeon pre-operatively to ensure that the procedure is appropriate, the surgical site is marked correctly and informed consent obtained.

**CORESS Comments:**

The following documents set out principles of consent:

**Royal College of Surgeons of England - Good Surgical Practice:**

**3.5.1.** Ensure that consent is obtained either by the person who is providing the treatment or by someone who is actively involved in the provision of treatment. The person obtaining consent should have clear knowledge of the procedure and the potential risks and complications.

**GMC - Consent: patients and doctors making decisions together**

**26.** If you are the doctor undertaking an investigation or providing treatment, it is your responsibility

- to discuss it with the patient. If this is not practical, you can delegate the responsibility to someone else, provided you make sure that the person you delegate to:
  - a. is suitably trained and qualified
  - b. has sufficient knowledge of the proposed investigation or treatment, and understands the risks involved
  - c. understands, and agrees to act in accordance with, the guidance in this booklet.

**26.** If you delegate, you are still responsible for making sure that the patient has been given enough time and information to make an informed decision, and has given their consent, before you start any investigation or treatment.

An observation from the CORESS Advisory Board was that *"the road to litigation is paved by assumptions"*.