of the hiatus and lower mediastinum is complete, to allow adequate closure of the hiatus. The sutures are placed via the thoracic aspect of the crura allowing the suture to be tied within the thorax. Surgical clips (Premium Surgiclip II (M); Tyco, Norwalk, CT, USA) join the ends of the sutures, which are left untied and passed into the posterior mediastinum (Fig. 1). The posteriorly placed sutures are easily retrieved at the end of the thoracic stage of the procedure (Fig. 2) and can be tied to the appropriate tension (Fig. 3), with the gastric tube *in situ*.

DISCUSSION

Herniation through the hiatal defect following oesophagogastrrectomy can occur in up to 4% of cases.¹ Considerable morbidity is associated with hiatal herniation including the need for further surgery.^{1,2} Repair of the hiatal defect at the time of oesophagogastrrectomy reduces the risk of herniation. The technique described allows easy placement of crural sutures during the abdominal stage while allowing appropriate approximation of the crura during the thoracic stage of the procedure.

References

1. van Sandick JW, Kneijens JL, van Lanschot JJB, Obertop H. Diaphragmatic herniation following oesophagectomy. *Br J Surg* 1999; **86**: 109–12.
2. Zaninotto G, Rampado S, Ruol A, Ancona E. Diaphragmatic herniation after esophagectomy. *Eur J Cardiothorac Surg* 2006; **30**: 669.

Use of a cork-screw femoral head extractor for removal of a stuck intramedullary nail

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BACKGROUND

Removal of an intramedullary nail after fracture fixation has occurred can be a technically challenging procedure. A threaded bolt attached to a jig is usually screwed into the end of the nail allowing the nail to be removed. Specialist nail removal sets exist with a variety of different bolts designed to fit the more common types of intramedullary nail. If the internal thread of the nail is damaged or if the available bolts do not fit the exact type of nail, it can be almost impossible to remove a seemingly stuck nail. We have found that a standard cork-screw instrument, normally used for removal of a fractured femoral head, can be used successfully for removal of an intramedullary nail that appears stuck despite conventional techniques.

TECHNIQUE

A standard cork-screw, found in most hip hemi-arthroplasty instrument sets (Fig. 1), is firmly screwed into the end of the nail.

Figure 1 A cork-screw instrument.

The corkscrew is inserted as far as possible before it is tapped backwards, pulling the nail out of the medullary canal.

DISCUSSION

This technique has been used successfully in our unit as a 'last-ditch' attempt to remove a stuck nail when conventional techniques have failed. If this technique fails, any remaining thread inside the nail may have been damaged further. Additionally, the cork-screw instrument can become damaged. Therefore, this technique should be reserved for occasions when other methods of nail removal have failed. Despite this, this technique can be used successfully and should be considered when a stuck intramedullary nail is unable to be removed by other means.

Inserting peritoneal dialysis catheters without special instruments

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BACKGROUND

Accurate placement of peritoneal dialysis catheters is essential for proper catheter function and effective dialysis. The tip of the intraperitoneal section of the catheter must be positioned in the true pelvis, the most dependent part of the abdominal cavity and the site where peritoneal dialysis fluid accumulates, thus allowing dialysate drainage by siphoning. Accurate catheter tip placement can be achieved easily without visualisation or special instrumentation.

TECHNIQUE

The abdomen is opened through a 4-cm midline, paramedian or oblique subumbilical incision. The tip of the intraperitoneal

Figure 1 Introduction of sponge-holding forcep and peritoneal dialysis catheter into the abdominal wound.

section of the catheter is grasped with a Rampley 10-inch (250-mm) sponge-holding forcep (Aesculap AG & Co., Tuttlingen, Germany). The forcep and catheter are guided gently in an oblique caudal direction through the abdominal incision (Fig. 1) and into the true pelvis. When the forcep is inserted up to the hilt (Fig. 2), the catheter tip lies in the rectovesical or recto-uterine pouch because there is no other location in the lower abdomen

Figure 2 Sponge-holding forcep inserted up to the hilt with catheter in the rectovesical pouch.

deep enough to take such a length of instrument. The catheter is then released from the Rampley forcep which is withdrawn, and the catheter position can be confirmed by palpation with an index finger. The peritoneum is closed with the catheter at the caudal end of the incision, while the linea alba or rectus sheath is closed with the catheter at the cephalad end, thereby ensuring an oblique tunnel through the abdominal wall to maintain the position of the catheter in the pelvis.¹

DISCUSSION

A Rampley sponge-holding forcep, or very similar instrument, is available widely and is present on every general surgical tray for use as a holder for the prep sponge or gauze. No special instrumentation is required for safe, accurate and straightforward placement of peritoneal dialysis catheters.

Reference

1. Francis DMA, Donnelly PK, Veitch PS, Proud G, Taylor RM, Ramos JM *et al.* Surgical aspects of continuous ambulatory peritoneal dialysis – 3 years' experience. *Br J Surg* 1984; **71**: 225–9.