Figure 4 Ultrasound image of the author's internal jugular vein and common carotid artery.

2). One of the vessels is designated the simulated vein and selected as a target for puncture. The needle is then advanced towards the simulated vein (simV) and away from the simulated artery (simA) using ultrasound to monitor the progress of the needle through the surrounding tissues (Fig. 3). The ultrasound images of the simulated artery and vein obtained with the model are similar to those obtained in patients (Fig. 4). Puncture of the simulated vein corresponds with free water aspiration from inside the model into the syringe and loss of the ultrasound image of the vessel. The model can then easily be prepared for further use.

Reference

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Closed cutaneous left iliac fossa mucus fistula after emergency subtotal colectomy

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BACKGROUND

Patients with ulcerative colitis often require an emergency subtotal colectomy with end ileostomy. Such individuals may be

Figure 1 Closed cutaneous left iliac fossa mucus fistula after emergency subtotal colectomy

septic and heavily immunosuppressed making management of the rectal stump problematic. If closed and left within the peritoneal cavity it can break down, resulting in pelvic sepsis. A safer alternative is to leave this as an open mucus fistula usually in the left iliac fossa (LIF). This facilitates localisation of the rectal stump if further surgery is contemplated but leaves the patient with two stomas and is poorly tolerated. A closed rectal stump sutured to the rectus sheath in the lower aspect of the midline wound has been advocated.¹ This avoided a troublesome mucus fistula routinely, but if dehiscence of the rectal stump occurred, allowed this to discharge into the wound, avoiding intra-abdominal sepsis. However, significant contamination may develop in the midline wound predisposing to wound disruption/dehiscence and slow healing. We propose the closed cutaneous LIF mucus fistula as a novel but preferable technique.

TECHNIQUE

A standard subtotal colectomy and end ileostomy is performed. The sigmoid colon is divided above the pelvic brim with a linear stapler, allowing enough length for the rectal stump to be brought to the surface via a left iliac fossa trephine. The staple line on the rectal stump is left intact and the skin is subsequently everted over this and secured to it with 3.0 Prolene sutures (Fig. 1). In most instances the staple line remains intact and the skin simply heals over it.

DISCUSSION

A closed cutaneous LIF mucus fistula has several advantages. If the staple line remains intact, patients are left with a single stoma (end ileostomy), a rectal stump that can be easily identified in the future and an intact, well-healed, midline wound. However, if the staple line breaks down, then this

discharges onto the surface with minimal subcutaneous contamination essentially forming a controlled open LIF mucus fistula. The midline wound remains intact with no disruption. In view of this, a closed cutaneous LIF mucus fistula is our technique of choice after emergency subtotal colectomy in patients with ulcerative colitis.

Reference

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An aid to removal of cement during revision elbow replacement

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BACKGROUND

Primary total elbow replacement (TER) survival analysis has demonstrated a higher prosthesis revision percentage for all causes, 13% at 5 years, than total hip replacement.¹ This means that although fewer TERs are undertaken, there is still a heavy revision burden. The reported complications for revision TER include fracture during cement removal, related to difficulty with access because of the narrow medullary canal and often secondary to poor bone stock because of osteolysis.² This technical note presents a novel aid for easier cement removal from the humerus and ulna which has been used in 10 patients undergoing revision TER.

TECHNIQUE

Patient positioning, preparation, approach and prosthesis removal was undertaken using the surgeon's standard technique. The visible loose cement was removed from the humerus and ulna. A standard 30° 5-mm arthroscope (Linvatec, Largo, FL, USA) was then introduced into the medullary canal. Under direct vision, the cement plug was breached distally using a high speed burr (5-mm head and 8-cm long). The remaining cement was burred loose from the bone. The boundary between cortical bone and cement is easily visualised during the burring procedure (Fig. 1). Remaining cement can be removed using a combination of irrigation and an arthroscopic grabber under direct vision. Once the cement had been removed, the revision was completed routinely.

DISCUSSION

Revision elbow replacement is a complex procedure associated with high rates of complications.² The technique described above

Figure 1 Intra-operative arthroscopic photograph of cement burring in the medullary canal of the ulna.

has proved, in a limited number of patients, to be a safe and useful method of cement removal.

References

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Technical tips

A simple adjunct to lavage of open fractures

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Lavage of open fractures is crucial and proven to reduce the risk of secondary infection. Irrigation leads to spillage of fluid, which soaks surgical drapes, increasing the chances of wound contamination. Gowns worn by the surgical and nursing staff get wet, increasing exposure of potentially contaminated body fluids from the patient. We report the use of a tray, at the Coventry and Warwickshire Hospital. The limb is placed on the tray, excess irrigant drains through the holes and collects in the underlying compartment and can be discarded via a sucker. In our experience, this reduces the spillage of excess irrigant. This tray was manufactured locally, at the hospital workshop, and has been in use for over 30 years (unfortunately not available commercially). We