tion, haemorrhage, peritonitis and death.^{1,2} A gastrostomy tube that is devoid of these complications is described.

TECHNIQUE

The tube, with an exit opening at its midpoint, is placed in a loop and the ends locked together (Figs 1a and 2). Tube exchange involves belaying the new tube into position (Figs 1b–d and 3).

DISCUSSION

The exchange is atraumatic because the external diameter of the tube is uniform throughout its length. It is impossible for the new tube to be misplaced since it is guided into position by the old tube. This technique is suitable for obese patients with a thick abdominal wall and saves on confirmatory radiology or endoscopy.³ Additionally, the loop and lock make tube dislodgement, usually a common problem, unlikely. The author has used it in five adult patients.

References

1. DiBaise JK, Rentz L, Crowell MD *et al*. Tract disruption and external displacement following gastrostomy tube exchange in adults. *J Parenter Enteral Nutr* 2010; **34**: 426–430.
2. Shahbani DK, Goldberg R. Peritonitis after gastrostomy tube replacement in the emergency department. *J Emerg Med* 2000; **18**: 45–46.
3. Jacobson G, Brokish PA, Wrenn K. Percutaneous feeding tube replacement in the ED – are confirmatory x-rays necessary? *Am J Emerg Med* 2009; **27**: 519–524.

Figure 3 Choked and new tubes belayed, ready for exchange

TECHNICAL TIPS

A simple technique to achieve effective irrigation at the end of an arthroscopy

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When irrigating a joint at the end of an arthroscopy, the loose bodies and resected tissue that the surgeon is trying to remove can get caught in the soft tissues and remain in the joint. A tube to hold apart the soft tissues of the portal used for the outflow of irrigation fluid can be created by cutting the end off a hypodermic needle sheath. Irrigation fluid can then be drained with a high flow through a large channel from a different portal to where it entered the joint, enabling effective irrigation.

Incisions for vascular clamps in minimal access aortic surgery

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Incisions for minimally invasive aortic surgery are frequently compromised by access to iliac vessels and the aneurysm neck for clamping. By placing 2mm incisions over the iliac vessels, as previously described,¹ and one cephalad to the main incision, we can clamp the vessels without needing to lengthen the main incision. In addition, we have found that if the clamp handles are held away from trailing sutures, the fulcrum effect can be utilised to aid intra-abdominal retraction and this allows easier access for the hand to tie down the suture on the proximal anastomosis. Incisions are closed with one skin staple and heal with minimal scarring.

Reference

1. Cerveira JJ, Halpern VJ, Faust G, Cohen JR. Minimal incision abdominal aortic aneurysm repair. *J Vasc Surg* 1999; **30**: 977–984.

Figure 1