Technical Section

TECHNICAL NOTES & TIPS

TECHNICAL NOTES

A simple, novel, cost-effective technique for the management of chest drains

M Spinoza, A McQuillan, M Elliott

Department of Cardiothoracic Surgery, Great Ormond Street Hospital, London, UK

CORRESPONDENCE TO

Marc Spinoza, Department of Cardiothoracic Surgery, Great Ormond Street Hospital, 34 Great Ormond Street, Bloomsbury, London WC1N 3JH, UK
E: SpinoM@gosh.nhs.uk or mspinoza@hotmail.com

BACKGROUND

Chest drain insertion is regular practice in cardiothoracic surgery; it also forms part of emergency medical care.^{1,2} Effective fixation is essential following a time-sensitive emergency procedure.^{1,3} Resulting complications are well known and, whilst there are many factors which contribute to the failure of chest drains,^{2,4,5} no standard method to secure, identify, adjust and remove surgical drains has ever been described.⁴ We describe a novel technique using a braided device to address these issues in a series of 50 patients admitted to Great Ormond Street Hospital's Cardiothoracic Unit.

TECHNIQUE

The device was developed to secure size 16-Fr chest drains using a simple braided sleeve with anchoring points for suturing (Fig. 1). The sleeve is loaded on to the drain and pushed down to the skin surface and secured with sutures (Fig. 2). Adjustments and or removal can be performed easily by longitudinal compression of the device or by cutting the sutures (Fig. 3). In piloting, tape was recommended at the distal end of the device to prevent patient interference; however, in practice, this was deemed unnecessary. A barium thread, braided into the device, allows easy identification on X-ray (Fig. 4).

DISCUSSION

This device managed simultaneously to save time and simplify the securement, identification, adjustment and removal of drains

Figure 1 Braided sleeve with anchoring points for suturing.

Figure 2 Loading sleeve on to the drain, pushing down to the skin surface and securing with sutures.

Figure 3 Adjustment.

secured. Braidlock® (Biw Ltd, Unit 5 Churcham Business Park, Churcham, Gloucester GL2 8AX, UK) has now been developed further with the introduction of an adhesive back as well as Velcro strapping. This development has a wide application for all medical lines and is now in use in a variety of clinical settings.

References

1. Advanced Life Support Group. *Advanced Paediatric Life Support; The Practical Approach*, 4th edn. London: Blackwell, 2004; 172, 244–5.

Figure 4 Barium thread, braided into the device, allows identification on X-ray.

2. Ball CG, Lord J, Laupland KP, Gmora S, Mulloy RH, Ng AK *et al*. Chest tube complications: how well are we training our residents? *Can J Surg* 2007; **50**: 450–8.
3. Melamed E. Locking plastic tie – a simple technique for securing a chest tube. *Prehosp Disast Med* 2006; **22**: 344–5.
4. Rashid MA. A simple technique for anchoring chest tubes. *Eur Respir J* 1998; **12**: 958–9.
5. O'Flynn P, Akhtar S. Effective securing of a drain. *Ann R Coll Surg Engl* 1999; **81**: 418–9.

Goldfinger™ – a simple method of delivering a circular stapler anvil for laparoscopic Roux-en-Y gastric bypass

RN Williams, CD Sutton, DJ Bowrey

Department of Surgery, Leicester Royal Infirmary, University Hospitals Leicester, Leicester, UK

CORRESPONDENCE TO

RN Williams, E: robert.n.williams@uhl-tr.nhs.uk

BACKGROUND

Laparoscopic Roux-en-Y gastric bypass requires formation of a gastrojejunostomy that is often fashioned using a circular stapler. Accurate placement of the anvil whilst avoiding trauma to

Figure 1 Staple line gastrotomy fashioned with harmonic scalpel.

Figure 2 Spike with 2/0 polypropylene suture re-attached to anvil.

Figure 3 Goldfinger™ passed through staple line and lateral gastrotomies.

the stomach is essential. We describe a technique that facilitates smooth delivery of the anvil head into the stomach using a Goldfinger™ (Ethicon, UK).

TECHNIQUE

A gastrotomy is created above the mid-point of the transverse staple line in (what will become) the gastric pouch using a harmonic scalpel or alternative energy source (Fig. 1). A 25-Fr anvil is introduced into the abdomen using the stapler handle via a dilated port site; use of a 25-Fr stapler ensures adequate closure of