Figure 2 Tail passed backwards and over the bight. Ensure the bight is under tension.

Figure 3 The tail being pulled through the loop, with the needle secured to the anterior abdominal wall.

traction for tying. The instrument is passed through the loop and pulls the tail through (Fig. 3), forming a square knot. Repeated throws secure the knot down.

DISCUSSION

The technique describes laparoscopic intracorporeal knot tying using only one instrument, thereby eliminating the need for a third port. It is, therefore, most useful in two-port laparoscopic procedures (this method was employed in a diagnostic laparoscopy) and potentially when access with two instruments is difficult. Polyfilament sutures are most suited, as it allows easy manipulation of the tail end. Prolene sutures have a memory and, therefore, it can be difficult to throw the tail end of the suture over the bight. Additionally, by securing the needle to anterior abdominal wall, accidental damage to structures is minimised. We believe the method described is simple to master and quick to execute.

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Safe and cost-effective stabilisation of the patient's head in the beach-chair position

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BACKGROUND

The beach-chair position is very commonly employed for upper limb procedures. Safe stabilisation of the patient's head can be problematic when using this position because of the location of the airway and the need for securing the patient's head to the headboard.

Figure 1 Chin-strap with one-point fixation requiring additional stabilisation with a crêpe bandage.

Figure 2 Chin-strap with two-point fixation using the back-strap from the patient's sling.

TECHNIQUE

A specific chin-strap is commercially available. This system has an aperture for the airway and Velcro straps for fastening; however, it only has one-point fixation, which regularly necessitates additional stabilisation with a crêpe bandage (Fig. 1). Furthermore, they individually cost £12.92. We estimate our annual cost to be more than £6400, based on ~500 procedures per year. The senior author (RHA) felt that this arrangement could be improved, and developed the idea of utilising the back-strap from the sling that the patient will be placed into at the end of the procedure. A 2-cm slit is cut longitudinally at the half-way point of the strap to allow passage of the airway, it is then passed through the buckles on either side of the headboard; finally, the ends of the strap attached to each other across the forehead with Velcro (Fig. 2).

DISCUSSION

Not only is this method more secure by providing two-point fixation, it is fully adjustable, it is quicker to apply and to release, and it remains usable as the back-strap at the end of the procedure if required and no extra cost has been incurred.

Low-cost laparoscopic paediatric inguinal hernia repair simulator

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BACKGROUND

Laparoscopic repair of paediatric inguinal hernia is becoming increasingly popular.¹ One of the techniques used involves the application of a purse-string suture around the patent deep inguinal ring and intracorporeal knot tying. We propose a simple, low-cost simulator to practice these skills.

TECHNIQUE

The simulator is constructed from a 20-cm × 10-cm piece of cardboard and a surgical glove. The cardboard is folded and stapled to form a wedge. Four holes are made in one of the long surfaces of the wedge to mimic the deep inguinal ring. The glove is split down the sides and the thumb and excess material is removed. The finger stalks are pushed through the holes and the glove secured with staples (Fig. 1A). The base of the simulator is fixed with double-sided adhesive tape to the floor of a laparoscopic pelvi-trainer and suturing is practiced. The simulator is removed once suturing is completed for evaluation (Fig. 1B).

DISCUSSION

There has been increasing awareness that the acquisition of new

Figure 1 (A) The laparoscopic simulator; (B) inspection of satisfactory purse-string suture *in situ*.

procedural skills should be undertaken outside the operating theatre.² Intensive simulator training has been shown to improve operating time and accuracy in paediatric surgery.³ We suggest that this low-cost simulator may be used to acquire and maintain requisite skills necessary for laparoscopic paediatric inguinal hernia repair.

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Fat retraction in laparoscopic surgery

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BACKGROUND

In laparoscopic surgery, views of the left upper quadrant may be impaired by omentum (Fig. 1). Access to the angle of His, which