Figure 2 The suspension suture is passed into the entry aperture, caught by the fish hook and drawn out through the exit aperture.

DISCUSSION

These 'fish hooks' make it easy to guide suspension sutures repeatedly through outer table calvarial tunnels. This system is easy to assemble, using ubiquitous and inexpensive items, and provides secure suspension suture passage in reconstructive surgery.

Closed reduction of paediatric radial neck fractures

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BACKGROUND

Accounting for 5–10% of children's elbow injuries,¹ radial neck fractures occur from a fall on to an outstretched hand (forearm supinated) imparting a valgus strain to the extended elbow.^{1,2} If the fracture is translated 2mm or angulated 30°, treatment is required.³ Closed techniques include:

- Israeli¹ – The elbow is flexed (forearm supinated), pressure is applied directly over the radial head and the forearm is pronated concurrently.

Figure 1 Intraoperative anteroposterior views of an O'Brien type II radial neck fracture in a child aged 11 years and 5 months: prior to manipulation, angulated 40°, in full extension and supination (A); fracture reduced in extension and full pronation (after flexion and re-extension) with no manoeuvre involving external lateral pressure over the radial head (B); and reduction maintained even with subsequent supination in extension (C)

- Neher–Torch³ – With the elbow extended and forearm supinated, two thumbs stabilise the radial shaft (laterally directed force) with subsequent varus elbow stress and laterally applied pressure on the radial head.
- Monson *et al*⁴ – With elbow flexed and forearm supinated, posteriorly directed pressure is applied to the radial shaft.

If closed reduction fails, percutaneous/intramedullary/open methods are described.¹ We describe an ancillary closed reduction method for O'Brien⁵ type II fractures (angulated 30–60°).

TECHNIQUE

The elbow is extended with the forearm supinated (Fig 1A). Traction with varus, decompressing the lateral column, is followed by full pronation in extension; the radial head then 'locks' into the proximal radioulnar joint. The radial shaft reduces on to it during simple elbow

Figure 2 Anteroposterior (A) and lateral (B) views of elbow at three weeks following surgery. Same case as in Figure 1. The child had a full range of supination/pronation on cast removal.

flexion (forearm still pronated). Reduction stability is confirmed by x-rays in extension/flexion and neutral/supination/pronation (Figs 1B and 1C).

DISCUSSION

By stabilising the proximal fragment, our method obviates the need for cumbersome laterally applied radial head pressure (required by both the Israeli and Neher–Torch techniques). We have used our method successfully (Fig 2) in five consecutive children: after failure of the other closed procedures in three and as the primary manoeuvre in two.

References

1. Pring ME. Pediatric radial neck fractures: when and how to fix. *J Pediatr Orthop* 2012; **32**(Suppl 1): S14–S21.
2. Jeffery CC. Fractures of the head of the radius in children. *J Bone Joint Surg Br* 1950; **32**: 314–324.
3. Neher CG, Torch MA. New reduction technique for severely displaced pediatric radial neck fractures. *J Pediatr Orthop* 2003; **23**: 626–628.
4. Monson R, Black B, Reed M. A new closed reduction technique for the treatment of radial neck fractures in children. *J Pediatr Orthop* 2009; **29**: 243–247.
5. O'Brien PI. Injuries involving the proximal radial epiphysis. *Clin Orthop Relat Res* 1965; **41**: 51–58.

A technique for division of the sympathetic trunk during endoscopic thoracic sympathectomy

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During two-port thoroscopic sympathectomy, there are technical difficulties with advancing the tips of a 5mm non-U-shaped clip applicator over the sympathetic trunk owing to close apposition of nerve on to underlying rib.¹ We propose inserting one end of a length of polyglactin through the thoracic trocar and threading this through a carefully dissected space posterior to the sympathetic trunk. The potential risk of bleeding from this dissection has not been experienced in our practice. Gentle manual tension applied via both ends of this sling tents the nerve, allowing ease of clipping (Fig 1) and division. The sling is removed.

Reference

1. Fibla JJ, Molins L, Mier JM, Vidal G. Effectiveness of sympathetic block by clipping in the treatment of hyperhidrosis and facial blushing. *Interact Cardiovasc Thorac Surg* 2009; **9**: 970–972.

Figure 1 Two clips applied to the sympathetic trunk, facilitated via use of a polyglactin sling

Splintage following supracondylar fracture in paediatrics

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BACKGROUND

The proximity of the neurovascular bundle to paediatric elbow fractures puts these structures at risk both at the time of injury and in the following hours. During plaster or backslab application, wool padding is applied routinely in a circumferential fashion with each layer overlapping the previous by 50%.¹ With the elbow flexed at 90°, in order to apply adequate padding posteriorly (olecranon), the anterior aspect is overstuffing with either excessive layering or creasing of the wool padding. Both can increase the pressure on the antecubital fossa (ACF) neurovascular structures. A proposed alternative is using cotton wool balls in the ACF to accommodate for swelling.² However, these are rarely available on plaster trolleys.

TECHNIQUE

We present a two-stage application of wool padding to the flexed elbow that allows for space in the ACF. The first layer is applied in a figure-of-eight fashion from the proximal forearm to the distal upper arm, bridging an empty ACF and acting as a protective scaffold (Fig 1). A second layer is applied on top of this scaffold, in a conventional circumferential fashion, to allow for adequate padding posteriorly while maintaining a dead space for swelling in front of the ACF (Fig 2).