Figure 2 Lateral view and overlays showing technique for obtaining guidewire purchase: initial wire (A); small ellipse is site of cortical breach at the defined entry point, after cannulated drilling only through the cortex (B); initial wire has been removed and definitive guidewire inserted into the entry point (C); wire has been advanced into the centre of the femoral head (D)

point and angulated appropriately up the femoral neck, the tip centralising in the central third femoral head on perpendicular views (minimising risk of inadvertent joint penetration).

DISCUSSION

Our technique of wire placement has two stages: entry point definition and oblique guidewire passage. Wire placement is simplified by removing the initial concern of anatomical insecurity.

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Handheld modification of the laparoscopic hook using the Trewavis® arthroscopic lateral release hook

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The laparoscopic hook allows the user to dissect and ‘hook away’ tissue. We use a handheld version of the laparoscopic hook (Trewavis, Bayswater, VIC, Australia) at open surgery (Fig 1). It allows precise dissection of tissue, and its longer length, compared with the spatula, enables tissues deep in the pelvis and the upper abdomen to be dissected. Furthermore, it fits on the same diathermy handle as the spatula (Fig 2). It allows dissection, traction and division of tissues using one hand while enabling the surgeon to use the other hand to provide countertraction or to perform other manoeuvres. It is available in 115mm, 150mm (our preferred size) and 190mm.

Figure 1 Handheld version of the laparoscopic hook

Figure 2 The hook in use

An inexpensive alternative method in the management of paediatric forearm fractures

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BACKGROUND

Elastic stable intramedullary nailing (ESIN) revolutionised paediatric long bone fracture management. Prebent nails create a stable, non-rigid, bending moment; preserving the thick, osteoblast rich paediatric periosteum encourages rapid bone healing.

Figure 1 Preoperative radiography of a nine-year-old boy with right midshaft forearm fractures

Figure 2 Postoperative radiography of the same patient three months after using the 'save a nail' technique

In paediatric diaphyseal forearm fractures, a single nail is sufficient for each bone; the radius and ulna form a synergistic unit via the interosseous membrane. Nails of identical diameter create equal opposing bending forces, avoiding malalignment. Often more difficult to reduce, the radius is frequently splinted first. The ulna typically reduces spontaneously. Nail ends are cut 5mm from the cortex with excess nail length being discarded.

TECHNIQUE

Our technique involves cutting a single nail in half to give two nails, more than sufficient in length, to splint both bones. The radius is nailed retrogradely and ulna reduction is ensured before the radial nail is cut. The retained radial nail is used as the ulna nail. Bending the nail end with pliers simulates the action of the smooth prebent nail tip. This allows easy ulna anterograde nail insertion and manipulation for fracture reduction. Aftercare and later nail removal is identical to traditional treatment.

DISCUSSION

In using one rather than two nails, the implant cost is halved. In a continuing case series, we have not noticed any technical or outcome difficulties (Figs 1 and 2). Our orthopaedic trauma unit performs paediatric forearm ESIN between 15 and 20 times a year; the costs from different companies vary between £95 and £130 per nail. We believe this technical adjustment could save a similarly sized orthopaedic department between £1,425 and £2,600 a year.