Figure 2 The biliary stent is slid into place over the guide-wire using a pusher.

Figure 3 Correct stent placement is confirmed radiologically.

Figure 4 With the stent in place, the choledochotomy is closed primarily.

ment is checked radiologically before the guide-wire is removed (Fig. 3). The choledochotomy is then closed primarily with interrupted 3/0 pds sutures (Fig. 4). A small tube drain is placed in the subhepatic space and left for 24 h following surgery in case of bile seepage through the choledochotomy closure. The stent is removed endoscopically 8 weeks after surgery.

DISCUSSION

This safe and simple method of stenting the common bile duct allows primary closure of the choledochotomy after laparoscopic exploration avoiding the need for a T-tube. We have performed 24 cases in the last 8 years with no significant complications.

REFERENCE

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A low-cost, convenient model for the teaching of tendon repair

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BACKGROUND

Tendon repair is a core surgical skill. Its training is currently undertaken in animal specimens or artificial simulations but existing models are limited in terms of accessibility and the scope for feedback on the technique. The humble drinking straw has unique characteristics that meet these needs.

TECHNIQUE

Drinking straws are held at the ends by taping to a table top. Tendon repair is rehearsed using conventional instruments and sutures. Once complete, the straws are held up to the light or placed on a light-box for analysis (Fig. 1 shows a modified Kessler repair). Suture-placement can be clearly seen; furthermore, the marks made by toothed Adson forceps show clearly if the 'tendon' has been poorly handled. The strength of the repair can then be tested by pulling the straws apart.

DISCUSSION

Figure 1 A modified Kessler repair.

Trainees must seek simulated practice to maximise their surgical training. Existing tendon repair models have significant limitations. The dental roll lacks the translucency of the drinking straw. Silicon rods and pig trotters are excellent models; however, both are inconvenient, expensive and offer no feedback on handling technique. Furthermore, these models are easier to repair than human tendon through their size and handling characteristics. On drinking straws, tendon repair was picked up well by novices but impeccable stitch-handling is required for a 'perfect' repair. It is offered as an adjunct to existing models, offering specific technical benefits and the convenience to be used at any time, at home or at work.

A new surgical approach to remove subscapular exostoses in children

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Figure 1 Longitudinal incision splitting the scapular apophysis.

Figure 2 Cobb elevator developing the subperiosteal plane of the inner table.

Figure 3 The base of the exostosis has been divided.

Figure 4 Excised exostosis with cartilaginous cap intact.

BACKGROUND

Exostoses (osteochondromas) are benign, cartilage-capped bone tumours. Subscapular exostoses can cause scapulothoracic crepitus, winging of the scapula and bursa formation.¹ They may be solitary or occur in the autosomal dominant condition hereditary multiple exostosis (HME).² Excision has traditionally been performed through a parascapular approach, dividing muscle fibres to gain extraperiosteal access to the inner table of the scapula. We propose that splitting the scapular apophysis and sub-periosteal dissection causes less soft tissue damage and is a simpler approach to remove these lesions in children.

TECHNIQUE

A skin incision is made over the medial border of the scapula. The subcutaneous tissues are sharply dissected to reach the scapular apophysis which is then split longitudinally with a scalpel in a similar way to splitting the iliac apophysis in the anterior approach to the hip. A Cobb elevator is used to raise the sub-periosteal plane of the inner table of the scapula. This dissection is continued to the base of the exostosis which is exposed using bone levers and cut with an osteotome. The lesion is then detached from the soft tissues and removed in its entirety (Figs 1–4). The apophysis is repaired with 1-vicryl sutures.

DISCUSSION

Splitting of the iliac apophysis is commonly performed to gain access to the paediatric hip. This produces minimal muscle damage and ease