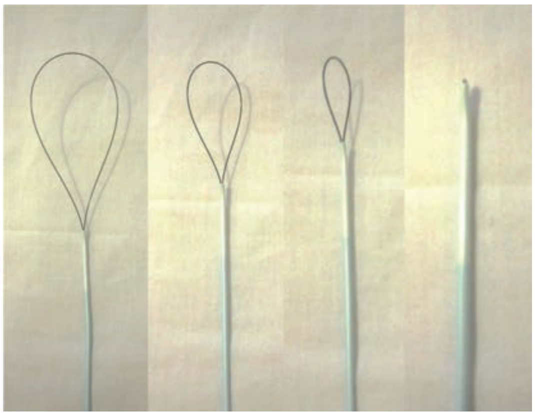

Figure 1 The 'homemade' endovascular snare, shown from open (left) to closed (right)

tween £150–£200 per unit, and may not always be readily available when required, particularly in an urgent setting.

TECHNIQUE

A 'homemade' snare can be fashioned using a 0.018" (0.46mm; external diameter) hydrophilic guidewire (eg ZIPwire®; Boston Scientific, Natick, MA, US; unit cost £18) and a 0.038" (0.97mm; internal diameter) endovascular catheter (eg Torcon NB®; Cook Medical, Bloomington, IN, US; unit cost £10). The stiff end of the guidewire is passed into the catheter until it emerges at the tip. It is then reversed and passed back into the tip to re-emerge at the catheter hub (Fig 1). The size of the snare is controlled by pulling on the two ends of the catheter at the hub.

DISCUSSION

A 0.038" catheter accommodates a 0.038" guidewire snugly. The two ends of the 0.018" guidewire amount to 0.036", allowing 0.002" (0.05mm) for ease of movement in the catheter. This approach may be used with a straight or curved-tipped catheter, the latter allowing the snare to be more easily 'directed' in the vessel. At a total cost of less than £30, this inexpensive snare is a helpful option during endovascular procedures.

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A knot quicker and easier than Whip stitching in anterior cruciate ligament reconstruction

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We describe a method for tying a self-locking knot to apply tension to a free tendon end for hamstring graft anterior cruciate ligament reconstruction. This is faster, safer and easier than Whip stitching and is secure enough to feed the graft through bone tunnels.

The suture is folded and the tendon is laid on top (Fig 1a). The suture ends are then fed over the tendon and through the loop (Fig 1b). This is repeated (Fig 1c). The end result is shown in Figure 1d. The knot is pulled tight and a square knot is tied around the tendon to secure it.

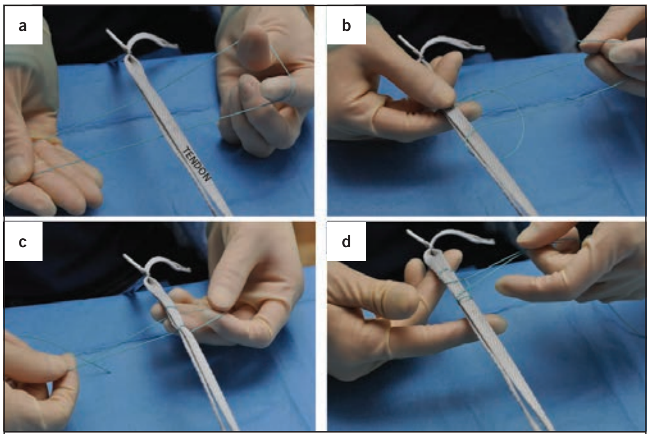

Figure 1 Method for tying a self-locking knot

Prevention of extension lag using a sling attachment for Ligamentotaxor® devices in complex proximal interphalangeal joint injuries

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BACKGROUND

Fracture subluxations at the proximal interphalangeal joint can be difficult to treat and variable in their outcome.[1,2] A number of devices have been described that provide dynamic external fixation, allowing rehabilitation during the period of stabilisation.[3,4] The Ligamentotaxor® device (Arex, Palaiseau, France) has been in use at our institution since 2008 and good results have been achieved. It was recognised that a small number of patients develop an extension lag at the distal interphalangeal joint while a Ligamentotaxor® device is in situ during treatment of fractures in the proximity of the proximal interphalangeal joint.

TECHNIQUE

The sling attachment shown was devised in our unit. It is quick and simple to apply to the frame. It is manufactured from Velcro® and Orfit thermoplastic (Wijnegem, Belgium), and is easy to remove for exercise (if appropriate). It does not affect the normal functioning of the frame.

1. Warmed Orfit thermoplastic is bonded onto 'loop' Velcro® approximately 2cm from one end.
2. The Velcro® strip is secured around one of the distal portions of the spring at the level of the distal phalanx (Fig 1).

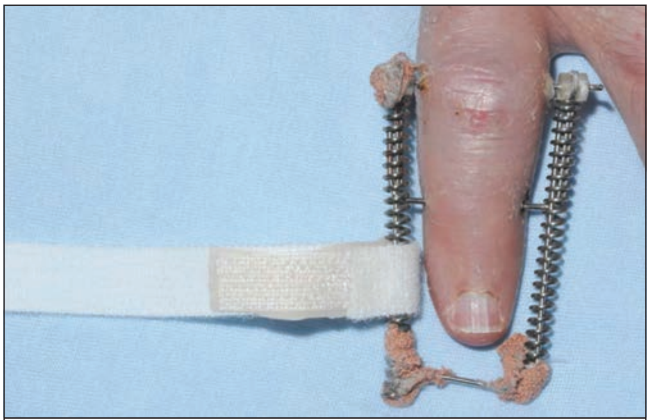

Figure 1 Velcro® is bonded to Orfit thermoplastic and attached to Ligamentotaxor® device.

3. The adhesive backed 'hook' Velcro® is adhered to the thermoplastic, passed under the distal phalanx and wrapped around the spring on the other side of the Ligamentotaxor® device, fastening to the loop Velcro® underneath, thereby supporting the distal phalanx (Fig 2).

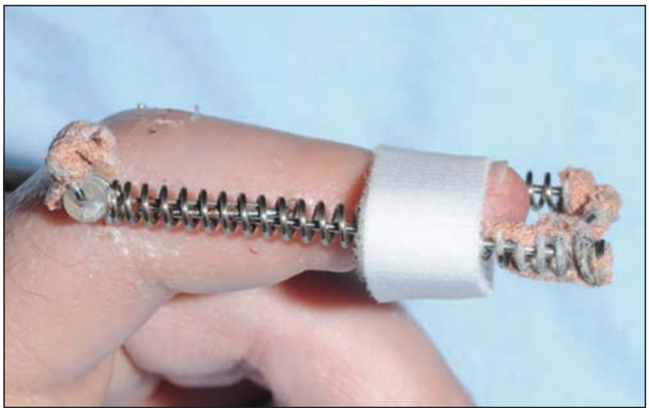

Figure 2 Sling is passed under distal phalanx, looped around device and fastened.

DISCUSSION

Prompt recognition of extensor lag and treatment using this frame modification arrests progression of the problem and facilitates its resolution. We recommend use of the Ligamentotaxor® sling in all cases complicated by extension lag.

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A low cost model for teaching tendon repair

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BACKGROUND

A recent technical note suggested that a drinking straw is a suitable model for the teaching of tendon repair and offered advantages over silicone rods.[1] We have developed an alternative model based on the drinking straw using silicone sealant.

TECHNIQUE

Easily available commercial silicone sealant is used to create the model (No Nonsense® Sanitary Silicone Clear; Screwfix, Yeovil, UK). A standard drinking straw is filled from one end with silicone sealant. Under pressure, the sealant will flow to the opposite end of the straw. The sealant is then left to cure for two weeks. The model should be left in a well ventilated area as acetic acid is produced during the curing process. Once set, the drinking straw can be cut away from the model (Fig 1).

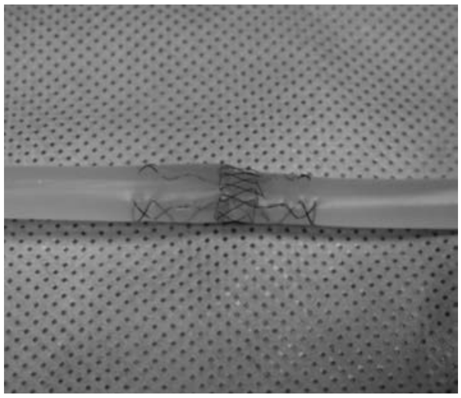

Figure 1 Silicone model for the teaching of tendon repair

DISCUSSION

We have found this model provides better suture handling feedback than the drinking straw model described previously.[1] The silicone model maintains the position of inserted suture material and the accuracy of insertion can be assessed by a trainer as the model is transparent. The 'feel' of the model imitates that of a human tendon more realistically and marks made by the injudicious use of forceps during tendon handling are also seen easily. Different sizes of model can be made to replicate biological structures of differing diameters by using straws of varying size. A 310ml cartridge of sealant can be purchased for £2.89. This will produce over 30 lengths of the model. This is in comparison with commercially available medical grade silicone rods that cost over £150 for a 5cm length.

Reference

1. Sheppard NN. A low-cost, convenient model for the teaching of tendon repair. *Ann R Coll Surg Engl* 2011; **93**: 257–258.