LETTERS TO THE EDITOR 579

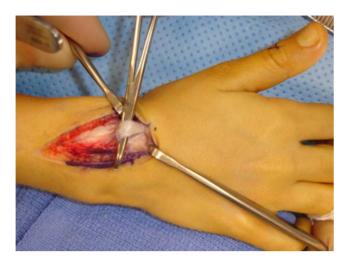


Fig 1 The EPL was ruptured and the distal stump was scarred to the distal radius over Lister's tubercle.

was referred for a second opinion. Our evaluation showed that the child was able to fully extend the thumb metacarpophalageal and interphalangeal joints, albeit with some weakness. However, she was unable to lift the thumb when the hand was placed flat on the table and a delayed rupture of the EPL was diagnosed. Postoperative radiographs showed acceptable general alignment, but a prominent dorsal spike was noticed at the fracture site. It was felt that the EPL might be tethered to the distal radius or ruptured. At surgery, the EPL was found to be completely ruptured with the distal stump scarred to the third extensor compartment near Lister's tubercle (Fig 1). The proximal fragment had retracted into the forearm. The extensor indicis proprius was transferred to the EPL. Recovery after the surgery was uneventful, with return of a full range of motion and strength of the thumb.

Several theories about the cause of EPL rupture have been proposed. These can be divided into two major groups: mechanical and vascular. EPL rupture is more likely to be caused by attrition of the tendon on a sharp edge of bone, or a roughened area of the radius around Lister's tubercle, with a displaced fracture and this is most likely to have been the cause of tendon rupture in this case. In these instances, the tendon may become tethered between the bone edge and the third extensor compartment (Heidemann et al., 2002). Clinicians should realize that EPL rupture is a rare, but possible, complication after distal radius fractures in children. Parents need to be warned about this possibility.

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## Fibroma of Tendon Sheath: a Rare Cause of Carpal Tunnel Syndrome

Dear Sir,

A 49 year—old, right-handed woman presented with a 7 month history of numbness of her right hand in the median nerve distribution, associated with a swelling on the flexor aspect of her wrist and intermittent discomfort over the anteromedial side of her forearm. Examination identified a non-tender, firm, elliptical mass, measuring  $2.5 \times 1.5$  cm, ulnar to the palmaris longus tendon and

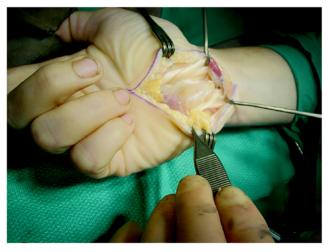


Fig 1 Fibroma of tendon sheath adherent to the flexor digitorum superficialis tendon of the middle finger within the carpal tunnel.

1.5 cm proximal to the distal wrist crease. The swelling moved on finger movements, suggesting that it was attached to the flexor tendons. There was no muscle wasting and Tinel's and Phalen's signs were negative. Exploration under general anaesthesia revealed a mass of  $2.3 \times 1.3$  cm adherent to the flexor digitorum superficialis tendon of the middle finger within the carpal canal (Fig 1). The mass was excised with a small segment of underlying tendon but leaving the tendon intact. Fibroma of tendon sheath was confirmed on histology. Postoperatively, the patient made an uneventful recovery and follow-up at 6 months revealed no evidence of recurrence.

Fibroma of tendon sheath, first described by Geschickter and Copeland in 1936, is a very rare cause of carpal tunnel syndrome, with only five cases reported in the literature over the last 30 years (Evangelisti and Reale, 1992; Garrido et al, 2004). This tumour is well-circumscribed, often lobulated, but unencapsulated. It is attached to tendon or tendon sheath. Although benign, inadequate excision may lead to recurrence because of pseudopod formation and separate tumour foci.

Fibroma of tendon sheath is twice as common in males as females with a peak incidence between 20 and 40 years (Chung and Enzinger, 1979; Evangelisti and Reale, 1992). Most patients present with a mass and no other symptoms. The overall recurrence rate is 24%. These have all been in the fingers, with recurrence usually appearing within 1 to 4 months (Evangelisti and Reale, 1992).

Most carpal tunnel decompressions are carried out under local anaesthesia. If this tumour is suspected, or encountered while carrying out this surgery as a local anaesthetic procedure, we recommend further discussion with the patient and excision under general anaesthesia to ensure complete clearance.

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## Atraumatic Flexor Tendon Retrieval: The Use of a Slip Knot

Dear Sir,

Retrieval of a retracted flexor tendon can be a challenging problem leading to further trauma to the tendon and its blood supply. Sourmelis and McGrouther (1987) described an atraumatic technique of retrieval using a side-to-side suture placed between the tendon proximally and a paediatric feeding catheter. This is used to pull the divided tendon end into the wound. The advantages of this technique are (1) that the catheter is passed from proximal to distal, ensuring correct placement (2) the tendon is not removed from its sheath, hence undamaged vinculae remain undamaged (3) the tendon remains in its correct anatomical position (4) the end of the tendon is not further traumatised and any type of tendon repair can be performed. The only difficulty the senior author has had with this technique has been releasing the catheter from the tendon once the tendon has been repaired, especially if there has been a long length of tendon retraction, as in a flexor pollicis longus repair, and the securing knot is within an undissected part of the hand.

We, therefore, propose a modification of this technique using a pull out suture to allow easy removal of the catheter. The divided tendon and its sheath are found through an incision proximal to the injury. The tendon sheath is identified and a Size 6 paediatric feeding catheter is passed alongside the tendon until it is seen in the distal wound. The proximal tendon is sutured side to side to the catheter with a 3/0 prolene suture. Firstly, a simple throw is tied and then a looped throw is tied to create a pull out knot (Fig. 1). The ends of the suture are left long. The tendon is delivered into the original wound distally by pulling on the distal end of the catheter and is, then, secured by placing a hypodermic needle through the tendon. The tendon can be simply released from the catheter by pulling on the loose end of the suture, hence pulling the loop out of the knot and undoing the knot. The catheter can then be withdrawn proximally with ease, pulling out the remaining suture at

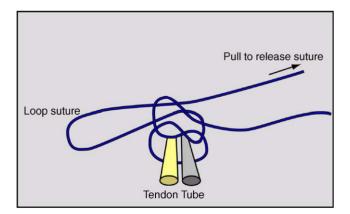


Fig 1 Illustration of the loop suture used to suture the tendon and paediatric feeding catheter (Acknowledgement to Neel Patel for the illustration).

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