A retinacular sling for subluxing tendons of the first extensor compartment

A CASE REPORT
R. Ramesh, J. M. Britton
From North Hampshire Hospital, Basingstoke, England

Over-zealous release of the first dorsal compartment of the wrist for de Quervain’s disease or other lesions such as ganglia, may result in volar subluxation of the tendons of abductor pollicis longus and extensor pollicis brevis. This is usually asymptomatic, but may occasionally become disabling. We describe an operation using part of the extensor retinaculum to stabilise such a subluxation.

Surgical release for de Quervain’s disease is an effective procedure and can give gratifying results. Complications are few and are usually due to damage to the superficial branch of the radial nerve, tendon adhesions or incomplete release. Symptomatic volar subluxation of a tendon is uncommon. We describe the use of a sling from part of the extensor retinaculum to stabilise these structures.

Case report

A 48-year-old woman was seen with a painful swelling on the radial aspect of the left wrist. A complex ganglion was diagnosed. This was aspirated and steroid injected, but it recurred within two weeks. Extensive thickening of the synovium was present and surgical excision was therefore undertaken. The tendon sheath was laid open widely and the synovium was excised together with the ganglion.

The patient was seen again four years later with painful ‘clicking’ of the left thumb. Clinical examination showed that she had marked subluxation of the tendons of abductor pollicis longus and extensor pollicis brevis over the radial styloid on movement of the thumb. She failed to respond to conservative treatment. At operation it was confirmed that both tendons had subluxed from the sheath. A radially-based flap was raised from the extensor retinaculum to create a ‘U’-shaped sling to restrain the two tendons. This loop was anchored to remnants of the sheath and to the periosteum of the distal radius using absorbable sutures (Fig. 1). After operation the wrist was splinted in a neutral position for four weeks. Examination at follow-up showed stable tendons with a full range of painfree movement.

Discussion

Subluxation of the tendons in the first dorsal compartment after surgery in this region is uncommon and usually asymptomatic. If there are symptoms, conservative treatment with splinting and local injections of steroid often fails.

Subluxation can be avoided if the incision for release is made on the dorsal margin of the retinaculum. A complete release may be necessary to free intracompartmental septae, to remove a ganglion or to carry out tenosynovectomy. In such instances, immobilisation of the thumb in plaster for two weeks may prevent subluxation.

Tendon restraints have been constructed using brachi-
radialis, extensor digiti minimi and the extensor retinaculum. We present an alternative method of stabilisation which is both simple and effective.

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References


