Endoscopic synovectomy of the 4th compartment of the extensors

Intra-articular wrist diseases may be associated with extensor synovitis. Surgical management of wrist pathologies can be performed with arthroscopy but extensor synovitis may necessitate an open excision.

The goal of the authors was to describe their experience in extensor synovectomy in 4 cases.

METHOD

4 patients were retrospectively included: one SNAC wrist type II, one dorsal ganglion cyst, one extensor synovial cyst and one case of primitive extensor synovitis. The endoscopic synovectomy was associated in 3 cases with a wrist arthroscopy and was isolated in one case. The articular arthroscopy was performed first when needed, then the extensor synovectomy. Fragment of the synovialis membrane was harvested from the shaver blade for histology. Clinical examinations with a Visual Analogue Scale (VAS) pain and Disabilities of Arm, Shoulder, and Hand (DASH) scores were performed pre-operatively and post-operatively.

RESULTS

Per-operative: the average duration was 45 min, the five tendons of the fourth compartment were visualized in all cases, the EPL was also visualized distal to the Lister Tubercle. Synovectomy was only performed in the fourth compartment. Outcomes (n=4): the mean follow-up was 6 months. The synovitis was aspecific in histology for all cases. Concerning efficiency, there was significant improvement in pain and DASH scores when compared to the pre-operative scores. Concerning safety: none tendinous or sensitive skin disorders was observed.

SUMMARY POINTS

In our short experience, an endoscopic synovectomy of the 4th compartment of the extensors was possible and safe; it may decrease adhesions compared to an open excision and preserve the retinaculum. This work was a first step to perform a complete synovectomy of all the extensor compartments.