ORTHOSPORTS
QUESTION FOR PHYSIOTHERAPISTS

QUESTION | I HAVE A PATIENT WITH DE QUERVAIN'S TENOSYNOVITIS. SHE CAN'T USE A SPLINT BECAUSE IT INTERFERES WITH HER JOB. AT WHAT STAGE WOULD YOU CONSIDER AN INJECTION OR OPERATION FOR THIS?

ANSWER |

De Quervain's tenosynovitis is a condition affecting the tendons of the first dorsal compartment at the wrist. These are the tendons of the abductor pollicis longus (APL) and extensor pollicis brevis (EPB) muscles, which work to radially deviate the wrist, abduct the thumb and extend the thumb metacarpophalangeal (MCP) joint.

Despite the common name ("-itis"), is not inflammatory but more likely a degenerative condition. It is an overuse condition resulting from increased forces on the tendon, leading to thickening and swelling of the first dorsal compartment retinaculum. Patients present with pain & swelling in the area, along with sensations of painful crepitus. There is local tenderness at the first dorsal compartment. Stretching the tendon within the compartment also causes localised pain, either by resisted thumb abduction or by passive stretching (Finklestein test).

Initial management for mild-moderate disease is aimed at avoiding aggravating factors and the use of supportive splints that cross the wrist and thumb. However, often the symptoms recur when the splint is removed and severe cases are often not adequately controlled by a splint.

Therefore, for patients with moderate-severe disease or for those who are unable to tolerate a splint full-time, then an *injection of corticosteroid* is an effective treatment. Literature reports that up to 80% of patients will have complete symptom resolution with a single steroid injection. I couple the steroid injection with a referral for physiotherapy. If an injection gives good relief of symptoms for a reasonable period of time, say, a couple of months, then it is reasonable to repeat the injection.

A failure of the injection to work may indicate multiple separate first compartment tunnels, injection to the wrong area or recalcitrant disease. In this instance, I think it is worthwhile repeating the injection once if the patient is willing, but I tend to repeat it using a different technique. If the first injection had been done ultrasound-guided, then I will give the second injection without ultrasound; and vice versa.

Operative release of the first dorsal compartment is indicated in disease which does not resolve with injections, splints and activity modification. Likewise, ongoing disease after six months of repeated injections and physiotherapy is an indication for operative release. I do this in the operating room under local anaesthetic as much as possible. This removes the risk of general anaesthetic and also allows me to have the patient move the thumb during the operation to ensure that the crepitus has resolved. Literature reports over 90% resolution of symptoms with operative release of the compartment.

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