Partial Fasciectomy for Dupuytren Contracture

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Hypothesis

Surgical treatment options for Dupuytren contracture include fasciotomy, partial and radical fasciectomy, and dermofasciectomy. Although the literature does not clearly favor one treatment option over another, the preferred technique of the authors of this video is a partial fasciectomy. The authors of this video believe that, with a thorough partial fasciectomy, function can by maximized while avoiding the increased morbidity associated with radical fasciectomy and dermofasciectomy.

Case Overview

The case presentation of a 66-year-old woman with longstanding right ring and little finger contractures is reviewed. Preoperatively, the patient had a flexion contracture of 60° at the ring finger proximal interphalangeal joint and 45° at the little finger metacarpophalangeal joint. Postoperatively, the patient had restoration of full active ring and little finger flexion and extension.

Technique

Using a Brunner incision, the subcutaneous tissue was carefully raised from the underlying cord, taking care to maintain the dermal layer as thick as possible. The radial and ulnar neurovascular bundles were identified proximally. The radial digital nerve was densely adherent to the cord, which included the central cord, spiral cord, and natatory cord. Meticulous neurolysis was performed to tease the nerve free from the cord. The Dupuytren cord was meticulously dissected in its entirety from proximal to distal. The underlying flexor tendon was clearly exposed and maintained throughout the procedure. After complete excision of the Dupuytren cord, the right little finger was able to fully extend passively with minimal manual pressure.

Results

Excellent functional return was reported in 35 of 38 patients who were treated via this technique. Complications included transient paresthesia in one patient; however, no lasting nerve injuries were reported, and no revision procedures were performed.