Percutaneous Sonographically Guided Release of Carpal Tunnel and Trigger Finger: Biomechanics, Clinical Results, Technical Developments

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INTRODUCTION/HISTORY/DEFINITIONS/BACKGROUND

Improvement of sonography over the last 2 decades, with the superficial use of linear probes giving images of musculoskeletal superficial anatomic structures with high spatial and temporal resolution, now offers surgeons precise dynamic imaging of hand anatomy. Sonography is no longer reserved to radiologists, anesthesiologists, and rheumatologists; sonography is used by hand surgeons for diagnosis and progressively for interventional purposes like targeted injection, peroperative assessment, and even percutaneous release.

Trigger finger (TF) and carpal tunnel syndrome (CTS) are 2 common diseases that share the particularity of a simple basic principle in their surgical treatment: release of a ligament. A1 digit pulley and transverse carpal ligament (TCL) being relatively superficial anatomic structures, the use of sonography to guide their percutaneous release...