COMPARISON OF PERCUTANEOUS RELEASE, OPEN RELEASE, ULTRASOUND GUIDED AND CORTICOSTEROID INJECTION IN THE TREATMENT OF TRIGGER DIGITS; A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction
Stenosing tenosynovitis, occurs with an incidence of 5-11%. The pathophysiology is the discrepancy between tendon size and sheath (A1 pulley). The current standard therapy of trigger finger involves splinting, corticosteroid injections or open surgical release of the tendon sheath. Percutaneous release, is becoming more popular in treatment of trigger finger. Endoscopic release, and ultra-sound guided percutaneous release are becoming more popular.

Methods
A literature review of all published data from 1965 to May 2012 was conducted using PubMed, Medline,National library of Medicine, Cochrane review database, and Google Scholar. Inclusion criteria included clear follow-up, recurrence rate, and complications rate. A cross-reference review of the articles was performed. All articles were reviewed for complication rates study design, a, ministered doses, number of digits (patients) , follow up, and success rates.

Results
• Overall success rate of three modalities combined: 89%
  - Corticosteroid Injection: 64%
  - Open Surgery: 94%
  - Percutaneous Release: 94%
  - Ultrasound Guided Release: 98%

Percutaneous and ultrasound guided release are potential effective alternative.

Discussion
Can be performed in the outpatient setting and may be more cost-time effective than open surgery with similar success rate and comparable complications.

References