Arthroscopy-Assisted Repair of Latent Syndesmotic Instability of the Ankle


Scientific Literature Review

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Podiatric Relevance: This study investigates the results of the repair of latent ankle syndesmotic instability with a combined arthroscopic and percutaneous approach.

Methods: This study is a therapeutic case series consisting of 6 patients presenting between 2002 and 2005 with latent syndesmotic instability after sustaining rotational ankle injuries. Indications for repair included radiographic evidence of persistent or recurrent ankle diastasis after injury, as well as functional deficits that prevented the patient from returning to pre-injury activity levels. As part of the pre-operative assessment, an American Orthopaedic Foot and Ankle Study (AOFAS) ankle-hindfoot score was determined for each patient, as well as measurement of tibiofibular apposition and medial clear space from weightbearing films. All six patients underwent arthroscopic-assisted syndesmotic repair with percutaneous fixation and were followed postoperatively for a minimum of 2 years (range 24-64 months). AOFAS scores were obtained postoperatively at the latest follow-up assessment as well as radiographic measurements from weightbearing films at the same point in time.

Results: All patients had improvement of their AOFAS scores with a mean change of 32 +/- 7.0, with the functional aspect of the AOFAS score demonstrating the largest improvement (+15). Radiographic measurements demonstrated improvement in all 6 patients, with reduction of medial clear space being the most consistent finding (mean change 3.2mm) indicating an improvement in mortise congruity.

Conclusions: This study suggests that arthroscopy-assisted treatment of latent syndesmotic instability is an effective method to improve levels of pain and function.