Subtalar Arthroscopy for Sinus Tarsi Syndrome: Arthroscopic Findings and Clinical Outcomes of 33 Consecutive Cases

Reference:

Scientific Literature Reviews

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Podiatric Relevance:
Sinus tarsi syndrome is a generalized diagnosis often following trauma. This study utilized subtalar joint arthroscopy in an attempt to determine the underlying cause of the sinus tarsi syndrome, as well as review treatment results following arthroscopy.

Methods:
A retrospective review of thirty-three cases of subtalar joint arthroscopy with a diagnosis of sinus tarsi syndrome was performed. Patients were excluded if they had a fracture around the sinus tarsi and/or additional procedures for combined lesions of the foot and ankle. Mechanisms of injury included inversion ankle sprain (91%), eversion ankle sprain (6%), and overuse injury (3%). Diagnosis was made on clinical exam of pain over sinus tarsi and relief of pain with local anesthetic injection. All preoperative radiographs were normal. Preoperative MRI’s were performed in 25 of 33 cases and showed partial tears of the interosseous talocalcaneal ligament (ITCL) or cervical ligament (CL), sinus tarsi fat alterations, and synovial thickening. Conservative treatment, including NSAIDS/analgesics, steroid injections, ankle brace and PT were attempted prior to surgery.

Results:
During arthroscopy, pathologic findings were observed in all 33 cases. Findings included partial tear of ITCL (88%), synovitis (55%), partial tear of the CL (33%), arthrofibrosis (24%), and soft tissue impingement (21%). Twenty-eight cases had combined pathology. The VAS score improved from 7.3 points pre-op to 2.7 points post-op and the mean AOFAS ankle hindfoot score improved from 43.1 points pre-op to 86.2 post-op. Of all the cases, 42% had an excellent result, 46% had a good result and 12% had a fair result. One patient required secondary neurolysis because of superficial peroneal nerve irritation.

Conclusions:
Subtalar joint arthroscopy is a valuable modality for diagnosis and treatment of the underlying causes of sinus tarsi syndrome.