Hindfoot Arthroscopy for Posterior Ankle Impingement: A Systematic Surgical Approach for Identifying Relevant Anatomy and Hindfoot Pathology

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Open vs. Arthroscopic
Treatment for Posterior Ankle Impingment

Systematic review of 16 studies:
Complication rate → 15.9% (open) vs 7.2% (arthroscopic)
Return to activity → 16 weeks (open) vs 11 weeks (arthroscopic)
Use of hindfoot arthroscopy increasing, with 2-portal posterior technique most common – however no systematic approach

Purpose

Present a structured systematic surgical approach for identifying relevant anatomical structures and pathology during hindfoot arthroscopy

Report the clinical results of our case series
Systematic Approach

Identify the posterior intermalleolar ligament

Golanó. KSSTA. 2010
Superomedial & Superolateral

FLEXOR HALLUCIS LONGUS

POSTERIOR TIBIOFIBULAR LIGAMENT
Inferomedial & Inferolateral

POSTERIOR TALAR PROCESS (OS TRIGONUM)

POSTERIOR TALOFIBULAR LIGAMENT

CALCANEOFIBULAR LIGAMENT
Intra-articular

TIBIOTALAR JOINT

SUBTALAR JOINT
Results

Complications

Infection (1)
Returned to basketball at 32 weeks

Dysthesia of deep peroneal nerve (1)
Resolved following 2 months

Mean return to sporting activities 12 weeks (range, 6 – 16)
Conclusion

Results are comparable to the current literature (return to activities, 12 vs 11.3 wks)

FHL pathology seen in all patients with os trigonum and Stieda process

Anatomy of posterior ankle is complex and a systematic approach may help guide the surgeon