

Results of Hindfoot Endoscopy for Posterior Ankle Pain

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HINDFOOT ENDOSCOPY

- 1997, van Dijk et al;

Access to the posterior tibial tendons, treatment

- 1998, van Dijk et al;

Tendoscopy of the peroneal tendons

- 2000, van Dijk et al;

Endoscopic release of the flexor hallucis longus tendon

Van Dijk CN, Kort N, Scholten P. Tendoscopy of the posterior tibial tendon. Arthroscopy. 1997;13:692–698.

Van Dijk CN, Kort N. Tendoscopy of the peroneal tendons. Arthroscopy. 1998;14:471–478

Van Dijk CN, Scholten PE, Krips R. A 2-portal endoscopic approach for diagnosis and treatment of posterior ankle pathology. Arthroscopy. 2000;16:871–876.

PATIENTS and METHODS

- 26 patients
- 20 M / 6 F
- Between 17-70 ages

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Patients and Method

- 11 professional athletes
 - 4 volleyball
 - 3 basketball
 - 2 football
 - 1 tennis
 - 1 orienteering

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Types of Hindfoot Pathology

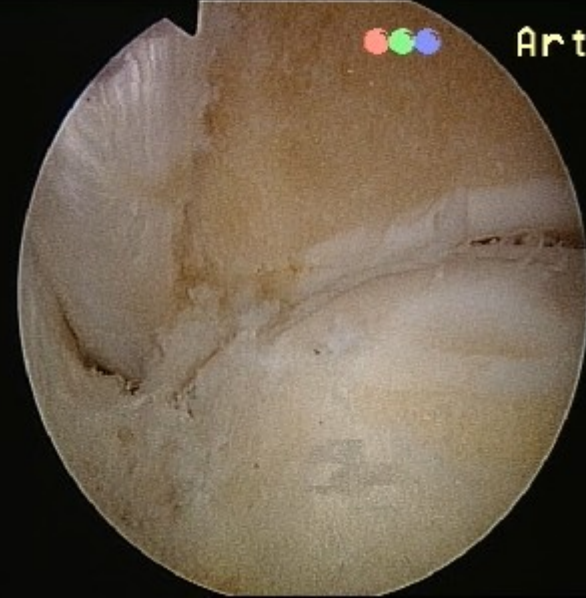
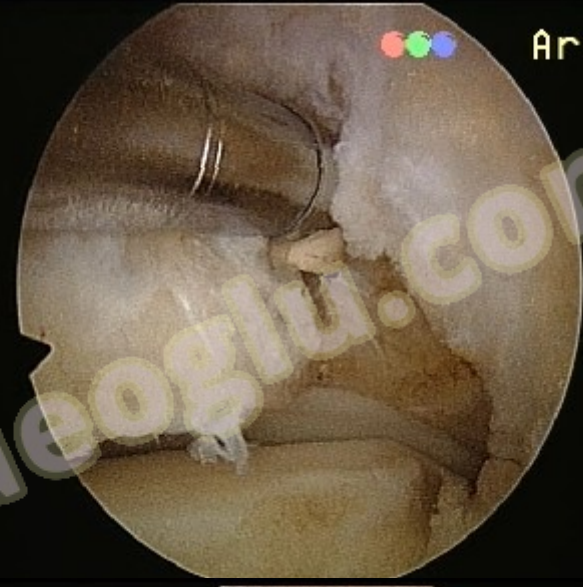
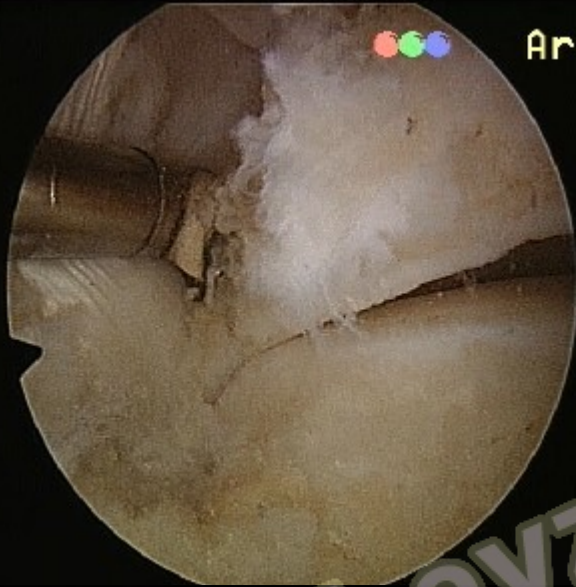
- Talar chondral lesion (2)
- FHL Tenosynovitis (11)
- Os Trigonum syndrome (7)
- Haglund deformity (5)
- Loose body (1)

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- All patients had two portal hindfoot endoscopy by the same surgeon

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Os trigonum excision



FINDINGS

- Mean follow-up: 34 months (12-68)
- **AOFAS hindfoot score:**
preop 51 (29-64), postop 98.1 (76-100)
- **Ogilvie-Harris score: significant***
improvement in all 5 parameters
(pain, swelling, stiffness, limping, activity)

*($p < 0.05$, Wilcoxon rank-sum test)

Mean return time to pre-injury sports level:

- 4 months

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MINOR COMPLICATIONS

- 3 patients had painful scar tissue at portal insicions,
- 1 patient had persistant subcutaneous edema for one month,
- 1 patient had temporary sensory loss for two months

RESULTS

- Although non-homogenous patient group
- Satisfactory functional outcomes
- No major complications
- Early return to sports activity
- Less postoperative pain than open surgery
- Outpatient treatment
- Functional postoperative treatment

Guo et al.;

- Os trigonum
- 16 open surgery, 25 endoscopic excision
- No difference between postoperative results
- Shorter time to return to previous sports levels after endoscopic excision

Guo QW, Hu YL, Jiao C, Ao YF, Tian de X. Open versus endoscopic excision of a symptomatic os trigonum: a comparative study of 41 cases. Arthroscopy. 2010 Mar:384-90

Scholten et al;

- Posterior ankle impingement
- 55 patients (35 trauma, 20 overuse)
- Results compare favorably with open surgery reported in the literature
- Ankle impingement caused by overuse have better results than following trauma

Scholten PE, Sierevelt IN, van Dijk CN. Hindfoot endoscopy for posterior ankle impingement. J Bone Joint Surg Am. 2008 Dec:2665-72

Noguchi et al.:

- Posterior ankle bony impingement
- 12 athletes
- AOFAS ankle-hindfoot score improved from 68.0 to 98.3
- The average period to return to sports was 5.9
- Minimally invasive and suitable for athletes who desire an early return to sports activity

Noguchi H, Ishii Y, Takeda M, Hasegawa A, Monden S, Takagishi K. Arthroscopic excision of posterior ankle bony impingement for early return to the field: short-term results. Foot Ankle Int. 2010 May;398-403.

Willits et al.:

- Hindfoot impingement
- 15 patients, 16 ankles
- Mean time to return to work: 1 month
- Mean time to return to sports: 5.8 months
- Satisfactory functional outcomes
- No significant complications!

Willits K, Sonneveld H, Amendola A, Giffin JR, Griffin S, Fowler PJ. Outcome of posterior ankle arthroscopy for hindfoot impingement. Arthroscopy. 2008 Feb;19(2):196-202.

CONCLUSION

- Hindfoot endoscopy is a safe, effective and minimal invasive surgical procedure in the treatment of hindfoot problems even for professional athletes

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THANK YOU

Tahsin Beyzadeoglu, MD



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