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

PATIENTS and METHODS

• 26 patients
• 20 M / 6 F
• Between 17-70 ages
Patients and Method

• 11 professional athletes
  4 volleyball
  3 basketball
  2 football
  1 tennis
  1 orienteering
Types of Hindfoot Pathology

- Talar chondral lesion (2)
- FHL Tenosynovitis (11)
- Os Trigonum syndrome (7)
- Haglund deformity (5)
- Loose body (1)
• All patients had two portal hindfoot endoscopy by the same surgeon
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
MINOR COMPLICATIONS

• 3 patients had painful scar tissue at portal incisions,

• 1 patient had persistent 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 then 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

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

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

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!

CONCLUSION

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