Correlations of the Results of Surgical Treatment of Haglund’s Deformity with the Imaging Studies.

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My disclosure is in the Final AOFAS Program Book.  
I have no potential conflicts with this presentation.
Introduction

- Haglund's deformity is one of the common disase in hindfoot and shows variable degree of its symptom.
- Some patients complain refractory pain or discomfort even small sized bony deformity on the calcaneus.
- We studied surgical results of this mild deformities and correlations with imaging studies.
Materials & Methods (1)

- The included patients data
  - Between Nov 2006 and Mar 2011
  - The surgery were performed for the patients who failed conservative treatments for 6 months.
  - 19 feet (17 patients) of Haglund's deformity were under surgical treatment and followed up over 6 months.
  - Excluded in cases of Achilles tendinopathy (insertional & non-insertional)
  - Plain X-ray (preop, postop)/ MRI (preop) were taken and evaluated.
Materials & Methods (2)

- The surgery was performed thru lateral approach and removed superoposterior protrusion of calcaneus proximal to Achilles tendon attachment.
- 5 patients was treated using suture anchor (Statak® ø3.5mm, Zimmer®) to reattach the Achilles tendon partially.
- Splint immoblization : 2 weeks
- Full W/B : allowed after 2 weeks
Results (1)

- Clinical results
  - 7 females/10 males (2 both feet)
  - < AOFAS hindfoot score >
    - 78 preoperatively (ranged 65–80) and improved to 94 postoperatively (ranged 80–96).
  - < Recovery after surgery >
    - Casual walk: possible 4 weeks
    - Return to work: possible 7.5 weeks
  - < Subjective satisfaction >
    - Excellent (12 feet) Good (5) Normal (1) poor (1)
  - No complications occurred
Results (2)

Radiological results

**< Simple X-ray >**
- Radiolucence (or erosion) of superoposterior area of calcaneus were noticed in 17 feet. *(sensitivity = 89.4%)*
- Radiolucence were evaluated by 3 observers (OS board man) independently.
- Mean Phillip–Fowler angle is 46.7 (range 40 to 52) and not significant in statistically.

**< MRI >**
- Bony bruise or retrocalcaneal bursitis in 18 feet *(sensitivity = 94.7%)*
- **Achilles tendinopathy** were noticed mild to moderate in 18 feet (94.7%).
- Retrocalceal bursitis were found in all feet.
Conclusions

- On plain X-ray, not bony deformity but radiolucence (or erosion) of superoposterior area of calcaneus can be a good meaningful and sensitive sign in symptomatic Haglund deformity.

- On MRI scan, bone bruise or edema on calcaneus were found in nearly all cases (18/19 feet, 94.5%).

- Ostectomy of superoposterior protrusion of calcaneus can be a good option in surgical treatment for EVEN Mild Haglund's deformity or refractory retrocalcaneal bursitis.
THANK YOU FOR YOUR ATTENTION!