Risk Factors and Treatment Outcomes of Plantar Fasciitis

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My disclosure is in the Final AOFAS Program Book.
I have no potential conflicts with this presentation.
Purpose of The Study

- Effect of meary angle and calcaneal pitch angle as risk factors
- Effect of meary angle, calcaneal pitch angle and gender on treatment outcomes
Materials and Methods

✓ From 2011.1 to 2012.5
✓ Treatment: NSAIDS, Streching exercise
✓ Follow up: 4 weeks
✓ 92 persons (Male 35, Female 57), 139 cases (both 46)
✓ Mean age 48 (20-73)

✓ Pain: VAS
✓ Radiologic measurement
  : meary angle, calcaneal pitch angle
Treatment

NSAIDS, Streching exercise during 4 weeks

1) Ice can rolling
2) Heel cord streching
3) Towel streching
4) Eccentric streching
5) Toe exercise
Results

139 cases: Male 51 (36%), Female 88 (64%)
Meary angle: $< 0^\circ$ 55 (40%), $> 0^\circ$ 84 (60%)
Calcaneal pitch angle: $< 20^\circ$ 55 (40%), $> 20^\circ$ 84 (60%)
Results

VAS improve: 115 (83%)
Male 44/51 (86%), Female 71/88 (80%)
Meary angle <0° 50/55 (90%), >0° 65/84 (77%)
Calcaneal pitch angle <20° 46/55 (83%), >20° 69/84 (82%)
Statistics and Limitation

- Chi-square Test (<0.05)
  VAS/Meary angle >0° : P=0.039

- Not compared with normal foot
- BMI not checked
Conclusion

- High arch midfoot is a significant risk factor of plantar fasciitis and poor prognostic indicator, as compared to high arch hindfoot

- Hindfoot arch and gender are not significant risk nor prognostic factors
Reference


10. Sarrafian, SK: Functional characteristics of the foot and plantar aponeurosis under tibiotalar loading. Foot & ankle. 8: 4-18.