Clinical Results of Posterior Antiglide Plating for the SER Type Lateral Malleolar Fractures

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My disclosure is in the Final AOFAS Mobile App.

I have no potential conflicts with this presentation.
Posterior antiglide plating is widely used for the lateral malleolar fracture caused by supination-external rotation (SER) injury
Introduction

• Debates in postoperative complication especially, incidence of peroneal tendinopathy

• Relatively low incidence
  – Treadwell JR, Fallat LM $^2$
    2 of 71 (2.8%) of peroneal tendonitis
  – Ostrum $^1$
    4 of 32 (12.5%) of transient peroneal tendinitis
• Relatively high incidence
  - Weber M, Krause F

  30 of 70 (43%) : Postoperative discomfort or peroneal tendinitis

  9 of 30 (30%) : Underwent hardware removal

  → Confirmed peroneal tendinopathy
Purpose

Is peroneal tendinopathy related to the posterior antiglide plating for SER type lateral malleolar fractures?

- Analyzed clinical results and complications after posterior antiglide plating in SER type lateral malleolar fractures
Materials and Methods

• From 2004 April to 2012 May
• Posterior antiglide plating for lateral malleolar fracture by SER injury
• Follow-up period: Mean 4 year 7 months (Range, 12 ~ 109 months)
• 70 cases
• Retrospective case review
Materials and Methods

- Conventional 1/3 tubular plate (AO synhes®)
- Medical records and radiographic images
- The AOFAS scores, subjective satisfaction of the patients
- Symptoms of lateral ankle pain or discomfort can be related to peroneal tendinopathy
Results

- Good bony union: Mean 8 weeks 1 day

- AOFAS score at final follow-up:
  - Mean 90.76 points (Range, 55 ~ 100)

- Subjective satisfaction as Excellent or Good:
  - 52 of 70 (74.3%)
• **Postoperatively lateral ankle pain**: 3 cases

  - All of them: SER stage IV injury
  - No evidence of peroneal tendinopathy
    : No tenderness, Negative peroneal provocation test
  - 1 case: Transient pain ➔ Disappeared
  - 2 cases: Hardware irritation ➔ Hardware removed

  **but no intraoperative finding of peroneal tendinopathy**
Conclusions

• Lateral ankle symptoms: 3 of 70 (4.3%)
• No definite evidence of peroneal tendinopathy related to the posterior antiglidel plating

Limitation of Study

• Retrospective case review
• No further diagnostic imaging study for peroneal tendinopathy
