Lateral Ankle Instability and Association of Peroneal Tendon Pathology and Posterior Ankle Impingement

A retrospective study of 44 patients (46 ankles) with lateral ankle instability.

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Disclosure

Our disclosure is in the Final AOFAS Mobile App.
We have no potential conflicts with this presentation.
Retrospective Series.

2011-2013 [minimum follow up of 2 years]

44 patients [46 Ankles]

Minimum history of pain +/-instability for 6 months prior to surgery.

All patients underwent MRI study.

Clinical history, physical examination, imaging studies and intraoperative findings were conducted.

Chronic lateral ankle instability was confirmed by history, physical examination and intraoperative stress testing.

All patients underwent conservative Rx [immobilization, activity modification, PT, Bracing, Orthotics etc.]
Materials & Methods


[1] Ankle underwent traditional approach without any other procedures.

- Ankle Arthroscopy 27/46 [58.7%]
- We performed ankle arthroscopy at the same time of ligament reconstruction.
- [Gravity, <60 minutes for scope]
Results

- **Sex**
  - Male: 12 [27%]
  - Female: 32 [73%]

- **Laterality**
  - Right: 24 [52%]
  - Left: 22 [48%]

- **Generalized Ligament Laxity**
  - 10 patients: [23%]

- **Varus Alignment of the heel**
  - 11 patients [24%]
  - 7/11 patients underwent calcaneal osteotomy.
Peroneal Tendon Pathology

Peroneal tendon pathology

No  Yes

41 [89%]  5 [11%]

Peroneal tendon involvement.

Strauss et al  FAI 2007  28% Peroneal Tendon involvement.

Digiovanni FAI 2000  77% Peroneal Tendon involvement.
Intra-articular Pathology

Anterolateral impingement

- 5 [11%]
- Yes
- No

Ankle Synovitis

- 41 [89%]
- Yes
- No

11%

Anterolateral Impingement

- 18 [39%]
- Yes
- No

28 [61%]

OCD

- 36
- 2
- 8

None
- Tibia
- Talus

UAB Study 21.7%

Digiovanni FAI 2000 23%
Posterior Impingement

- UAB Study 37%
- Strauss et al. FAI 2007 23%
• Comparison of musculoskeletal Radiologist report vs our findings.
• For different pathologies 14/39 [Peroneal Tendon], 3/9 [OCD lesions], 17/21 [Posterior impingement syndrome] radiologists were not able to diagnose the pathology.
• Radiologist report vs MRI reading by an Orthopaedic Surgeon.
Results

• None of the patients underwent revision surgery.

• Out of [17/46] patients with posterior impingement [all patients underwent open debridment], only one patient had residual stiffness [age >40 years.]
Conclusions

• Our results confirm the **frequency of associated conditions** in individuals with chronic lateral ankle instability.

• The frequency of identification of **Peroneal tendon** injuries as frequent or more than other studies.

• The frequency of **Posterior Impingement Syndrome** was more than any other studies.
Conclusions

- The study confirms the importance of examination of generalized ligament laxity and Heel varus.

- Extended anterolateral approach and use of suture anchors for Broström Gould repair didn't affect the outcome.

- Limited use of didn't affect the outcome of lateral ligament reconstruction in the same settings. Ankle arthroscopy

- Knowledge of identification of different pathologies on MRI is also very important.