Maisonneuve Fracture in a Male Collegiate Football Player

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Background
A 21 year-old male collegiate wide receiver was injured during a football game. While attempting to receive the football the athlete was tackled. The direct impact caused him to land on his right ankle, resulting in ankle eversion and external rotation. Athlete was evaluated by the team physician assistance, and was referred for radiographs. The X-ray reviewed proximal fibular fracture with no displacement, and widening of the syndesmosis and medial joint space.

Clinical Presentation
- Pain
- Swelling
- Ecchymosis
- Non-weight bearing
- Decreased ROM
- Instability
- Catching/Locking
- No previous ankle history

Differential Diagnosis
- Ankle Fracture
- Fibular Fracture
- 3rd degree Deltoid Ligament Sprain
- Syndesmotic ankle sprain

Treatment

Acute:
RICE, Crutches, and pain medication.

Operative:
Athlete underwent open reduction and internal fixation of the syndesmosis, 10 days post-injury. Implants included: The Arthrex 4-hole 1/3rd tubular locking plate utilizing 3.5mm cortical screws X2 and the Arthrex TightRope X2.

Post-operative:
2 weeks: Casted in neutral, NWB, crutches
4 weeks: Walking boot, NWB
6 weeks: Athlete WB as tolerated in boot, AROM exercises and Achilles tendon stretching

Rehabilitation
Rehabilitation began 8 weeks following surgery, and extended over a period of 4 months. Athlete was seen 3 times a week.

Stage 1
Restore ankle range of motion and strength, corrected gait mechanics, core strengthening, and stationary bike to maintain cardio.

Stage 2
Proprioception, total body strength, and aquatic rehab for pre-plyometric exercises and running.

Stage 3
Sports specific exercises, plyometric, and agility drills.

Return to play
Athlete was cleared to participate in Spring football, non-contact drills, and progressed with no limitations over a span of 4 weeks.

Conclusion
Although ankle injuries are common and can be prevented, it is important not to overlook injuries associated with talocrural dislocations. Athlete in this case returned to participate in spring football practice 6 months following surgery, but remains non-contact participation. He will return to full contact participation during this fall football season.