

Bilateral Avulsion Fracture: Injury, Treatment, and Outcome

Morgan Suski, Airika Phillips, and Jennifer Lancaster

Sports Medicine; Kinesiology Department; Tarleton State University; Stephenville, TX

Category: Undergraduate

Advisor / Mentor: Lancaster, Jennifer (jlancaster@tarleton.edu)

ABSTRACT

HISTORY: A 22 year old college senior cornerback experienced an ankle injury while tackling a receiver during a game. While he was diving for the tackle, he collided with a teammate who landed on his foot. The athlete described feeling and hearing a pop followed by immediate swelling. He was removed from the competition immediately and further evaluated on the sideline. There was no previous history of injuries to this ankle.

PHYSICAL EXAMINATION: Examination on the sidelines revealed severe tenderness over the medial and lateral aspect of the ankle. There was obvious swelling, and the athlete could not bear weight at the time. There was also little range of motion. Special tests were unable to be performed due to the severity of the swelling.

DIFFERENTIAL DIAGNOSIS:

1. ATF sprain
2. CF sprain
3. PTF sprain

TEST AND RESULTS:

Anterior-posterior and lateral radiographs:
- Bilateral avulsion fracture

FINAL DIAGNOSIS:

Bilateral avulsion fracture accompanied by a grade 2 sprain of the ATF and CF ligament

TREATMENT AND OUTCOMES:

1. Immobilization in a walking boot for one week
2. High volt electrical stimulation and game ready immediately post injury
3. Milk massage accompanying electrical stimulation and game ready to reduce swelling
4. ROM exercises started immediately after massage and continued throughout rehabilitation
5. Ankle isometric exercises started 1 week post injury
6. Did not return to play post injury due to the season ending, but had full ROM and increased strength. It is believed the athlete could have met the demands to his sport about a month post injury.