History
Flexion deformity of distal interphalangeal joint after sports injury.

Diagnosis
Flexor Digitorum Profundus Avulsion Injury

Discussion
Flexor digitorum profundus (FDP) avulsion injury is also known as "Jersey Finger" or "Rugby Finger". The mechanism of injury is forceful extension of the distal interphalangeal joint with maximal contraction of the FDP; examples include injury while trying to tackle a football or rugby player by the jersey, starting a lawn mower, restraining a pet on a leash and having a rope rapidly pulled. The ring finger is the most vulnerable. Occasionally, FDP avulsion can be confused with tenosynovitis. The FDP originates along the proximal ulna, the interosseous membrane and the deep forearm fascia. The FDP inserts along the volar aspect of the base of the distal phalanges after passing through the chiasma of the flexor digitorum superficialis. The 3rd through 5th digits usually share the same muscle belly and act in unison.

In general, 3 variations of injury are seen. Type I involves retraction of the FDP tendon to the level of the palm and because of the length of retraction is at risk for avascular necrosis. Type II involves retraction of the FDP tendon to the level of the proximal phalanx and is at risk for fibrotic change at the chiasma. Type III involves avulsion of the volar plate of the distal phalanx.

Findings
US-Flexor digitorum profundus tendon is retracted through the chiasma of the flexor digitorum superficialis tendon at the level of the proximal phalanx. No bone fragment is seen. Note the fluid within the flexor digitorum profundus tendon sheath.

Reference
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