

CLINICAL HISTORY: 50-year-old male with left thumb pain for six weeks after a ski injury, rule out tear of the ulnar collateral ligament.

TECHNIQUE: Axial, sagittal and coronal fat and water-weighted images emphasizing the left thumb include direct coronal images through the ulnar collateral ligament and thumb MCP joint.

COMPARISON: None available at this time.

FINDINGS: Consistent with the clinical history is high-grade tearing of the accessory and proper bands of the first MCP ulnar collateral ligament (MCL) with retraction and a low-signal mass-like structure along the adductor aponeurosis consistent with a so called Stener lesion that measuring 9-11 mm transverse x 11 mm in length.

There are slight subcortical changes and spurring along the radial collateral ligament without a defect of the accessory or proper bands of the radial collateral ligament. A low-grade proximal sprain or chronic fraying at the radial collateral ligament is likely.

The interphalangeal joint is normal.

A marrow contusion is observed within the head of the first metacarpal without a fracture line, bony avulsion or cortical disruption. The proximal and terminal phalanges of the thumb are normal.

Normal extensor tendons in the first through sixth dorsal compartments. The ECU tendon is normally sited within the ulnar sulcus without subluxation or evidence of tearing of the ECU sub-sheath. Intact flexor tendons.

The extensor pollicis longus tendon, extensor pollicis brevis tendon and FPL tendon at the level of the metacarpal and the thumb demonstrate no tearing. There is mild FPL tenosynovitis. Intact thenar musculature. Scaphomultangular first and second carpometacarpal articulations are congruent. No fracture of the second metacarpal or digit.

An incidental bone island at the second metacarpal head is of no significance other than the fact that it may be radiographically visible.

IMPRESSION (MRI OF THE LEFT THUMB WITH AN ULNAR COLLATERAL LIGAMENT PROTOCOL):

1. **High-grade tearing of the accessory and proper bands of the first MCP ulnar collateral ligament with a fluid-filled defect and a Stener lesions interposed along the adductor aponeurosis. Subacute periligamentous edema is consistent with the stated injury.**
2. Incomplete low-grade sprain of the proximal proper band of the radial collateral ligament without a defect or malalignment.
3. Associated marrow contusions at the base of the thumb and the apposing first metacarpal without a fracture or bony avulsion and an associated joint effusion. Superimposed mild chronic spurring along the volar aspect of the first metacarpal and along the radial collateral ligament.
4. No tearing of the extensor pollicis longus, extensor pollicis brevis or flexor pollicis longus tendon.