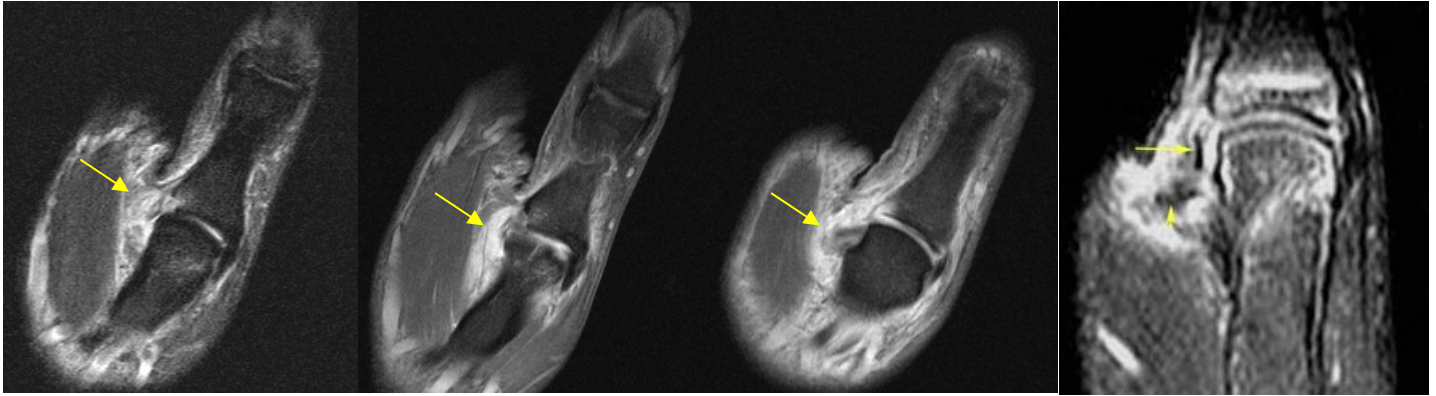


**INTERESTING CASE: STENER LESION**



**Clinical Presentation:** This patient was referred to AIC by Dr. Balfour for an MRI of the wrist to rule out a Stener lesion of the thumb. The patient had a history of trauma to the thumb.

**Imaging Findings:** The ulnar collateral ligament (UCL) is torn at its distal end and appears not attached to the proximal phalanx. It appears buckled and proximally displaced with moderate surrounding edema/hemorrhage. The adductor aponeurosis is interposed between the torn UCL and the proximal phalanx.

**Diagnosis:** UCL injury (Gamekeeper's thumb) is called a Stener lesion when the UCL is external/superficial to the aponeurosis, preventing it from self healing (as in the above case). The Stener lesion may have the appearance of a "yoyo on a string" on MRI. The "yoyo" is the balled-up and retracted UCL, and the "string" is the adductor aponeurosis. The UCL is the major stabilizer of the ulnar side of the thumb. An abduction injury to the first metacarpophalangeal joint may cause a UCL injury with or without an avulsion fracture at the site of UCL attachment to the base of the proximal phalanx of the thumb.

**Discussion:** The injury was originally termed "**gamekeeper's thumb**" because it occurred in **Scottish gamekeepers** hunting for rabbits in the manner they used to kill the rabbits (maybe it was the rabbits' way of retribution). Today the injury most commonly occurs in **skiers**. As mentioned above, when the UCL is retracted and displaced superficial to the adductor aponeurosis, it is referred to as a **Stener lesion**. The interposition of the adductor aponeurosis between the torn UCL and the bone will prevent normal healing. The incidence of Stener lesions is about one third of all gamekeeper's thumb injuries.

**Treatment:** Partial tears or non-displaced complete rupture of the UCL are treated conservatively. However, complete rupture of the UCL with displacement or Stener lesion requires surgical intervention. It is important to correctly diagnose a Stener lesion early on since treatment in the first few weeks after injury has a much better outcome.

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