



**QUESTION |** HOW DO I ASSESS SKIER'S THUMB INJURIES? WHICH OF THESE CAN BE TREATED WITH IMMOBILISATION AND THERAPY ALONE, AND WHICH NEED TO BE REFERRED TO A HAND SURGEON?

**ANSWER |** This is a timely question given the upcoming Australian winter season.. In the snow sport context, it is usually the result of a sudden ulnar-deviating or hyperextending force applied to the thumb by the straps of a ski pole during a fall.

The long term problem with an untreated skier's thumb is pain and weakness. This is worst during pinch grip, during which the UCL is pivotal in stabilising the thumb MCP joint.

The patient with a skier's thumb will complain of pain over the ulnar side of the thumb MCP joint, worse during pinch grip. There may be some localised swelling.

Examination may show a radially deviated thumb at rest. There may be visible bruising or swelling over the MCP joint. Palpation will reveal tenderness over the ulnar side. A tendon which is retracted and rolled over itself may be palpable as a firm lump.

Comparing the range of motion to the contralateral side is important. Flexion-extension range will be decreased due to pain.

Stress testing the thumb MCP joint into radial deviation will help ascertain the stability of the joint. However, it is important that an X-ray is performed prior to this examination. Be sure to ask for a thumb X-ray, not a hand X-ray, so that correct views are obtained. If the X-ray shows an undisplaced avulsion fracture, then a stress test should not be performed as the fracture may displace.

To perform a stress test, hold the MCP flexed to about 30°. Stabilise the metacarpal with one hand while using the other hand to push the MCP joint into radial deviation. A complete UCL tear will normally allow at least 15° greater radial deviation compared to the other thumb. The endpoint of radial deviation will be soft, rather than firm. A partial thickness UCL tear will not show any increase in radial deviation laxity.

## Treatment

A partial UCL rupture (without laxity into radial deviation) can be treated in a splint for 4 weeks. Following this, gentle range of motion therapy should be started while continuing to protect in the splint for a further 2 weeks. The joint should be protected from full stress for 3 months from injury.

A complete UCL rupture (with an unstable joint) should be referred to a hand surgeon for operative treatment. Surgery is likewise indicated for displaced or large avulsion fractures. If treated early enough, a direct repair of a ligament tear can be performed. However, if operative intervention is delayed greater than 3 or 4 weeks from injury, the ligament becomes more difficult to repair and reconstruction with a graft may be required.

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