

Information leaflet: Gamekeeper's or Skier's thumb

What is it?

The first joint of the thumb is known as the 'MCP joint' (*see picture*). It is a mobile joint with ligaments that connect the bones and make the joint stable. The ligament on the inside of that joint is called the 'ulnar collateral ligament'. A gamekeeper's or skier's thumb describes an injury to this ligament.

This injury was originally found in Scottish gamekeepers who progressively damaged the ulnar collateral ligament by repeatedly twisting the necks of rabbits and birds. It so became known as the 'gamekeeper's thumb' and is a chronic injury. In modern times, it is most commonly seen in skiers as an acute injury, and hence the term 'skier's thumb'.

Is it called by any other name?

Ulnar collateral ligament injury

What is its cause?

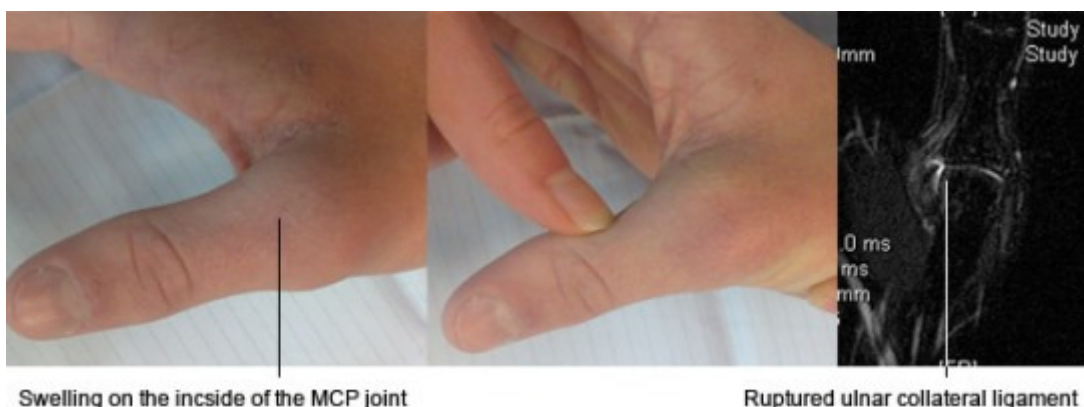
Any injury at which the thumb is abnormally bent sideways or backwards can avulse the ligament from the bone. The most common examples are in car or bike accidents when the thumb is draped round the steering wheel or handle bar at impact; or a fall on an outstretched hand, with a ski pole in the palm of the hand.

What are the symptoms and how is the condition diagnosed?

In the acute stage, the main complaint is of pain and swelling on the inside of the thumb in the web space (*picture below on the left*). Activities that need a strong side pinch between the thumb and index finger (i.e. holding a key as you turn the lock) are uncomfortable.

Palpating the thumb on its index side will be tender. The injury is confirmed by holding the base of your thumb in a fixed position, while applying a sideways force on the tip of your thumb (*see middle picture*). If the thumb moves a lot more than on the uninjured side, an injury to the ulnar lateral ligament is suspected.

In an acute injury this test may be carried out under local anaesthesia. If the joint opens significantly after this stress test, a complete rupture is likely and surgical treatment may need to be considered.





Mr Vinay Takwale MB,MS, FRCS
Consultant Orthopaedic Surgeon

Will further tests or investigations be needed?

An x-ray of the thumb is usually recommended to rule out any fractures. Sometimes an ultrasound or MR scan (*see picture on the right above*) may be advised to confirm the injury.

What is the treatment?

1. In sprains or incomplete rupture of the ligament, conservative management is advised. This consists of immobilizing the thumb in a thumb plaster cast or splint for up to 6 weeks.
2. In complete ruptures or chronic injuries, repair of the ligament is advised. After surgery, the thumb will be put in a lightweight plaster cast for 4 weeks, before gentle mobilization can be commenced.

What happens if it is not treated?

It is likely that after complete ruptures the ligament may not heal, leading to instability of the joint, which in turn may cause chronic pain.

What is the success of surgical treatment?

The success rate of surgical treatment for complete ruptures is high, though the procedure may not completely resolve the symptoms in a small proportion of patients.

What are the complications of surgical treatment?

1. The surgical scar may be tender for 6-8 weeks. However it is seldom troublesome in the longer term.
2. Infection of the wound is possible, and in the early stage can be successfully treated with antibiotics. If pain increases after surgery infection needs to be ruled out.
3. The operation may fail to improve symptoms.
4. Stiffness of the thumb and finger joints is possible and hence the need to exercise them soon after surgery. Severe complex regional pain syndrome (CRPS) is a rare but serious complication after hand surgery. Unfortunately it is not possible to predict this problem but needs to be monitored and treated (usually just with physiotherapy) if it develops.
5. Any surgical intervention has the risk of developing complications that are unpredicted. These complications may have the potential to leave the patient worse than before surgery.

Is there anything I can do to improve the outcome?

- After surgery keep the hand up to help reduce swelling.
- Start exercising your fingers immediately after surgery (Make a fist, and then stretch your fingers out). This will help avoid finger swelling and stiffness.
- Keep the wound and dressing dry.
- The scar can be massaged regularly with a soft non-perfumed cream, for a couple of months.
- Hand therapy instructions should be followed.
- It is advised not to wear rings on the operated hand for 4-6 weeks after surgery.

When can I do various activities?

Return to work depends on many factors including the nature of the job and hand dominance.

- Generally patients can return to a desk job within 2 weeks if they are happy to use the splint and work and perform reasonable tasks with the hand.
- Manual work should be avoided for 6-12 weeks depending on the procedure performed.
- Driving should be possible within 4-6 weeks of the operation. This will depend on which thumb has been operated on and whether the car to be used is an automatic or manual.
- Certain activities should be avoided for 3 months i.e. holding a dog lead with the thumb which has been repaired.