

## NON-OPERATIVE TREATMENT AS AN OPTION IN CASE OF COMPLETE RUPTURE OF THE RADIAL COLLATERAL LIGAMENT OF THE THUMB

**Damir Mišura, Marcela Romić, Iva Sesar-Cirković, Sanda Dubravčić-Šimunjak**

Clinical Hospital Sveti Duh, Croatia  
e-mail: [damir.misura1@gmail.com](mailto:damir.misura1@gmail.com)

### Background

We are presenting a case of a twenty-eight-year-old patient, a surgeon by profession, with trauma of the thumb and rupture of the radial collateral ligament of the I MCP joint.

### Case report

While performing physical activity (football), our patient received a moderately strong blow to the thumb of the right hand but couldn't recall the exact mechanism of injury. Shortly after, pain, haematoma and mild joint swelling had started to develop. He was examined by a surgeon, and standard imaging was done - RTG, which showed no abnormality, and the diagnostic ultrasound, which was inconclusive. Rest, ice, NSAIDs and an immobilisation splint were prescribed. At this point the working diagnosis was an injury of the ulnar collateral ligament (skier's thumb). Since the pain persisted, MR imaging was ordered which showed a complete rupture of the proximal attachment of the radial collateral ligament with retraction, as well as a minor partial rupture of the abductor pollicis brevis muscle. A hand surgeon specialist examined our patient and, taking into consideration the MR finding, concluded that since there were clinically no signs of instability of the MCP joint, conservative treatment is preferred. The patient was enrolled in a physical therapy program focusing on the mobility and strength exercises, but also passive procedures were included (such as HILT).

### Conclusion

We would like to emphasise two important notes with this case. Firstly, although the pathology of the radial collateral ligament is rare and much less common than the UCL, we need to take it into consideration with injuries of the thumb. Also, for the correct diagnosis we often need targeted MR images. Secondly, while the available literature states that a complete rupture requires surgical treatment, in some cases conservative treatment is possible.

**Keywords:** Thumb, injury, RCL, UCL, ligament