

Treatment of a football player with os Trigonum producing neurological symptoms

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Background:

The os trigonum, found in 5-15% of the population, is a frequent cause of posterior ankle impingement syndrome. It can cause pain and hindered mobility, particularly during plantar flexion. This report details the case of a professional footballer who experienced neurological symptoms caused by os trigonum, focusing on the successful treatment of this condition.

Case presentation:

A 21-year-old male football player presented with pain and tingling sensation spreading into the middle and lateral part of his right heel after a collision with another player 7 days earlier. During clinical examination pain in the area of the tarsal tunnel, as well as a positive Tinel sign (percussing over the nerve elicits a sensation of tingling in the distribution of the nerve) at the tibial nerve projection were present. Ankle mobility remained unimpaired. Magnetic resonance imaging (MRI) results showed a bone oedema of the os trigonum. After 6 weeks of conservative treatment and rest from training and matches, a follow-up examination disclosed a still positive Tinel sign at the tibial nerve projection within the tarsal tunnel. Subsequently, MRI was performed again, uncovering unchanged presence of bone oedema in the os trigonum and effusion around the tibial nerve. The patient underwent posterior ankle arthroscopy as described by van Dijk, in a prone position, under spinal anesthesia. The os trigonum was visualized and removed completely. The perioperative course was uneventful. The patient proceeded with a range of motion exercises and physical therapy from the first postoperative day. After 6 weeks the patient was symptom-free, eventually returning to his everyday training and matches.

Conclusion:

Symptomatic os trigonum typically manifests as ankle pain and restricted range of motion. This report underscores the potential for concurrent neurological symptoms arising from the same issue and highlights the safety and effectiveness of arthroscopic surgery as the preferred treatment approach.