



PERFORMING ARTS

SPECIAL INTEREST GROUP



ORTHOPAEDIC SECTION
AMERICAN PHYSICAL THERAPY ASSOCIATION



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Os Trigonum / Posterior Ankle Impingements – CITATION SUMMARY

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The extreme plantar flexion of relevé en pointe in the ballet dancer and the pointed foot in ballet and modern dance can be associated with persistent posterior ankle pain. Differential diagnosis includes os trigonum syndrome, exostosis, chronic Achilles tendonitis, Haglund's deformity, hypertrophic posterior talar process, synovitis of the posterior capsule, osteoid osteoma of the calcaneus, retrocalcaneal bursitis, talar compression syndrome, posterior-medial talar facet fracture, tarsal tunnel syndrome, calcaneofibular impingement post conservative treatment of calcaneal fracture, pigmented villonodular synovitis, and tenosynovitis of the flexor hallucis longus muscle. The forced plantar flexion test is suggestive of the presence of an os trigonum and generally rules out Achilles tendon related involvement. The os trigonum is an accessory bone of the foot, bones that are often confused with avulsion fractures. Cili et al. (2005) and Coskun et al. (2008) identified accessory bones in 18% and 21% of all foot x-rays.

Conservative treatment is generally successful and includes mobilization of the talus, release of the calf muscles, strengthening of the anterior leg muscles, retraining of the pointe tendu, and ice. If conservative treatment is not successful, corticosteroid injection may be helpful. For refractory cases, arthroscopic excision of the os trigonum is very successful. Dancers can return to full dance activity within 9 to 12 weeks.