

Case Report: Triggering of Hallux

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Abstract

Triggering of the Hallux, also known as hallux saltans, is a rare but well described condition and is most frequently seen in ballet dancers [1-3]. It is commonly due to stenosing tenosynovitis of the flexor hallucis longus tendon (FHL) in the region of the sustentaculum tali, with other sites of pathology being rare [4-9].

The authors present a case of triggering of the flexor hallucis longus tendon at the sesamoid region of the great toe. Description of triggering at this area, with no clear precipitating cause is rarely described within the literature. The patient was treated with steroid injection to the FHL tendon sheath and remains symptom free at 7 months following treatment.

Introduction

Stenosing tenosynovitis of the flexor hallucis tendon in the region of the sustentaculum tali leading to entrapment and triggering of the great toe is a pathology that is relatively well described within the medical literature. It is most often reported in ballet dancers, sports people or in association with trauma [3,5,10-13]. However, distal entrapment in the region of the tibial sesamoids is a much rarer entity, especially in a young patient with no clear underlying cause [1,2].

Case Report

A 28-year-old Caucasian female patient presented with a three-month history of triggering of the right great toe, associated to joint crepitus. Further examination revealed mild tenderness around the medial malleolus in line with the proximal FHL tendon upon triggering. There was no history of trauma, or participation in sporting activity. Examination of the foot and ankle was otherwise unremarkable, with normal range of movement and no neurovascular deficit present.



Figure 1: Plain Radiographs of Right Foot, Visualization of normal sesamoid bones.

Plain radiographic imaging of the foot appeared normal (Figure 1).

This was followed by magnetic resonance imaging (MRI), showing unremarkable appearances of the flexor hallucis tendon along its course, as well as no bony pathology. The next step utilised dynamic ultrasound, requiring the patient to clinically trigger the toe whilst the radiologist searched for pathology. A small echogenic focus was seen within the sheath of the FHL tendon, adjacent to the tibial sesamoid. This was suggested to be a small calcific deposit, and was the likely source of her symptoms. It was decided to attempt non-operative management. Under ultrasound guidance, the tendon sheath was injected with a steroid and anaesthetic solution.

7 months following injection, the patient remains asymptomatic, with full active mobility of the interphalangeal joint of the hallux.

Discussion

Stenosing tenosynovitis of the hallux is a relatively well described pathology, and is most commonly described in ballet dancers [3]. By far the most commonly reported site of entrapment is in the region of the sustentaculum tali, posterior to the medial malleolus [3,5,7,8,10]. We were able to find two previous papers describing FHL pathology distally in the sesamoid region. Firstly a paper by Gould et al., presenting nine cases largely associated to a precipitating injury. Three of Gould's patients were treated by local infiltration of the tendon sheath with 1% lidocaine, the remainder underwent surgery [2]. Local injection of steroid & anesthetic were the treatment of

choice in our patient, with satisfactory results. A second paper by Sanhudo, J. reported a single case of triggering as a result of tenosynovitis at the sesamoid area following toe trauma. In this paper, the patient did not respond to non-operative management, requiring surgical tenolysis to provide adequate symptomatic relief [1]. We have presented a case of hallux saltans due to impingement of the FHL tendon in the region of the tibial sesamoids, with no clear precipitating cause.

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