

## **Conference**

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## **Title**

Foot Pain While Golfing?

## **Authors**

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## **Case History**

An 18-year-old male presented with left foot pain that began 1 month prior without acute injury. He was referred to our sports medicine clinic by his PCP, and he had not yet tried any medications, physical therapy, or injections. Pain was reportedly most noticeable while swinging his golf club or while walking on the course. He also reported pain upon waking in the morning. The pain was localized to the left lateral base of the 5th metatarsal. He described the pain as achy and intermittent with a pain score of 5/10. Weight-bearing activities (e.g., standing, walking, and exercise) increased pain, whereas rest typically alleviated it. Despite a 2-week hiatus from golf, the patient did not notice any improvement in pain.

## **Physical Examination**

Upon inspection of the left foot, no evidence of gross deformity, pes planus, or swelling/ ecchymosis was found. There was mild tenderness to palpation over the base of the 5th metatarsal. Ankle range of motion was 15 degrees dorsiflexion, 40 degrees plantarflexion, 40 degrees inversion, and 20 degrees eversion. Pain was reproducible with resisted eversion. No ligamentous laxity or pain resulted with anterior drawer or talar tilt. The metatarsal squeeze test was negative. 5/5 strength was found with ankle dorsiflexion, plantarflexion, inversion, and eversion.

## **Differential Diagnosis 1**

Traction apophysitis of base of 5th metatarsal

## **Differential Diagnosis 2**

Avulsion fracture of base of 5th metatarsal

## **Differential Diagnosis 3**

Os vesalianum

## **Differential Diagnosis 4**

Jones fracture 5th metatarsal

## **Differential Diagnosis 5**

Tear of distal peroneus longus tendon

**Tests & Results**

Left foot X-ray showed no acute findings but noted prominent growth plate at the base of the 5th metatarsal indicating traction apophysitis.

**Final/Working Diagnosis**

Traction apophysitis at the base of the 5th metatarsal.

**Discussion**

Traction apophysitis of the 5th metatarsal, also known as Iselin's disease, is a rare cause of lateral foot pain. This can be seen radiographically at age 10 for females and age 12 for males, with fusion between the apophysis and the 5th metatarsal base occurring within 2-4 years. In this case, we saw that even at age 18, growth plates persisted, demonstrating an uncommon late fusion. As seen with our patient while golfing, repetitive inversion at the forefoot can cause stress at the base of the 5th metatarsal. Although unusual, traction apophysitis should be considered as a differential in late-stage adolescents with similar symptoms.

**Outcome**

The patient was counseled on activity modification and is currently in a postoperative shoe.

**Return to Activity and Follow-Up**

He is currently awaiting a 4-6 week follow-up for repeat radiographs and assessment for clinical improvement.