

Gaurav Majmudar, MD¹; Torrance Wang, MD¹; Jordan Wickstrom, PhD¹; Samuel T. Dona, MD²

¹ ABBEL Research Division, Rehabilitation Institute at Sinai, Sinai Hospital of Baltimore, Baltimore, MD

² Neurology and Orthopaedics, University of Maryland School of Medicine, Baltimore, MD

CARE BRAVELY

Case History

- 18-year-old male golfer referred to Sports Medicine physician by PCP for acute (1 month) left lateral foot pain
- At initial appointment, he had not tried any treatment, including medications, physical therapy, or injections
- However, he had taken a two-week hiatus from golf without any noticeable improvement in pain
- Pain was reported to be most noticeable upon waking and during weight-bearing activity (e.g., walking, swinging club)
- Patient described pain as achy and intermittent with a pain score of 5/10



Physical Examination

Inspection

- No gross deformity, evidence of pes planus, or swelling/ecchymoses

Palpation

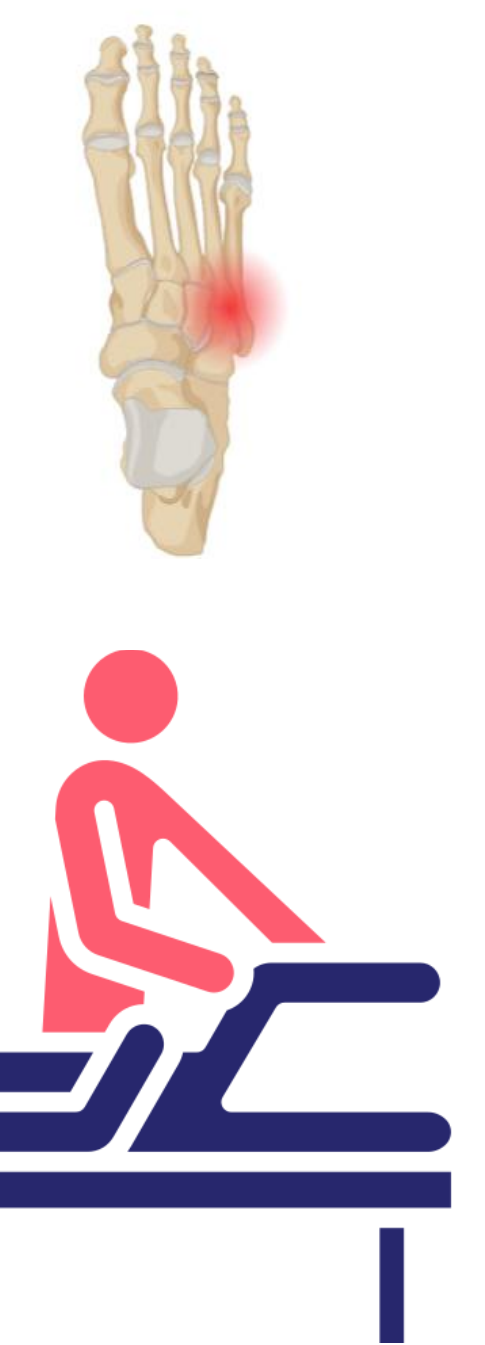
- Mild tenderness to palpation over the base of the 5th metatarsal

Strength

- 5/5 strength in left and right ankle dorsiflexion, plantar flexion, inversion, and eversion

Special Tests

- No ligamentous laxity or pain with anterior drawer or talar tilt; metatarsal squeeze was negative

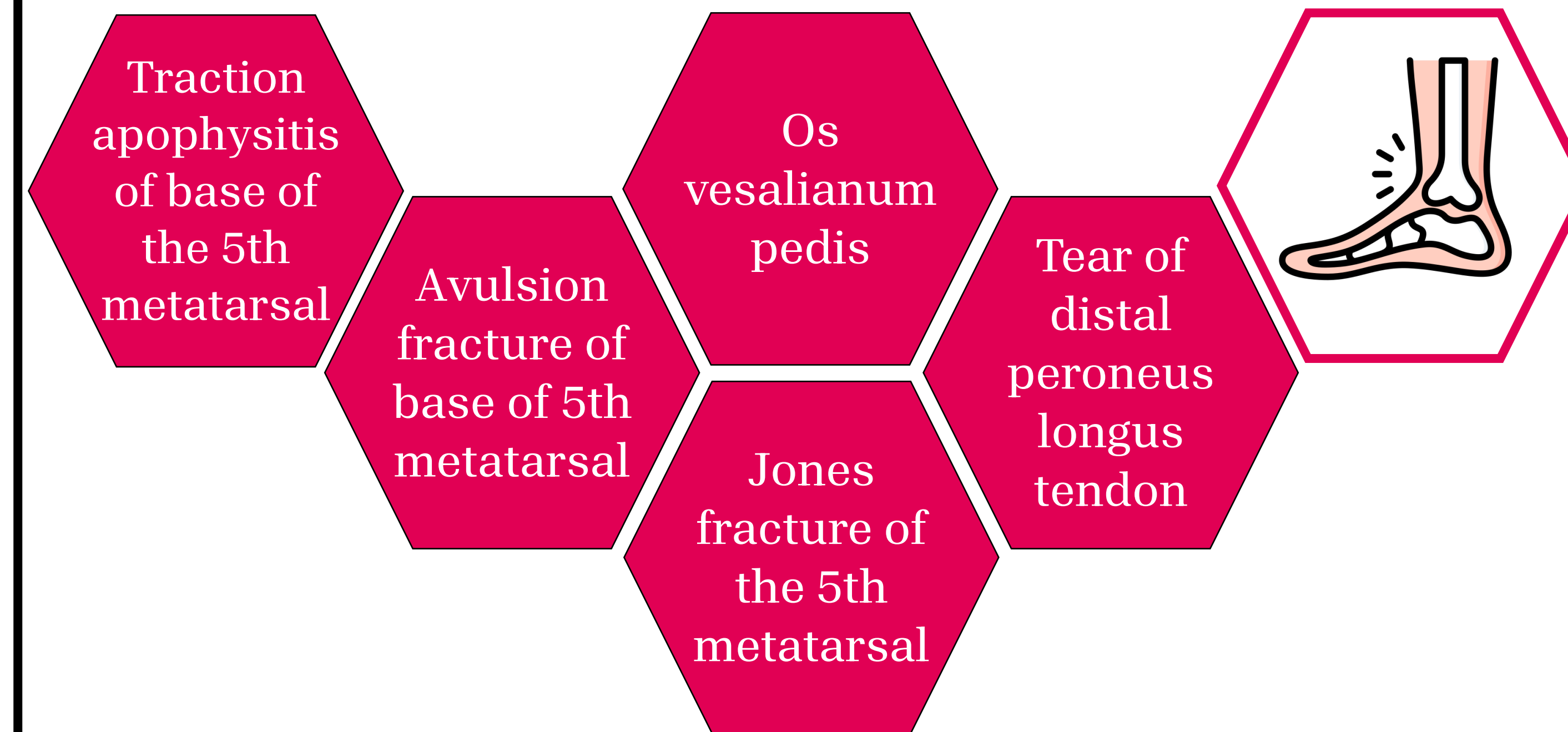


RANGE OF MOTION

PLANTAR FLEXION 40°	DORSIFLEXION 15°
INVERSION 40°	*EVERSION 20°

*Pain reproduced on exam

Differential Diagnosis



Tests and Results



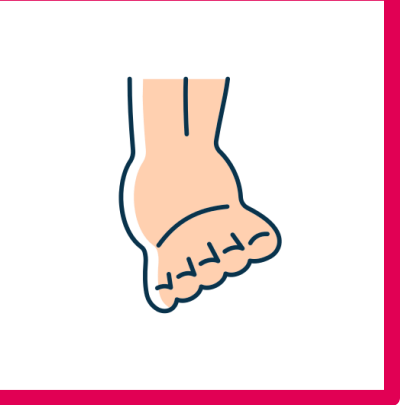
X-rays of left foot revealed no acute findings; prominent growth plate at base of fifth metatarsal suggests traction apophysitis

Working Diagnosis

Traction apophysitis of base of 5th metatarsal

Discussion

- Traction apophysitis of the fifth metatarsal (Iselin's disease) is a rare cause of lateral foot pain in adolescents
- Any repetitive inversion at the forefoot can cause stress at the base of the fifth metatarsal and lead to this condition, as seen with our patient while golfing¹
- Typically seen radiographically at age 10 for females and age 12 for males^{2,3}
- Expected fusion occurs between the apophysis and the fifth metatarsal base within 2 to 4 years of each age^{2,3}
- The persistent growth plate, in combination with repetitive inversion of his left foot during golf, led to traction apophysitis in our patient, which was confirmed with X-ray



Primary Finding

While uncommon, growth plates can persist past adolescence and lead to unexpected complications, such as late fusion of the apophysis to the 5th metatarsal base, as seen in our patient

Outcome / Return to Activity

- Patient placed in postop shoe and counseled on activity modification
- Recommended to follow up in 4-6 weeks for repeat imaging and clinical improvement assessment
- Unfortunately, the patient did not return for follow-up appointments

References



SCAN ME