

**CLINICAL HISTORY:** 23-year-old female with right foot pain without a specific injury. Pain is at the ball of the foot, rule out a stress fracture.

**TECHNIQUE:** Multiplanar, multisequence fat and water weighted images of the right foot were performed.

**COMPARISON:** No previous study is available for comparison at this time.

**FINDINGS:** No acute fracture of the midfoot or forefoot. There is a bi-partite medial cuneiform which is an anatomic variant with minimal marrow resorption, and array of subchondral cysts and arthrosis along the synostosis and a small synovial cyst or erosion within the apposing medial border of the medial cuneiform along the intercuneiform articulation as seen on image #16, series 6 and axial image #24, series 9. No acute fracture is observed within the midfoot. The transverse tarsal, naviculocuneiform and tarsometatarsal articulations are normal. No divergence of Lisfranc joint or tearing of the interosseous portion of Lisfranc ligament or the dorsal component of Lisfranc ligament. No metatarsal stress fracture.

No tearing of the extensor tendons, including the ATT insertion. Intact flexor tendons as they cross and diverge from Henry's knot.

Normal plantar fascia, plantar intrinsic foot muscles, and distal branches of the medial and lateral neurovascular bundles.

No sesamoid fracture, marrow edema, or volume loss to suggest osteonecrosis. Normal intersesamoid ligament, first MPJ plantar plate, medial and lateral capsular ligaments, EHL and FHL tendons. No interdigital masses.

No MPJ fracture, Freiberg infraction, plantar plate or collateral ligament defect, dorsal subluxation or specific evidence of predislocation phenomenon.

No tearing of the collateral ligaments.

**IMPRESSION (MRI OF THE RIGHT FOOT):**

1. **No acute fracture is identified.**
2. **No divergence of Lisfranc joint or tearing of Lisfranc ligament. Essentially normal transverse tarsal, naviculocuneiform and tarsometatarsal articulations.**
3. **There is a bi-partite morphology of the medial cuneiform (an anatomic variant) associated with a 12 mm in length array of subchondral cysts along the synostosis. Along the medial and intermediate intercuneiform articulation is a small synovial cyst or ganglion with intra-osseous extension and bone marrow edema into the medial lower one-third of the intermediate cuneiform.** This erosion or cyst may be associated with the small effusion within the bi-partite morphology, or somewhat less favored given the absence of other erosions, gout. No soft tissue tophus formation.
4. Minimal hallux valgus. No metatarsal stress fracture.
5. Normal Lisfranc ligament without divergence of Lisfranc joint.

6. No MPJ fracture, Freiberg infraction, plantar plate or collateral ligament defect, dorsal subluxation or specific evidence of predislocation phenomenon. No fracture of the midfoot, divergence of Lisfranc joint or tearing of Lisfranc ligament. No advance arthropathy of the forefoot.