Rheumatology Overread Services

FOOT AND ANKLE ULTRASOUND REPORT

PATIENT:	**ORDERING PHYSICIAN:**
ID#:	**FACILITY:**
DOB:	**SONOGRAPHER:**
STUDY DATE: 6/3/2021	**READING DATE:** 6/4/2021

MACHINE: Siemens P300 Acuson with 18 MHz Linear Transducer

STUDY: Ultrasound of left foot and ankle

PRIMARY INDICATION: Infection vs Cellulitus

SECONDARY INDICATION: Joint Swelling

REPORT NOTES: Moderate swelling and erythema of LT lateral ankle, dorsal mid-foot around distal talus, and 1st MTP.

TECHNIQUE: A high frequency probe was used in real time imaging of the longitudinal view of the tibio-talar, subtalar, 1st MTP, 2nd MTP, and 5th MTP joints. Longitudinal and transverse views were obtained of the Achilles and peroneal tendons. Oblique view of the tarsal tunnel was obtained. Power Doppler was used to assess for synovitis, enthesitis, and tenosynovitis. All soft tissue structures in these views were evaluated. Provider may request additional views. This exam includes ultrasound examination of all of the following joint elements: joint space, peri-articular soft-tissue structures that surround the joint, and any identifiable abnormality. All images are permanently recorded per CMS guidelines.

FINDINGS:

Left foot and ankle: Minor subcutaneous edema next to the lateral malleolus. There is fluid in the tendon sheath of both peroneal tendons, from the fibula to the cuboid. No tenosynovitis is noted. Focal subcutaneous edema reappears adjacent to the cuboid and the peroneal tendons become quite indistinct. The base of the 5th metatarsal head is somewhat irregular, with possible signs of rupture of the peroneus brevis. There is hyperemia in this area at the location of the altered appearance of the peroneal tendons. In addition to the decreased appearance of the peroneal tendons distally, there is some thickening of the tenosynovium here as well with some components being hypoechoic and some being hyperechoic. There is a cyst overlying the navicular bone with some internal material. There is an irregular appearance to the navicular bone along with a bone spur at its articulation with an unidentified cunieform bone. There is significant cortical irregularity of the cunieform bone, suggesting erosive changes. The cyst is inflamed and measures 16 mm in widest dimension. There is intense power Doppler signal here. It does not appear to communicate with the extensor digitorum tendon. Double contour sign on the dorsum of the 1st MTP with synovial hypertrophy and hyperemia. Tophaceous material is noted on the medial aspect of the 1st MTP with significant hyperemia. Synovial hypertrophy in the 5th MTP with active power Doppler signal. Possibly tophaceous material on the lateral aspect of the 5th MTP as well. The visualized portions of the bones and soft tissues are otherwise normal appearing.

Comparison: none

IMPRESSION:

(1) Tophaceous gout of the 1st and 5th MTPs and possibly, in the mid-foot as well surrounding the intermediate cuneiform bone, where there is an erosion.
(2) There is also significant inflammation distal to the cuboid. There is significant tendinopathy here and possibly even rupture of the peroneus brevis from the base of the 5th metatarsal head. It is possible that the appearance of the tendon is actually due to impregnation with gout crystals and chronic inflammation but again, I cannot exclude the possibility of a peroneal brevis rupture.
(3) While the inflammatory features appear to be due to gout, please note: ultrasound cannot distinguish the inflammation of a crystalline arthritis from cellulitis.

Shane Anderson

A. Shane Anderson, MD, RhMSUS, RMSK
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Electronically signed by A. Shane Anderson, MD, RhMSUS, RMSK at 10:42 AM on 6/4/2021