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Left Calf Pain—Runner

Thomas Chu, Drexel University Sports Medicine, Philadelphia, PA Email: tdc67@drexel.edu (Sponsor: Thomas Trojian)

History: 56 y/o F runner w/PMHx of DM1, HTN presented with L calf pain. It has been 6 months of dull moderate pain located to posterior calf with running and walking without radiation to foot. She would stop these activities to relieve the pain. It was not present with spin classes. There was no back pain, leg weakness, numbness, swelling, or discoloration. She was referred to us for possibility of chronic exertional compartment syndrome and testing.

Physical Examination:

Lower extremities were normal color and warm to palpation. There was no tenderness to palpation of the left calf. Straight leg raise and slump test were negative. The left lower extremity demonstrated normal strength and sensation in the L2-S1 nerve roots with 2+ Patella and ankle reflexes. Dorsalis pedis (DP) pulses were 1+ to palpation bilaterally and posterior tibial (PT) was faint.

Differential Diagnosis:

1) L popliteal entrapment syndrome 2) Chronic exertional compartment syndrome 3) Peripheral artery disease 4) stress fracture of posterior tibia

Test and Results:

X-ray of the LEFT tibia/fibula revealed calcifications along the popliteal artery but was otherwise normal.

Office-performed ultrasound-guided ankle-brachial index (ABI) was performed of the left lower extremity: DP ABI was 1.27 and PT ABI was 0.35. Exercise ABI were attempted following week, unable to get PT waveform. She was then referred for formal ABI testing by podiatrist.

Formal ABI of bilateral lower extremities: ABI of left leg was 0.97 for DP but unable to compress PT vessel so believed to be erroneous value and TBI 0.75. There was noted focal stenosis in the left distal SFA and abnormal monophasic PT waveforms. Right leg TBI was 0.74, but the ABI was unable to be obtained due inability to locate the PT artery.

Final/Working Diagnosis: Peripheral artery disease of the left lower extremity

Treatment/Outcome: Patient was started on Aspirin 81mg. She was also offered a supervised exercise program and Cilostazol, however she declined. She was already maintained on a moderate intensity statin.