Numbness and tingling and pain, oh my: Unexpected etiology of leg pain in a Division I football player

Stephanie A. Carey, MD, MPH; Joseph M. Andrie, MD; Cayce Onks, DO, MS, ATC
Penn State Milton S. Hershey Medical Center, Hershey, PA.

HPI: A 20-year-old Division I college football player experienced acute upper left leg pain after exercising on a track at school without an inciting event. He was evaluated at an outside institution and endorsed numbness, tingling, and back pain. A lumbar MRI was ordered and showed congenital spinal stenosis. He was given an epidural corticosteroid injection without relief of his symptoms. At presentation to our office 2 months later, he continued to endorse posterior left leg pain with numbness and tingling on the lateral aspect of his calf and on the dorsal aspect of his foot. He endorsed a painful snapping sensation in the back of his upper leg that was present with running and knee extension when weightlifting. When questioned about the snapping, he did endorse feeling a mass in the back of his leg just above his knee. No knee or ankle pain.

Physical Examination:
MSK: Tenderness to palpation just superior to the popliteal fossa with a non-mobile mass appreciated in this area. Tenderness along the lateral lower leg, along the peroneal muscle bellies. No bony tenderness. Mild discomfort with knee flexion against resistance localized to the posterior thigh.
Neuro: 5/5 strength in the bilateral lower extremities distally, negative Tinel’s sign over the tarsal tunnel
Vascular: 2+ dorsalis pedis and posterior tibialis pulses bilaterally


Test and Results:
X-ray: Pedunculated exostosis arising dorsally from the femoral diaphysis.
MRI and CT 3D: Pedunculated exostosis with a thin cartilage cap arising dorsally from the distal femoral diaphysis consistent with x-ray findings. The bifurcation of the sciatic nerve into the tibial and common peroneal nerve is draped over the tip of the exostosis with increased signal of the common peroneal nerve just distal to the bifurcation compatible with neuritis. There is also mild mass effect on the deep lateral aspect of the semimembranosus muscle.
Pathology: Osteochondroma.

Final/Working Diagnosis: Osteochondroma of Left Femur with Neuritis of the Common Peroneal Nerve at the Sciatic Nerve Bifurcation and Mass Effect on the Semimembranosus muscle
Treatment and Outcomes: The patient was referred to orthopedic oncology and subsequently had the osteochondroma removed with the help of neurosurgery, who provided nerve dissection. He then remained on crutches for 4 weeks with the hope to return to sport in the fall season without pain.