Chronic Limb-Threatening Ischemia Masquerading as Lumbar Radiculopathy: A Case Report

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Introduction

Lower extremity pain radiating from the back is often attributed to lumbar radiculopathy.[1,2] Chronic limb-threatening ischemia (CLTI) presents with leg pain, numbness, and diminished reflexes, often mimicking radiculopathy.[3] This diagnostic challenge may delay treatment, increasing the risk of adverse outcomes such as necrosis, infection, loss of limb and/or life.[4] These cases do not present with all the classic signs of acute limb ischemia including: pallor, pulselessness, polikothermia, pain, paresthesia, and paralysis, and by definition are more insidious in onset.[5] We report a case in which a pain medicine–centered physical examination helped distinguish the lumbar radiculopathy and CLTI, prompting emergent referral and limb-salvaging endovascular intervention.

WHY IT MATTERS

Anchoring on a radiculopathy diagnosis is a common pitfall in interventional pain management. When back and leg pain arrives with a familiar label, it is easy to stop asking questions. Taking a careful history of how the pain began, what brings it on, and how it behaves over time helps uncover the true cause. Paired with a focused physical exam, including peripheral pulses, this can expose a mimicking condition such as limb ischemia. It can also spare patients unnecessary interventional procedures and the delay in diagnosis they cause.

THE CASE

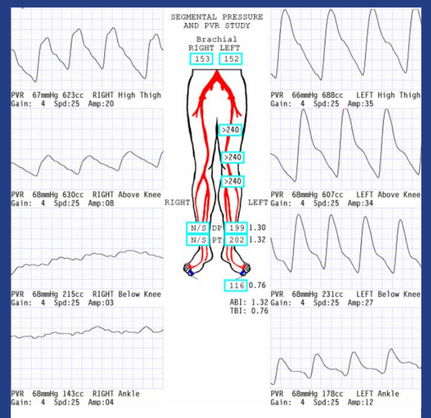
A 60-year-old man with a one-year history of **exertional** right foot numbness, active in tennis, cycling, and resistance training, presented to a pain-management clinic with progressive **right-sided low back pain radiating into the right leg**. Three weeks earlier, **after intense cycling,** he developed acute worsening of right leg pain (8/10) and numbness, transient leg weakness, and nocturnal pain disrupting sleep, which he had attributed to sciatica. Examination revealed 5/5 strength, 2+ patellar reflexes, and negative straight-leg raise, but **diminished sensation** over the **medial/lateral right foot,** absent right ankle jerk, calf tenderness, and **absent** right dorsalis pedis, posterior tibial, and popliteal pulses with an intact femoral pulse (**Table 1**). Recognizing a limb-threatening vascular process superimposed on presumed radiculopathy, the physician deferred spinal imaging and injection and referred the patient directly to the emergency department. Computed tomography angiography confirmed acute thrombotic occlusion of the right superficial femoral and popliteal arteries with two-vessel pedal runoff. The patient underwent aspiration thrombectomy and balloon angioplasty of the right superficial femoral, popliteal, and tibial arteries via left common femoral access, achieving 0% residual stenosis. Ankle-brachial index improved from unobtainable to 1.01, and he was discharged home three days later with a viable, reperfused limb.

Leg pain that looks like a **pinched nerve** can be a **blocked artery.**

Check pulses before any spine procedure.

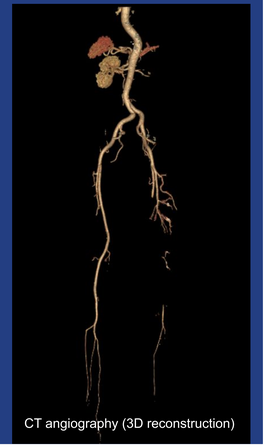
Table 1. Office-Based Physical Examination Findings (Pain-Management Clinic Visit, Day 0)

Parameter	Right Lower Extremity	Left Lower Extremity
Pain score (NRS)	8/10 worst, 4/10 current, burning/dull	Not applicable
Strength (all groups)	5/5	5/5
Sensation (foot)	Diminished, medial & lateral aspects, between toes	Intact
Patellar reflex	2+	2+
Achilles reflex / ankle jerk	2+ patellar/Achilles; ankle jerk absent	2+, present
Straight-leg raise	Negative	Negative
Femoral pulse	Intact	Intact
Popliteal pulse	Absent	Intact
Dorsalis pedis / posterior tibial pulse	Absent (both)	Intact (both)

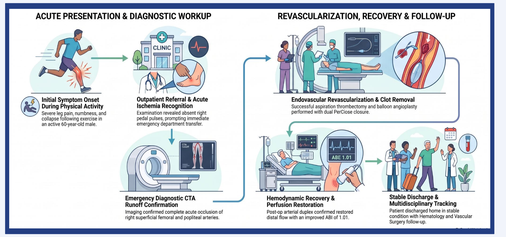


Segmental pressures and PVR study: flattened right-leg waveforms


CT angiography (MIP)


CT angiography (3D reconstruction)

WHAT WE DID



DISCUSSION

This case illustrates how CLTI can masquerade as lumbar radiculopathy, particularly when neither poikilothermia nor cyanosis is present.[2,5] A focused vascular examination remains essential in any patient with radicular leg symptoms, especially if the pain is asymmetric, exertional, or nondermatomal.[5] Pain physicians should maintain a low threshold to assess peripheral pulses before pursuing any interventional spine procedure, as delayed recognition of limb ischemia risks irreversible loss of limb.[1,3,4]

ETHICS & CONSENT

Single de-identified patient; exempt from IRB review per Broward Health policy (documentation available on request). Written informed consent for publication obtained. All care (arterial duplex, CTA, aspiration thrombectomy, balloon angioplasty) was guideline-based standard of care; no experimental, investigational, or off-label use; no IND required. Authors report no financial conflicts of interest.

REFERENCES

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References