A Rare Case of Diabetic Myonecrosis

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Supplemental Video

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Introduction: Diabetic myonecrosis is a rare complication of diabetes among the more commonly recognized microvascular complications of nephropathy, neuropathy, and retinopathy. Often found to mimic symptoms of other common acute leg pain conditions such as deep vein thrombosis, soft tissue abscess, hematoma, or inflammatory myositis, physicians’ awareness of diabetic myonecrosis will allow for early recognition and treatment essential to decrease short- and long-term morbidity.

Case presentation: A 31 year-old male with Type 1 diabetes mellitus (most recent hemoglobin A1C of 7.1), diabetic nephropathy, end-stage renal disease on hemodialysis, diabetic retinopathy on right, and hypertension who presented with complaints of left thigh swelling and pain with ambulation. He was diagnosed with superficial thrombophlebitis and discharged home with tramadol for pain. Patient returned 1 week later with progressively worsening left thigh pain and swelling. Patient had mild erythema to the left inner thigh which was tender to palpation. Venous Doppler was negative for DVT. Arterial Doppler was without discrete stenosis, but with abnormal flow from the mid superficial femoral artery through the dorsalis pedis artery. Left femur MRI demonstrated increased signal on T2 weighted images within the anteromedial group of thigh muscles extending along the vastus medialis to the level of the knee joint, consistent with the diagnosis of diabetic myonecrosis. Patient was treated with symptomatic management for pain and adjustments in insulin dosing for tighter BG control.

Final Diagnosis: Diabetic myonecrosis

Outcome/Management: Diabetic myonecrosis is a rare complication often affecting patients with longstanding uncontrolled diabetes. Diagnosis often requires a high level of suspicion and can be made using clinical exam and magnetic resonance imaging. Tissue biopsy can be used to make a definitive diagnosis of diabetic myonecrosis, although it is not often completed as it can prolong recovery with increased risks of poor wound healing, infections, and hematoma. Treatment involves optimal glycemic control along with symptomatic management for pain and low-dose aspirin.

Learning Objectives
1. Identify when diabetic myonecrosis should be suspected.
2. Describe the diagnosis criteria for diabetic myonecrosis.
3. Treat patients diagnosed with diabetic myonecrosis.

References and Resources