



HADD Enough? Not in the Knee: A Minimally Invasive Solution.



Resolution of Knee Pain Following Ultrasound-Guided Aspiration and Lavage of Calcific Tendinopathy of the Popliteus Tendon

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INTRODUCTION

- Hydroxyapatite deposition disease (HADD) = calcium hydroxyapatite crystal accumulation in periarticular soft tissues¹
- Most common site: rotator cuff in shoulder¹
- Standard treatments: conservative therapy, corticosteroid injections, shock wave therapy, and surgery for refractory cases²
- Emerging therapies: ultrasound-guided aspiration and lavage as minimally invasive options³
- Evidence base: Well-described in shoulder HADD, Limited data in other sites³

METHODS

This case report contains no patient identifiers and is exempt from IRB review under Mayo Clinic policy. Written informed consent was obtained for the procedure, and verbal consent was obtained for the case report.

CASE REPORT

A 69-year-old male presented with progressive left lateral knee pain radiating distally for several months. The pain was insidious, worsened by walking and twisting, and rated 8/10 during exacerbations. Rest relieved symptoms, and he denied trauma or neurologic deficits.

Physical examination revealed focal tenderness and mild swelling along the lateral knee. Range of motion and strength were preserved without instability or effusion. Radiographs showed a calcific density adjacent to the left lateral femoral condyle, consistent with HADD of the popliteus tendon.

Under ultrasound guidance, the calcific deposit was treated via aspiration and lavage. Following local infiltration with 4 mL of 1% lidocaine, an 18-gauge, 1½-inch needle was advanced anterior-to-posterior into the tendon using combined in-plane and out-of-plane visualization. Three needle passes were made, with lavage performed using five 8 mL syringes of normal saline. Cloudy aspirate was obtained but not analyzed. A post-lavage injection of 4 mL preservative-free 1% lidocaine and 40 mg triamcinolone acetone was administered for anti-inflammatory effect.

At two-week follow-up, the patient reported complete pain resolution and resumed full physical activity.

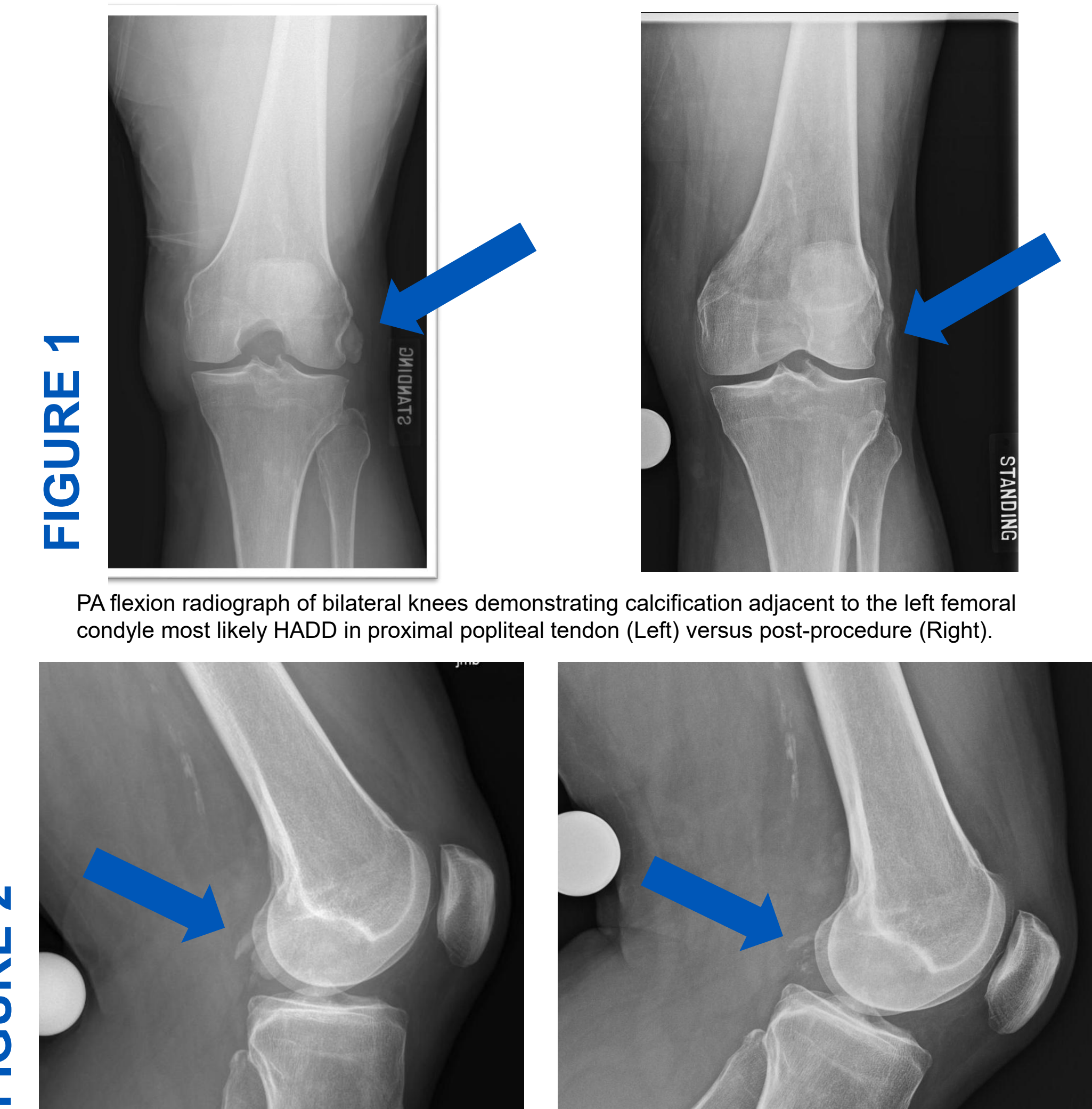


FIGURE 1
PA flexion radiograph of bilateral knees demonstrating calcification adjacent to the left femoral condyle most likely HADD in proximal popliteal tendon (Left) versus post-procedure (Right).

FIGURE 2
Weight bearing lateral radiograph of the left knee that demonstrates cross-sectional view of area of calcific tendinosis/HADD of popliteal tendon (Left) versus post-procedure (Right).

DISCUSSION

- Ultrasound-guided aspiration and lavage, well-established in shoulder HADD, was successfully applied to the knee, a rarely involved joint³
- Minimally invasive approach provided complete symptom relief without surgical morbidity
- Broader applicability: technique may extend to atypical HADD presentations

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