

# Persistent Weakness Without Pain Exacerbation: Iliopsoas Bursitis Following THA

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# **Background**

- Total hip arthroplasty (THA) is an effective procedure for improving mobility and reducing pain in advanced osteoarthritis.
- Postoperative complications most often manifest as pain, implant loosening, neurologic injury, or hematologic abnormalities.<sup>1,2</sup>
- No existing literature reports isolated hip flexion weakness without pain exacerbation or radiographic abnormalities attributable to iliopsoas bursitis following THA.<sup>3,4</sup>
- Iliopsoas bursitis is rarely recognized as a cause of isolated motor weakness and postoperative complication.<sup>3</sup>

## **Case Presentation**

#### 74-year-old male underwent right THA

- Postoperative baseline:
  - o right hip pain and gait abnormalities
  - <u>Isolated hip flexion weakness</u> with the <u>inability to lift</u> the right leg independently while seated
- Despite years of physical therapy and conservative management, symptoms persisted without improvement.
- Resisted hip flexion strength was 2/5 but nonpainful.
- Gait analysis demonstrated mild compensatory circumduction related to hip flexor weakness but no pain or instability.
- Kappoplsumasstra#da43Baligned, intact prosthesis with no evidence of loosening or fracture.

# **Imaging**



Figure 1. Anteroposterior and lateral standing radiographs of the pelvis and right hip demonstrating well aligned and intact total hip arthroplasty components without evidence of fracture, migration, or radiolucency.

### **Intervention & Resolution**

#### 4 years after right THA

- Underwent ultrasound-guided corticosteroid injection into the iliopsoas bursa.
- Within two months, complete resolution of weakness and full restoration of hip flexio?smfn2h.

#### Discussion

- Iliopsoas bursitis is a rare complication of THA.
- Anatomical location and variable clinical features further complicate diagnosis.<sup>5</sup>
- Nonoperative management of iliopsoas pathology, including ultrasound-guided corticosteroid injection, has been described as both diagnostic and therapeutic.<sup>4,6</sup>
- In this case, corticosteroid injection provided complete and durable recovery after years of failed conservative therapy, suggesting an inflammatory mechanism involving the iliopsoas bursa.

#### Conclusion

- Low-grade iliopsoas bursal inflammation can inhibit hip flexor function without pain or imaging abnormalities
- Corticosteroid injection may serve as an effective and minimally invasive treatment option for iliopsoas bursitis, restoring function and preventing unnecessary revision surgery.

## References

- DeFrancesco CJ, Kamath AF. Abductor muscle necrosis due to iliopsoas bursal mass after total hip arthroplasty. Journal of Clinical Orthopaedics and Trauma. 2015;6(4):288-292. doi:https://doi.org/10.1016/j.jcot.2015.05.002
- Beksaç, Burak, et al. "Extravascular Compression of the Femoral Vein due to Wear Debris-Induced Iliopsoas Bursitis: A Rare Cause of Leg Swelling after Total Hip Arthroplasty." The Journal of Arthroplasty, vol. 22, no. 3, 3 Apr. 2007, pp. 453–456, www.sciencedirect com/science/article/pii/S085854906003378, https://doi.org/10.1016/j.arth.2006.04.002.
- Conroy J, Caus S, Nelms NJ. A Case of Iliopsoas Bursitis With Compressive Femoral Nerve Palsy Treated With Iliopsoas Tendon Release. Arthroplast Today. 2022;14:148-153. Published 2022 Mar 18. doi:10.1016/j.ard.2022.02.004
- Corvino A, Venetucci P, Caruso M, et al. Iliopsoas bursitis: The role of diagnostic imaging in detection, differential diagnosis and treatment. Radiol Case Rep. 2020;15(11):2149-2152. Published 2020 Sep 3. doi:10.1016/j.radcr.2020.08.036
- and treatment. Radiol Case Rep. 2020;15(11):2149-2152. Published 2020 Sep 3. doi:10.1016/j.radcr.2020.08.036

  Douis, H., Dunlop, D.J., Pearson, A.M. et al. The role of ultrasound in the assessment of post-operative complications
- following hip arthroplasty. Skeletal Radiol 41, 1035–1046 (2012). <a href="https://doi.org/10.1007/s00256-012-1390-9">https://doi.org/10.1007/s00256-012-1390-9</a>
  6. Cheung YM, Gupte CM, Beverly MJ. Iliopsoas bursitis following total hip replacement. Arch Orthop Trauma Surg.