

## Lumbar Radiculopathy or Iliopsoas Rupture? A Rare Case of Iliopsoas Rupture Disguised as Lumbar Radiculopathy

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### Abstract

Isolated iliopsoas tears are a relatively uncommon cause of hip pain in adults. Making a diagnosis can be difficult, as it may be disguised by other common causes of hip pain, such as intra-articular pathology, sacroiliac joint dysfunction, and lumbar radiculopathy. This case illustrates a patient who presented with hip flexion weakness and decreased weight-bearing capacity who was eventually found to have an iliopsoas tear. This patient's situation is noteworthy because Patient chronic lumbosacral radiculopathy initially concealed the clinical presentation of patient iliopsoas rupture. A well-informed pain provider should consider the differential diagnosis of iliopsoas injuries in patients with hip pain that is refractory to conservative measures.

**Keywords:** Pain; Iliopsoas; Joint; Lumbar; Orthopedic.

### Introduction

Hip pain often results in significant functional decline and presents with a broad differential of diagnoses. Isolated iliopsoas tendon tears are relatively rare. Classically, they are associated with traumatic hip flexion injuries in athletes [1].

A traumatic iliopsoas tendon rupture is extremely rare, with an estimated prevalence of 0.66% [2].

Iliopsoas injury usually presents as severe groin pain that is refractory to conservative and interventional management [2]. Risk factors include age, steroid use, and degenerative joint disease [3]. Prompt diagnosis can be challenging as presentation is often masked by other common etiologies of hip pain, such as intra-articular pathology, sacroiliac joint dysfunction, and lumbar radiculopathy.

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## Methods

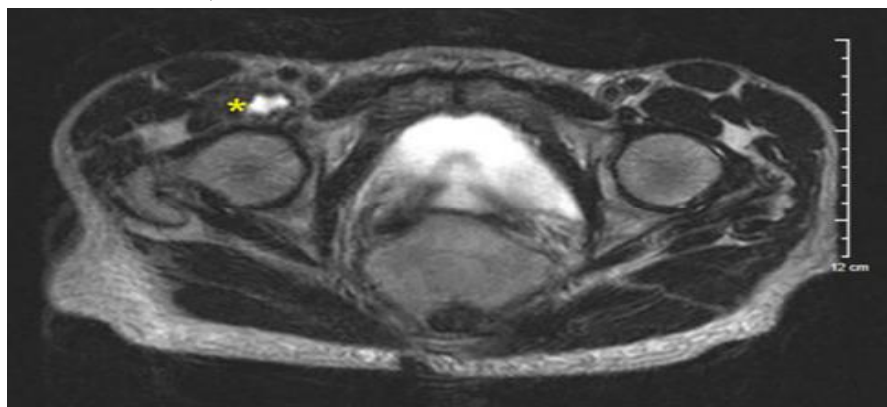
Researcher present the case of a 58-year-old female with a past medical history significant for hypertension and osteoarthritis of multiple major joints. Patient presented with a 6-month history of lower lumbar pain with concurrent deep right-sided anterior hip/anterior thigh pain in the setting of progressive gait dysfunction. Initial workup was significant for lumbar radiograph demonstrating moderate generalized lumbar spondylosis and electrodiagnostic (EDX) findings consistent with chronic right-sided S<sub>1</sub> radiculopathy. The patient was initially started on first-line pharmacologic agents and completed outpatient physical therapy without relief. Given that her lower lumbar pain appeared to radiate down the right leg in an L<sub>4</sub> distribution, Patient underwent an L<sub>4</sub>-L<sub>5</sub> transforaminal epidural steroid injection, which provided only transient relief. Patient was re-evaluated in the clinic, at which time

patient physical exam was consistent with bilateral SI joint dysfunction with provocative maneuvers positive for Fortin finger sign, tenderness over SI joints, Patrick's test, and Gaenslens test.

However, the patient was also noted to have hip flexion weakness with decreased weight-bearing capacity, which was not present in prior encounters. At this time, MRI imaging of the right hip was ordered.

## Result

MRI imaging of the right hip was completed and demonstrated a rupture in the distal portion of the iliopsoas tendon with associated retraction, surrounding hemorrhage, and tissue edema (Figure 1). The patient was referred to an orthopedic surgeon who recommended conservative, non-operative management in accordance with current guideline.



**Figure 1:** Coronal T1 Weighted MRI of Hip demonstrating rupture of distal portion of the iliopsoas muscle with surrounding hemorrhage and tissue edema.

## Discussion

Though the exact etiology of the Patient tear remains unknown, it is suspected that Patient ruptured the tendon during one of patient

falls between the last normal motor exam on 9/28/22 and the first abnormal motor exam demonstrating hip flexion weakness on 11/17/22. Our patient's presentation is unique

as patient chronic lumbosacral radiculopathy initially masked the clinical presentation of the iliopsoas rupture. Therefore, a well-informed clinician should consider the

differential diagnosis of iliopsoas injuries in patients with hip pain that is refractory to conservative measures and interventional treatment options.

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