

## **Chronic Lumbar Radiculopathy with Superior Cluneal and Superior Gluteal Neuropathy**

FERRAS ATASSI, VERED ARBEL, ADITI GUPTA, TAL AMASAY

Department of Kinesiology & Nutrition; University of Illinois at Chicago; Chicago, IL

---

*Category: Undergraduate*

*Advisor / Mentor: Arbel, Vered (varbel2@uic.edu)*

### **ABSTRACT**

**CASE HISTORY:** A 39-year-old female presenting with chronic left lower back pain radiating down the leg and affecting the gluteal region. The pain is described as burning and is accompanied by atrophy of the left gluteal muscles. Additional symptoms included muscle weakness and sharp spasms. Functional movements of daily living aggravated pain.

**PHYSICAL EXAM:** Examination identified a decrease in the circumference of the left thigh, tenderness in the Left gluteal region and anterolaterally hip joint, a decrease in ROM of the lumbar spine, muscle weakness on the left lower extremity, and antalgic gait pattern. **DIFFERENTIAL DIAGNOSES:** Lumbar Radiculopathy, Labral Tear of the hip, Superior Cluneal Nerve Neuropathy, Gluteal Nerve Neuropathy. **TESTS & RESULTS:** Left hip MRI showed a partial-thickness tear at the anterior labrum. Lumbar MRI showed STIR signal abnormality in the superficial medial left gluteal, trace punctate STIR abnormality at the inferior left sacroiliac joint, minimal retrolisthesis at L5-S1, and mild spondylosis. Electromyographic confirmed chronic left L5 radiculopathy, mild left superior cluneal neuropathy, and left superior gluteal neuropathy with chronic gluteal muscle atrophy. **FINAL DIAGNOSIS:** Chronic left L5 Radiculopathy, mild left Superior Cluneal Neuropathy, and left Superior Gluteal Neuropathy. **DISCUSSION:** Lumbar radiculopathy is a pain condition caused by compression or irritation of a nerve root in the lower back. Disc herniation may cause nerve impingement, leading to lumbar radiculopathy. It often occurs secondary to the spine degenerative processes. Prevalence is 3% to 5% of the population. Men are affected in their 40s and women in their 50s. Symptoms can mimic multiple pathologies, leading to potential misdiagnoses and faulty care. **OUTCOME OF THE CASE:** The physical therapy program included core strengthening, decompression techniques, and flexibility of the trunk and lower extremities. Neuropathic pain was managed using pharmaceutical treatments and nerve blocks. **RETURN TO ACTIVITY AND FURTHER FOLLOW-UP:** A multidisciplinary approach to managing chronic pain and a targeted treatment plan addressing the underlying causes enabled the patient to return to normal activities with improved function and quality of life and reduced symptoms.