

# *Hip Adductor Strain Misdiagnosed as Herniated Lumbar Disk: Case Report*

## *Lomber Disk Herniasyonu Olarak Değerlendirilen Bir Kalça Addüktör Strain Olgusu*

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### **ABSTRACT**

A 55 year old man was admitted in the physical medicine and rehabilitation ward with severe lower lumbar and left gluteal region pain that had radiation to lower extremity. The patient was uncooperative in physical examination and unable to stand and walk due to the severity of his pain. Magnetic resonance imaging and electrodiagnosis were in favor of herniated lumbar disk. However, after 17 days, the patient did not respond to conservative treatment. Therefore, he was scheduled for operation. But the unsaid history of falling down in swamp and careful physical examination revealed the hip adductor strain and he had a dramatic response to injection. (*J PMR Sci 2011;14: 54-6*)

**Keywords:** Herniated disk, injection, strain, rehabilitation

### **ÖZET**

Ellibeş yaşında kadın hasta fiziksel tıp ve rehabilitasyon kliniğine sol alt ekstremiteye yayılan şiddetli sol lomber ve sol gluteal ağrı ile başvurdu. Hasta fizik muayene iyi kooperere olamıyordu ve ağrının şiddeti nedeniyle ayakta durmakta ve yürümekte güçlük çekiyordu. Manyetik rezonans görüntüleme ve elektrotanısıl inceleme lomber disk hernisi lehine idi. Ancak hasta 17 gün boyunca konservatif tedaviye yanıt vermedi. Bu nedenle operasyon planlandı. Ancak daha önce belirtilmeyen çamuda düşme öyküsü ve dikkatli bir fizik muayene kalça addüktör strainini ortaya koydu ve hasta lokal injeksiyona dramatik yanıt verdi. (*FTR Bil Der 2011;14: 54-6*)

**Anahtar kelimeler:** Hernie disk, injeksiyon, strain, rehabilitasyon

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### **Introduction**

A significant amount of the upper medial thigh damages are hip adductor injury caused by tensile overload. Adductor tendons injury (strain) is frequently encountered in gymnastics, horseback riding, ice hockey, soccer, skiing, and other kicking sports. These strains can be due to acute or repetitive overload (1-5).

Here, we present a 55 year old man with the signs and symptoms similar to a radiculopathic process although eventually he was found to be a case of adductor tendinopathy.

### **Case**

The patient was a 55 year old man that was referred with the chief complaint of severe low back pain and radiation to

the left lower extremity. Pain was suddenly started after drawing a heavy object about 10 days prior to admission. Also, pain intensity increased with time and he became bedridden 3 days prior to admission. Past medical history was unremarkable. He had just taken some analgesic medication such as acetaminophen during this period.

Physical examination at admission time revealed an irritable, restless and uncooperative patient due to severe pain. He was unable to turn in bed, stand and walk. General physical examination had no significant positive finding. He did not tolerate passive or active movement of the left lower extremity but the other extremities had normal manual muscle testing and the range of motion. Sensory testing was unremarkable. The patient avoided lying prone for palpation of the back and he resisted doing the straight leg raising test at the left side. Deep tendon reflexes were 0/2 at the left knee and left ankle and the others were normal. Skin texture and the pulse of the extremities were normal. VAS (Visual Analog Scale) was 10/10 and FIM (Functional Independence Measure) of mobility was 1/7.

With the differential diagnosis of herniated lumbar disk, brucellosis and occult malignancy work ups were done. Just in magnetic resonance imaging of the lumbosacral area hemangioma of T12 and L1, diffuse disc bulging at the level of T12 – L1 with no pressure effect and disc protrusion of L4 –L5 with pressure effect over the left side nerve roots and focal stenosis were detected (Figure 1).

For the patient, medical treatment (muscle relaxant, analgesic and sedative) and physiotherapy were prescribed. Also, acupuncture and tender points injection were done, all being ineffective. After 17 days of admission, neurosurgical

consultation was done and he was scheduled for the laminectomy of the L4-L5 vertebrae.

Finally, a friend of the patient reported that he had fallen in swamp just one day before the onset of his pain. After that, careful physical examination revealed significant tenderness at the medial side of the groin on the hip adductor tendons. Requested X-ray and sonography of the hip were unremarkable. Injection of this area with 40mg Methyl prednisolone Acetate plus 2cc Lidocaine 2% showed dramatic improvement. One day later, he had just a mild pain and walked independently without any walking aids. VAS was 3/10 and FIM of mobility changed to 6/7. The schedule of surgery was cancelled and he was discharged. Visiting the patient after 10 days revealed complete recovery, normal walking and ability to return to his job.

## Discussion

Although the hip adductor strain is not as widespread as other lower extremity injuries, it might occur in some sports or overload injuries and it may be misdiagnosed as herniated lumbar disk, extra spinal sciatica, or unexplained sciatica. Also, differential diagnosis should be made with avascular necrosis of the femoral head, ankylosing spondylitis, rheumatoid arthritis, gout, pseudogout, and less often with hemochromatosis and synovial chondromatosis (6). The possibility of brucellosis should be considered in endemic areas as well and must be differentiated from an intervertebral disc herniation (7-9). However, most of these differential diagnosis did not explain the features of our patient. For example, pain is not the major clinical manifestation of avascular necrosis of the femoral head. Also, laboratory studies such as rheumatologic markers were in the normal range.

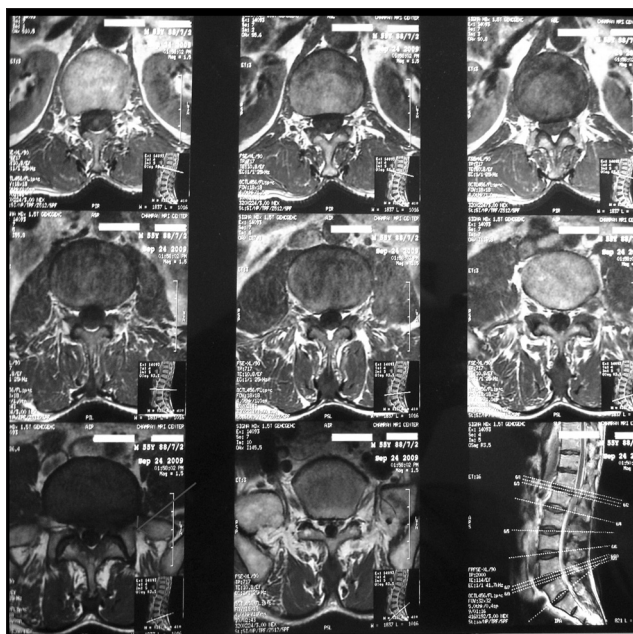
Although initially in our case clinical and radiological findings were in favor of L4- L5 disc herniation, the main problem was over adductor region that was found finally by precise history and physical examination. So, in addition to a radiculopathic process, he was suffering from an adductor tendinitis that had no direct relation with his concomitant radiculopathy and resolved with injection of adductor tendons.

Therefore, accurate diagnosis of radiculopathy is possible only in case of a cautious history, skillful physical examination, and suspicion about other conditions to prevent unnecessary surgical interventions.

List of abbreviations  
mg: milligram  
CC: cubic centimeter

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**Figure 1. Disc protrusion of L4 –L5 with pressure effect over left sided nerve roots and focal stenosis (arrow)**

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