To the editor:

A 24-year-old woman was admitted with low back pain radiating to the right leg. She had been complaining of mild low back pain for 3 years. On physical examination there were no neurological deficits except for slight hypoesthesia of the right L5 dermatome and mildly painful lumbar spine movements. The severity of pain was at level 5 on the Visual Analogue Scale (VAS). We treated conservatively using nonsteroidal anti-inflammatory drugs, hot applications and organized activities of daily living lasting for a week. We performed a lumbar MRI (magnetic resonance imaging) scan because there were no changes in the clinical findings of the patient. The pathological evaluation was proposed by the radiologist for differential diagnosis because of the appearance of a pathological mass or a giant mass of extruded disc herniation at the L5-S1 intervertebral disc level and a compressed right S1 nerve root (Fig.1). Two surgeries, a right-L5 laminectomy and a L5-S1 microdiscectomy, were performed after consultation with the neurosurgery clinic. Pathological examination showed that the mass was part of the herniated disc fragment. Postoperative pain (VAS:3) decreased and the patient was followed under conservative treatment with monthly controls. During this period, the clinical findings of the patient did not change. After postoperative 4 months, lumbar MRI showed that the right paramedian extruded disc herniations at the L5-S1 disc level were smaller than in the previous image (Fig 2).

There are four stages in the development of a herniated disc, from disc bulging to sequestration. There is no correlation between the clinical findings and the size of the hernia [1]. Moreover, there is not yet a consensus on which method of treatment should be chosen in which stage of lumbar disc herniation (LDH) [2,3]. In recent years, because MRI scanners have become easily accessible, it may sometimes be decided to proceed with surgery according to the size of the disc herniation, ignoring the patient’s clinical status [2,3]. However, better regression resulting from conservative management of large disc herniation has been reported [3]. Therefore, it is argued that the patient should not be rushed to surgery based on the size of the hernia material on a MRI [2]. A massive LDH might resemble pathologic masses such as schwannoma or meningiomas [4]. In this case, consultation with radiologist for differential diagnosis is essential. In this way, confirmation of a pathologic diagnosis in cases where a massive LDH can not be distinguished from a tumor, as in our case, will be accurate.

Figure 1. Sagittal and transvers T2-weighted MRI of the lumbar spine shows giant mass of extruded disc herniation that was at the L5-S1 intervertebral disc level and compressed right S1 nerve root or pathological mass

Figure 2. Sagittal and transvers T2-weighted lumbar MRI (postoperative) showed that right paramedian extruded disc herniations are smaller than in the previous image in the L5-S1 disc level

References