

Intraforaminal and extraforaminal far lateral lumbar disc herniation (a review of 63 cases)

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Abstract

Background: Far lateral discal herniation is an uncommon disorder and is difficult to assess by physical examination alone. This study is designed to define clinical and epidemiological findings and to establish the indications of surgical and medical treatment for FLLDH.

Methods: Between 2000 and 2005, a total of 2035 patients with lumbar disc herniation underwent surgical discectomy by the authors in several neurosurgical centers in Mashhad. Among these patients, 63 (3.1%) had FLLDH (42 men and 21 women). Clinically these patients had unilateral radicular pain with or without paresis. SLR was positive in 100% of cases. Conservative therapy consisting of bed rest, nonsteroidal anti-inflammatory drugs and physiotherapy had failed. We used a combination of classical interlaminar approach and the intertransverse route through a midline approach for the treatment of our patients.

Results: From 63 cases in our series, 42 were men and 21 were women. 19 patients had extraforaminal and 44 had foraminal disc herniation. The most common level for far lateral discal herniation was L4-L5. Our patients had LBP in 43.6% (27 cases) and positive SLR and radicular leg pain in 100% (63 cases). In all patients leg pain was relieved immediately after surgery.

Conclusion: FLLDH should be considered in all cases with lower limb radiculopathy. These patients have more severe radicular pain than patients with paracentral lumbar disc herniation. FLLDH happens more frequently at L4-L5 and L3-L4 levels. It can often be difficult to diagnose or easily overlooked on radiographic studies. In almost all cases, conservative treatment is unsuccessful and surgical treatment is recommended.

Keywords: far lateral disc, lumbar spine, foraminal and extraforaminal, disc surgery.

Introduction

Lumbar disc herniation is one of the most common medical and surgical problems all over the world. The vast majority of lumbosacral radiculopathies are caused by para-

central herniation. However, Hood reported that far lateral lumbar disc herniation (FLLDH) accounts for 2.8 – 10% of all disc herniations.

Over 75% of FLLDHs occur at the L3–L4 and L4–L5 levels. In addition, FLLDH presents a clinical challenge, since it can be diffi-

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