Investigation of Surgery Characteristics in Patients with Spondylolisthesis, Rasht, Iran from 2006 to 2011

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Background & Aim: Spondylolisthesis is a visible deformity in lumbosacral region with vertebral slip and fracture or other deformities of pars interarticularis. This study aims at investigating the characteristics of spondylolisthesis surgery in operated patients.

Methods & Materials/Patients: This is a retrospective study which included all the patients who had undergone spondylolisthesis surgery by one same surgeon from 2006 to 2011. Demographic characteristics such as age, gender, and surgery information including type of spondylolisthesis, incision site, laminectomy site, foraminotomy site, fixation site of vertebra and site of vertebral disc evacuation were collected. The data were analyzed using SPSS (Version16).

Results: 52 of 63 enrolled patients were women (82.5%) and 11 men (17.5%) with mean age of 49.6 years. Based on frequency, spondylolisthesis types were 60 degenerative (95.2%), 2 post-surgical (3.2%) and 1 post-traumatic (1.6%), respectively. 58 patients had spondylolisthesis only in one vertebra and 5 patients in two vertebrae. The total number of slipped vertebrae was 68, in which slip was seen in L3, L4 or L5 vertebrae. In 42 patients, laminectomy was performed only in one vertebra, in 19 patients in two vertebrae, in 1 patient in three vertebrae and in 1 patient in five vertebrae. The total number of vertebrae with foraminotomy was 106. The highest frequency of foraminotomy was seen in L5, L4, and S1 vertebrae, respectively. Except in one case, the rest 62 patients underwent fixation surgery in two or three vertebrae.
**Conclusion:** Based on the results, the frequency of spondylolisthesis was approximately five times in women compared to men. The most common type was degenerative spondylolisthesis. Type of surgery was fixation with pedicle screw and fusion.

**Keywords:** Surgery; Characteristics; Spondylolisthesis