

SUMMARY

The present study involved 4 patient suffering from sciatic pain with or without low back pain, and other manifestations of lumbosacral root(s) compression. All the patients were proved to have a lumbar disc prolapse both clinically and radiologically. They were failed to respond to conservative measures for adequate period and were scheduled for surgery in neurosurgical departments of Benha University Hospital and Gamal ABdel Naser Health Insurance Hospital in Alexandria.

Patients were distributed into two groups nearly similar in their signs and symptoms. Group I patients were operated upon through hemilaminectomy and group II patients were operated upon through fenestration. Both groups were evaluated postoperatively in the first week and then followed up for three months in a monthly visits and all the results were tabulated and discussed in relation to results in the literature.

There was a male predominance among our patients and male to female ratio was 2.6:1. The most affected age group was the age group 30-40 years old. Most of our patients were heavy workers 67.5%.

Leg pain was the constant complain in all the patients associated with back pain in about 77.5% of all patients.

On clinical examination motor deficits were encountered in 30% of patients with a positive stretch signs in about 92.5% of patients and diminished reflexes in about 52.5% of all patients. Back signs were reported in about 85% of all patients and were mainly in the form of scoliosis, local tenders, diminished mobility, kyphotic deformity, loss of lumbar lordosis and paravertebral muscle spasm.

- One patient was impotent preoperatively.
- C.T. scan lumbar spine was used as a diagnostic imaging study in 31 patient, myelogram in eight patients and MRI in only two patients one patient was investigated with a myelogram and was not conclusive so a C.T. scan was asked for and was positive.
- Disc protrusion was reported in the level of L5S1 in 19 patient (47.5%) and L4-5 level in 18 patients (45%) and L3-4 level in only three patients (7.5%).
- Intraoperatively the level of disc protrusion diagnosed by image studies was correct in all the cases, also intraoperatively a thick ligamentum flavum was recorded in 4 patients and a lumbar canal stenosis in one patient.
- The over all results were good and the best relieved signs and symptoms were in order, leg pain, tension signs, back signs. The least relieved signs and symptoms were in order, reflex changes, sensory changes and motor weakness.
- Results of leg pain in the end of the third month was good in about 90% of patients in group I and in 90% also in patients in group II.

- Back signs were relived in 75% of patients in group I and in 83.3% in patients of group II.
- Motor weakness was improved in 66.7% of patients in group I and in 50% of patients in group II.
- Tension signs were Absent in 88.9% of patients in group I and in 94.7% of patients in group II.
- Reflex changes were improved in 27.3% of patients in group I and in 30% of patients in group II.
- Sensory changes were Absent in 69.2% of patients in group I and in 71.4% of patients in group II.
- Postoperative complications included one case of wound infection which was resolved without sequelae, one case of discitis which was improving by the third month of follow up and one case of C.S.F leakage which was transient and controlled conservatively without any complications.
- A poor outcome was encountered in the patient with preoperative impotence who continue to complain of leg pain, back pain, persistent numbness.