"CORRELATION OF SYMPTOM COMPLEX AND MRI FINDINGS IN PATIENTS WITH INTERVERTEBRAL DISC PROLAPSE AND PREDICTING THE OUTCOME AT SHORT TERM FOLLOW UP"

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ABSTRACT

BACKGROUND

Lumbar disc herniation is one of the common cause for lower back pain. In India we have numerous activities which involve bending and twisting of the spine. For example,the religious postures, sitting crossed leg, squatting and cleaning the floors.Due to these reasons there is a higher possibility of asymptomatic disc degeneration and herniation in Indian population compared to that of the West. The same extent of lumbar disc herniation may be asymptomatic in few patients but can cause symptoms of severe spinal nerve root compression in others. MRI is the investigation of choice in such to assess neural compression and to delineate the alterations in the anatomy and tissue properties of the lumbosacral disc, which then has to be considered in the clinical context. MRI is done routinely for patients with suspected intervertebral disc prolapse, one is not sure which of the MRI findings are clinically relevant, and have diagnostic as well as prognostic value[3].In other words MRI alone is not enough to retrieve the cause of low back pain with radiculopathy, Correlating clinical signs and symptoms with MRI findings remains essential to determine which of the detected abnormalities are symptomatic. Therefore there is a need for study of Correlation of symptom complex and MRI findings in a suspected intervertebral disc prolapse patients and whether one can predict the outcome for the patient in a short term follow up study.

AIMS AND OBJECTIVES

1) Correlation of clinical signs and symptoms with MRI findings in a patient with IVDP.

2) To investigate whether history and physical examination (signs and symptoms) can predict the outcome.

3) To investigate whether MRI findings can predict the outcome.

METHODS AND OBSERVATIONS

75 patients of intervertebral disc prolapse patient were taken up for studyPatients underwent Clinical evaluation, ODI scoring, SPWT test and VAS scoring for leg pain and back pain and X-rays and MRIs. On their initial visit to OPD patient clinical signs and symptoms were recorded as baseline and followed up at 4 weeks interval. Patient MRI findings were then correlated with symptom complex. It was observed that drastic reduction in ODI scores seen at the end of 12 weeks with good improvement in VAS scores and most of patients returning back to their daily activities. A good correlation was made between symptom complex and MRI findings however predictors of outcome could not be established.

RESULTS AND CONCLUSION

MRI is the investigation of choice for diagnosing the exact level of involvement and it is well correlating with patient symptoms. Gender, obesity, symptomatic level and presence of positive stretch test showed no significant association. Patients with ODI score above 60% and presence of higher level (L3-L4) was found to predict unfavorable outcome. Presence of neurological deficits and nerve root involvement in MRI were not significant to predict patients outcome.

Keywords- Lumbar canal stenosis (LCS); Owestry disability index (ODI);NCOS (Neurogenic claudication score); VAS (Visual analogue scale)