

ABSTRACT

The Efficacy of Radiofrequency in Radicular Pain among Lumbar Disc Herniation Patients

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Introduction : In recent years, pulsed radiofrequency have been used as a minimally invasive pain interventions. However, various studies on efficacy of pulsed radiofrequency as modalities for the treatment of radicular pain in lumbar disc herniation have varied results.

Aims : This study aims to determine the efficacy of pulsed radiofrequency in reducing radicular pain among lumbar disc herniation patients compared with conservative treatment.

Methods : This is a quasi experimental research. There were 50 subjects that fulfilled the inclusion criteria and divided into intervention grup (n=25) and control grup (n=25). The intervention grup was given once pulsed radiofrequency in the dorsal root ganglion. All subjects were assessed for Visual Analog Scale (VAS) in 0-100 mm and Oswestry Disability Index (ODI) before treatment, 1 week, 2 weeks and 4 weeks after treatment.

Results : After 1 week, 2 weeks and 4 weeks, the VAS decreased in the intervention grup was statistically significant than in the control grup. Four weeks after the intervention, the VAS score decreased in the intervention grup (mean VAS = -78,520, SD = ± 16,880) more significant then in the control grup (p = ≤0,001). The ODI score decreased in the intervention grup (mean ODI = -61,800, SD = ± 20,067) more significant than in the control grup (p = ≤0,001). The NNT was 1,19 until 2,08 and the NNH was 100.

Conclusion : Finding demonstrated that after 1 week, 2 weeks and 4 weeks pulsed radiofrequency more efficacious in reducing radicular pain among lumbar disc herniation patients than conservative therapy.

Keywords : efficacy, lumbar disc herniation, pulsed radiofrequency, radicular pain.