

Abstract # 21

Efficacy of Epidural Triamcinolone and Methylprednisolone in Low Back Pain with Sciatica

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Introduction: 80% of the population suffers from back pain at some time during life. It is the cause of considerable disability and loss of work days, resulting in economic hardship to the patients. It is by far the most common condition seen in the pain clinics. The cause of backache with sciatica often remains obscure. Many modalities of non surgical treatment have evolved; including bed rest, physiotherapy, manipulation, traction, corsetry, drugs, etc. Our study is to find out the efficacy of epidural steroid therapy for the treatment of low back pain.

Methods: 131 ASA Grade I and II patients of chronic low back pain with sciatica were studied. Patients with known cardio-respiratory/endocrine disorders were excluded from the study. The patients were randomly divided into two groups (chit-in-a-box-technique) on the basis of whether they received methylprednisolone (N=51) or triamcinolone (N=50) epidurally. Each group was again divided into two sub-groups on a random basis for either lumbar route (L) or caudal route (C). Group I-L (N=25) Group I-C (N=26) Group II-L (N=27) Group II-C (N=25). Three epidural injections were given at monthly intervals and the patients were followed up in the 2nd, 6th, 12th and 16th weeks. Straight Leg Raising Test (SLR) and Lasegue's test were done prior to the epidural injections, after each such injection and during the follow-ups. Pain was assessed by the Visual Analogue Scale, (modified according to the patient's individual perception) in percentile. Data obtained from all patients, were analyzed using chi square test and t- test (paired and unpaired), $p < 0.05$ was taken as significant.

Results were categorized into 4 groups –

Excellent: Complete relief of pain and other symptoms, no work restriction and no need for further treatment.

Good: Complete or near complete relief of pain and other symptoms.

Fair: Pain and other symptoms of moderately decreased intensity with moderate work restriction, patient needs further active treatment for lumbosciatic pain.

Poor: No relief, unable to work, requires further hospitalization or surgery.

Results: Out of 103 patients, 63 (61.17%) had good improvement of pain, 20 (19.42 %) had excellent improvement, and 11 (10.68 %) had fair improvement. There was no significant difference in distribution of patients among the two groups. There was no significant difference in terms of route of injection (Lumbar/caudal) within the groups. 78.43% of patients in Group I (methylprednisolone) had excellent to good result as compared to 82.69% of patients in Group II (triamcinolone). Fair to poor result were seen in 21.57% in Group I and 17.3% in Group II respectively.

Discussion: Our study shows that reaching the epidural space and injecting the right medication there, is more important than the route employed. As far as drug groups are concerned, there was no significant difference in the overall result, as both the drugs are steroids, have duration of action of 12-36 hours, have elimination half life of 2-4 hours and have the same anti-inflammatory potency. Therefore, both are equally efficacious.

Conclusion: Epidural steroid injection, through either caudal or lumbar route, is a good conservative means of treatment for chronic low backache with sciatica.

References:

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