

Epidural Corticosteroids Infiltrations For Lumbar Stenosis: A Prospective Study

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Introduction

Lumbar stenosis (LS) is a major cause of lower back pain and functional disability. Major symptoms are low back pain and radicular claudication. Medical therapeutic options include painkillers, NSAIDS, Steroids, antiepileptic drugs and epidural infiltrations. Surgery is indicated when medical treatment fails.

Methods

This prospective study was conducted on 60 patients presenting to our institution. Isolated LS was suspected after physical examination and was confirmed by MRI. All our patients were treated with NSAIDS and antiepileptic drugs (Gabapentin 800 mg daily) for 6 weeks. 7 patients had laminectomy during the year of follow-up and were excluded from the statistical analysis; 53 patients were followed-up for 1 year (88.3%).

The treatment protocol consisted of three interlaminar epidural infiltrations under fluoroscopic guidance of 80 mg Methylprednisolone and 100 mg of Lidocaine administered at 2-weeks interval at the level of the stenosis. Evaluation was done using 4 scales:

- Visual Numerical Scale (VNS)
- Roland5 Point Scale (R5PS)
- Walking distance (WD) (0 to 4)
- Patient satisfaction scale (PS)

Conclusions

Based on our results, ESI are efficient in LS. Our study correlates with many results in the literature although few studies were conducted exclusively on LS. We attributed the efficacy of steroids to their probable ability to block the nociceptive pathways and to their effect on prostaglandins

As an alternative for medical treatment, ESI could be a promising option before indicating surgery in LS, or in surgery contraindications.

Results

Mean VNS: D0: 7,27 (4-10), D15: 3,13 (0,5 to 6), 1y: 3,45 (1 to 6) (p <0.0001)

Mean R5PS: D0:4,08 (3 to 5), D15: 1,85 (0 to 3), 1y: 1,83 (1 to 4) (p<0.0001)

Mean WD: D0: 1,85, D15: 3,34, 1y: 3,34 (p<0.0001)

50% amelioration of VNS: D15: 71.1%, 1y: 67.9% (p<0.0001).

50% amelioration of R5PS: D15: 75.5%, 1y: 75.5% (p<0.0001)

50% amelioration of WD: D15: 50.9%, 1y: 52.8%

PS: Very good and good results=65%, Average and bad results=35%.

Learning Objectives

By the conclusion of this session, participants should be able to:

- Describe the importance of lumbar epidural infiltrations in Lumbar stenosis
- Discuss the effectiveness of epidural steroids infiltration in lumbar stenosis
- 3) Identify an alternative treatment fo Lumbar stenosis

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