

## **A Comparison of the Efficacy of Transforaminal Triamcinolone with and Without Low Dose dexmedetomidine in Radicular Low Back Pain Patients**

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### **Abstract**

Low back (LBP) pain is a common health problem all over the world. Many people suffer from low back pain at some stage of their life. Sixty percent of the Indian population has significant low back pain at some time or the other in their life time.

**Aims and Objectives:** To compare the analgesic efficacy of transforaminal triamcinolone with or without low doses of dexmedetomidine for the treatment of low back pain.

**Material and Methods:** This prospective randomized double blind controlled trial was conducted on Thirty patients (30 in each group) in age group 18-65 years of either sex having low back pain and fulfilling the inclusion and exclusion criteria at MGM Medical college, Navi Mumbai. Institutional ethics committee permission was taken. The study was conducted for a period of 2 years from June 2016 to May 2018. All patients of either sex with age between 18-65 years having incapacitating chronic (several months to several years) low back pain and sciatica unresponsive to non-invasive treatments; suspected arachnoiditis, prolapsed disc, no abnormality, or inconclusive findings were included. All the patients were assessed at least 1 week prior to the procedure and a standard treatment protocol was advised to them, i.e., combination of oral tramadol 37.5 mg+paracetamol 325mg and gabapentin 300 mg two times a day. All the collected data was entered in Microsoft Excel sheet and then transferred to SPSS software ver. 17 for analysis.

**Result:** The mean age of patients in Groups 1 and 2 was  $41.77 \pm 5$  years and  $40.27 \pm 4.4$  years respectively. Statistically, there was no significant difference between the groups ( $p= 0.22$ ). The mean weight of patients in Groups 1 and Group 2 was  $59.17 \pm 9$  and  $60.43 \pm 9.4$  kilograms respectively. The mean height of patients in Groups 1 and 2 was  $159.97 \pm 6.5$  cm and  $160.83 \pm 9.4$  cm respectively. The gender ratio (Male: Female) in patients of Group1 was 18:12 and in patients of Group2 was 21:9 and were comparable p value was 0.417. mild, moderate and severe VAS was observed in 30%, 36 % and 34% of Triamcinolone group (Group 1) respectively while in Triamcinolone + Dexmedetomidine ( Group 2) it was observed in 62 %, 22 % and 16 % of study population and this difference was statistically significant.

**Conclusion:** This study demonstrates that addition of dexmedetomidine with triamcinolone via a transforaminal epidural injection showed major difference in effectiveness for chronic low back pain when compared with triamcinolone alone during early postoperative days (7 day).

### **Keywords**

- Comparison
- Efficacy
- Transforaminal Triamcinolone
- Dosedexmedetomidine Low Back Pain