Outcome of Caudal Epidural Steroid Injection in Chronic Low Back Pain

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ABSTRACT
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**Introduction:** Caudal epidural injection can be considered in persistent low back or sciatic pain not responding to conservative measures. There has been dramatic increase in the use of epidural steroid injection. They are now one of the most commonly performed procedures in the United States for the management of low back pain.

**Study Design:** Experimental study

**Place and Duration of Study:** The study was conducted at Liaquat university Hospital and a private practice setup during the period from may 2009 to December 2011.

**Materials and Methods:** Numeric rating scale (NRS) was used to document the intensity of pain. (0 no pain, 1-3 mild pain, 4-6 moderate pain, and 7-10 sever pain.)

Inclusion criteria were adult patients between the ages of 18 to 60 years. History of moderate to severe lower back for a minimum period of 8 weeks. Exclusion criteria History of trauma, tuberculosis, and tumor related to the spine. Previous history of spine surgery. Uncontrolled medical illness, pregnancy. Sensitivity to injection drugs.

A mixture of 9 ml of 1 % lidocaine and 1ml (40 mg) of methyl prednisolone was taken in a 10 cc syringe. Anatomical landmarks were palpated and a 20 gage spinal needle was passed in sacral hiatus without fluoroscopic control. Hoosh test was performed and the mixture was injected. The injection was repeated a total of three times in non responders. Second injection was given after 48 to 72 hours and third after 2 weeks of second injection.

The results were assessed soon after first injection, after two week, six weeks, three months and six months. Pain relief was taken as significant when 50% or more of reduction was seen in NRS.

**Results:** A total of 50 patients were included in the study. Mean NRS at base line was 6.8. Thirty two out of 50 patients show significant pain relief (50% or more reduction in NRS from base line) after single injection and were pain free at 6 months.

Eighteen out of 50 patients show no relief soon after injection. The procedure was repeated in these patients and a total of three injections were given. Among these patients only 8 responded with significant pain relief which was sustained for 6 months. The remaining 10 (20%) patients did not responded and had no pain relief after third injection. These patients were referred to specialized centers. Mean NRS in 50 patients soon after injection was 3.86, after two weeks it was 3.56, after 6 weeks 2.64. Ten non responding patients were referred to
specialized centers at this stage and in the remaining 40 (80%) patients became totally pain free at 3 and 6 months after injection.

**Conclusion:** caudal epidural steroid injection is effective in patients with chronic low back pain. In majority of patients good long term pain relief is achieved. The procedure is easy to perform and has low complication rate. Failure rate may be high if the injection is performed without fluoroscopic control.

**Key Words:** caudal steroid, back pain.

**REFERENCES**


18. Caudal Epidural Steroid Injections Bentley A. Ogoke, MD Pain Physician 200;3(3).


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