



A STUDY ON CERVICAL EPIDURAL INJECTIONS FOR RADICULOPATHY IN UPPER LIMB PAIN

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ABSTRACT

INTRODUCTION -

Cervical radiculopathy is because of an abnormal process that involves the nerve root. The most common reason of this radiculopathy is Cervical Disc herniation or cervical Spondylosis. The aim of our study was to give cervical epidural injection to those patients who had radicular symptoms more than 6 months and see the post injection VAS score pre and post injection.

MATERIAL AND METHOD -

Patients attending orthopaedics OP with pain in neck region radiating to one or both upper limb and who has undergone a trial of conservative management for minimum 6 months, these patients have been included in this study. Patients were given Cervical Epidural Steroid, pre and post VAS score was observed on consecutive intervals of 2nd Post-op day of Injection, 3 month and 6 month.

RESULTS -

Most of the patients complaining with radiculopathy were female. The mean duration of symptoms was 1 year. The mean age was 46.8 years and the youngest being 32 years and the eldest being 59 years. The patients who were mostly involved were labourers (60%). All the patients were followed up for a duration of 6 months starting from 2nd post injection day, 3 week, 3 month, 6 month follow-up. There was no immediate or late complication noted.

CONCLUSION -

It was observed that the patient most of the patient post-cervical epidural injection had relief of symptoms. Many of the patients remain pain free for the entire duration of follow-up, hence a single shot of cervical epidural is helpful cervical disc without any severe complication to the patient before planning for any operative intervention.

KEYWORDS : Upper Limb, Radiculitis, VAS Score, Cervical Epidural, Cervical Pain, Neck Pain

INTRODUCTION:

Chronic neck pain with or without upper extremity pain due to inflammation of nerve root is common in general adult population. Chronic neck pain is associated with significant economic, social and health impact [1]. Cervical radiculopathy affects approximately 83 per 100,000 population per year [2]. It is due to an abnormal process that involves the nerve root, caused mostly by cervical disk herniation or cervical spondylosis. The symptoms of cervical radiculopathy are neck and brachial-radicular pain, with or without motor weakness or paresthesia, in 80%–100% of patients [1]. However, local corticosteroid injections may be indicated in patients who have persistent radicular pain. Percutaneous injection therapies are being reported and used for lumbar radicular pain with increasing frequency [3 – 5]. Lidocaine may improve intra-neural metabolism and reduce inflammatory mediators [6-12]. The purpose of our study was to evaluate the efficacy of cervical epidural corticosteroid injections to control pain in patients.

METHODS AND MATERIAL:

Total 80 patients who meet the inclusion criteria were included in the study. Patients were explained in details about the procedure and informed consent was taken. Patients in the age group of 30 to 60 years with cervical pain with or without radiculopathy who were previously been managed with other conservative modalities of treatment but not relieved were included in the study. Pain relief was calculated in terms of VAS.

OBSERVATION AND RESULT:

All 80 patients were considered in this study with follow-up up to 6 months. Mean duration of symptoms was 1 year. Mean age of 46.8 years with youngest being 32 years and eldest being 59 years, 44 patients (55.00%) were female. 60% of the patients who came with complain of pain were labourers. On 2nd Post op day after injection 80 patients (100%) had complete relief from pain, with 8 patients had mild pain at entry site of injection. At 3-week follow-up all 80 patients (100%) had complete relief from pain with return to routine

day-to-day activity. At 3 month follow-up 70 patients (87.50%) had complete relief with complete routine activity, 4 patients (5%) had more than 75% relief with complete day to day activity, 2 patient (2.50%) had more than 50 % relief and 4 patients (5%) complained of pain similar or worse than before Epidural Steroid Injection. At 6 month follow-up 60 patients (75.00%) had complete relief from pain and complete routine activity, 0 patients (0.00%) had more than 75% relief, 6 patients (7.50%) had more than 50 % relief and can do their routine activity without any difficulty, 14 patients (17.50%) complained of pain similar or worse than before Epidural Steroid Injection. There was no immediate or late complication noticed in all 80 patients.

DISCUSSION:

In a review of the literature, Ellenberg and colleagues concluded that when groups of patients with proved cervical radiculopathy are treated nonsurgically, ideal outcomes may occur in 80%–90% of cases. Surgery should be reserved for patients who have unremitting pain despite careful nonsurgical treatment, progressive weakness, and/or new or progressive cervical myelopathy. However, in another randomized study conducted [18] found that the surgery, physiotherapy, or a cervical collar in patients who had cervical radicular pain of at least 3 months duration was equally effective in the long term. Such injections should usually be performed after 2–3 months of medication [3]. In our study all 40 patients showed complete pain relief at 2 weeks. At 2 month follow-up 5% of patients started complained of pain similar or worse than before Epidural Steroid Injection. At 6 months 75.00% patients had complete pain relief and back to complete routine activity, 17.5% had partial relief but could be able to do their routine activity without any difficulty, only 7.50% patients complained of pain similar or worse than before Epidural Steroid Injection. Tolerance of the procedure was good in all 40 patients. There was no immediate or late complication noticed in all 40 patients. Our results suggested that corticosteroid injections should be considered as a complementary step in the course of conservative treatment. An inflammatory response at the level of the lumbar nerve root or disk

herniation has been demonstrated (15–16). Steroids have been proved to block C fiber activity, their injection near the dorsal root ganglion in the intervertebral foramen may explain the previously reported break in the self-maintained pain cycle (16). The correlation between radicular and neck pain relief after periradicular injection suggests that the effects of steroids on the disease process that involves the nerve root include the relief of not only radicular pain but also neck pain and that the nerve root that causes radicular pain might also be responsible for neck pain.

CONCLUSION:

A substantial durable pain relief occurred immediately after epidural corticosteroid injection and it last for more than 6 months in 75 % of patients. The fluoroscopically guided approach ensures the correct placement of needle and epidural cocktail. It also ensures the safety of vital structures such as cord and provides a safe stopping point before it enters in a subdural space of spinal cord. Hence this treatment can be very much effective as a complementary step before invasive treatments.

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