

## ORIGINAL RESEARCH PAPER

Neurosurgery

## INTRA-OPERATIVE LOCAL INJECTION OF TRIAMCINOLONE OVER INFLAMMED LUMBAR ROOT DURING MICROLUMBAR DISCECTOMY

**KEY WORDS:** 

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#### AIM:

To inject steroid (triamcinolone) over the involved and inflammed roots during micro lumbar discectomy to reduce immediate post operative pain.

#### INTRODUCTION:

Pain after surgery is distressing for patients and may delay the mobilisation .Although the use of opioids for relief of pain is widespread, uptake by patients is limited by side effects. Wound infiltration with bupivacaine at the end of surgical procedures on lumbar spine reports are equivocal. The present study is to inject steroid triamcinolone over the involved and inflamed roots during microlumbar discectomy and pain relief in subsequent post op periods.

#### **METHODS:**

All patients admitted in the Department of Neurosurgery for lumbar pain are taken into the study. Written consent is obtained. Prior approval was obtained from the ethics committee. 38 patients who underwent a primary microlumbar discectomy procedure were randomly assigned to receive either Triamcinolone or placebo in a double-blinded fashion. All patients were allowed to receive intraoperative local irrigation of triamcinolone over the inflammed nerve root. Patient postoperative pain levels were determined using the Visual Analogue Pain Scale and were documented at 12, 24, and 36 hours postoperative.

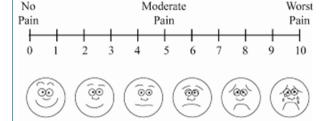
All the patients were operated in the prone position. Prior to closure, injection triamcinolone is irrigated over inflamed and involved roots. Among 38 patients 20 recieved triamcinolone drug and restreceived placebo.

After giving the written informed consent preoperative pain scores are recorded, visual analogue scores are recorded. Outcome of visual analogue scores are recorded at 12,24 and 36 hours post operative.

#### **RESULTS:**

38 patients were approached to participate in the study and all gave consent. Preoperative visual analogue scores are recorded. post operative pain score at 12,24,36 hours are recorded.

### VISUAL ANALOGUE SCALE:



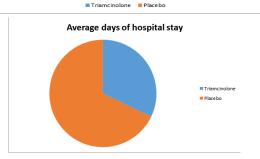
4

8

10

Comparison of preoperative vs postoperative VAS in both groups

9
8
7
6
5
4
9
PREOPERATIVE 12 HOURS 24 HOURS 36 HOURS



#### T—TRIAMCINOLONE P—PLACEBO

Pain scores were significantly lower in the patients in subsequent postoperative after triamcinolone administration compared to patients with placebo administration. Patients administered with triamcinolone has shorter hospital stay than others.

#### DISCUSSION:

The infiltration of triamcinolone intraoperatively over the inflamed and involved roots offers a shorter stay in hospital compared to others. This prospective randomised study tested the hypothesis that intraoperative irrigation of triamcinolone over inflamed nerve roots can reduce pain after surgery .Additional work might be needed to determine the optimum dose of triamcinolone .

#### **CONCLUSION:**

Local irrigation of triamcinolone around the inflamed nerve root during discectomy has made dramatic painless recovery for all patients who have suffered from severe sciatica preoperatively .So far 38 patients have been involved and among them 20 members experienced no pain right from the immediate post operative period and discharged early from hospital than others.

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