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Case Report

# TRACTION AS CONSERVATIVE MANAGEMENT OF LOWER BACK PAIN: CASE REPORT

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### **ABSTRACT**

PURPOSE: The aim of the study is to evaluate the effect of traction on lower back pain.

METHODS: a prospective study of 100 patients with lower back pain with straight leg raising test positive and with decrease in disc space on X-ray.

RESULTS: 83.6% of the patients got relief. Patients who got relief were evaluated radiologically and clinically.

CONCLUSION: We conclude that traction is cost effective and very effective method for relieving low back pain due to disc pathology and stable lumbar fractures.

**Key words:** traction, conservative treatment, lower back pain.

### INTRODUCTION

Low back pain has become one of the greatest public health problems worldwide.

Lower back pain affects at least 80% of the general population at some point in time. Physical and psychological factors contribute to a person's experience of back pain (1, 2).

There are different modalities for the treatment of lower back pain from conservative management to surgical management (3, 4).

Lower back strain is caused by damage to the muscles and ligaments of the back. A herniated disc in the lumbar spine can put pressure on spinal nerve roots, causing pain in the lower back or legs (5).

Lower back pain can be caused by a variety of problems with any parts of the complex, interconnected network of spinal muscles, nerves, bones, discs or tendons in the lumbar spine (6).

### MATERIALS AND METHODS

Study: Prospective study. Sample Size: 100 patients.

**Inclusion criteria:** patients with lower back pain (no age limit) with straight leg raising test positive and with decrease in disc space on X-ray were included in the study. (**Figure 1**)

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Patients with stable fracture of spine were also included in the study.

**Exclusion criteria:** Patients with unstable fractures spine and cauda equina syndrome were not included in the study.

Patients with visual analog scale (VAS) score more than 5 were admitted for pelvic traction and patients with VAS score less than 5 were managed with pelvic traction on outpatient department (OPD) basis.

Patients on OPD basis were called for follow up weekly and after 15 days X-ray was repeated. Traction was given to the patient till the VAS score was 0 or 1. (**Figure 2**)

Patients who were admitted for pelvic traction were given traction for 7 days.

## PROTOCOL FOR INDOOR PATIENT DEPARTMENT (IPD) PATIENTS

- X-ray at the time of admission.
- Pelvic traction was given for whole day and was removed before the meals and also 2-3 hours after meals.
- Traction was not given at night at the time of sleeping.
- X-ray was again repeated to check the disc spaces and the straightening of the spine.

- Patients were discharged on the 8<sup>th</sup> day with advice of back strengthening exercises and SOS analgesics.
- Patients were called for follow up after every month.

### RESULTS

• Average age of the patients was 52.2 years.



Figure 1. X-ray at the time of admission.

### **CONCLUSION**

Our study concludes that traction is cost effective and very effective method for relieving low back pain due to disc pathology and stable lumbar fractures as it works on the principle of distraction of the disc spaces and relieving the compression on the nerves (7).

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- Minimum days of traction given to the patient were 7 days and maximum was 15 days.
- 83.6% of the patients got relief. Patients who got relief were evaluated radiologically and clinically. (**Figure 2**)
- The patients who did not have relief on the 1<sup>st</sup> follow up or within 4-5 days were further investigated with magnetic resonance imaging (MRI) LS spine (5).



Figure 2. X-ray at the time of discharge.

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