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**Do we really need to fix and fuse thoracolumbar burst fractures with no neurological deficit? a review of 32 patients**

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**Objectives:** The objective of the study is to evaluate outcome of patients with stable thoracolumbar burst fractures managed conservatively with regard to pain, function and deformity

**Design:** The study involved a retrospective case note review of patients admitted over a 4-year period.

**Subjects:** Thirty-two patients- 17 females and 15 males with median age - 54 years, were involved in the study.

**Methodology:** Patients with neurological deficit were excluded. Using the follow-up lateral x-rays, the Cobb angles and vertebral heights were calculated. Pain was assessed using the visual analogue scale. Patients were given the option of surgery or conservative management. Twenty-six patients were managed conservatively, 6 had surgery. Three of these crossed from conservative to surgery due to worsening pain on mobilising. All except one patient had a single-level burst fracture. No complications were observed in either group. Follow up x-rays were taken post-operatively and at 3 months whereas those managed conservatively had x-rays on standing, mobilising and at 2, 6 and 12 weeks. In both groups, the mean Cobb angles were 21° and 10°, mean anterior vertebral body heights were 1.63 cm and 2.30 cm, and mean posterior vertebral heights were 2.78 cm and 3.40 cm, respectively.

**Results:** There was no difference in VAS (Visual Analogue Scale) in either group. Conservatively managed patients did not show any significant difference in low back pain or deformity compared to surgical group.

**Conclusions:** Conservative management is safe and effective in thoracolumbar burst fractures, is not associated with lifestyle limiting spinal deformity or pain and should be considered as a first choice for patients with stable burst fractures.

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