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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:** To evaluate outcome of patients with stable thoracolumbar burst fractures managed conservatively with regards to pain, function and deformity.

**Materials & Methods:** The study design followed a retrospective case note review of patients admitted over a four-year period. The subjects included 32 patients, with median age: 54 years of which 17 were female and 15 males. 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 and six had surgery. Three of these switched from conservative to surgery due to worsening pain on mobilizing. 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 three months, whereas those managed conservatively had x-rays on standing, mobilizing and at two, six 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 the visual analogue scale (VAS) in either group. Conservatively managed patients did not show any significant difference in lower back pain or deformity compared to surgical group.

**Conclusions:** It could be concluded that 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.