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**Minimally Invasive Treatment of Thoracolumbar Fractures**

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**Introduction:** Thoracolumbar spinal injuries are common, especially in blunt trauma such as motor vehicle accidents and falls. These injuries often necessitate operative interventions to restore stability to the spinal column. While more traditional methods of spinal fusion are successful for these injuries, newer minimally invasive techniques have been developed and show promise in the setting of traumatic injury.

**Methods:** All surgical cases from the senior author over a one year period were reviewed. Cases of minimally invasive fusions done for thoracolumbar trauma were identified. Laminectomies and kyphoplasty/vertebroplasty were omitted. These cases were assessed for operative time, length of hospital stay, and estimated blood loss. The exact procedure and number of levels fused were also recorded.

**Results:** Of the 210 cases done over a one year period by the senior author, 12 of these were minimally invasive fusions for thoracolumbar spinal trauma. The average number of levels fused was 5. Average estimated blood loss was 250 ml. Average operative time was 4 hours. Average hospital stay was 8.3 days.

**Conclusions:** Minimally invasive spinal fusion techniques are promising and growing in popularity. Minimally invasive techniques in general have been shown to reduce length of stay, post-operative pain, and blood loss. There may be a particular utility for minimally invasive techniques in spinal trauma for these same reasons. A direct comparison of minimally invasive techniques with more traditional methods of spinal fusion for trauma is warranted to assess these topics.