

Korea University Guro Hospital

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Kwon et al., from the Department of Neurosurgery, [Korea University Guro Hospital South Korea](#) introduced a [technique](#) and results of retro-pleural/ peritoneal “lateral pediclectomy” for the decompression of [thoracolumbar fractures](#) and [reconstruction](#) using expandable [titanium cage](#), and [circumferential fixation](#) at a single stage.

18 [patients](#) who had single unstable, burst [thoracolumbar fracture](#) were treated by this technique between January 2014 and December 2016 (T12: 9 cases, L1: 7 cases, L2: 2 cases). They were reviewed retrospectively in terms of radiologic (CT scan and X-ray), clinical [outcomes](#) and [complications](#). The results were compared with another cohort of thoracolumbar fractures treated by posterior only surgery.

There was no radiologic complications implying [pseudoarthrosis](#) or [instrument failure](#) on the postoperative 6 months CT scan. There was also no neurologic deterioration or [infections](#) during the same period. 2 patients (11.%) of iatrogenic and 1 patient of trauma related injury of the dura were secured without any delayed [complications](#). 3 patients (16.7%) of transient [weakness](#) in left hip flexion immediately after operation were observed and recovered within 2 weeks in all cases. 6 patients (33.3%) complained of [dysesthesia](#) and/or [hypoesthesia](#) on incision site.

The present technique suggests “lateral pediclectomy” as a distinct anatomic landmark and surgical tactics to access and remove bony fragment effectively and safely. This provides a more straightforward access to the burst fragment and helps the surgeon to make better intra-operative decompression strategies. Moreover, this circumferential instrumentation with anterior support and fusion revealed better restoration of the thoracolumbar spine alignment compared to posterior only surgery, with acceptable complications rates ¹⁾.

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