Endoscope-assisted minimally invasive transforaminal thoracic interbody fusion

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Surgical treatment of thoracic disc herniation is technically challenging from anterior, lateral or posterior approaches. Because of the deeply located thoracic discs and non-retractable thoracic thecal sac, standard anterior and lateral procedures for discectomy require extensive tissue dissection causing prolonged lengths of stay in hospital. In this video, the authors present a case of calcified disc herniation at the level of T10/11 causing paraplegia and voiding difficulty. The patient was operated on via an endoscope-assisted minimally invasive transforaminal thoracic interbody fusion (EA-TTIF). The herniated disc and calcification were removed through a 26-mm tubular retractor, under microscopes via a unilateral transpedicular approach. The endoscopes were used for direct visualization of the ventral thecal sac and confirmation of complete decompression. After the operation, the patient’s neurological function completely recovered. Minimally invasive EA-TTIF is a viable and effective option for the surgical management of thoracic disc herniation. Thoracic interbody fusion can be achieved through a minimally invasive approach from the back.

The video can be found here: [http://youtu.be/54rRMtvSyCM](http://youtu.be/54rRMtvSyCM).

(key words) • endoscopy • minimally invasive surgery • thoracic discectomy • transpedicular approach • transforaminal thoracic interbody fusion (TTIF) • video

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Manuscript submitted May 1, 2013.
Accepted June 11, 2013.
Please include this information when citing this paper: DOI: 10.3171/2013.V2.FOCUS13203.

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