Mini-open transforaminal lumbar interbody fusion

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The potential advantages of a mini-open transforaminal interbody fusion (TLIF) operation are reduced blood loss, shorter length of stay, and less soft-tissue trauma compared to the standard open technique. Prior reports from our group and others have demonstrated successful outcomes using MIS techniques in lumbar fusion surgery.

In this 3D video, we demonstrate the key steps of the mini-open technique for a transforaminal lumbar interbody fusion using an expandable tubular retractor and contralateral percutaneous screw fixation for the treatment of a multiple recurrent disc herniation. The video demonstrates patient positioning, surgical opening with development of the Wiltse plane, placement of the tubular retractor, pedicle screw placement through both a percutaneous technique and a mini-open technique, decompression of the neural elements, graft insertion, and wound closure.

The video can be found here: http://youtu.be/LYRU9lbBdNg. (http://thejns.org/doi/abs/10.3171/2013.V2.FOCUS13187)

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