Intraoperative navigation assisted placement of percutaneous pedicle screws

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Minimally invasive surgical (MIS) approaches are gaining popularity in many surgical fields. Potential advantages include reduced blood loss, shorter length of stay, and less soft-tissue trauma. Potential disadvantages include inadequate deformity correction, increased fluoroscopy, longer operative times, and decreased posterolateral fusion surface area exposure.

This video demonstrates the key steps in our mini-open transforaminal lumbar interbody fusion (TLIF) using an expandable tubular retractor, placement of cannulated pedicle instrumentation, and subsequent deformity correction. The video demonstrates positioning, surgical opening through a midline incision, a bilateral Wiltse plane tubular approach for the TLIF, placement of bilateral cannulated pedicle screws, and deformity correction.

The video can be found here: [http://youtu.be/Jj7w4i2DTMQ](http://youtu.be/Jj7w4i2DTMQ).

Key Words • minimally invasive • intraoperative navigation • fusion • spine • transforaminal lumbar interbody fusion • video

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