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Abstract



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# P131. Long term effectiveness of full endoscopic versus open microdiscectomy for sciatica: a 24-month RCT

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## BACKGROUND CONTEXT

Open microdiscectomy (OM) is the current standard procedure to treat sciatica caused by lumbar disk herniation. Percutaneous transforaminal endoscopic discectomy (PTED) is an alternative procedure which is performed under local anesthesia. Here we report the long-term results.

## PURPOSE

To assess long-term effectiveness of PTED vs OM at 24 months.

## STUDY DESIGN/SETTING

A pragmatic, multicenter, non-inferiority, randomized controlled trial.

## PATIENT SAMPLE

A total of 613 were randomized to either PTED (n=304) or OM (n=309).

## OUTCOME MEASURES

The primary outcome is self-reported leg pain measured by the 0-100 Visual Analogue Scale (VAS) with a noninferiority margin of 5. Secondary outcomes include self-reported ODI, back pain, health-related quality of life and self-perceived recovery.

## METHODS

A pragmatic, multicenter, non-inferiority, randomized controlled trial was conducted in which patients were randomized between PTED or OM in a 1:1 ratio. The primary outcome is self-reported leg pain measured by the 0-100 visual analogue scale (VAS) with a noninferiority margin of 5. Secondary outcomes include self-reported ODI, back pain, health-related quality of life and self-perceived recovery. Outcomes were measured the day following surgery, at 2, 4, and 6 weeks, and at 3, 6, 9,12 and 24 months.

## RESULTS

At 24 months, 92% of the patients had followup data available. At 24 months, the adjusted between group difference of the VAS leg pain was 7.3 in favor of PTED (17.0 ± 22.4 vs 24.3 ± 26.5;). There was no difference in back pain at 24 months between both groups. All other secondary patient-reported outcomes showed small but statistically more favorable results for the PTED-group. Complications rates and rate of recurrent disc surgery appear similar between both groups.

## CONCLUSIONS

At long-term, PTED remains noninferior to OM in the treatment of sciatica at 24 months of followup and clinical outcomes appear to be more favorable for PTED, albeit not exceeding established MCIDs. Therefore, based on these study results, implementation of PTED as a treatment option for sciatica is warranted.

## FDA DEVICE/DRUG STATUS

This abstract does not discuss or include any applicable devices or drugs.

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