Objective
To determine if the excellent short term outcomes observed after transforaminal endoscopic discectomy (TESS) were maintained through 12 and 24 months and comparable to those after microdiscectomy (Micro).

Methods
109 patients with a single-level primary lumbar disc prolapse (age 25-55 years and weight <100 kg) have been recruited as part of a TESS vs. Micro RCT. Anaesthesia was by sedation plus local anaesthesia or GA respectively. Functional outcomes and costs were collected 3, 12 and 24 months post-surgery.

Results
In the TESS group back pain had decreased 3 months after surgery by a mean of 61% and pain in the affected leg by a mean of 44% (VAS 0-10 score). These improvements were maintained to 2 years. ODI progressively decreased from a mean of 43 at surgery to 29, 25 and 18 at each assessment time. SF-36PF increased from 37±24 to 68±27, p <0.05; SF-36MH scores were unchanged. Results were not significantly different from those following Micro with the exception of ODI, which was better at 2 years in the TESS group (18±14 TESS, 30±18 Micro, p <0.05, n=49).

Revision rates were higher following TESS (4 versus 1 by 2 years) but 3 patients chose repeat endoscopic surgery. 9 patients were lost to follow up at 12 months (5 TESS, 4 Micro).

Conclusion
Improvements in back pain, leg pain and function following TESS are maintained to two years and equivalent to those after microdiscectomy. A higher rate of revision may reflect the learning curve of a technically difficult procedure.