TRANSFORAMINAL ENDOSCOPIC FORAMINOTOMY FOR ACUTE NEURALGIA

JN Alastair Gibson and Menno Iprenburg†
The Royal Infirmary and University of Edinburgh, Scotland
† Herniakliniek, Veenhuizen, Netherlands

INTRODUCTION

In the last ten years there have been significant improvements in:

- HD Camera technology
- Endoscopic bone reamers
- Diamond cutting drills
- Radiofrequency and Laser probes

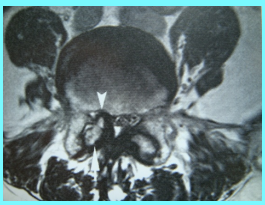
AIMS AND OBJECTIVES

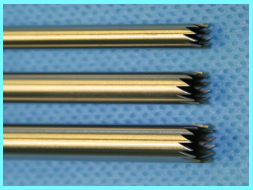
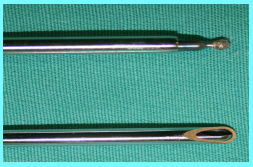
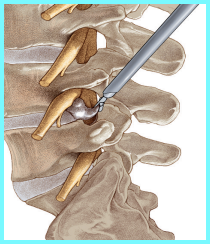
To determine the safety and effectiveness of transforaminal endoscopic foraminotomy (TEF) as an alternative to open laminotomy

PATIENTS AND METHODS

- 34 patients (22m,12 f) mean age 56±12 yrs all with MR foraminal compression
- Comparison with 25 patients (11m,13f) mean age 57±13 yrs with respect to hospital stay and secondary surgery
- VAS, ODI and EQ5-D logged on British Spine or Jointell QMS registries

SURGERY



RESULTS

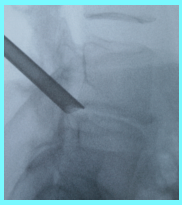
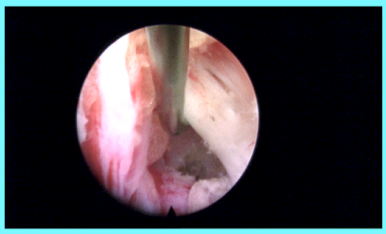
TEF

- 36 foramina widened:
  5 L3/4, 17 L4/5, 14 L5/S1
  26 disc margins trimmed
- Surgery 60 min (range 33-140)
- Radiation 43±16s
- 28/34 patients Day Case
- All 23 workers returned to work at a median time of 28 days

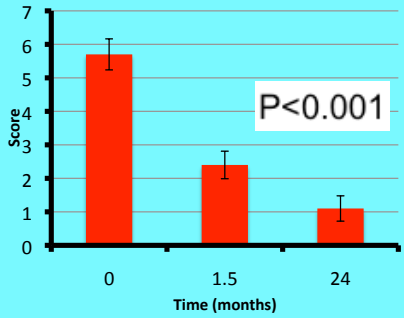
Laminotomies

- 25 foramina widened
- Mean stay 2.3±1.2 nights

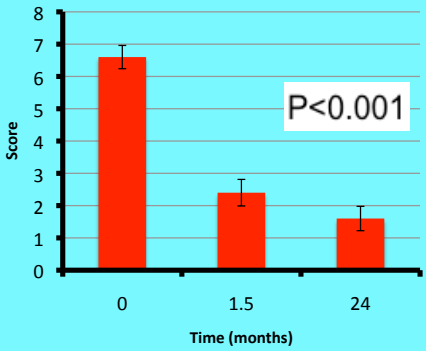


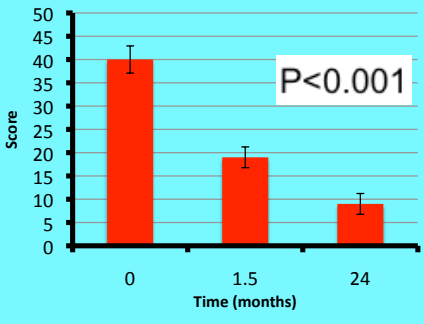
Back pain VAS



Worst leg VAS



ODI



(Means ± SEM)

COMPLICATIONS

- No direct complications

- TEF – 4/34 secondary surgery – 2 Repeat TEF, 2 Axialif
- Laminotomy – 3/25 secondary surgery – pedicle fusion

CONCLUSIONS

- TEF was performed safely
- Visualisation allowed safe widening of foramen and resection of disc material if necessary
- Immediate recovery more rapid than laminotomy
- Low rate of repeat surgery
- Early return to work

ACKNOWLEDGEMENTS

Theatre staff – RIE and Spire Shawfair Park Hospital, Edinburgh; Herniakliniek, Veenhuizen

DISCLOSURES

JNAG and MI have received payments for teaching from joimax GmbH