



OUTCOMES FOLLOWING TRANSFORAMINAL ENDOSCOPIC SURGERY – TWO YEAR RESULTS

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INTRODUCTION

Transforaminal endoscopic discectomy (TESS) is less invasive than microdiscectomy (Micro) but outcomes from surgery should be at least equivalent to support use of the technique.

AIMS AND OBJECTIVES

To compare outcomes and cost data 3 months, 1 and 2 years post surgery.

METHODS

Included:

- ◆ RCT – Computerised allocation immediately pre-surgery
- ◆ Patients 25-55 years with single level PLID
- ◆ <100kg weight
- ◆ L3/4, L4/5 or L5/S1

Excluded:

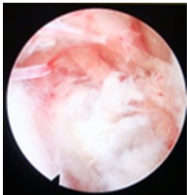
- ◆ Previous disc surgery
- ◆ Malignancy

Surgery:

Microdiscectomy (GA)



versus TESS (LA + Sedation)

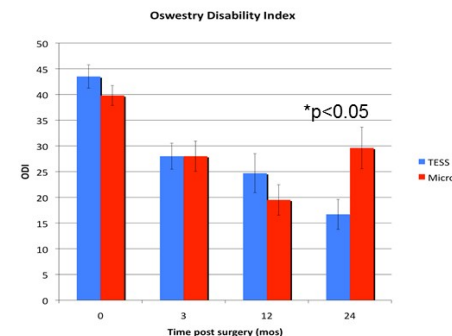
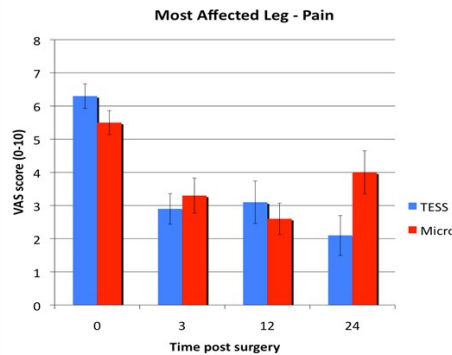
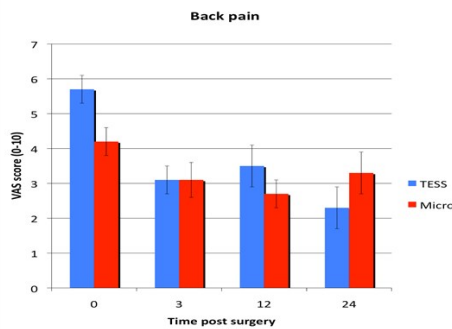


RESULTS

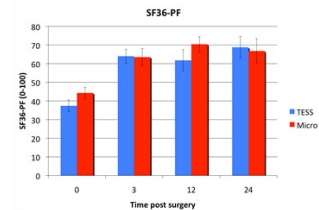
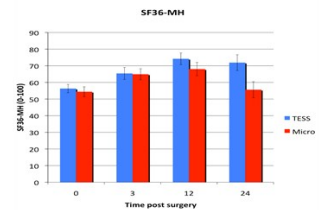
Patients

TESS	Micro
54 patients	55 patients
32 male, 31 female	25 male, 31 female
82 ± 18kg	74 ± 18kg
16 smokers	27 smokers
36 L5/S1	31 L5/S1
4 Lost to follow-up	6 Lost to follow-up

Outcomes (Values shown are Means ± SEM; comparisons by Student's t-test)



Odom's criteria: 1= met expectation to 4 = worse		
	TESS	Micro
3 mos	1.7 ± 1.1	1.9 ± 1.2
1 yr	1.5 ± 1.8	1.6 ± 1.0
2 yr	1.5 ± 1.0	2.0 ± 1.0



Costs		
	TESS	Micro
In-patient (nights)	0.2 ± 0.45	1.1 ± 0.45
Physiotherapy (mean visits)	2.8 ± 6.5	3.4 ± 4.5
Analgesia (duration)	4 ± 2 weeks	4 ± 2 weeks
Revision surgery	4 at 12 mo +1 at 24 mo	1 at 12 mo +1 at 24 mo
Adjacent PLID	x1	x1

COMPLICATIONS

- 5% re-herniation at 2y (3 chose TESS for revision)
- 1 Epidural bleed with Nerve weakness (TESS)
- 1 TESS to Micro (telescope malfunction)
- 0 Dural tear (1 headache each group lasting <24hrs)
- 0 Infection

CONCLUSIONS

- ◆ Equivalent results overall for the two procedures
- ◆ Lower ODI at 2 years following TESS
- ◆ Functional results maintained to two years
- ◆ Possibly greater revision rate post TESS but minimal scarring from surgery
- ◆ Shorter hospital stay - potential for treatment under LA/Sedation with TESS

ACKNOWLEDGEMENTS

Theatre staff – RIE; Ethics Approval – Lothian REC, UK

DISCLOSURES

JNAG has received payments for teaching from joimax GmbH

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