

Endoscopic Discectomy – Clinical Outcomes for Contained Protrusions					
Author	Operation Type	Outcome Measure	Follow Up Period & Patient Number	Complications	Outcome
Carragee et al 1999	Open Microdiscectomy	Visual Analogue Pain Score	2 Years 152 Patients	11% & 5% revisions	78%
Hermantin et al 2000	Open Microdiscectomy	MacNab	19 Months 30 Patients	Large Herniations excluded	93%
	Arthroscopic Microdiscectomy	MacNab	19 Months 30 Patients		97%
Yeung et al 2002	Endoscopic Discectomy	MacNab	12 Months 307 Patients	3.5%	89%

Endoscopic Laser Foraminoplasty – Clinical Outcomes for more advanced pathology					
Author	Operation Type & Pathology	Outcome Measure	Follow Up Period & Patient Number	Complications	Outcome
Knight et al 2000	ELF Chronic Lumbar Spondylosis	ODI Gain >50%	24+ Months 172 Patients	2.4%	76%
	ELF Failed Back Surgery	ODI Gain >50%	24+ Months 78 Patients		48%
Knight et al 2002	ELF Spondylolytic Spondylolisthesis	ODI Gain >50%	24+ Months 26 Patients	0%	76%

Spinal Surgery Morbidity & Complications	
Independent Audited Prospective Study of Endoscopic Laser Foraminoplasty	958 Interventions Cohort Integrity 100% Review @ 6 weeks
Complication Rate 2.4%	
Discitis (Infected) 9 (1)	Myocardial Infarction at 6 weeks 1
Dural Tear 1	Erectile Dysfunction 1
Deep Wound Infection 1	Panic Attack 1
Foot Drop Transient 2 (1)	Residual Herniation 8
Independent meta-analysis of Randomised Controlled Clinical Trials reporting complications (1998)	
Fusion 11.8%	Endoscopic Laser Foraminoplasty > 3 times safer
Decompression 7.8%	
Discectomy 6.0%	

Current Status of Randomised Controlled Clinical Trials (RCT) of Fusion Surgery				
Study Type	Author et al.	Follow up & Patient Numbers	Clinical Outcome	Complications
National Swedish Prospective RCT 3 Fusion methods compared to Conservative Therapy	Stromqvist 2001	24 Months 294 Patients	Pain reduction in: Fusion group in 33% Conservative Group in 7%	17%
			Disability reduction in: Fusion Group in 25% Conservative Group in 6%	
Swedish Prospective RCT. Fusion vs Conservative Care	Fritzell 2002	24 Months 294 Patients	Better or Much Better: Fusion Group: 63% Conservative Group: 29%	17%
Norwegian Multi-centred RCT Fusion vs Cognitive Behavioural Therapy	Brox 2003	12 Months 178 Patients	No significant difference in pain or disability outcome in the 2 groups	18%
UK Prospective RCT Fusion vs Cognitive Behavioural Therapy	Fairbanks 2005	24 Months 349 Patients	No significant difference in pain or disability outcome in the 2 groups	11%

Current Status of Total Disc Replacement Surgery					
Study	Number of Patients	Duration	Pain ↓	Function ↑	Complications
Baltimore SB Charité Study 2003	41	2 Years	?%	@40%	?%
Texas SB Charité Study 2003	57	1 Year	51%	38%	?%