



TND-SPSCG
spinettr.com

OOT/ OPEN
OPERATING
THEATRE

eccE-
learning



6th Congress of the Middle East Spine Society

September 23-25, 2022

Dedeman Hotel Gayrettepe - Istanbul / Turkey



Comparison Of Percutaneous Endoscopic Lumbar Discectomy And Microdiscectomy In Terms Of Sexual Functions And Clinical Outcomes

Ulkuun Unlu Unsal¹, Salim Senturk², Onur Yaman², Mesut Mete²

¹Manisa City Hospital-Department Of Neurosurgery/ Manisa,Turkey

²Memorial Bahcelievler Hospital-Spine Center/ Istanbul,Turkey

³Celal Bayar University-Department Of Neurosurgery/ Manisa,Turkey

Introduction: Objective: Sexuality is an important factor in terms of quality of life. There are ongoing discussions regarding the choice of surgical technique in the treatment of lumbar disc herniation (LDH). Microdiscectomy (MD) and percutaneous endoscopic lumbar discectomy (PELD) are widely used in the treatment of LDH. The aim of this study was to compare the clinical outcomes and sexual function of male and female patients who underwent PELD and MD due to LDH.

Development: Methods: The retrospective study included 72 sexually active patients aged 24-50 years. PELD was performed in 39 (20 male and 19 female) and MD was performed in 33 (20 male and 13 female) patients. Age, gender, body mass index (BMI), and operation level were recorded for each patient. Patients were divided into four groups based on genders and surgical techniques: (i) Male-PELD (n=20, 52%), (ii) Male-MD (n=19, 48%), (iii) Female-PELD (n=20, 61%), and (iv) Female-MD (n=13, 39%). Visual Analogue Scale (VAS), Oswestry Disability Index (ODI), International Index of Erectile Function 5 (IIEF-5) (for male patients), and Female Sexual Function Index (FSFI) (for female patients) were administered both preoperatively and at postoperative month 3. Results: Mean age of the patients in the Male-PELD, Male-MD, Female-PELD, Female-MD groups was 38.4, 39.1, 39.9, and 42.4 years, respectively. The third-month VAS-Leg pain, VAS-LBP, and ODI scores decreased significantly in all groups compared to preoperative scores. In both genders, no significant difference was found between the PELD and MD groups with regard to preoperative IIEF-5 and FSFI scores, whereas the third-month IIEF-5 and FSFI scores were significantly higher and thus greater improvement was achieved in the PELD groups compared to the MD groups.

Table-1

	Male			Female		
	PELD (n=20)	MD (n=19)	p value	PELD (n=20)	MD (n=13)	p value
Age	38.4±6.95	39.11±5.73	0.471	39.95±4.63	42.46±4.37	0.136
BMI	24.94±1.98	24.63±3	0.582	25.36±2.63	24.85±2.53	0.395
Operation level (L3-4/L4-5/L5-S1)	n: 2/13/5	1/14/4	0.930	n:3/13/4	1/10/2	0.740

Demographic characteristics and Operation level of the patients

Oral Presentations

Table-2

	Female					
	Preoperative			Postoperative		
	PELD (n=20)	MD (n=13)	p value	PELD (n=20)	MD (n=13)	p value
VAS leg	8.55±0.76	8.15±0.89	0.276	2.05 ± 0.94	2.15 ± 0.55	0.541
VAS LBP	4.9±0.85	5.15±1.14	0.522	2.1 ± 0.44	2.46 ± 0.52	0.109
ODI	63.2±11.1	61.69±6.05	0.617	17 ± 4.03	18.61 ± 3.86	0.267

Clinical characteristics of male patients

Table-3

	Male					
	Preoperative			Postoperative		
	PELD (n=20)	MD (n=19)	p value	PELD (n=20)	MD (n=19)	p value
VAS leg	8.6±0.82	8.36±0.76	0.459	1.9 ± 1.02	2.37 ± 0.68	0.155
VAS LBP	4.75±0.85	5.1±0.93	0.242	2.1 ± 0.55	2.15 ± 0.6	0.787
ODI	62.8±8.97	61.79±7.08	0.271	20.2 ± 5.02 (range 12-28)	17.47 ± 5.33 (range 10-32)	0.07

Clinical characteristics of male patients

Conclusion: Conclusion: The results indicated that although both PELD and MD improved the sexual function in patients with LDH, PELD had a greater positive effect compared to MD and this difference was statistically significant. We consider that this study needs to be supported by larger case series and psychiatric tests assessing anxiety.

Table-4

	International Index of Erectile Function (IIEF-5)		
	Preoperative	Postoperative	p
PELD (n=20)	11.5 ± 4.79 (range 6-24)	18.7 ± 3.85 (range 12 - 24)	0.001
MD (n=19)	12.26 ± 5.70 (range 6 - 24)	15.63 ± 4.28 (range 10 - 25)	0.014
p	0.825	0.021	

Comparison pre- and post-operative IIEF-5 scores of male patients

Table-5

	The Female Sexual Function Index (FSFI)		
	Preoperative	Postoperative	p
PELD (n=20)	40.25 ± 6.58 (range 28 - 50)	58.95 ± 7.17 (range 44 - 74)	0.001
MD (n=13)	41.92 ± 6.25 (range 30 - 54)	52.23 ± 7.01 (range 44 - 63)	0.002
p	0.603	0.023	

Comparison pre- and post-operative FSFI scores of female patients

Keywords: Endoscopic discectomy, Lumbar disc herniation, Microdiscectomy, Sexual activity