



FUNCTIONAL OUTCOME OF PERCUTANEOUS TRANSFORAMINAL ENDOSCOPIC LUMBAR DISCECTOMY (TELD) IN PIVD; OUR EARLY REPORT

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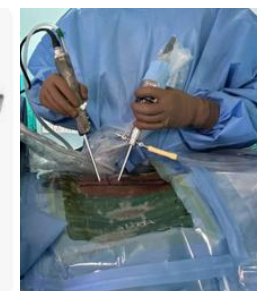
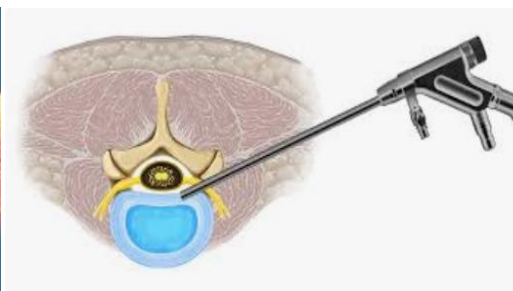
Disclosure - none

Background

Surgery for LDH : 1. MIOLD

2. Microdiscectomy - Gold standard

3. Endoscopic Discectomy



Benefits of Endoscopic Spine Sx ^{1,2}

1. Day care surgery
2. Can be done under LA
3. Fewer complications
4. Faster postoperative recovery
5. Less damage to bony structures and soft tissues
6. Hemostasis
7. Flushing of small bleeding
8. Identification of the bleeding source
9. Better identification of microanatomy
10. Magnified endoscopic view, and
11. Better cosmesis
12. Avoiding fusion surgery



> Instr Course Lect. 2023;72:675-687.

Endoscopic Spine Surgery: Advertisement or Game Changer?³

- Has the potential to revolutionize spine surgery

The Role and Future of Endoscopic Spine Surgery: A Narrative Review⁴

[Hyungjoo Kwon](#)¹, [Jeong-Yoon Park](#)^{2,✉}

► Neurospine. 2023 Mar 31;20(1):43-55. doi: [10.14245/ns.2346236.118](https://doi.org/10.14245/ns.2346236.118) [✉](#)

- ESS - a cutting edge spine surgery that can take advantages of navigation, AR, VR, Robotics and 3D image technology

Transforaminal Endoscopic Lumbar Discectomy: Basic Concepts and Technical Keys to Clinical Success⁵

[Sang Gu Lee](#)¹, [Yong Ahn](#)^{1,✉}

- Outcomes equal to open surgery with early recovery and fewer complications

Is Spinal **Endoscopy** the **Future** of **Spine Surgery**?⁶

YES

Lambrechts MJ, Steinmetz MP, Karamian BA, Schroeder GD.

Clin Spine Surg. 2023 Jun 1;36(5):183-185. doi: 10.1097/BSD.0000000000001427. Epub 2023 Jan 20.

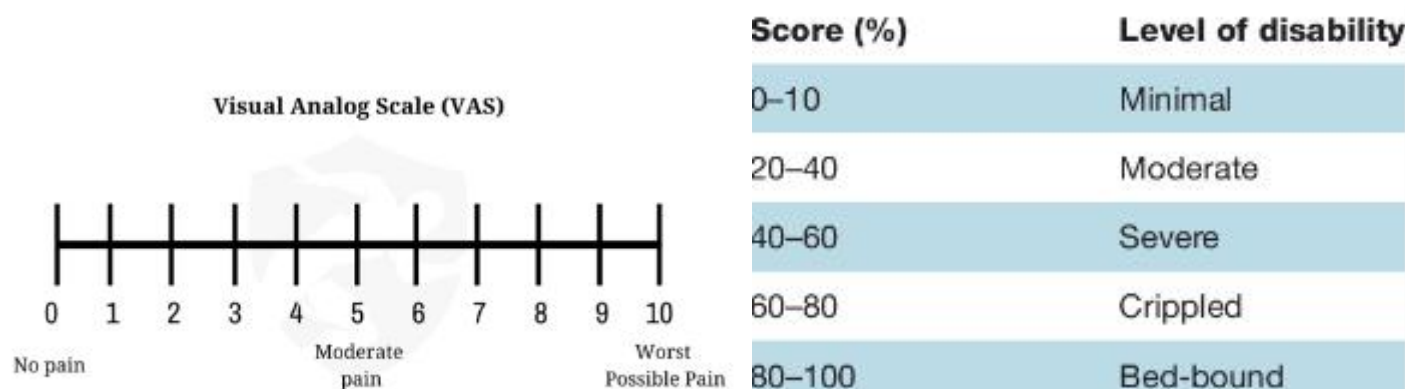
PMID: 36727877

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PURPOSE AND METHODOLOGY

- To evaluate the *VAS*, *ODI* and *modified Macnab Scores* at minimum 6 months



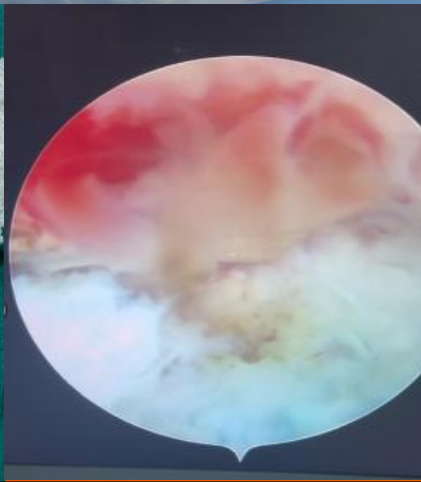
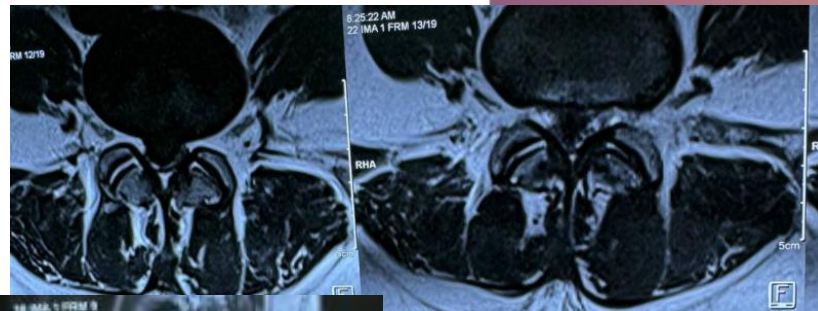
Outcome	Description
excellent	Free of pain No restriction of mobility Able to return to normal work and activities
good	Occasional nonradicular pain Relief of presentig symptoms Able to return to modified work
fair	Some improved functional capacity Still handicaped &\or unemployed
poor	Continued objective symptoms of root involvement Additional op. intervention needed at index level irrespective of repeat or length of postop. period

Summary of Modified Macnab Criteria Outcome (4)

- Prospective study of 21 cases that underwent Transforaminal Endoscopic Discectomy from January 2023 to April 2024 at CMCTH



Results:



S. No	Variables	Mean values				
1	Age	38.61 ± 12.16 years				
2	Sex	Male 10, female 11				
3	Median duration of symptoms	6 (1-24) months				
4	Duration of surgery	68 ± 21 minutes				
		Pre-op	Post op 1 month	Post op 3 months	Post op 6 months	P Value
5	VAS BP	4.28 ± 1.8	1.33 ± 0.65	0.71 ± 0.56	0.28 ± 0.46	P<0.05
6	VAS LP	7.3 ± 1.19	1.2 ± 0.56	0.80 ± 0.6	0.47 ± 0.51	P<0.05
7	ODI SCORE	72.56 ± 15.32	14.38 ± 5.21	7 ± 3.34	3.57 ± 2.63	P<0.05
8	Mod Macnab Score	Excellent 90.47% and Good 9.52%				



Results:

- Preop **VAS LP** of **7.3 ± 1.19** improved to **0.47 ± 0.51** ($P < 0.05$) at 6 months
- Preop **ODI** of **72 ± 15.32** improved to **3.57 ± 2.63** ($P < 0.05$) at 6 months follow up
- **Mod. Macnab** score at 6 months - **Excellent 90.47%** **Good 9.52%**
- **Complications** : Headache in one,
Converted to open in one
Paresthesia increased in one



Discussion

- Our results - Comparable to others

Zhang et al. *Journal of Orthopaedic Surgery and Research* (2018) 13:169
<https://doi.org/10.1186/s13018-018-0868-0>

Journal of Orthopaedic
Surgery and Research

RESEARCH ARTICLE

Open Access



Transforaminal endoscopic discectomy
versus conventional microdiscectomy for
lumbar disc herniation: a systematic review
and meta-analysis ⁹

Bin Zhang^{1†}, Shen Liu^{1†}, Jun Liu^{1,2†}, Bingbing Yu¹, Wei Guo¹, Yongjin Li¹, Yang Liu¹, Wendong Ruan¹,
Guangzhi Ning¹ and Shiqing Feng^{1*}

- Compared to microdiscectomy; TELD
has shorter hospital stay.

Review > Medicina (Kaunas). 2022 Oct 26;58(11):1523. doi: 10.3390/medicina58111523.

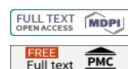
Is Biportal Endoscopic Spine Surgery More
Advantageous Than Uniportal for the Treatment of
Lumbar Degenerative Disease? A Meta-Analysis ¹⁰

Wen-Bin Xu ¹, Vit Kotheeranurak ^{2,3}, Huang-Lin Zhang ⁴, Zhang-Xin Chen ⁵, Hua-Jian Wu ¹,
Chien-Min Chen ^{6,7,8}, Guang-Xun Lin ^{1,4}, Gang Rui ^{1,4}

Affiliations + expand

PMID: 36363480 PMCID: PMC9698221 DOI: 10.3390/medicina58111523

FULL TEXT LINKS



ACTIONS



- Uniportal has early back pain relief

		Our results	Gu et al ⁷	Yao et al ⁸	Lee et al ⁵
1	Mean VAS	7.3 ± 1.19 (Pre-op) 0.28 ± 0.46 (post-op) (P < 0.05)	9 (pre-op) 1 (Post-op) (P<0.05)	8.2 ± 1.9 to 1.8 ± 1.1 (P<0.05)	Significant decrease in VAS
2	Mean ODI	72.56 ± 15. 32 (pre-op) 3.57 ± 2.63 (Post-op 6 m) (P<0.05)		62.4 ± 8.2 9.2 ± 3.4 (P<0.05)	74.96 (Pre-op) 14.72(Post -op) (P<0.05)
3	Mean MMS	Excellent 90.47% Good 9.52%	Ex/good: 95.7% Fair : 2.9% Poor: 1.4%	Ex/Good:91.0 7% Fair: 8.92 %	Ex/good 85.05% Fair 6.31% Poor 2.10%

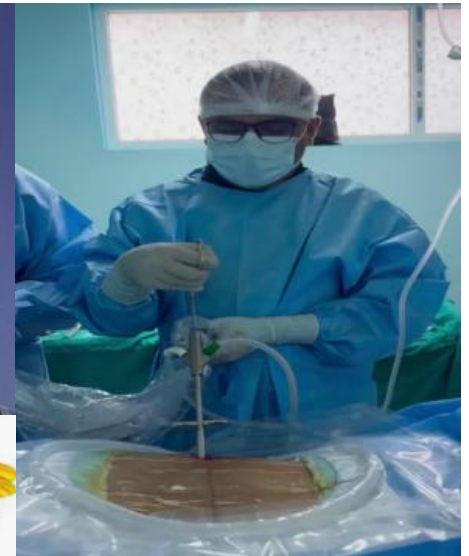


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Conclusion



Transforaminal endoscopic lumbar discectomy
has *excellent* outcome in Lumbar PIVD





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