AMPLIFY SURGICAL DUAL PROTECT



The dualPortal[®] solution is a novel two-portal endoscopic approach to the spine that allows surgeons to easily learn and perform a wider array of lumbar spine procedures with lower cost compared to the conventional one-portal technique. It also provides flexibility to perform endoscopic lumbar fusions with the dualX[®] Expanding Interbody Fusion System.







Shallow Learning Curve

dual Portal[®]

Compared to uni-portal spine endoscopy.

- Shorter Learning Curve: similar workflow to a familiar posterior approach.
- Lower Cost: compatible with widely available endoscopic systems.
- Versatility: accommodates a variety of lumbar procedures, including multi-level fusions.

CASE STUDY: dual[LIF]

A 63-year-old female patient presented with low back pain, lower left extremity. (A) The preoperative imaging showed degenerative spondylolisthesis with central stenosis, facet and ligamentum hypertrophy at L4–5. A dualPortal[®] transforaminal lumbar interbody fusion (TLIF) with unilateral laminotomy for bilateral decompression, using Amplify Surgical's dualX[®] dualexpanding titanium cage, was performed with a left-sided approach.*

*Heo DH, Hong YH, Lee DC, et al. Technique of biportal endoscopic transforaminal lumbar interbody fusion. Neurospine 2020;17(Suppl 1):S129-37.



Comparing dualPortal® (biportal endoscopic) TLIF using an Enhanced Recovery After Surgery (ERAS) pathway to microscopic TLIF, researchers found that dualPortal® TLIF with ERAS improved VAS back scores significantly more than microscopic TLIF, postoperatively. "Biportal endoscopic TLIF with ERAS pathway may have good aspect to accelerate recovery after surgery. There was no inferiority of fusion rate of endoscopic TLIF comparing to microscopic TLIF. Biportal endoscopic TLIF using a large cage with ERAS pathway may be a good alternative treatment for lumbar degenerative disease."*

 * Heo DH, Jang JW, Park CK. Enhanced recovery after surgery pathway with modified biportal endoscopic transforaminal lumbar interbody fusion using a large cage. Comparative study with minimally invasive microscopic transforaminal lumbar interbody fusion. European Spine Journal (2023)

dualX[®] T/PLIF

Enhanced recovery after surgery pathway with modified biportal endoscopic transforaminal lumbar interbody fusion using a large cage. Comparative study with minimally invasive microscopi transforaminal lumbar interbody fusion

Dong Hwa Heo¹ · Jae Won Jang² · Choon Keun Park²

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Abstract Parpore Studies about the clinical efficacy of endoscopic lumbar interbody fusion using an enhanced recovery after surgery (ERAS) pathway are immificient. Thus, the purpose of this study was to investigate clinical usefulnes? (ERAS) pathway are immificient. Thus, the purpose of this study was to investigate clinical usefulnes? (ERAS) pathway are immificient. Thus, the purpose of this study was to investigate clinical usefulnes? (ERAS) pathway are immificient. Thus, the purpose of this study was to investigate clinical usefulnes? (ERAS) were grouped into an endoscopic TLIF group. Those who received microscopic TLIF without ERAS were grouped into an encourse clinical and rafidoptic parameters were compared by the study and the study are associated and the study of the Studies about the clinical efficacy of endoscopic lumbar interbody fusion using

dual Portal ACCESS SYSTEM Ideal for any surgical setting.

Complete set of **patented** access and decompression instruments, developed interdependently with the dualPortal[®] surgical technique by the leading physicians and researchers in South Korea.

Coupling proprietary instrumentation with the unique endoscopic approach, this groundbreaking system enables surgeons to perform reproducible, safe and powerful surgeries with great clinical outcomes.

Ideal for both inpatient and outpatient settings, the dualPortal® Access System leverages readily available equipment to address a wide variety of lumbar pathologies.



dualPortal CANNULA

- Manages irrigation fluid control.
- Critical for visualization. - Facilitates easy access for
- working instruments.



dual Portal NERVE RETRACTORS Designed to be used with the dualPortal® ANNULOTOMY KNIFE.



dual Portal ANNULOTOMY KNIFE Designed to be used with the dualPortal® (NERVE RETRACTORS. TRAY 2





dual Portal HEMOSTATIC TUBE Delivers hemostatic agent to targeted site.

dual Portal SCOPE RETRACTOR Transforms the endoscope additionally into a retractor. PITUITARY PITUITARY CURRETTE dualPortal MUSCLE DETACHER MICRO PITUITARIES (2) MICRO PITUITARIES (2)

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CONTACT

EMAIL info@amplifysurgical.com

PHONE (765) AMPLIFY [(765) 267-5439]

ADDRESS 9272 Jeronimo Road, Suite 107B Irvine, CA 92618 **Transforming the Ordinary** www.amplifysurgical.com @amplifysurgical



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