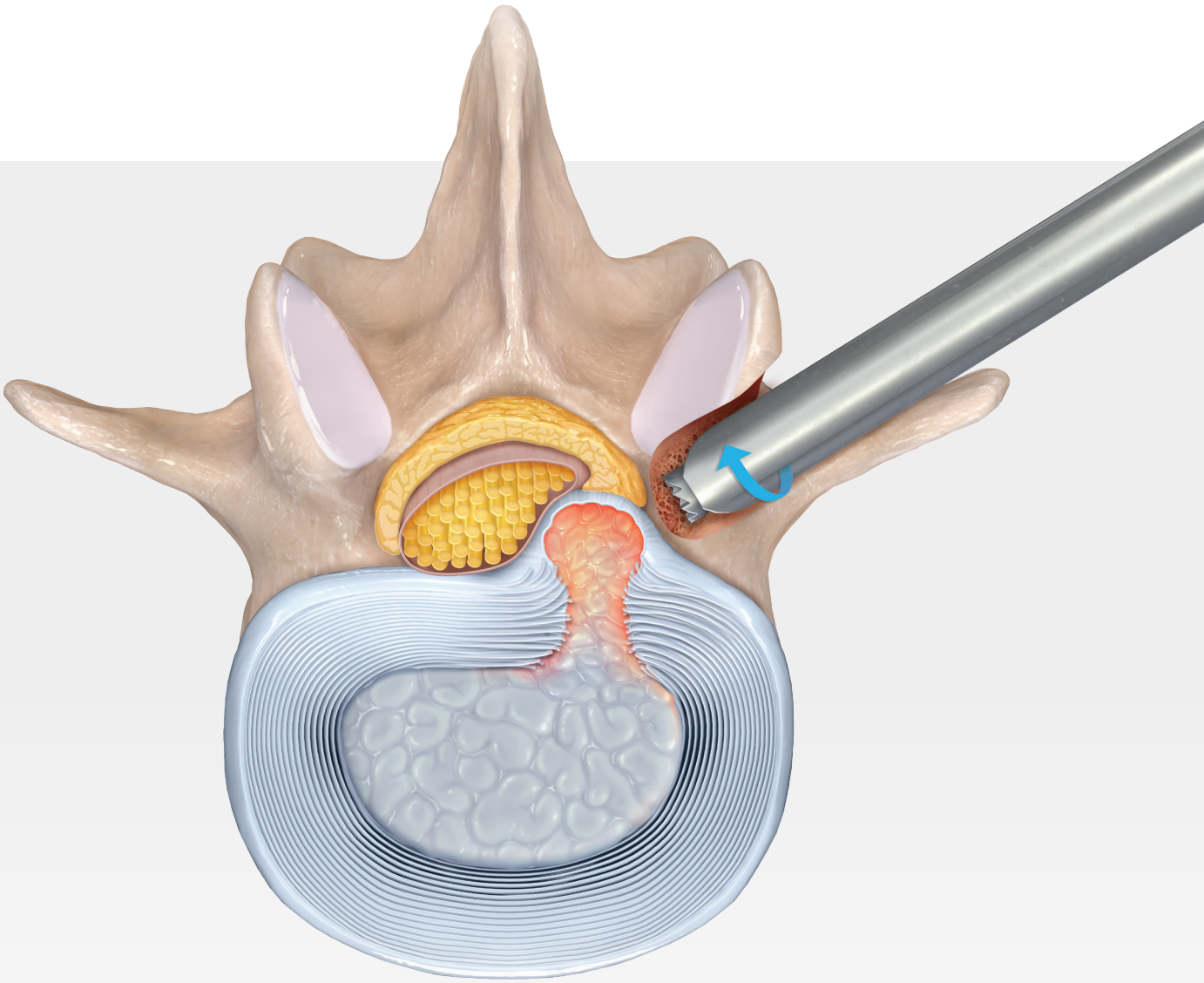
Trans-SAP Lumbar Discectomy

Endoscopic Surgical Technique



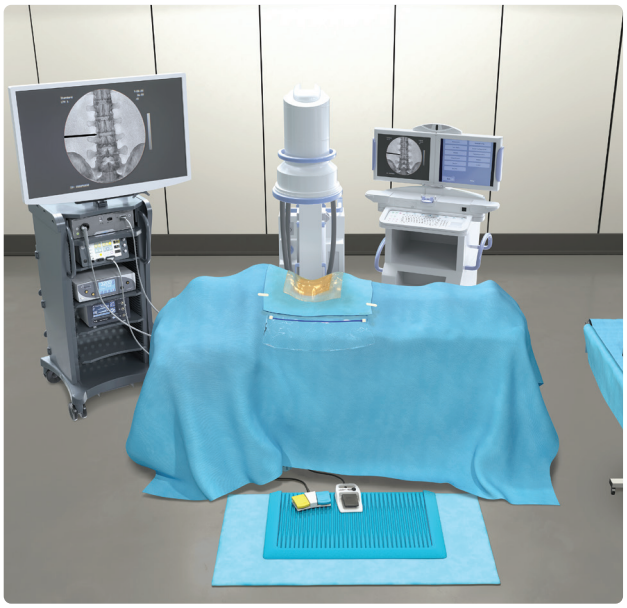
Arthrex®

Endoscopic Approach to Trans-SAP Lumbar Discectomy

Introduction

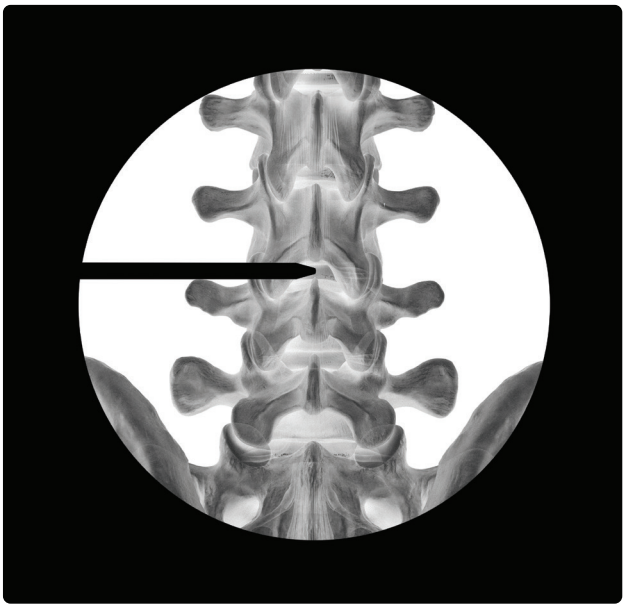
The ultra-minimally invasive endoscopic approach to the trans-SAP (superior articular process) technique creates a targeted pathway for accessing foraminal and lateral recess pathology, as well as cranial disc extrusions, particularly when facet anatomy limits a direct trajectory beneath the SAP. During this procedure, a spine-specific endoscope is used for access and visualization. The Synergy imaging system, in conjunction with ergonomic instruments, provides innovative technology to treat this pathology.

- WishBone™ handle combines ergonomics, efficiency, and control
- Synergy integration and imaging optimize visualization
- Depth stop and cannula holder allow for improved control of the endoscope and cannula
- Shaver burs support precise and efficient bone removal



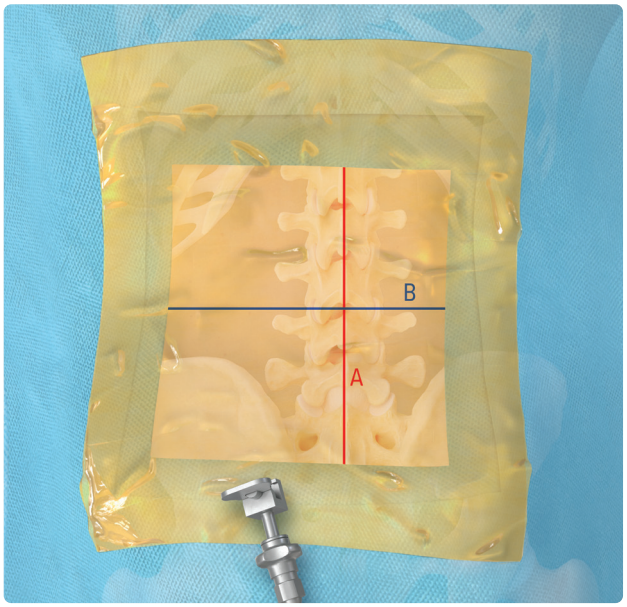
1

Patient Positioning and OR Setup
With the patient prone and their arms extended, position the C-arm across from the surgeon with the video monitor at the head and the C-arm monitor at the foot of the bed.



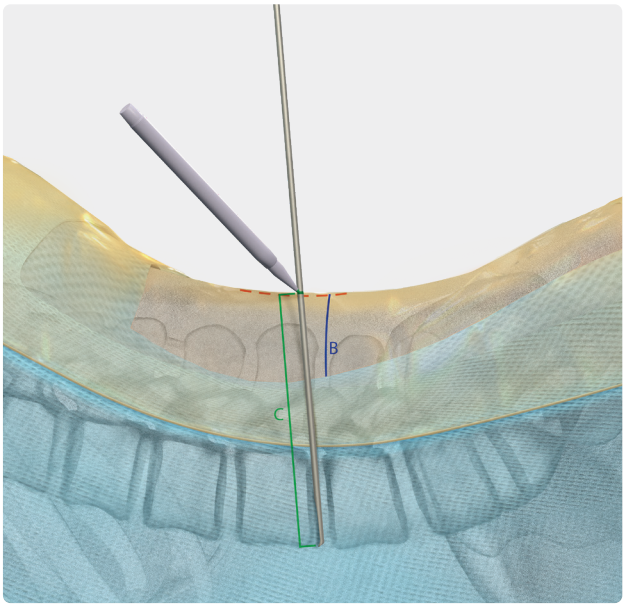
2

Targeting
Use AP and lateral views to target and confirm the correct level is being treated.



3

AP Targeting
Mark the midline (A). Mark a line on the skin through the center of the disc space (B).



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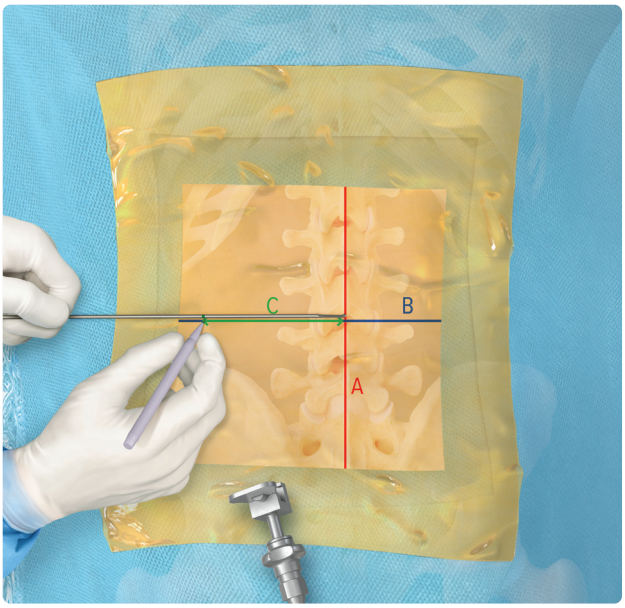
Lateral Targeting
Place an instrument vertically, with its tip at the front of the disc space in line with the endplates. Mark a line on the instrument at the level of the dorsal skin surface (C).



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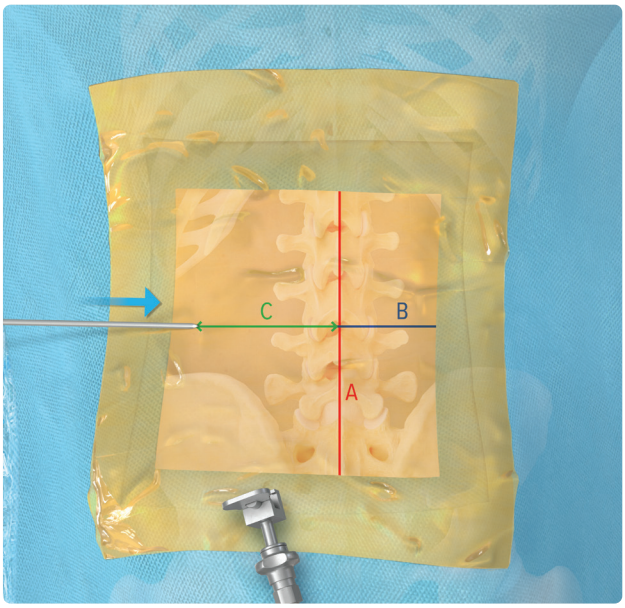
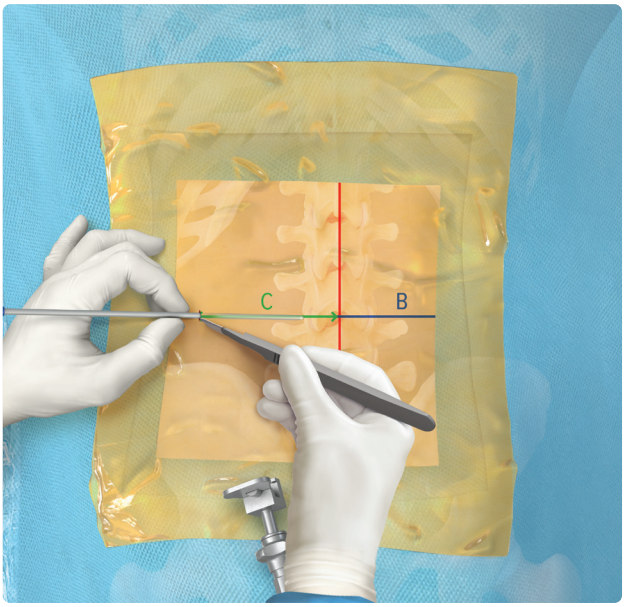
Incision Marking
With the instrument tip on the midline, mark the distance (C) from the midline to the line on the instrument along the disc space line (B). This is the incision point.



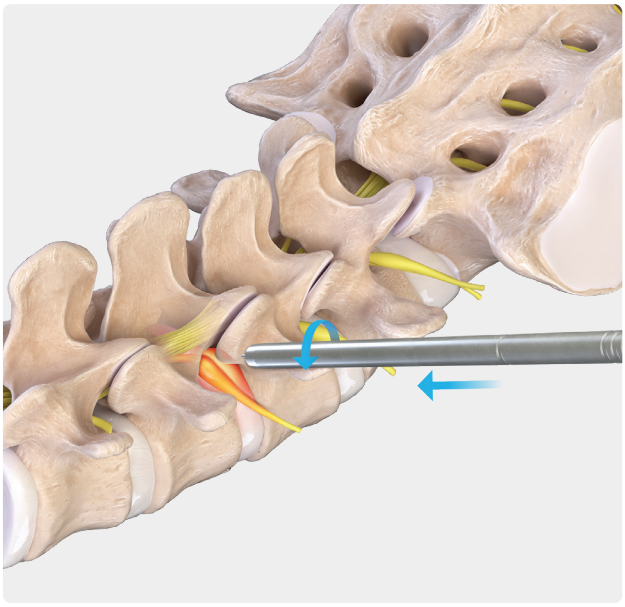
6

Needle Placement
Insert the docking trocar needle at the lateral end of distance line (C), advancing it along the disc space line (B) to dock dorsally in the foramen, targeting the ventral medial aspect of the SAP. Use AP and lateral fluoroscopy views throughout advancement to avoid neural structures.



7

Incision
Remove the stylet, insert the guidewire, and make an incision through the skin and fascia to accommodate the outer diameter of the dilators and working cannula.



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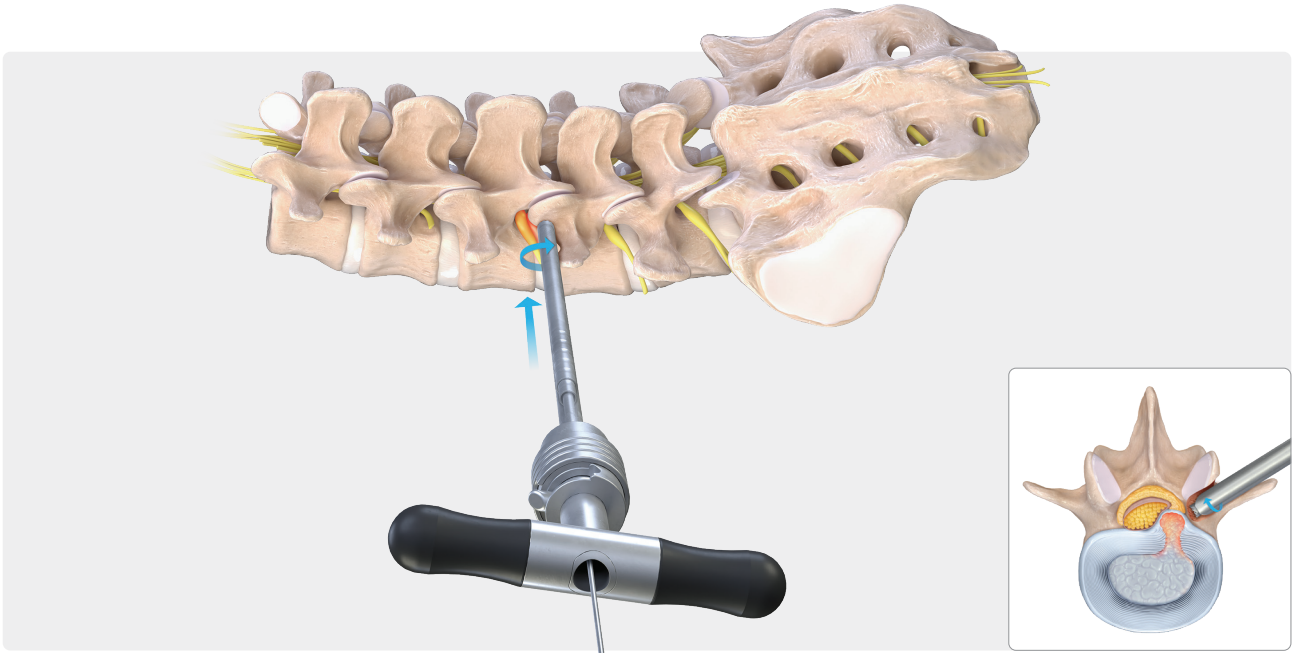
Dilating
Place the sequential dilators over the guidewire while rotating. Alternatively, a single step dilator can be used.



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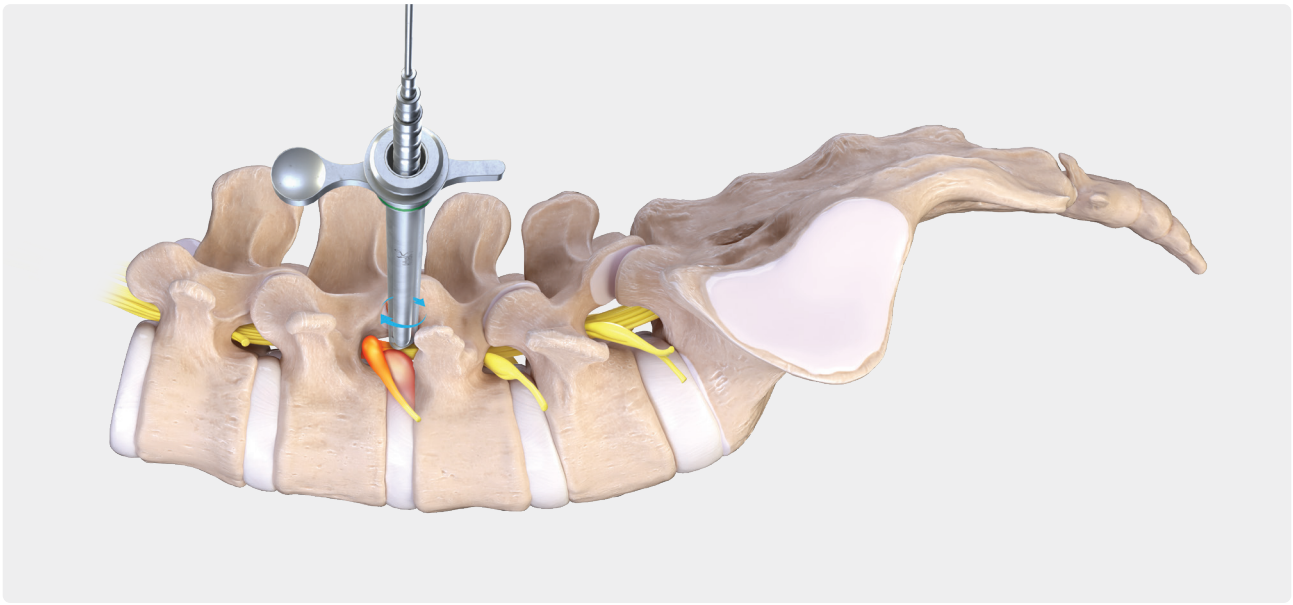
SAP Resection (Reaming)
Use a trephine and/or a rasp to remove the ventral medial aspect of the SAP through the trephine protection tube. This provides access to cranial disc extrusions while simultaneously enlarging the foramen to accommodate the working cannula and endoscope. Alternatively, after positioning the endoscope, a bur can be used instead of a trephine or rasp to perform SAP resection under direct visualization.



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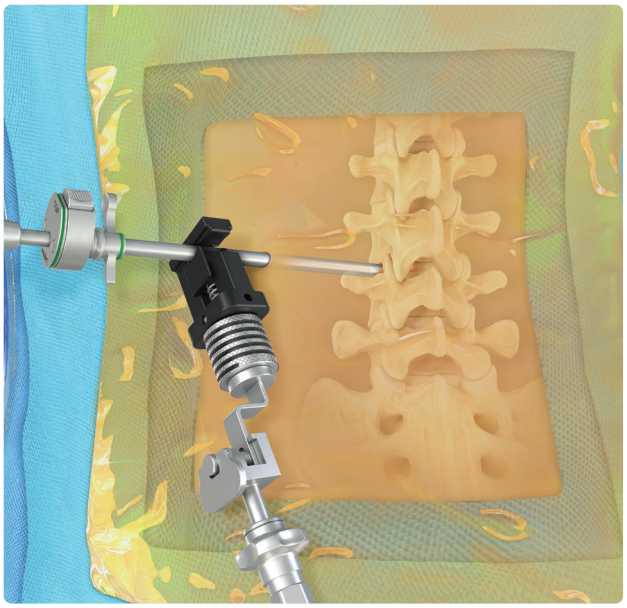
Docking
Advance the cannula over the dilators or switching stick, keeping the bevel opening oriented cranially toward the exiting nerve root. Rotate the cannula clockwise for left-sided approaches and counterclockwise for right-sided approaches, protecting the exiting nerve root with the long side of the cannula.



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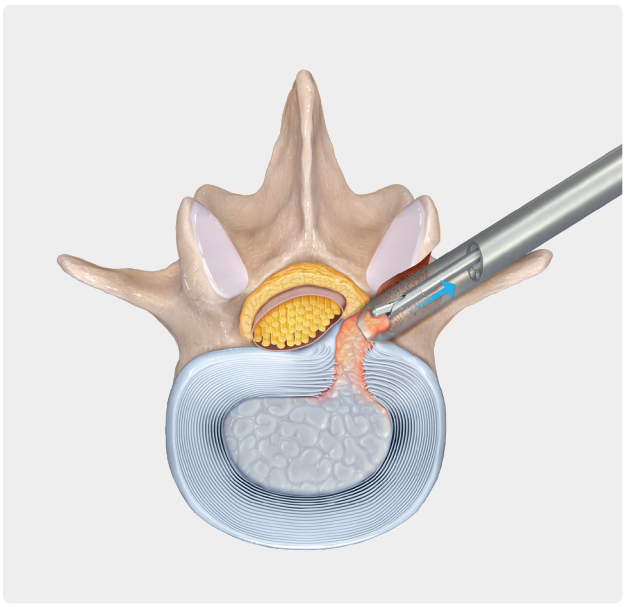
Set Up and Insert Endoscope
With the TRIMANO® arm holder attached to the bed via a bed rail adapter, connect the cannula holder to the cannula. Attach the light cord, camera, irrigation, and depth stop to the endoscope. Following removal of the switching stick or dilators, insert the endoscope into the cannula.



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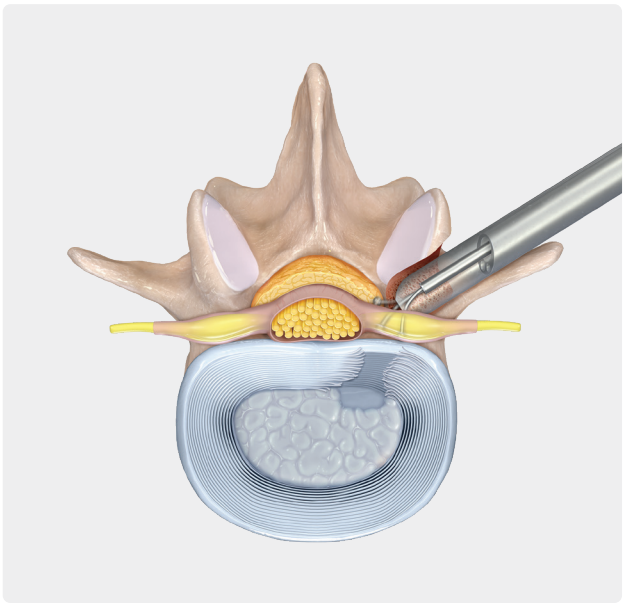
Decompression
Use endoscopic instruments such as graspers and the FlexTip RF probe to remove excess tissue, enhance visualization, coagulate vessels, access disc pathology, and decompress neural elements.



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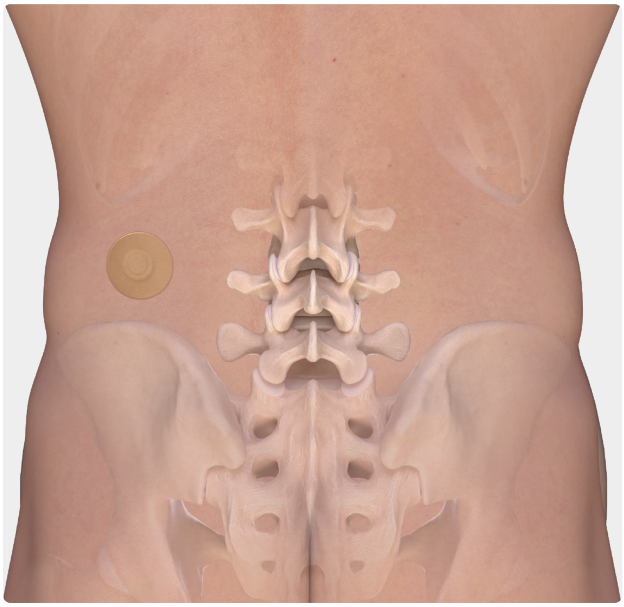
Assess
Use a ball-tip probe along with direct visualization to ensure all fragments have been removed and the discectomy and decompression are complete prior to removing the cannula.



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Complete Procedure
Remove the endoscope and cannula. Close the incision and apply a JumpStart® antimicrobial wound dressing.

Ordering Information

Spine endoscopic case, large	AR-S1000-C1
Spine endoscope case	AR-S1000-C3
Dilator, 2.5 mm × 230 mm	AR-S6524-025-230
Dilator, 4.1 mm × 220 mm	AR-S6524-041-220
Dilator, 5.1 mm × 210 mm	AR-S6524-051-210
Dilator, 6 mm × 200 mm	AR-S6524-060-200
Dilator, 7.1 mm × 190 mm	AR-S6524-071-190
Docking trocar, 11G, 200 mm	AR-S4000-11J-200-S
Docking trocar, 9G, 200 mm	AR-S4000-9J-200-S
Guidewire, nitinol, 0.8 mm × 400 mm	AR-S4000-008-400
Switching stick, 7 mm × 225 mm	AR-S3020-070-225
Cannula w/ oblique window, 8 mm × 178 mm	AR-S3420-080-178
Spine endoscope, 7 mm × 181 mm, 30°	AR-S3350-7030-181
Cup forceps, 2.5 mm × 330 mm	AR-S7110-025-330
Cup forceps, up angle, 2.5 mm × 330 mm	AR-S7110-025U-330
Blakesley forceps, 3.5 mm × 330 mm	AR-S7118-035-330
Scissor punch, 2.5 mm × 330 mm	AR-S7116-025-330
Scissor punch, up angle, 2.5 mm × 330 mm	AR-S7116-025U-330
Blunt dissector, 2.5 mm × 310 mm	AR-S1342-025-310
Hook probe, 2.5 mm × 310 mm	AR-S10030-025-310
Kerrison/ball tip probe, handle	AR-S7400-000-000H
Ball-tip probe shaft, flexible, 1.8 mm × 330 mm	AR-S7405-018-330
Ball-tip probe shaft, flexible, 2.4 mm × 330 mm	AR-S7405-024-330
Kerrison, 3.5 mm × 360 mm, 40°	AR-S7440-035-360
Kerrison, 4 mm × 360 mm, 40°	AR-S7440-040-360
Trephine handle	AR-S7700-000-000H
Trephine, 3.55 mm × 350 mm	AR-S7705-035-350
Trephine, 5.1 mm × 225 mm	AR-S7705-051-225
Trephine, 6.6 mm × 225 mm	AR-S7705-066-225
Trephine, 7.6 mm × 225 mm	AR-S7705-076-225
Rod pusher, 2.5 mm	AR-S6524-025-230P
Rod pusher, 4 mm	AR-S6524-040-230P
Rod pusher, 5 mm	AR-S6524-050-230P
Dilator holder	ML-0057
FlexTip RF probe, 35 cm	AR-S9805-0035
Coarse diamond oval bur, retractable, 3 mm × 330 mm	AR-SOV-R30-330CD
Oval bur, retractable, 3 mm × 330 mm	AR-SOV-R30-330
JumpStart® antimicrobial wound dressing, 2.5 in	ABS-4054

See product catalog for full product listings. Instruments dependent on surgeon preferences and pathology.

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.

Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)

US patent information

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