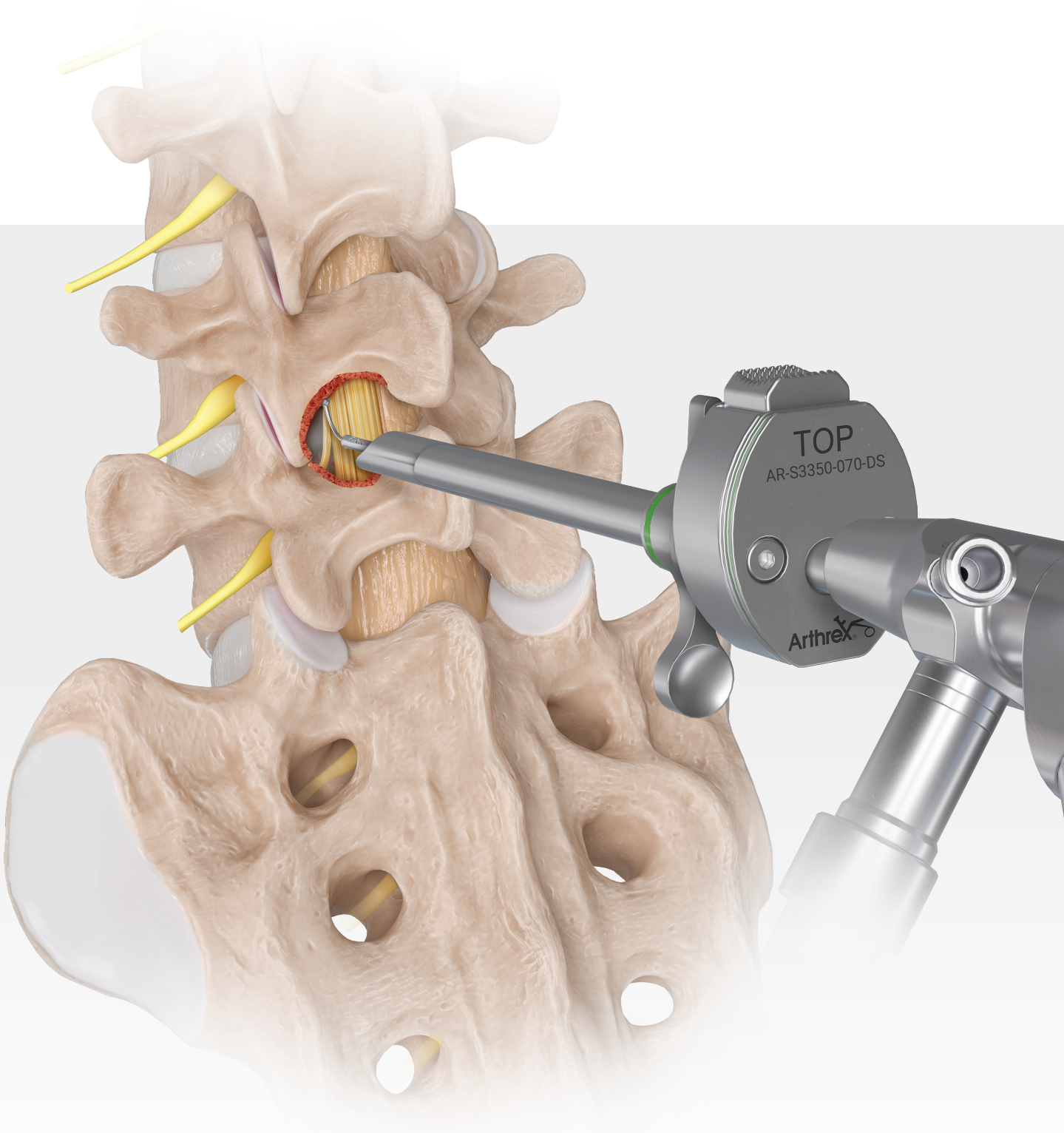
Lateral Recess Decompression

Endoscopic Surgical Technique



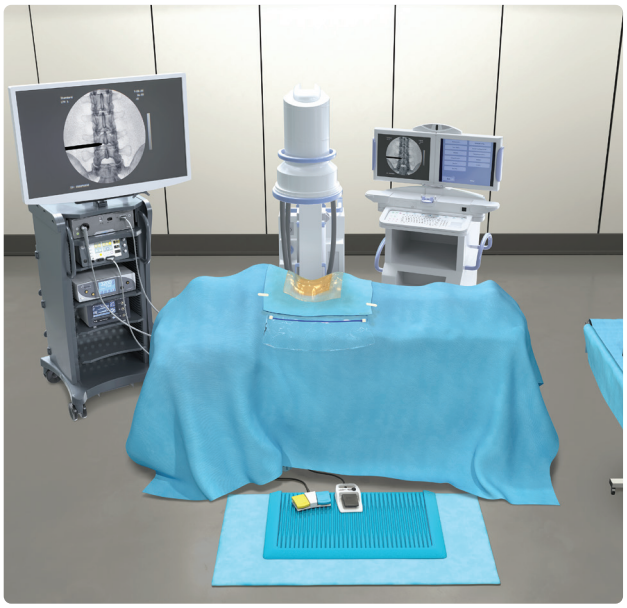
Arthrex®

Endoscopic Approach to Lateral Recess Decompression

Introduction

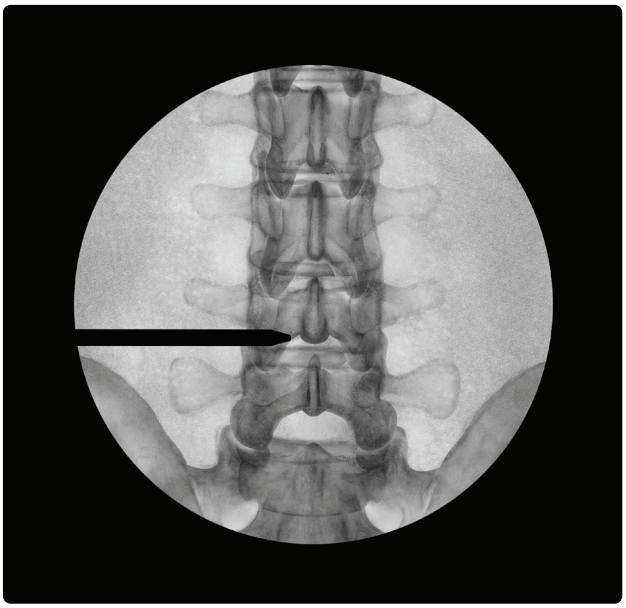
The ultra-minimally invasive endoscopic approach to lateral recess decompression creates a precise working channel for addressing stenosis localized to the lateral recess while preserving central canal anatomy. By utilizing the interlaminar corridor, surgeons can precisely remove compressive tissue with minimal disruption to surrounding structures. 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
- Whisker shavers help facilitate efficient, controlled soft-tissue removal



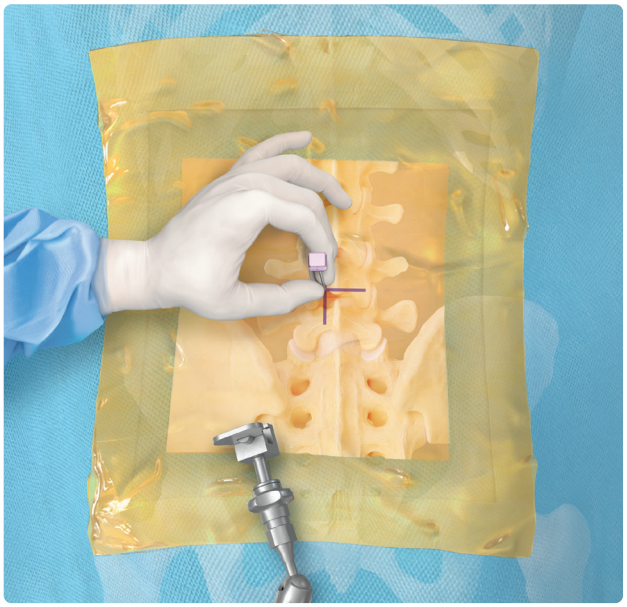
1

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.



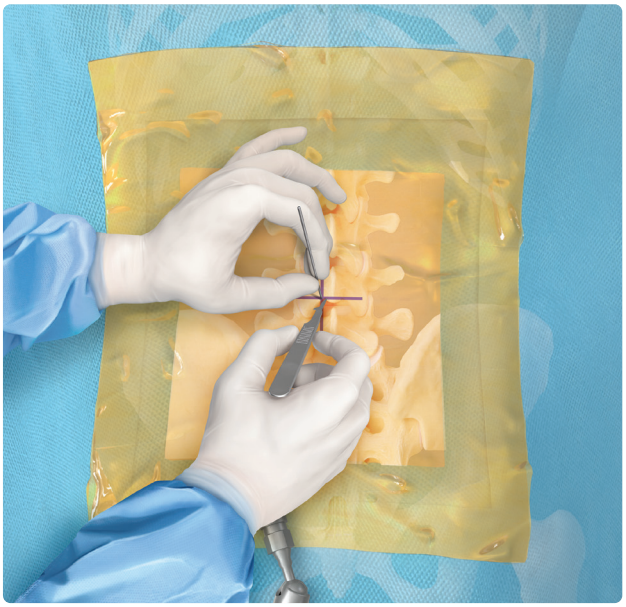
2

Targeting
Use AP and lateral views to target and confirm the correct level is being treated. Tilt the C-arm to maximize the interlaminar window at the level of the decompression. Target between 9 and 12 o'clock in the interlaminar window for a left-sided decompression or between 12 and 3 o'clock for a right-sided decompression.



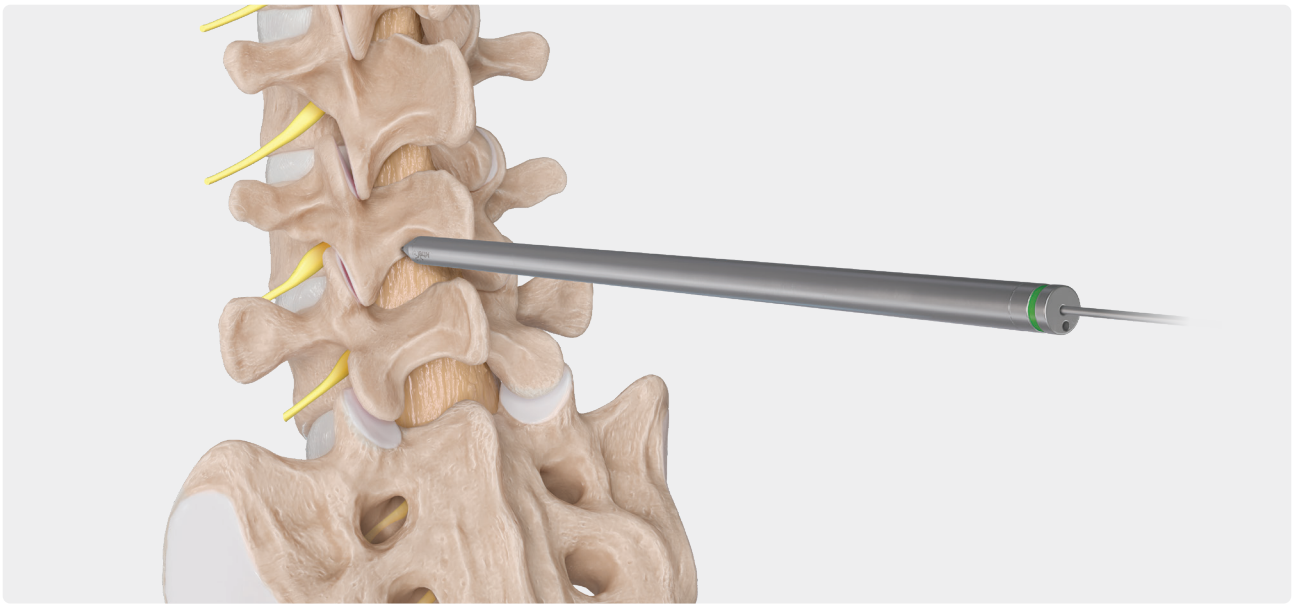
3

Needle Placement
Insert the needle and dock on the inferior medial edge of the cranial lamina.



4

Incision
Use a #11 or #15 blade to create an incision <1 cm in length through the skin and fascia.



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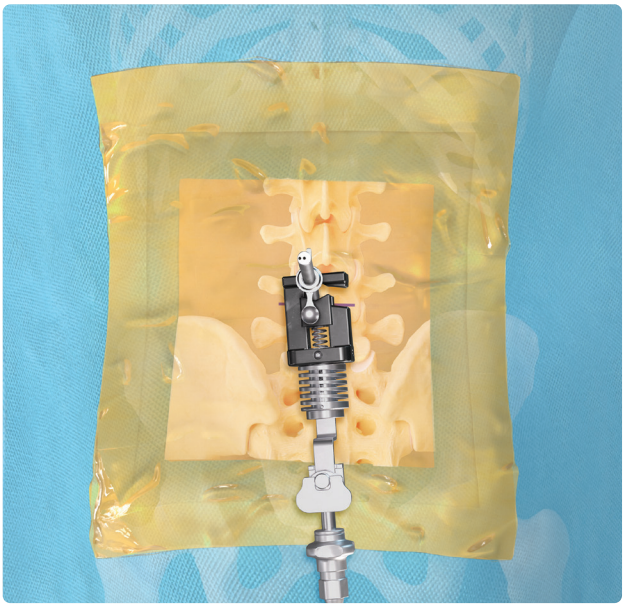
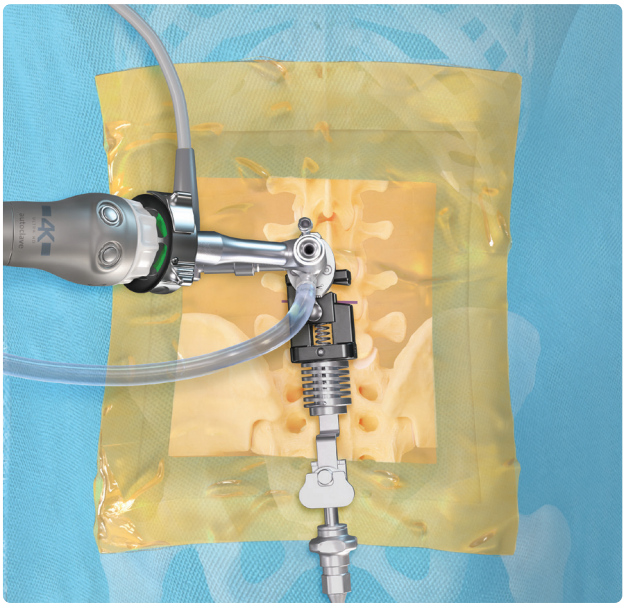
Dilating
Dilate through the musculature and fascia. Dock on the inferior medial edge of the cranial lamina. Use fluoroscopy to confirm positioning.



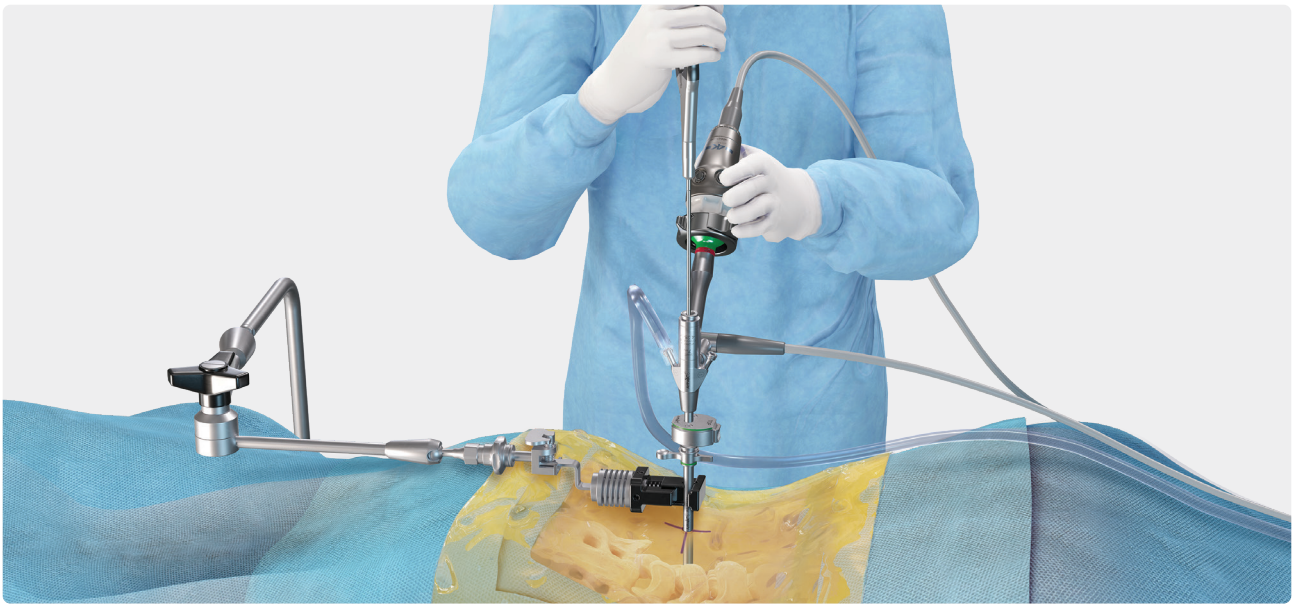
6

Cannula Holder
Insert the cannula over the switching stick. With the TRIMANO® arm holder attached to the bed via a bed rail adapter, connect the cannula holder. Maintain anatomy while positioning and attaching the holder to the cannula.



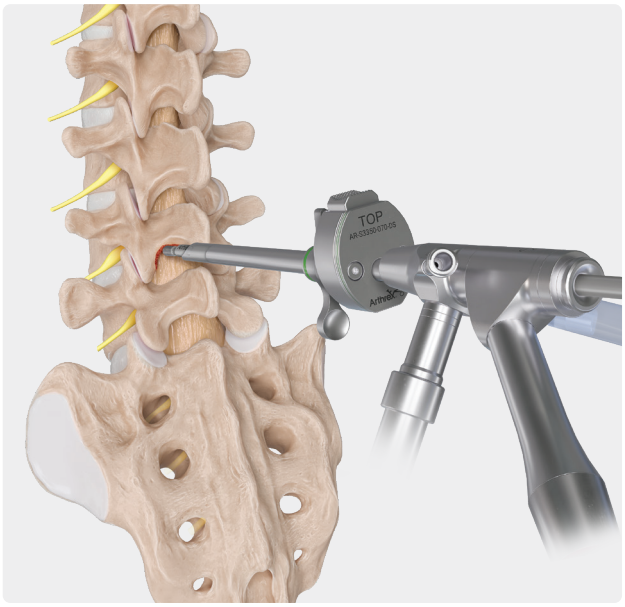
7

Set Up and Insert Endoscope
Attach the light cord camera, irrigation, and depth stop to the endoscope. Following removal of the switching stick, insert the endoscope into the cannula.



8

Exposure
After inserting the endoscope, insert a series of grasping instruments and the FlexTip probe through the endoscope's working channel. Remove excess tissue and coagulate blood vessels to identify anatomical landmarks and expose the ligamentum flavum, making sure to expose the junction between the lamina and ligamentum flavum.



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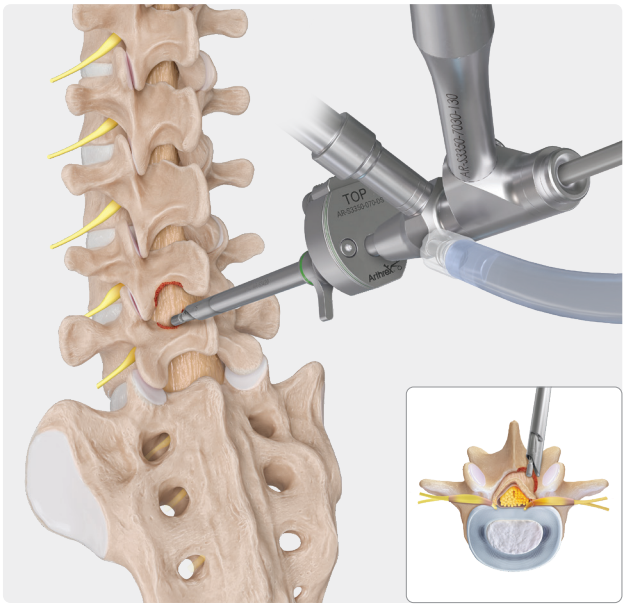
Undercut Cranial Lamina
Rest the bur on the ligamentum flavum, caudal to the cranial lamina. Undercut the ventral lamina at the attachment of the ligamentum flavum until it detaches from its cranial extent.



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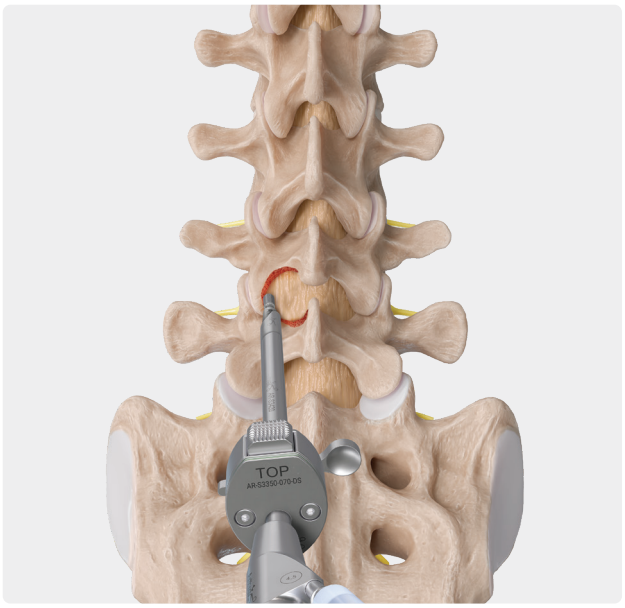
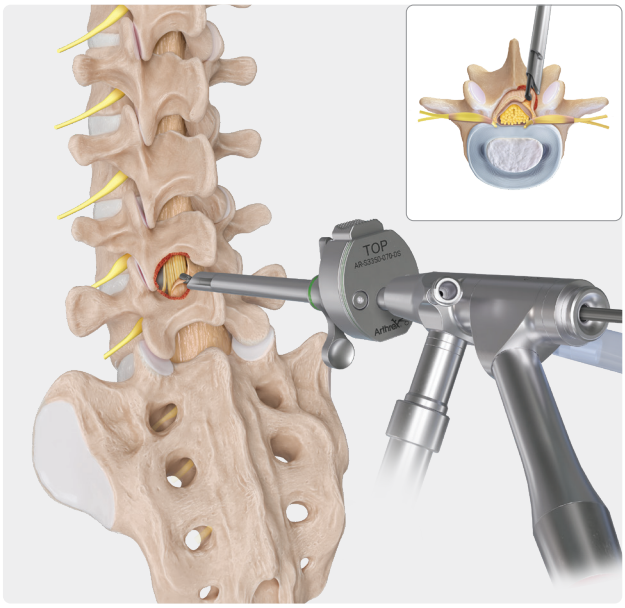
Undercut Caudal Lamina
Follow the lateral aspect of the cranial lamina to the medial facet and the caudal lamina. Rest the bur on the ligamentum flavum and resect the caudal lamina until the ligamentum flavum detaches from its caudal extent.



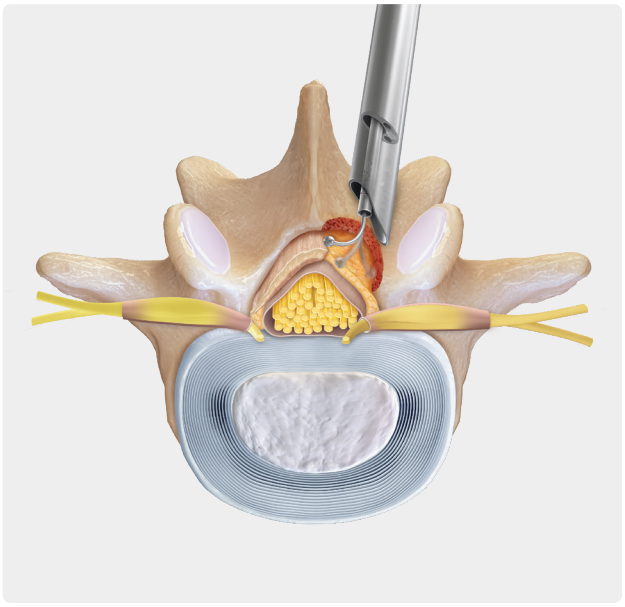
11

Undercut Facet
Extend this drilling to the medial facet until the medial aspect of the superior articulating process (SAP) is reached.



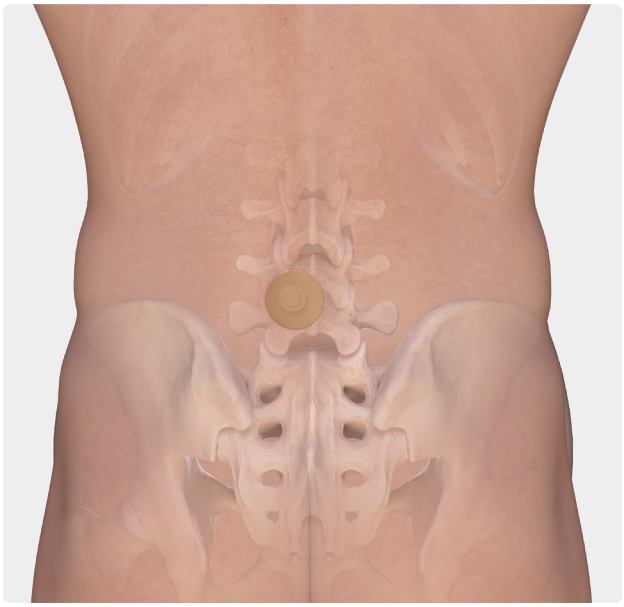
12

Decompress
Resect the ligamentum flavum, using Kerrison rongeurs or grasping instruments to fully expose and decompress the traversing nerve root.



13

Assess
Using a ball-tip probe with direct visualization, assess for adequate decompression of the lateral recess and mobilization of the traversing nerve before removing the cannula.



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Complete Procedure
Remove the endoscope and cannula and close the incision. Apply JumpStart® antimicrobial wound dressing over the incision site.

Ordering Information

Spine endoscopic case, large	AR-S1000-C1
Spine endoscope case	AR-S1000-C3
Switching stick, 7 mm × 225 mm	AR-S3020-070-225
Switching stick, 10 mm × 185 mm	AR-S3020-100-185
Cannula w/ oblique window: 8 mm × 125 mm	AR-S3420-080-125
Cannula w/ oblique window, 11 mm × 134 mm	AR-S3420-110-134
Spine endoscope, 7 mm × 130 mm, 15°	AR-S3350-7015-130
Spine endoscope, 10 mm × 139 mm, 15°	AR-S3350-1015-139
Cup forceps, 2.5 mm × 260 mm, WB	AR-S7110-025-260W
Cup forceps, 3.5 mm × 260 mm, WB	AR-S7110-035-260W
Cup forceps, up angle, 2.5 mm × 330 mm, WB	AR-S7110-025U-330W
Scissor punch, 2.5 mm × 260 mm, WB	AR-S7116-025-260W
Scissor punch, up angle, 2.5 mm × 330 mm, WB	AR-S7116-025U-330W
Kerrison ball-tip probe, handle, WB	AR-S7400-000-000W
Blunt dissector, 2.5 mm × 310 mm	AR-S1342-025-310
Hook probe, 2.5 mm × 260 mm	AR-S10030-025-260
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 × 260 mm, 40°	AR-S7440-035-260
Kerrison, 4 mm × 260 mm, 40°	AR-S7440-040-260
Dilator holder	ML-0057
FlexTip RF probe, 28 cm	AR-S9805-0028
Coarse diamond oval bur, retractable, 3 mm × 280 mm	AR-SOV-R30-280CD
Oval bur, retractable, 3 mm × 280 mm	AR-SOV-R30-280
Slotted whisker, 3.5 mm × 280 mm	AR-SSW-35-280
Fenestrated whisker, 3.5 mm × 280 mm	AR-SFW-35-280
Spine access kit, disposable	AR-S4000K-S
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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