

Dual-Portal Endoscopic Lumbar Decompression: a Case-Based Technique Video

Nebiyu Osman¹, Nicholas Scott Vollano², Jared Tishelman, Jong-Yun Woo, Charla R Fischer, Yong H Kim³

¹Uconn Orthopedics Residency, ²NYU Langone Health, ³NYU Langone Medical Center

This video uses a case presentation to demonstrate the steps to perform unilateral biportal endoscopic decompression of degenerative lumbar spinal stenosis. The case reviewed is a 51-year-old male who presented with a chief complaint of low back and bilateral buttock/leg pain for one year. Preoperative imaging revealed degeneration of the L4-5 disc with a diffuse bulge, in addition to moderate facet and ligamentum hypertrophy causing central and lateral recess stenosis. The patient was then indicated for decompression of L4-5 using the biportal endoscopic technique.

Conventional approaches for decompression such as open, microscopic open, and microscopic tubular techniques typically trade adequate anatomic visualization for excessive resection of spinal support tissues or vice versa. Unilateral biportal endoscopy provides the benefits of minimally invasive techniques without sacrificing visualization of the spinal anatomy or suffering the technical limitations of the uniportal endoscopic design.