

Foraminoscopy

With the idea of a safe working triangle between the exiting and traversing roots in the foramen, [endoscopic spine surgery](#) started to leave the safety of the indigo carmine blue-stained nucleus and explore the [lumbar intervertebral foramen](#).

In 1993 Mayer and Brock used an angled lens scope that allowed more dorsal visualization of anular pathology ¹⁾

Foraminoscopy was described by Mathews in 1996 ²⁾ and Ditsworth in 1998. ³⁾

In 1996 Kambin and Zhou described lumbar nerve root decompression by anulectomy and decompression of lateral recess stenosis with the use of forceps and trephines. ⁴⁾

In 2005 Schubert and Hoogland described their technique for transforaminal endoscopic removal of a sequestered disc fragment using reamers to expand the foraminal window by removing the ventral portion of the superior articular process. ⁵⁾

Multichannel endoscopes with larger working channels were introduced by Tsou et al. in 1997 ⁶⁾ and Ruetten et al. in 2007 ⁷⁾

A number of reports of the clinical success of direct endoscopic decompression of foraminal pathology would follow:

Yeung and Tsou in 2002 ⁸⁾ Ruetten et al. in 2007 ⁹⁾ Ruetten et al. in 2008 ¹⁰⁾ and Jasper et al. in 2013 ¹¹⁾.

see [Percutaneous endoscopic lumbar foraminotomy](#)

¹⁾

Mayer HM, Brock M: Percutaneous endoscopic lumbar discectomy (PELD). Neurosurg Rev 16:115–120, 1993

²⁾

Mathews HH: Transforaminal endoscopic microdiscectomy. Neurosurg Clin N Am 7:59–63, 1996

³⁾

Ditsworth DA: Endoscopic transforaminal lumbar discectomy and reconfiguration: a posterolateral approach into the spinal canal. Surg Neurol 49:588–598, 1998

⁴⁾

Kambin P, Zhou L: History and current status of percutaneous arthroscopic disc surgery. Spine (Phila Pa 1976) 21:24 Suppl57S–61S, 1996

⁵⁾

Schubert M, Hoogland T: Endoscopic transforaminal nucleotomy with foraminoplasty for lumbar disk herniation. Oper Orthop Traumatol 17:641–661, 2005

⁶⁾

Tsou PM, Yeung CA, Yeung AT: Posterolateral transforaminal selective endoscopic discectomy and thermal annuloplasty for chronic lumbar discogenic pain: a minimal access visualized intradiscal surgical procedure. Spine J 4:564–573, 2004

⁷⁾ ⁹⁾

Ruetten S, Komp M, Merk H, Godolias G: Use of newly developed instruments and endoscopes: full-endoscopic resection of lumbar disc herniations via the interlaminar and lateral transforaminal approach. J Neurosurg Spine 6:521–530, 2007

⁸⁾

Yeung AT, Tsou PM: Posterolateral endoscopic excision for lumbar disc herniation: Surgical technique, outcome, and complications in 307 consecutive cases. Spine (Phila Pa 1976) 27:722-731, 2002

¹⁰⁾

Ruetten S, Komp M, Merk H, Godolias G: Full-endoscopic interlaminar and transforaminal lumbar discectomy versus conventional microsurgical technique: a prospective, randomized, controlled study. Spine (Phila Pa 1976) 33:931-939, 2008

¹¹⁾

Jasper GP, Francisco GM, Telfeian AE: Clinical success of transforaminal endoscopic discectomy with foraminotomy: a retrospective evaluation. Clin Neurol Neurosurg 115:1961-1965, 2013

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=foraminoscopy>

Last update: **2024/06/07 02:59**

