Lumbar lateral recess stenosis

Diagnosis

The syndrome of lumbar spinal and lateral recess stenosis is characterized by pain and a variety of paresthetic symptoms occurring principally when the patient stands or walks. Sitting or lying down alleviate the symptoms promptly. The neurologic examination is characterized by a negative straight leg-raising test and a paucity of abnormal neurologic findings. The diagnosis is confirmed by a high-resolution CT scan. If conservative treatment fails, a myelogram is in order to establish a definitive diagnosis and assess the severity of neural compression prior to placing the indication for a surgical decompression of the stenotic spinal canal. The surgical procedure consists of a laminectomy and a partial facetectomy of the hypertrophied portion of the facet joint that compresses the adjacent lumbar nerve root from a dorsal direction. It is important to recognize all associated pathologic processes that must be dealt with accordingly at the same time in order to assure success of the operative procedure. The results of a surgical decompression for a lumbar spinal and lateral recess stenosis are excellent [1].

The clinical application of endoscopic technique for lumbar lateral recess stenosis (LRS) is still challenging. This study aimed to describe a transforaminal endoscopic decompression (TED) technique for LRS and to demonstrate its clinical results. METHODS:

Two-year follow-up data were collected from 45 consecutive patients who underwent TED for LRS. Full-scale endoscopic decompression can be performed in the dorsal and ventral aspects of the lateral recess with combined partial pediculectomy using an articulating bone burr and endoscopic instruments. Surgical outcomes were evaluated using the visual analog pain score (VAS), Oswestry disability index (ODI), and modified Macnab criteria. RESULTS:

Mean age of the 27 female and 18 male patients was 64.9 years. Mean VAS for leg pain and mean ODI improved from 7.93 and 75.87 at baseline to 1.71 and 17.87, respectively, at 2 years post-surgery ($P<0.001$ and $P<0.001$, respectively). Based on the modified Macnab criteria, excellent or good results were obtained in 86.7% of the patients, and symptomatic improvements were obtained in 97.8%. One patient underwent revision surgery due to incomplete decompression, and two experienced transient dysesthesia. CONCLUSION:

TED under local anesthesia can be effective for the treatment of LRS, especially for the elderly or patients at a high risk for general anesthesia [2].

1)
Ciric I, Mikhael MA. Lumbar spinal-lateral recess stenosis. Neurol Clin. 1985 May;3(2):417-23. PubMed PMID: 4021986.
2)
Ahn Y, Keum HJ, Lee SG, Lee SW. Transforaminal endoscopic decompression for lumbar lateral recess stenosis: an advanced surgical technique and clinical outcomes. World Neurosurg. 2019 Feb 11. pii: S1878-8750(19)30320-1. doi: 10.1016/j.wneu.2019.01.209. [Epub ahead of print] PubMed PMID: 30763754.