Lumbar foraminal stenosis conservative treatment

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Conservative treatment includes medication, rehabilitation, and spinal nerve block.

Physical therapy, anti-inflammatory medications and steroid injections. Advanced cases of lumbar foraminal stenosis may prompt to suggest open back surgery to remove elements in the spinal column that are causing the pain.

Patients with significant leg pain refractory to conservative treatment and concordance between the demonstrated area of stenosis and radicular symptoms and signs are candidates for decompression often combined with fusion. Desire for less extensive surgery led to developing new techniques and implants, including an interlaminar device designed with the goal of providing segmental stability without fusion, following decompression.

The role of arthrodesis and spinal instrumentation in the management of foraminal stenosis has to be addressed [1)].

A hyaluronic acid (HA), providing a sliding layer in the mechanical interface of a nerve root in a narrowed lateral recess, could potentially improve its neurodynamics and the trophic, leading to radicular pain reduction and improvement of function. This study aimed to assess the usefulness of ultrasound-guided HA epidural injections combined with neuromobilization in the conservative treatment of LFS. A group of 10 consecutively admitted patients with MRI-confirmed LFS and reduced straight leg raise (SLR) test results were qualified for a single HA epidural injection along with self-performed neuromobilization. Three measurement tools were used for primary outcomes: the numeric rating scale (NRS) for pain intensity, the Oswestry disability index (ODI) and the Roland-Morris questionnaire (RMQ) for disability level, and the angle of pain-free elevation in the SLR test as a functional assessment. The treatment was accomplished in all patients (100%). Overall, 60% of the patients completed all follow-up visits. There were no statistically significant differences regarding the

results of the NRS, ODI, or RMQ; however, a statistically significant increase in the results of the SLR test was noted (p = 0.015). Three patients reported a flare-up of the symptoms shortly after injection but without neurological deficits. In conclusion, an epidural HA injection combined with a self-administered exercise program is a promising method and might be a beneficial way to enhance the neurodynamics of nerve roots in LFS and offer an option for steroid treatment. However, this method of epidural HA administration in LFS should be verified in further studies to confirm its efficiency and safety [2)].

1)

Jenis LG, An HS. Spine update. Lumbar foraminal stenosis. Spine (Phila Pa 1976). 2000 Feb 1;25(3):389-94. Review. PubMed PMID: 10703115.

2)

Godek P, Ptaszkowski K. Safety of Epidural Hyaluronic Acid Injections in Managing the Symptoms of Lumbar Foraminal Stenosis: A Prospective Preliminary Study. J Clin Med. 2023 Mar 18;12(6):2359. doi: 10.3390/jcm12062359. PMID: 36983359; PMCID: PMC10052817.