



Decompression with or without Fusion Clinical Coverage Criteria

Overview

Disc Herniation with radiculopathy

The majority of patients with spinal nerve root impingement will improve independent of treatment. Disc herniations will often shrink/regress over time. Many, but not all, papers have demonstrated a clinical improvement with decreased size of disc herniations.¹ Direct visualization of intrinsic neurologic processes and neural impingement is of obvious importance in determining the etiology of radicular symptoms.² Certain physical findings are supportive (Manual muscle testing, sensory testing, supine straight leg raise, Lasegue's sign and crossed Lasegue's sign)³ and others are not (cough impulse test, Bell test, hyperextension test, femoral nerve stretch test, slump test, lumbar range of motion or absence of reflexes).⁴ In the absence of reliable evidence, it is the work group's opinion that a limited course of structured exercise is an option for patients with mild to moderate symptoms from lumbar disc herniation with radiculopathy.⁵ Transforaminal epidural steroid injections are suggested to improve functional outcomes in the majority of patients with lumbar disc herniation with radiculopathy, but higher degree of nerve root compression negatively affects outcomes.⁶ It is suggested that patients be assessed preoperatively for signs of psychological distress, such as somatization and/or depression, prior to surgery for lumbar disc herniation with radiculopathy. Patients with signs of psychological distress have worse outcomes than patients without such signs.⁷ There is insufficient evidence to make a recommendation for or against fusion for specific patient populations with lumbar disc herniation with radiculopathy whose symptoms warrant surgery.⁸

Lumbar disc herniation is a localized displacement of intervertebral disc material beyond the normal perimeter of the disc space. Depending on the volume, location, and type of herniation, adjacent neural structures may become compressed, resulting in radiculopathy associated with pain, numbness, or weakness. Impingement of the lumbosacral nerves by a herniated disc is the leading cause of sciatica, which is characterized by low back pain and radiating leg pain (Lorio et al., 2020).

A herniated or damaged disc most often occurs in the lumbar spine, but it can also occur in the cervical spine. Symptoms vary depending on the location of the herniated disc. Cervical radiculopathy from degenerative disorders can be defined as pain in a radicular pattern in one or both upper extremities related to compression and/or irritation of one or more cervical nerve roots. Frequent signs and symptoms include varying degrees of sensory, motor and reflex changes as well as dysesthesias and paresthesias related to nerve root(s) without evidence of spinal cord dysfunction (myelopathy). It is likely that for most patients with cervical radiculopathy

¹ Kreiner et. al. 2014, 10.

² Ibid., 12.

³ Ibid., 13

⁴ Ibid., 14.

⁵ Ibid., 30.

⁶ Ibid., 35.

⁷ Ibid., 57.

⁸ Ibid., 67.

from degenerative disorders signs and symptoms will be self-limited and will resolve spontaneously over a variable length of time without specific treatment. Surgical intervention is suggested for the rapid relief of symptoms of cervical radiculopathy from degenerative disorders when compared to medical/interventional treatment. Both anterior cervical discectomy (ACD) and anterior cervical discectomy and fusion (ACDF) are suggested as comparable treatment strategies, producing similar clinical outcomes, in the treatment of single level cervical radiculopathy from degenerative disorders. A systematic review of the literature yielded no studies to adequately address the comparison of long term results of single-level compared with multilevel surgical decompression in the management of cervical radiculopathy from degenerative disorders (Bono et al., 2012, p. 9).

Spinal stenosis

Degenerative lumbar spinal stenosis describes a condition in which there is diminished space available for the neural and vascular elements in the lumbar spine secondary to degenerative changes in the spinal canal. When symptomatic, this causes a variable clinical syndrome of gluteal and/or lower extremity pain and/or fatigue which may occur with or without back pain. Symptomatic lumbar spinal stenosis has certain characteristic provocative and palliative features. Provocative features include upright exercise such as walking or positionally-induced neurogenic claudication. Palliative features commonly include symptomatic relief with forward flexion, sitting and/or recumbency. Magnetic resonance imaging (MRI) is the diagnostic modality of choice for spinal stenosis as it allows for visualization of both soft tissues and neural structures. Thus, MRI confirms the presence of anatomic narrowing of the spinal canal or the presence of nerve root impingement.

In the absence of reliable evidence, it is the work group's opinion that the natural history of patients with clinically mild to moderately symptomatic degenerative lumbar stenosis can be favorable in about one-third to one half of patients.⁹ The diagnosis of lumbar spinal stenosis may be considered in older patients presenting with a history of gluteal or lower extremity symptoms exacerbated by walking or standing which improves or resolves with sitting or bending forward. Patients whose pain is not made worse with walking have a low likelihood of stenosis.¹⁰

Decompressive surgery is suggested to improve outcomes in patients with moderate to severe symptoms of lumbar spinal stenosis.¹¹

Policy

This Policy applies to the following Fallon Health products:

- Commercial
- Medicare Advantage
- MassHealth ACO
- NaviCare
- PACE

Prior authorization is required. These criteria address spinal decompression procedures for symptomatic disc herniation or spinal stenosis. Decompression may be accompanied by fusion when decompression causes instability. For fusion performed for instability without the need for decompression, please refer to the Medical Policy for Fusion.

Disc Herniation with Radiculopathy:

Fallon Health considers spinal decompression medically necessary for symptomatic spinal nerve root impingement due to disc herniation when:

⁹ Kreiner et al., 2013, 9.

¹⁰ Ibid., 13.

¹¹ Ibid., 56.

- History and physical examination findings consistent with disc herniation with radiculopathy, and
- The MRI report clearly reports spinal nerve root impingement, and
- For mild to moderate nerve impingement, the member failed conservative management including a transforaminal epidural steroid injection and at least 4 weeks of physical therapy, and
- The member has been assessed for signs of psychological distress.

Fusion added to the decompression for spinal nerve root impingement alone is not covered.

Spinal Stenosis:

Fallon health considers spinal decompression medically necessary for symptomatic lumbar spinal stenosis¹² when:

- History and physical examination findings are consistent with degenerative lumbar spinal stenosis, and
- Confirmation of the presence of anatomic narrowing of the spinal canal or the presence of nerve root impingement (MRI is the most appropriate noninvasive test to confirm the presences of anatomic narrowing of the spinal canal or the presence of nerve root impingement.¹³ In patients for whom MRI is either contraindicated or inconclusive, CT myelography is the next most appropriate test,¹⁴ followed by CT in patients for whom MRI and CT myelography are contraindicated, inconclusive or inappropriate.¹⁵ MRI or CT with axial loading is suggested as a useful adjunct to routine imaging in patients who have clinical signs and symptoms of lumbar spinal stenosis, a dural sac area (DSA) of less than 110mm² at one or more levels, and suspected but not verified central or lateral stenosis on routine unloaded MRI or CT.¹⁶ Electromyographic paraspinal mapping is suggested to confirm the diagnosis of degenerative lumbar spinal stenosis in patients with mild or moderate symptoms and radiographic evidence of stenosis.¹⁷), and
- In members with neurogenic claudication or radiculopathy, a multiple injection regimen of epidural steroid injections¹⁸ or caudal injections,¹⁹ and
- At least 4 weeks of physical therapy.²⁰

For Medicare Advantage members:

Effective for dates of service on or after January 9, 2014, Percutaneous Image-guided Lumbar Decompression (PILD) for Lumbar Spinal Stenosis is covered for Medicare Advantage plan members enrolled in a CMS-approved Coverage with Evidence Development (CED) clinical trial in accordance with National Coverage Determination (NCD) for Percutaneous Image-Guided Lumbar Decompression for Lumbar Spinal Stenosis (150.13). CMS-approved CED clinical trials for PILD are listed on the CMS website at: <https://www.cms.gov/Medicare/Coverage/Coverage-with-Evidence-Development/PILD>.

PILD is a posterior decompression of the lumbar spine performed under indirect image guidance without any direct visualization of the surgical area. This is a procedure proposed as a treatment for symptomatic LSS unresponsive to conservative therapy.

- CPT code G0276 is used when the clinical trial is a prospective, randomized, controlled clinical trial (RCT).

¹² Kreiner et al., 2013, 56.

¹³ Ibid., 20

¹⁴ Ibid., 22.

¹⁵ Ibid., 23.

¹⁶ Ibid., 24.

¹⁷ Ibid., 28.

¹⁸ Ibid., 46.

¹⁹ Ibid., 47.

²⁰ Ibid., 43.

- CPT code 0275T is used when the clinical trial is a prospective longitudinal study for an FDA-approved/cleared device that successfully completed a CMS-approved RCT.

Note: The claim may only contain one of these procedure codes, not both. Regardless of the type of CED approved clinical trial (i.e., RCT or prospective longitudinal study), PILD is only covered when billed with ICD-10 diagnosis code M48.05-M48.07, in place of service 22 (Outpatient) or 24 (Ambulatory Surgical Center), and with Z00.6 (ICD-10) in either the primary/secondary positions, modifier Q0/Q1 as appropriate and the NCT Identifier (CMS Transmittal R3811CP, Date: July 25, 2017).

Exclusions

- The following procedures are considered experimental and are not covered:
 - Percutaneous lumbar discectomy including automated percutaneous lumbar discectomy (APLD), and minimally invasive lumbar decompression (MILD) (CPT code 62287)
 - Percutaneous laser discectomy (PLDD)
 - Percutaneous thermal intradiscal procedures (TIPs), including but not limited to intradiscal electrothermal therapy (IDET), radiofrequency annuloplasty (RA), percutaneous disc decompression PDD), etc. (see Medicare NCD for Thermal Intradiscal Procedures (150.11)) (CPT codes for TIPs procedures performed within the annulus of the intervertebral disc: 22526, 22527 0062T, 0063T; CPT codes for TIPs procedures performed within the nucleus of the disc: 62287, 22899, 64999)
 - Laser-assisted disc decompression (LADD) (CPT 622287)

References

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Policy history

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Not all services mentioned in this policy are covered for all products or employer groups. Coverage is based upon the terms of a member's particular benefit plan which may contain its own specific provisions for coverage and exclusions regardless of medical necessity. Please consult the product's Evidence of Coverage for exclusions or other benefit limitations applicable to this service or supply. If there is any discrepancy between this policy and a member's benefit plan, the provisions of the benefit plan will govern. However, applicable state mandates take precedence with respect to fully-insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, federal mandates will apply to all plans. For Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this policy.