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# **MEDICAL POLICY**



Medical Policy Title	Lysis of Epidural Adhesions
Policy Number	7.01.73
<b>Current Effective Date</b>	October 15, 2025
Next Review Date	June 2026

Our medical policies are based on the assessment of evidence based, peer-reviewed literature, and professional guidelines. Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract. (Link to <u>Product Disclaimer</u>)

#### **POLICY STATEMENT(S)**

Lysis of epidural adhesions or epidural adhesiolysis, performed by catheter-based techniques or endoscopically, as a treatment for back pain, is considered **investigational**.

#### **RELATED POLICIES**

Corporate Medical Policy

11.01.03 Experimental or Investigational Services

#### **POLICY GUIDELINE(S)**

Not Applicable

#### DESCRIPTION

Epidural adhesiolysis, (also known as epidural neurolysis, epidural decompressive neuroplasty, and Racz neurolysis) is a treatment for back pain that involves disruption, reduction, and/or elimination of fibrous tissue from the epidural space, which is carried out by either catheter manipulation or the injection of saline or other adhesiolytic agents. A catheter is used to enter the epidural space through a caudal, interlaminar, or transforaminal approach. The goal is to free the nerve root of adhesions and allow introduction of medications to the affected nerve root. An anesthetic along with a glucocorticosteroid may also be injected as part of the procedure. These procedures may also involve spinal endoscopy to visually address the adhesions.

#### SUPPORTIVE LITERATURE

There is insufficient scientific evidence to support the use of epidural adhesiolysis, performed by catheter or endoscopically, as a treatment for back pain.

A small (75 subjects), single center, randomized controlled study published by Manchikanti et al (2004). Although the study was adequately designed and reported positive results, it provided insufficient evidence to conclude that lysis of epidural adhesions provides a health benefit. The effectiveness of the study's blinding is not clear, and interpretation of results is limited, because data for 19 patients in the control and three patients in each treatment arm were carried forward from the three-month or six-month evaluation and reported in 12-month outcomes.

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E. Hsu et al (2014) conducted a multi-center, retrospective study of 115 patients who underwent lysis of adhesions for failed back surgery syndrome (FBSS) (n = 104) or spinal stenosis (n = 11) between 2004 and 2007. Twenty-seven demographic, clinical, and procedural variables were extracted from medical records and correlated with the outcome, defined as 50% pain relief or greater lasting one month or more. Overall, 48.7% of patients experienced a positive outcome. Those who had a positive outcome were older (mean age 64.1 years; P = 0.02), while higher baseline numerical rating scale pain scores were associated with a negative outcome (mean 6.7 years; P = 0.07). Use of hyaluronidase did not correlate with outcomes (P = 0.65). In multi-variable analysis, patients aged 81 years and older, baseline numerical rating scale score 9 or less (P = 0.02), and patients on or seeking disability or worker's compensation (P = 0.04), were significantly more likely to experience a positive outcome. The authors concluded that patient selection for lysis of epidural adhesions may increase outcomes, but that further research is required.

A two-year follow-up of a randomized, controlled trial (RCT) with 120 patients treated for FBSS has been reported by Manchikanti and colleagues (2012). Patients were assigned to receive either caudal epidural injections or percutaneous adhesiolysis. Outcome measures included Oswestry Disability Index (ODI), employment status, and opioid intake. The authors reported that 82% of patients receiving adhesiolysis had significant improvement in functional status and relief of pain by at least 50%, compared to only 5% improvement in the epidural corticosteroid injection group. If patients had improved functioning and pain reductions of at least 50% for at least three months following adhesiolysis, repeat adhesiolysis was permitted. Patients in the adhesiolysis group received an average of 6.4 adhesiolysis procedures, while patients in the epidural corticosteroid injection group averaged 2.4 procedures over the two-year period. Limitations of the study include inadequate blinding, lack of a placebo group, and a high proportion of patient withdrawals.

In 2016, Pereira and colleagues published the results of a small case series study involving 24 subjects with epidural scar tissue following lumbar discectomy who were treated with a combination of different techniques. The techniques used were dependent on the consistency of the fibrous tissue found in each subject. Mild adhesions were lysed by distention of the epidural space with small boluses of saline solution and by mechanical dissection with the tip of a Fogarty catheter. Denser areas of fibrosis were treated by manipulating the inflated balloon of the Fogarty catheter or removing them with a 1 mm flexible endoscopic grasping forceps if no blood vessels could be identified in the vicinity. The thickest and hardest fibrotic areas were initially treated with Fogarty catheter, followed by radiofrequency ablation. All subjects received epidural steroids and anesthetic injection following surgical treatment. One subject reported no improvement at one month and withdrew from the study; all other subjects were followed for 12 months. The authors reported a statistically significant improvement in low back and lower limb pain at all assessment periods up to 12 months (p<0.0001 for all). A pain relief over 50% was achieved in 71% of the participants at one month, 63% at three and six months, and 38% at 12 months. Measures on the Oswestry Disability Index were significantly improved at the 15-day, 30-day, and 90-day time points (p<0.001, 0.001, and 0.019, respectively). One subject developed facet joint pain distinct from the pre-intervention pain at six months post treatment and underwent medial branch radiofrequency neurotomy with pain relief. No other percutaneous interventions were performed in any other subjects. One subject reported neck pain after irrigation of the epidural space, which resolved spontaneously. Another

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subject presented with an S1 sensory deficit following the procedure, with full recovery within 48 hours. No infections, additional neurological deficits, dural tears, or any other complications related to the procedure were noted. This small, unblinded, uncontrolled study has multiple methodologic flaws that prevent adequate assessment of the efficacy of lysis of epidural adhesions.

Brito-García et al (2019) assessed the efficacy, safety, effectiveness, and cost-effectiveness of epidural adhesiolysis for treating patients with chronic pain attributed to FBSS in a systematic review of the literature. Out of the studies that met the inclusion criteria, only two of them were RCTs which included a total of 212 participants; the other seven studies were observational. The authors assessed that even though the results from both RCTs had a favorable outcome for adhesiolysis, there was a high risk of bias and serious methodology flaws in the studies which included lack of blinding for participants, informing the participants of which treatment they had received and a high dropout rate. The observational studies were of low quality and did not provide any data indicating positive clinical development. The authors concluded the evidence on the efficacy and safety for adhesiolysis is insufficient in patients with FBSS and that further high quality RCTs should be done to assess for efficacy, effectiveness and cost.

#### **PROFESSIONAL GUIDELINE(S)**

In 2021, the American Society of Interventional Pain Physicians (ASIPP) published a guideline addressing epidural interventions in the management of chronic spinal pain (Manchikanti, 2021). The available evidence is for percutaneous adhesiolysis in the lumbar region only, utilizing a caudal approach. Evidence for the cervical and thoracic regions and transforaminal approach in the lumbar region is only emerging. Based on a review of the evidence, the ASIPP made the following recommendation regarding the use of percutaneous adhesiolysis:

- The evidence for percutaneous adhesiolysis in managing disc herniation based on one highquality, placebo-controlled RCT is Level II with moderate to strong recommendation for longterm improvement in patients nonresponsive to conservative management and fluoroscopically guided epidural injections
- The evidence for percutaneous adhesiolysis in lumbar stenosis based on relevant, moderate to high quality RCTs, observational studies, and systematic reviews is Level II with moderate to strong recommendation for long-term improvement after failure of conservative management and fluoroscopically guided epidural injections.
- For percutaneous adhesiolysis, based on multiple moderate to high-quality RCTs and systematic reviews, the evidence is Level I with strong recommendation for long-term improvement after failure of conservative management and fluoroscopically guided epidural injections.

#### **REGULATORY STATUS**

The Racz epidural catheter received Section 510(k) premarket clearance from the U.S. Food and Drug Administration (FDA) in 1996.

CODE(S)

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- Codes may not be covered under all circumstances.
- Code list may not be all inclusive (AMA and CMS code updates may occur more frequently than policy updates).
- (E/I)=Experimental/Investigational
- (NMN)=Not medically necessary/appropriate

#### **CPT Codes**

Description	
Percutaneous lysis of epidural adhesions using solution injection (e.g., hypertonic saline, enzyme) or mechanical means (e.g., catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 2 or more days	
1 day	
Injection/infusion of neurolytic substance (e.g., alcohol, phenol, iced saline solutions), with or without other therapeutic substance; subarachnoid	
Injection/infusion of neurolytic substance (e.g., alcohol, phenol, iced saline solutions), with or without other therapeutic substance; epidural, cervical or thoracic	
Injection/infusion of neurolytic substance (e.g., alcohol, phenol, iced saline solutions), with or without other therapeutic substance; epidural, lumbar, sacral (caudal)	

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**HCPCS Codes** 

Code	Description
Not	
Applicable	

#### **ICD10 Codes**

Code	Description
Multiple Codes	

#### REFERENCES

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#### **SEARCH TERMS**

Not Applicable

#### CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

Based on our review, lysis of epidural adhesions or epidural adhesiolysis is not addressed in National or Regional Medicare coverage determinations or policies.

#### **PRODUCT DISCLAIMER**

- Services are contract dependent; if a product does not cover a service, medical policy criteria do not apply.
- If a commercial product (including an Essential Plan or Child Health Plus product) covers a specific service, medical policy criteria apply to the benefit.
- If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.
- If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.
- If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

#### POLICY HISTORY/REVISION

#### **Committee Approval Dates**

03/16/06, 03/15/07, 02/21/08, 01/15/09, 01/21/10, 12/16/10, 12/15/11, 12/20/12, 12/19/13, 12/18/14, 12/17/15, 11/17/16, 11/16/17, 06/21/18, 12/20/18, 12/19/19, 12/17/20, 12/16/21, 12/22/22, 12/21/23, 06/20/24, 06/26/25

Date	Summary of Changes	
06/26/25	Annual review, policy intent unchanged.	

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01/01/25	Summary	of changes tracking implemented.
03/16/06	• Original e	effective date