

# Clinical Policy: Lysis of Epidural Lesions

Reference Number: LA.CP.MP.116

Date of Last Revision: 06/23

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## Description

Epidural adhesiolysis, also known as epidural neuroplasty, lysis of epidural adhesions, or caudal neuroplasty, is a minimally invasive surgery for patients with chronic back pain associated with epidural fibrosis or adhesions. Adhesions are commonly caused by scarring after spinal interventions and are associated with post-laminectomy syndrome or failed back surgery syndrome. Adhesions may also be caused by normal aging of the spine and spinal disorders such as lumbar disc herniation and spinal stenosis.

## Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that current medical literature does not support the efficacy of lysis of epidural lesions, including percutaneous epidural adhesiolysis and endoscopic epidural adhesiolysis, with or without use of an indwelling epidural Racz catheter.

## Background

Percutaneous lysis of epidural adhesions with epidural injections of hypertonic saline, in conjunction with steroids and analgesics or hyaluronidase, is an interventional pain management technique that has been investigated as a treatment option in managing chronic intractable low back pain caused by extensive peridural scarring. In theory, the use of hypertonic saline results in a mechanical disruption of the adhesions. Adhesions may also be disrupted by the manipulation of the catheter at the time of the injection. The hypertonic saline may also function to reduce edema within previously scarred and/or inflamed nerves. Hyaluronidase may be added to the injectate to further the penetration of the drugs into the scar tissue.

Spinal endoscopy has been used to guide the lysis of adhesions. Prior to use of endoscopy, adhesions can be identified as non-filling lesions on fluoroscopy. Using endoscopy guidance, a flexible fiberoptic catheter is inserted into the sacral hiatus, providing 3-D visualization to steer the catheter toward the adhesions, to more precisely place the injectate in the epidural space and onto the nerve root. Various protocols for lysis have been described; in some situations, the catheter may remain in place for several days for serial treatment sessions.

### *Evidence for percutaneous adhesiolysis*

Controlled trials have found short-term positive effects of percutaneous epidural adhesiolysis in patients with chronic, refractory back pain and lower extremity pain.<sup>1-5</sup> However, these studies are limited by methodological limitations including somewhat high attrition rates, insufficient blinding and inadequate statistical power to establish safety. Furthermore, many of the studies were conducted at the same interventional pain management center, which could limit the representativeness of the results obtained by the researchers.<sup>1</sup>

A Hayes review of six randomized controlled trials (RCTs) with search data through September 7, 2018 was completed for percutaneous epidural adhesiolysis treatment for adults with chronic

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low back pain (CLBP) unresponsive to other treatments.<sup>6</sup> This review showed a small body of low-quality evidence, suggesting that percutaneous adhesiolysis may cause improvement in patients with CLBP who have failed conservative treatment.<sup>6</sup> Hayes states that “while the evidence suggests potential short- and intermediate-term efficacy of this procedure in patients with CLBP, whether or not epidural adhesions are the actual source of the pain in these patients has been debated, and long-term outcomes remain to be determined in well-designed trials.”<sup>6</sup> Additionally, there has been a lack of RCTs published in the past five years, and there are currently no registered clinical studies researching percutaneous adhesiolysis.<sup>6</sup>

#### *Evidence for endoscopic adhesiolysis*

Research conducted on endoscopic epidural adhesiolysis is generally positive, with significant improvements in pain with endoscopic adhesiolysis compared to control groups.<sup>7-10</sup> The studies conducted thus far have been largely observational, however.<sup>7-10</sup> In a 2012 RCT conducted by Manchikanti et al., endoscopic adhesiolysis was found to significantly improve pain at three, six, and 12 months in patients who had failed conservative treatment for low back pain, compared to endoscopy alone.<sup>11</sup> A systematic review of endoscopic adhesiolysis was conducted by Helm et al. and included three observational studies and one RCT.<sup>12</sup> The systematic review concluded that there is fair quality evidence of positive effects, citing paucity of literature as a limitation.<sup>12</sup>

#### *Guideline Recommendations*

##### *American Society of Interventional Pain Physicians (ASIPP)*

A 2021 update of epidural interventions from guidelines published in 2013 by the American Society of Interventional Pain Physicians now rates the quality of evidence for percutaneous adhesiolysis as moderate to strong for managing chronic low back and lower extremity pain due to disc herniation and spinal stenosis and strong for post-surgery syndrome after failure of conservative treatment and fluoroscopically guided epidural injections.<sup>13</sup> The limitation of this guideline update continues to be a paucity of high quality RCTs assessing the intervention.<sup>13</sup> The guideline update does not address endoscopic adhesiolysis.

##### *National Institute for Health and Care Excellence (NICE)*

In a 2010 statement, the UK National Institute for Clinical Excellence (NICE) concluded, “current evidence on therapeutic endoscopic division of epidural adhesions is limited to some evidence of short-term efficacy, and there are significant safety concerns. Therefore, this procedure should only be used with special arrangements for clinical governance, consent and audit or research.”<sup>12</sup>

### Coding Implications

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CPT® Codes	Description
62263	Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 2 or more days
62264	Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 1 day
64999	Unlisted procedure, nervous system

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Revised policy statement to state, “current medical literature does not support the efficacy of lysis of epidural lesions,” and removed “investigational.” References review and updated.	1/2022	
Annual review. References reviewed, updated, and reformatted. Background updated with no clinical significance. Specialist reviewed.	7/22	9/26/22
Annual review. Background updated with no impact on Policy Criteria section. ICD-10 codes removed. Changed, “review date,” in the header to “Date of Last Revision,” and “Date” in the revision log header to “Revision Date.” References reviewed and updated. Added unlisted procedure code 64999.	06/23	8/24/23

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### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program

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