

Clinical Policy: Lysis of Epidural Lesions

Reference Number: LA.CP.MP.116

Date of Last Revision: ~~1/2022~~7/22

Coding Implications

Revision Log

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

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.¹⁻⁵ 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.¹

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.⁶⁻⁹ The studies

conducted thus far have been largely observational, however.⁶⁻⁹ In a 2012 randomized controlled trial (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.¹⁰ A systematic review of endoscopic adhesiolysis was conducted by Helm et al. and included three observational studies and one RCT.¹¹ The systematic review concluded that there is fair quality evidence of positive effects, citing paucity of literature as a limitation.¹¹

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.¹⁶ The limitation of this guideline update continues to be a paucity of high quality RCTs assessing the intervention.¹⁶ 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."¹¹

~~A 2013 Guideline Update by the American Society of Interventional Pain Physicians rates the quality of evidence for lumbar percutaneous adhesiolysis as fair for managing chronic low back and lower extremity pain due to post surgery syndrome and spinal stenosis.¹² This is due largely to limited number of high quality RCTs assessing the intervention. The guideline update does not address endoscopic adhesiolysis due to limited evidence.¹² Additionally, the UK National Institute for Clinical Excellence (NICE) has concluded that "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."¹³~~

~~Given the limited high quality research conducted on percutaneous and endoscopic adhesiolysis, these procedures are considered investigational.~~

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2020, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only and may not support medical necessity. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources

of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
62263	Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (e.g., 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 (e.g., catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 1 day

ICD-10-CM Diagnosis Codes

ICD-10-CM Code	Description
G96.12	Meningeal adhesions (cerebral) (spinal)
G96.198	Other disorders of meninges, not elsewhere classified
M48.00-M48.08	Spinal Stenosis
M50.00_M54.9	Other dorsopathies
M96.1	Postlaminectomy syndrome, not elsewhere classified

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	
<u>Annual review. References reviewed, updated, and reformatted. Background updated with no clinical significance. Specialist reviewed.</u>	<u>7/22</u>	

References

1. Heavner JE, Racz GB, Raj P. Percutaneous epidural neuroplasty: prospective evaluation of 0.9% NaCl versus 10% NaCl with or without hyaluronidase. *Reg Anesth Pain Med.* 1999;24(3):202-207. doi:10.1016/s1098-7339(99)90128-1
2. Veihelmann A, Devens C, Trouillier H, Birkenmaier C, Gerdesmeyer L, Refior HJ. Epidural neuroplasty versus physiotherapy to relieve pain in patients with sciatica: a prospective randomized blinded clinical trial. *J Orthop Sci.* 2006;11(4):365-369. doi:10.1007/s00776-006-1032-y
3. Manchikanti L, Rivera JJ, Pampati V, et al. One day lumbar epidural adhesiolysis and hypertonic saline neurolysis in treatment of chronic low back pain: a randomized, double-blind trial. *Pain Physician.* 2004;7(2):177-186.
4. Manchikanti L, Singh V, Cash KA, Pampati V. Assessment of effectiveness of percutaneous adhesiolysis and caudal epidural injections in managing post lumbar surgery syndrome: 2-

- year follow-up of a randomized, controlled trial. *J Pain Res.* 2012;5:597-608. doi:10.2147/JPR.S38999
5. Richardson J, McGurgan P, Cheema S, Prasad R, Gupta S. Spinal endoscopy in chronic low back pain with radiculopathy. A prospective case series. *Anaesthesia.* 2001;56(5):454-460. doi:10.1046/j.1365-2044.2001.01524-3.x
 6. Geurts JW, Kallewaard JW, Richardson J, Groen GJ. Targeted methylprednisolone acetate/hyaluronidase/clonidine injection after diagnostic epiduroscopy for chronic sciatica: a prospective, 1-year follow-up study. *Reg Anesth Pain Med.* 2002;27(4):343-352. doi:10.1053/rapm.2002.27175
 7. Donato AD, Fontana C, Pinto R, Beltrutti D, Pinto G. The effectiveness of endoscopic epidurolysis in treatment of degenerative chronic low back pain: a prospective analysis and follow-up at 48 months. *Acta Neurochir Suppl.* 2011;108:67-73. doi:10.1007/978-3-211-99370-5_11
 8. Manchikanti L, Boswell MV, Rivera JJ, et al. [ISRCTN 16558617] A randomized, controlled trial of spinal endoscopic adhesiolysis in chronic refractory low back and lower extremity pain. *BMC Anesthesiol.* 2005;5:10. Published 2005 Jul 6. doi:10.1186/1471-2253-5-10
 9. Helm S, Hayek SM, Colson J, et al. Spinal endoscopic adhesiolysis in post lumbar surgery syndrome: an update of assessment of the evidence. *Pain Physician.* 2013;16(2 Suppl):SE125-SE150.
 10. Manchikanti L, Abdi S, Atluri S, et al. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: guidance and recommendations. *Pain Physician.* 2013;16(2 Suppl):S49-S283.
 11. National Institute for Health and Care Excellence. Therapeutic endoscopic division of epidural adhesions. Interventional procedures guidance [IPG333]. <https://www.nice.org.uk/guidance/ipg333>. Published February 24, 2010. Accessed April 29, 2022.
 12. Rapčan R, Kočan L, Mláka J, et al. A Randomized, Multicenter, Double-Blind, Parallel Pilot Study Assessing the Effect of Mechanical Adhesiolysis vs Adhesiolysis with Corticosteroid and Hyaluronidase Administration into the Epidural Space During Epiduroscopy. *Pain Med.* 2018;19(7):1436-1444. doi:10.1093/pm/pnx328
 13. Choi EJ, Yoo YJ, Lee PB, Kim YC, Lee SC, Moon JY. A Retrospective Study to Evaluate the Effect of Concentration of Hypertonic Saline on Efficacy and Safety of Epidural Adhesiolysis. *Anesth Analg.* 2017;124(6):2021-2029. doi:10.1213/ANE.0000000000001925
 14. Tuijp SJ, Van Zundert J, De Vooght P, et al. Does the Use of Epiduroscopic Lysis of Adhesions Reduce the Need for Spinal Cord Stimulation in Failed Back Surgery Syndrome? A Short-Term Pilot Study. *Pain Pract.* 2018;18(7):839-844. doi:10.1111/papr.12681
 15. Percutaneous epidural adhesiolysis for chronic low back pain. Hayes. www.hayesinc.com. Published September 27, 2018 (annual review November 10, 2021). Accessed April 18, 2022.
 16. Manchikanti L, Knezevic NN, Navani A, et al. Epidural Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Comprehensive Evidence-Based Guidelines. *Pain Physician.* 2021;24(S1):S27-S208.
 1. Heavner JE, Racz GB, Raj P. Percutaneous epidural neuroplasty: prospective evaluation of 0.9% NaCl versus 10% NaCl with or without hyaluronidase. *Reg Anesth Pain Med.* 1999;24(3):202-207.

2. ~~Veihelmann A, Devens C, Trouillier H, et al. Epidural neuroplasty versus physiotherapy to relieve pain in patients with sciatica: a prospective randomized blinded clinical trial. J Orthop Sci. 2006;11(4):365-369.~~
3. ~~Manchikanti L, Rivera JJ, Pampati V, et al. One-day lumbar epidural adhesiolysis and hypertonic saline neurolysis in treatment of chronic low back pain: A randomized, double-blind trial. Pain Physician. 2004;7(2):177-186.~~
4. ~~Manchikanti L, Singh V, Cash KA, Pampati V. Assessment of effectiveness of percutaneous adhesiolysis and caudal epidural injections in managing post lumbar surgery syndrome: 2-year follow-up of a randomized, controlled trial. J Pain Res. 2012;5:597-608.~~
5. ~~Richardson J, McGurgan P, Cheema S, et al. Spinal endoscopy in chronic low back pain with radiculopathy. A prospective case series. Anaesthesia. 2001;56(5):454-460.~~
6. ~~Geurts JW, Kallewaard JW, Richardson J, Groen GJ. Targeted methylprednisolone acetate/hyaluronidase/clonidine injection after diagnostic epiduroscopy for chronic sciatica: a prospective, 1-year follow-up study. Reg Anesth Pain Med. 2002;27(4):343-352.~~
7. ~~Donato AD, Fontana C, Pinto R, et al. The effectiveness of endoscopic epidurolysis in treatment of degenerative chronic low back pain: a prospective analysis and follow-up at 48 months. Acta Neurochir Suppl. 2011;108:67-73.~~
8. ~~Manchikanti L, Boswell MV, Rivera JJ, et al. A randomized, controlled trial of spinal endoscopic adhesiolysis in chronic refractory low back and lower extremity pain [ISRCTN 16558617]. BMC Anesthesiol. 2005;5:10.~~
9. ~~Helm S, Hayek SM, Colson J, et al. Spinal endoscopic adhesiolysis in post lumbar surgery syndrome: an update of assessment of the evidence. Pain Physician. 2013;16(2 Suppl):SE125-150.~~
10. ~~Manchikanti L, Abdi S, Atluri S, et al. ASIPP-IPM. An update of comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain. Part II: guidance and recommendations. Pain Physician. 2013;16(2 Suppl):S49-283.~~
11. ~~National Institute for Clinical Evidence. Interventional procedure guidance IPG333: Therapeutic endoscopic division of epidural adhesions. February 2010. Accessed 04/20/21.~~
12. ~~Rapean R, Kocan L, Mlaka J, et al. A Randomized, Multicenter, Double-Blind, Parallel Pilot Study Assessing the Effect of Mechanical Adhesiolysis vs Adhesiolysis with Corticosteroid and Hyaluronidase Administration into the Epidural Space During Epiduroscopy. Pain Med. 2018 Mar 23. doi: 10.1093/pm/pnx328.~~
13. ~~Choi EJ, Yoo YJ, Lee PB, et al. A Retrospective Study to Evaluate the Effect of Concentration of Hypertonic Saline on Efficacy and Safety of Epidural Adhesiolysis. Anesth Analg. 2017 Jun;124(6):2021-2029. doi: 10.1213/ANE.0000000000001925.~~
14. ~~Tuijp SJ, Van Zundert J, De Vooght P, et al. Does the Use of Epiduroscopic Lysis of Adhesions Reduce the Need for Spinal Cord Stimulation in Failed Back Surgery Syndrome? A Short-Term Pilot Study. Pain Pract. 2018 Jan 18. doi: 10.1111/papr.12681.~~
15. ~~Hayes Medical Technology Directory. Percutaneous Epidural Adhesiolysis for Chronic Low Back Pain. Annual review Jan 14, 2021.~~

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

approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom LHCC has no control or right of control. Providers are not agents or employees of LHCC.

This clinical policy is the property of LHCC. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.

©2020 Louisiana Healthcare Connections. All rights reserved. All materials are exclusively owned by Louisiana Healthcare Connections and are protected by United States copyright law and international copyright law. No part of this publication may be reproduced, copied, modified, distributed, displayed, stored in a retrieval system, transmitted in any form or by any means, or otherwise published without the prior written permission of Louisiana Healthcare

CLINICAL POLICY
Lysis of Epidural Lesions



Connections. You may not alter or remove any trademark, copyright or other notice contained herein. Louisiana Healthcare Connections is a registered trademark exclusively owned by Louisiana Healthcare Connections.