Anthem

Medical Policy

Subject: Epiduroscopy
Document #: SURG.00073
Status: Reviewed

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Description/Scope

This document addresses epiduroscopy, also known as epidural spinal endoscopy or epidural myeloscopy, an endoscopic procedure where the epidural space is explored for the diagnosis and treatment of radicular spinal pain.

Note: Mechanical or laser lysis, which may be performed with epiduroscopy, is addressed in a related document. Please see the following for additional information:

- SURG.00072 Lysis of Epidural Adhesions

Position Statement

Investigational and Not Medically Necessary:

Epiduroscopy, also known as epidural spinal endoscopy or epidural myeloscopy, is considered **investigational and not medically necessary.**

Rationale

There is insufficient scientific evidence in peer-reviewed medical literature to determine the safety and efficacy of epiduroscopy as a diagnostic procedure or as a technique to guide interventional therapy.

Bosscher and Heavner (2012) published a study evaluating epiduroscopy used as a diagnostic procedure. The investigators used spinal canal endoscopy to study the spinal segment(s) where pain was elicited via endoscopic evaluation vs. the vertebral level from where the pain was thought to originate, as determined by clinical evaluation and by MRI. A total of 143 individuals who underwent spinal canal endoscopy (epiduroscopy) were asked whether pain generated by pressure upon epidural structures with the tip of an endoscope was similar in character and distribution (concordant) to the pain for which the individuals sought treatment. codingThe most common level was at L4 to L5. The least common level was L5 to S1. In 40 participants, the level determined by clinical evaluation correlated with the level at which pain could be reproduced during epiduroscopy. In 28 participants, the MRI indicated a specific vertebral level that corresponded to the level at which pain could be reproduced with epiduroscopy. The authors concluded that epiduroscopy is more reliable than is either clinical evaluation or MRI for determining the vertebral level where clinically significant spinal pathology occurs. However, this study was small, not randomized or blinded and had the potential for bias.

Dashfield and colleagues (2005) published the results of a randomized controlled trial (RCT) evaluating epiduroscopy to guide interventional therapy for 60 participants with sciatica undergoing steroid injection treatment. No significant differences in outcomes were identified between the group that received epiduroscopy guidance and the group that did not.

There are published case series evaluating epiduroscopy for guiding intervention (Hazer, 2018; Ruetten, 2003). In 2018, Hazer and colleagues retrospectively reviewed 88 individuals with low back pain and radicular pain who received epiduroscopy. Compared with baseline, after epiduroscopy, there were significant decreases in pain as measured by a visual analogue scale (VAS) and the Oswestry Disability Index (ODI), $p<0.001$ for each. The study was limited by the lack of a control or comparison group.

Gill and colleagues (2005) reported on 12 cases of visual impairment as a complication of epiduroscopy, considered a rare but significant complication of the procedure, in which a bolus injection of fluid resulted in a sudden increase in cerebrospinal fluid pressure and compression of the optic nerve.

Background/Overview

Epiduroscopy, also known as epidural spinal endoscopy or epidural myeloscopy, is a procedure in which a steerable or controllable flexible endoscope is used to visually examine the epidural anatomic structures. The procedure is mainly used for the visualization of the epidural space to identify epidural adhesions, fibrosis, and scars. In addition, epiduroscopy can be used for visualization during interventions such as mechanical or laser lysis of spinal adhesions, or introduction of steroids to areas of inflamed tissues. The Myelotec Myeloscope (Myelotec, Inc. Roswell, GA) device was cleared by the U.S. Food and Drug Administration (FDA) in September 1996.

Definitions

Endoscope: A highly flexible fiberoptic instrument which allows the user to see the inside of the body for diagnostic procedures and allows for therapeutic functions through special channels built into the scope that allow passage of specialized tools to the treatment area.

Endoscopy: The visual inspection of any cavity of the body by means of an endoscope.

Radiculopathy: Any disease of the spinal nerve roots and spinal nerves; radiculopathy is characterized by pain which seems to radiate from the spine to extend outward to cause symptoms away from the source of the spinal nerve root irritation; causes of radiculopathy include deformities of the discs between the building blocks of the spine (the vertebrae).

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services are Investigational and Not Medically Necessary:
When the code describes a procedure indicated in the Position Statement as investigational and not medically necessary.

CPT	
64999	Unlisted procedure, nervous system [when specified as epiduroscopy]
ICD-10 Procedure	
00JU4ZZ	Inspection of spinal canal, percutaneous endoscopic approach
00JV4ZZ	Inspection of spinal cord, percutaneous endoscopic approach
ICD-10 Diagnosis	
	All diagnoses

References

Peer Reviewed Publications:

1. Bosscher HA, Heavner JE. Diagnosis of the vertebral level from which low back or leg pain originates. A comparison of clinical evaluation, MRI and epiduroscopy. Pain Pract. 2012; 12(7):506-512.
2. Dashfield AK, Taylor MB, Cleaver JS, Farrow D. Comparison of caudal steroid epidural with targeted steroid placement during spinal endoscopy for chronic sciatica: a prospective, randomized, double-blind trial. Br J Anaesth. 2005; 94(4):514-519.
3. Gill JB, Heavner JE. Visual impairment following epidural fluid injections and epiduroscopy: a review. Pain Med. 2005; 6(5):367-374.
4. Hazer DB, Acarbaş A, Rosberg HE. The outcome of epiduroscopy treatment in patients with chronic low back pain and radicular pain, operated or non-operated for lumbar disc herniation: a retrospective study in 88 patients. Korean J Pain. 2018; 31(2):109-115.
5. Ruetten S, Meyer O, Godolias G. Endoscopic surgery of the lumbar epidural space (epiduroscopy): results of therapeutic intervention in 93 patients. Minim Invasive Neurosurg. 2003; 46(1):1-4.

Government Agency, Medical Society, and Other Authoritative Publications:

1. U.S. Food and Drug Administration (FDA) 510(k) Premarket Notification Database. Summary of Safety and Effectiveness. Myelotec Myeloscope. No. K960194. Rockville, MD: FDA. September 4, 1996. Available at: http://www.accessdata.fda.gov/cdrh_docs/pdf/K960194.pdf. Accessed on November 13, 2023.

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The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

Document History

Status	Date	Action
Reviewed	11/09/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Revised Description/Scope, Definitions, and References sections.
Reviewed	11/10/2022	MPTAC review. References section updated.
Reviewed	11/11/2021	MPTAC review. References section updated.
Reviewed	11/05/2020	MPTAC review. Rationale and References section updated.
Reviewed	11/07/2019	MPTAC review. References section updated.
Reviewed	01/24/2019	MPTAC review. Rationale and References sections updated.
Reviewed	03/22/2018	MPTAC review. The document header wording updated from “Current Effective Date” to “Publish Date”. Rationale, Background/Overview and References sections updated.
Reviewed	05/04/2017	MPTAC review. Updated References section.
Reviewed	05/05/2016	MPTAC review. Updated References section. Removed ICD-9 codes from Coding section.
Reviewed	05/07/2015	MPTAC review. Updated References section.
Reviewed	05/15/2014	MPTAC review.
Reviewed	05/09/2013	MPTAC review.
Reviewed	05/10/2012	MPTAC review. Rationale and References updated.
Reviewed	05/19/2011	MPTAC review. Rationale, Background and References updated.
Reviewed	05/13/2010	MPTAC review. Rationale, Background and References updated.
Reviewed	05/21/2009	MPTAC review. Rationale and References updated.
Reviewed	05/15/2008	MPTAC review. References updated.
	02/21/2008	The phrase "investigational/not medically necessary" was clarified to read "investigational and not medically necessary." This change was approved at the November 29, 2007 MPTAC meeting.
Reviewed	05/17/2007	MPTAC review. References updated.
Reviewed	06/08/2006	MPTAC review. References updated.
Revised	07/14/2005	MPTAC review. Revision based on Pre-merger Anthem and Pre-merger WellPoint Harmonization.

Pre-Merger Organizations	Last Review Date	Document Number	Title
Anthem, Inc.	07/27/2004	SURG.00052	Chronic Spine Pain Treatments/Procedures (Minimally Invasive)
WellPoint Health Networks, Inc.	09/23/2004	5.10.02	Epiduroscopy

Applicable to Commercial HMO members in California: When a medical policy states a procedure or treatment is investigational, PMGs should not approve or deny the request. Instead, please fax the request to Anthem Blue Cross Grievance and Appeals at fax # 818-234-2767 or 818-234-3824. For questions, call G&A at 1-800-365-0609 and ask to speak with the Investigational Review Nurse.

Federal and State law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage. The member's contract benefits in effect on the date that services are rendered must be used. Medical Policy, which addresses medical efficacy, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.