

IMED, INC.

2150 S. Central Expressway* Suite 200-262 * McKinney, TX 75070
Office: 469-219-3355 * Fax: 469-219-3350 * email: imeddallas@msn.com

[Date notice sent to all parties]:

04/06/2016

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE: cervical SNRB
Transforaminal ESI left C6 with fluoroscopy and monitored anesthesia

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR
OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:**
Board Certified Anesthesiology; Fellowship Cardiovascular Anesthesiology

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

PATIENT CLINICAL HISTORY [SUMMARY]: The patient is a male who was injured on XX/XX/XX after a cement block fell on the patient's head while working. The patient began to complain of pain in the bilateral occipital region posterior neck and the trapezius. Treatment had included both anti-inflammatories and muscle relaxants. The patient did report that both medications and a physical therapy program did improve symptoms and that none of the treatment had been ineffective to date. MRI studies of the cervical spine from XX/XX/XX noted a disc protrusion at C5-6 measuring 4 mm to the left contacting the exiting left C6 nerve root. The XX/XX/XX clinical report noted no weakness in the upper extremities. Reflexes were noted to be absent of the left brachioradialis. There was a positive left Spurling's sign noted with normal sensation. The patient did have limited range of motion in the cervical spine. The proposed selective nerve root block and epidural steroid injection to the left at C6 with fluoroscopy and monitored anesthesia was denied by utilization review as epidural steroid injections were not supported by current guidelines at a level higher than the C6-7 level due to potential complications and risks. The request was again denied on XX/XX/XX as the procedure was not supported by guidelines and limited evidence regarding radicular complaints in the targeted distribution.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

The patient has been followed for complaints of neck pain but did not describe any significant upper extremity complaints. Although the patient's physical exam findings did note an absent left brachioradialis reflex and a positive Spurling's sign which does correlate with imaging findings, the records specifically indicated that none of the patient's treatment to include medications and physical therapy has been ineffective for his symptoms. Given the lack of any indication that conservative management has failed for this patient and as current guideline recommendations do not support epidural steroid injections for the cervical spine above C6-7 due to the potential risks and complications of the procedure, it is this reviewer's opinion that medical necessity for the proposed left epidural steroid injection and selective nerve root block is not established at this time. It is also noted that the records do not include any indications regarding procedural anxiety or needle phobia that would require monitored anesthesia care which is not routinely recommended for this type

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS

ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES

Official Disability Guidelines (ODG), Treatment Index, 14th Edition (web), 2016, Neck & Upper Back Chapter.

Epidural steroid injection (ESI)

Not recommended based on recent evidence, given the serious risks of this procedure in the cervical region, and the lack of quality evidence for sustained benefit. These had been recommended as an option for treatment of radicular pain (defined as pain in dermatomal distribution with corroborative findings of radiculopathy), with specific criteria for use below. In a previous Cochrane review, there was only one study that reported improvement in pain and function at four weeks and also one year in individuals with radiating chronic neck pain. ([Peloso-Cochrane, 2006](#)) ([Peloso, 2005](#)) Other reviews have reported moderate short-term and long-term evidence of success in managing cervical radiculopathy with interlaminar ESIs. ([Stav, 1993](#)) ([Castagnera, 1994](#)) Some have also reported moderate evidence of management of cervical nerve root pain using a transforaminal approach. ([Bush, 1996](#)) ([Cyteval, 2004](#)) A previous retrospective review of interlaminar cervical ESIs found that approximately two-thirds of patients with symptomatic cervical radiculopathy from disc herniation were able to avoid surgery for up to 1 year with treatment. Success rate was improved with earlier injection (< 100 days from diagnosis). ([Lin, 2006](#)) There have been case reports of cerebellar infarct and brainstem herniation as well as spinal cord infarction after cervical transforaminal injection. ([Beckman, 2006](#)) ([Ludwig, 2005](#)) Quadripareisis with a cervical ESI at C6-7 has also been noted ([Bose, 2005](#)) and the American Society of

Anesthesiologists Closed Claims Project database revealed 9 deaths or cases of brain injury after cervical ESI (1970-1999). ([Fitzgibbon, 2004](#)) These reports were in contrast to a retrospective review of 1,036 injections that showed that there were no catastrophic complications with the procedure. ([Ma, 2005](#)) The American Academy of Neurology concluded that epidural steroid injections may lead to an improvement in radicular lumbosacral pain between 2 and 6 weeks following the injection, but they do not affect impairment of function or the need for surgery and do not provide long-term pain relief beyond 3 months, and there is insufficient evidence to make any recommendation for the use of epidural steroid injections to treat radicular cervical pain. ([Armon, 2007](#)) In other studies, there was evidence for short-term symptomatic improvement of radicular symptoms with epidural or selective root injections with corticosteroids, but these treatments did not appear to decrease the rate of open surgery. ([Haldeman, 2008](#)) ([Benyamin, 2009](#)) Some have said epidural steroid injections should be reserved for those who may otherwise undergo open surgery for nerve root compromise. ([Bigos, 1999](#)) There is limited evidence of effectiveness of epidural injection of methyl prednisolone and lidocaine for chronic MND with radicular findings. ([Peloso-Cochrane, 2006](#)) The FDA is warning that injection of corticosteroids into the epidural space of the spine may result in rare but serious adverse events, including loss of vision, stroke, paralysis, and death. ([FDA, 2014](#))

Recent evidence: ESIs should not be recommended in the cervical region, the FDA's Anesthetic and Analgesic Drug Products Advisory Committee concluded. Injecting a particulate steroid in the cervical region, especially using the transforaminal approach, increases the risk for sometimes serious and irreversible neurological adverse events, including stroke, paraplegia, spinal cord infarction, and even death. The FDA has never approved an injectable corticosteroid product administered via epidural injection, so this use, although common, is considered off-label. Injections into the cervical region, as opposed to the lumbar area, are relatively risky, and the risk for accidental injury in the arterial system is greater in this location. ([FDA, 2015](#)) An AMA review suggested that ESIs are not recommended higher than the C6-7 level; no cervical interlaminar ESI should be undertaken at any segmental level without preprocedural review; & particulate steroids should not be used in therapeutic cervical transforaminal injections. ([Benzon, 2015](#)) According to the American Academy of Neurology (AAN), ESIs do not improve function, lessen need for surgery, or provide long-term pain relief, and the routine use of ESIs is not recommended. They further said that there is in particular a paucity of evidence for the use of ESIs to treat radicular cervical pain. ([AAN, 2015](#)) In this comparative-effectiveness study, no significant differences were found between ESI and conservative treatments. ([Cohen, 2014](#)) See the [Low Back Chapter](#), where ESIs are recommended as a possible option for short-term treatment of radicular pain in conjunction with active rehab efforts, but they are not recommended for spinal stenosis or for nonspecific low back pain.

While not recommended, cervical ESIs may be supported using [Appendix D](#), Documenting Exceptions to the Guidelines, in which case:

Criteria for the use of Epidural steroid injections, therapeutic:

Note: The purpose of ESI is to reduce pain and inflammation, thereby facilitating progress in more active treatment programs, and avoiding surgery, but this treatment alone offers no significant long-term functional benefit.

- (1) Radiculopathy must be documented by physical examination and corroborated by imaging studies and/or electrodiagnostic testing.
- (2) Initially unresponsive to conservative treatment (exercises, physical methods, NSAIDs and muscle relaxants).
- (3) Injections should be performed using fluoroscopy (live x-ray) for guidance
- (4) If used for diagnostic purposes, a maximum of two injections should be performed. A second block is not recommended if there is inadequate response to the first block. Diagnostic blocks should be at an interval of at least one to two weeks between injections.
- (5) No more than two nerve root levels should be injected using transforaminal blocks.
- (6) No more than one interlaminar level should be injected at one session.
- (7) In the therapeutic phase, repeat blocks should only be offered if there is at least 50% pain relief for six to eight weeks, with a general recommendation of no more than 4 blocks per region per year.
- (8) Repeat injections should be based on continued objective documented pain and function response.
- (9) Current research does not support a “series-of-three” injections in either the diagnostic or therapeutic phase. We recommend no more than 2 ESI injections.
- (10) It is currently not recommended to perform epidural blocks on the same day of treatment as facet blocks or stellate ganglion blocks or sympathetic blocks or trigger point injections as this may lead to improper diagnosis or unnecessary treatment.
- (11) Cervical and lumbar epidural steroid injection should not be performed on the same day;
- (12) Additional criteria based on evidence of risk:
 - (a) ESIs are not recommended higher than the C6-7 level;
 - (b) Cervical interlaminar ESI is not recommended; &
 - (c) Particulate steroids should not be used. ([Benzon, 2015](#))

Criteria for the use of Epidural steroid injections, diagnostic:

To determine the level of radicular pain, in cases where diagnostic imaging is ambiguous, including the examples below:

(1) To help to evaluate a pain generator when physical signs and symptoms differ from that found on imaging studies;

(2) To help to determine pain generators when there is evidence of multi-level nerve root compression;

(3) To help to determine pain generators when clinical findings are suggestive of radiculopathy (e.g. dermatomal distribution), and imaging studies have suggestive cause for symptoms but are inconclusive;

(4) To help to identify the origin of pain in patients who have had previous spinal surgery.