



## IMED, INC.

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### Notice of Independent Review Decision

**DATE OF REVIEW:** 02/20/09

**IRO CASE NO.:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Item in dispute: Lumbar and cervical epidural steroid injections

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

Board Certified in Physical Medicine & Rehabilitation  
Fellowship Trained in Pain Management

**REVIEW OUTCOME**

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

Denial Upheld

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

1. Office notes from , , D.C., dated 06/27/08
2. Cervical and lumbar spine MRIs dated 08/21/08
3. , M.D., dated 10/30/08
4. Required Medical Evaluation/impairment rating evaluation from , Jr., M.D., dated 11/18/08
5. EMG/NCV testing of cervical and lumbar spine dated 11/20/08
6. Office notes from dated 01/12/09
7. Request for reconsideration dated 01/21/09
8. **Official Disability Guidelines**

**PATIENT CLINICAL HISTORY (SUMMARY):**

The employee was reported to have sustained work related injuries on xx/xx/xx. He was working as a of a company vehicle that was rear ended by another vehicle. He stated since that time he had experienced pain in the cervical spine, with numbness

extending to the fingertips of his right arm. He also complained of pain in the low back extending posteriorly to the feet with some paresthesias as well.

The employee was initially treated at Hospital. On the date of injury, x-rays revealed no fractures. The employee was diagnosed with cervical and lumbar strain and was released.

The employee began care with , D.C., and underwent multiple rounds of therapy to include physical therapy, medication, and manipulation.

On 08/21/08, the employee underwent an MRI of his lumbar and cervical spine. The lumbar spine revealed normal alignment. There was mild narrowing of the L5-S1 disc with moderate low signal change. Disc height was adequately maintained at all other levels. There was no posterior protrusion from T12-L1 to L3-L4. There was a 1 mm posterior protrusion at L4-L5 with abutment of the thecal sac, but no effacement. There was only mild encroachment of the neural foramina bilaterally. No entrapment of the exiting nerve roots was indicated. There was a 1-2 mm disc bulge at L5-S1. There was abutment but no effacement of the thecal sac. The neural foramina revealed minimal encroachment with no entrapment. The facet was well visualized. The MRI of the cervical spine revealed mild straightening of the mid cervical spine. No compression fracture was identified. No metastatic process was noted. No posterior protrusion from C2-C3 to C4-C5 was noted. There was a 1 mm disc bulge at C5-C6 with no involvement of the cord. There was moderate encroachment on the neural foramina bilaterally. C6-C7 noted a 1 mm posterior disc bulge. No involvement of cord and only minimal encroachment was noted on the neural foramina. C7-T1 did not reveal any disc bulge, only mild encroachment of the neural foramina bilaterally.

On 11/10/08, the employee underwent an EMG/NCV of the upper extremities bilaterally. This study revealed mild sensory median and ulnar nerves involvement sparing motor components bilaterally. No evidence of cervical radiculopathy or motor neuron disease was noted at that time.

On 11/18/08, the employee had a Designated Doctor Examination performed by Dr. . At that time, the neurological examination showed him to be alert and cooperative. Station and gait were normal. Motor strength testing of the upper extremities showed 5/5 strength with no weakness identified. Sensory evaluation revealed intact sensation throughout. Deep tendon reflexes were 1+ bilaterally of the lower extremities. Motor strength testing of the lower extremities revealed adequate motor strength, and sensation was intact. Cervical spine evaluation showed palpable tenderness at the C5-C6 level midline with no muscle spasms or guarding identified. There are no significant findings on examination of cervical spine with muscles being soft and pliable with no spasms appreciated. Range of motion of the cervical spine revealed adequate range of motion in all planes. The lumbar spine areas revealed point tenderness, but no root tension signs. Range of motion of the lumbar spine revealed normal range of motion with mild pain being produced on forward flexion. The employee was placed at Maximum Medical Improvement (MMI) and given 0% whole person impairment rating.

On 11/20/08 the employee underwent EMG/NCV studies of the bilateral lower extremities, which revealed a lumbar radiculopathy primary affecting the bilateral L5 and S1 nerve roots. Correlation with MRI was recommended.

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

The requests for cervical and lumbar epidural steroid injections are not medically necessary.

The employee has been evaluated by a designated doctor and found to be at MMI with a 0% impairment. On independent examination the employee had no objective evidence of active cervical or lumbar radiculopathies. An EMG/NCV was performed on 11/20/08 of the bilateral upper and lower extremities. This study reported electrodiagnostic evidence of a bilateral L5-S1 radiculopathy. This finding does not correlate with the employee's objective physical examination by an independent examiner. The **Official Disability Guidelines** require that radiculopathy must be documented by physical examination and corroborated by imaging studies and/or electrodiagnostic testing. The cervical muscle testing on the Designated Doctor Evaluation revealed no significant evidence of muscle spasms or neck impingement syndrome. The EMG/NCV testing revealed ulnar and median nerve neuropathy, but no evidence of active cervical radiculopathy, and therefore cervical epidural steroid injections would not be medically necessary or supported by current evidenced-based guidelines.

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

The **Official Disability Guidelines**, 13th Edition, The Work Loss Data Institute.

Epidural steroid injection (ESI)	Recommended as an option for treatment of radicular pain (defined as pain in dermatomal distribution with corroborative findings of radiculopathy). See specific criteria for use below. In a recent Cochrane review, there was one study that reported improvement in pain and function at four weeks and also one year in individuals with chronic neck pain with radiation. ( <a href="#">Peloso-Cochrane, 2006</a> ) ( <a href="#">Peloso, 2005</a> ) Other reviews have reported moderate short-term and long-term evidence of success in managing cervical radiculopathy with interlaminar ESIs. ( <a href="#">Stav, 1993</a> ) ( <a href="#">Castagnera, 1994</a> ) Some have also reported moderate evidence of management of cervical nerve root pain using a transforaminal approach. ( <a href="#">Bush, 1996</a> ) ( <a href="#">Cyteval, 2004</a> ) A recent 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). ( <a href="#">Lin, 2006</a> ) There have been recent case reports of cerebellar infarct and brainstem herniation as well as spinal cord infarction after cervical transforaminal injection. ( <a href="#">Beckman, 2006</a> ) ( <a href="#">Ludwig, 2005</a> ) Quadriplegia with a cervical ESI at C6-7 has also been noted ( <a href="#">Bose, 2005</a> ) and the American Society of Anesthesiologists Closed Claims Project database revealed 9 deaths or cases of brain injury after cervical ESI (1970-1999).
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([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 recently 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](#)) There is 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](#)) See the [Low Back Chapter](#) for more information and references.

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.

Criteria for the use of Epidural steroid injections, diagnostic:

	<p>To determine the level of radicular pain, in cases where diagnostic imaging is ambiguous, including the examples below:</p> <ol style="list-style-type: none"><li>(1) To help to evaluate a pain generator when physical signs and symptoms differ from that found on imaging studies;</li><li>(2) To help to determine pain generators when there is evidence of multi-level nerve root compression;</li><li>(3) To help to determine pain generators when clinical findings are suggestive of radiculopathy (e.g. dermatomal distribution) but imaging studies are inconclusive;</li><li>(4) To help to identify the origin of pain in patients who have had previous spinal surgery.</li></ol>
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