

# CASEREVIEW

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**IRO CASE #:**

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

Bilateral Anterior Cervical Fusion Discectomy C5-6 22551, 22845, 22851 with Inpatient LOS

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

This physician is a Board Certified Orthopedic Surgeon with over 18 years of experience.

**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]:**

This claimant is a female who was injured on XX/XX/XX. She was lifting a heavy binder at work at an awkward angle and felt pain in her right trapezius and parascapular muscles. She had a subacromial steroid injection without much relief, a right shoulder MRI showed some biceps tendinitis, underwent at least 12 physical therapy sessions and treated with a Medrol Dose Pack. She also report using stim helped.

On XX/XX/XX, the claimant presented for follow-up of her right shoulder injury. She described her pain as generally diffused, occurring constantly, moderate sharp/stabbing pain, which was unchanging with time. The pain was improved by rest and activity modification. It was made worse by activity, exercising, lifting, pushing, pulling, and overhead reach. She reported flare-ups with posterior pain that radiates diffusely about her shoulder and up into her neck making her stiff. On examination of her cervical spine, there was right paraspinal tenderness and mild pain with ROM. There was full painless ROM of the right shoulder without shrugging and 5/5 throughout with pain on empty can. Assessment: Myofascial trapezius and scapular pain. Plan: Cyclobenzaprine oral tablet 10 mg, PRN OTC NSAID, continue PT and duty restrictions.

On XX/XX/XX, the claimant presented with continued pain in her trapezius and parascapular muscles with radiation into her shoulder. She was requesting another MDP. XX recommended she see XX to be evaluated for a possible trigger pint injection and/or EMG/NCS eval.

On XX/XX/XX, the claimant presented to XX, who found on clinical exam, restricted cervical ROM with right lateral rotation with increased right trapezius pain. She had tenderness to palpation over the right trapezius. Her ROM of the right shoulder was 180 degrees with abduction and flexion. She had 90 degrees

of internal and external rotation. She had negative impingement tests. Her strength, sensation, and reflexes were normal and symmetric in the upper extremities. Assessment: Myofascial right trapezius pain. Plan: Proceed with trigger point injection of the right upper trapezius in two places. PROCEDURE: Trigger point injections. 80 mg triamcinolone mixed with 2 mL 2% lidocaine and 2 mL 0.25% Marcaine.

On XX/XX/XX the claimant presented reporting very mild improvement in her symptoms and felt less than 25% better. She reported worsening of pain for about 4 days after the injection. She was still having right trapezius pain that is made worse with lifting her arm. XX recommended returning to her treating physician for further recommendations.

On XX/XX/XX, the claimant presented with continued pain. XX recommended proceeding with a cervical MRI to rule out a disk herniation.

On XX/XX/XX, MRI Cervical Spine, Impression: 1. Moderate degeneration at C4-5 includes grade 1 anterior subluxation resulting in minimal central canal and foraminal stenosis asymmetric to the right. 2. Severe degenerative disc disease at C5-6 results in minimal to moderate central canal stenosis with slight deformity of the cord and moderate to severe foraminal narrowing. 3. Small broad-based disc bulge at C6-7 lateralizes to the left minimally narrowing the central canal and left foramen. 4. Minimal degenerative disc disease at C3-4. The right foramen is minimally narrowed by uncovertebral disease.

On XX/XX/XX, the claimant presented with right neck pain, right parascapular pain, right shoulder pain and right arm pain. On examination cervical ROM was reduced 25% toward the right. UE muscle strength was 5/5 bilaterally. Reflexes and sensation was normal bilaterally. Hoffmann was negative. Recommendation: Myelogram and CAT scan. Continued nonsurgical options may include home cervical traction and cervical epidural steroid injections.

On XX/XX/XX, Myelogram with CT Cervical Spine, Impression: Moderately severe central spinal stenosis at C5-6 partly due to instability. Possible right foraminal disc fragment at C5-6 which may encroach upon the right laterally coursing C6 root. The disc protrusion within the left intervertebral neural foramen at C5-6 impinging upon the left C6 root. Mild central spinal stenosis at C4-5 and C6-7 levels.

On XX/XX/XX the claimant presented with persistent pain. On examination, neuro bilateral UE was redone and right triceps strength was graded at 4+ compared to the left. Assessment: 1. Symptomatic right disc herniation at C5/6 with symptoms unresponsive to conservative measures for 8 months. 2. Concurrent left disc herniation at C5/6 and moderate stenosis. 3. Likely asymptomatic mild stenosis at C4/5 and C6/7. Plan: XX believed the disc herniations at C5/6 were likely caused by the work related injury. He did not think that the chronic findings at C4/5 and C6/7 were caused by the work injury. As she had failed conservative measures, he recommended a single level anterior cervical discectomy and fusion at C5/6 utilizing donor bone.

On XX/XX/XX, UR. Rationale for Denial: Based on the clinical information submitted for this review and using the evidence-based, peer-reviewed guidelines referenced above, this request is non-certified. There was no indication that the patient has received an adequate course of conservative treatment including steroid injections. A psychological screening was not seen in the records reviewed. The intended duration of hospital length of stay was not specified.

On XX/XX/XX, UR. Rationale for Denial: Based on the clinical information submitted for this review and using the evidence-based, peer-reviewed guidelines referenced above, this request is non-certified. After the peer discussion, due to the soft findings on physical exam, as well as, the provider having not seen the claimant in over a month and marked degenerative changes present, a follow-up would be more appropriate. As such, this request remains non-certified.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS**

## USED TO SUPPORT THE DECISION:

The request for Bilateral Anterior Cervical Fusion Discectomy C5-6 22551, 22845, 22851 with Inpatient LOS is denied.

The patient is currently dealing with pain in the neck and right arm. On examination, she has 4/5 strength in the right triceps muscle. Her recent MRI demonstrated degenerative disc disease at C4-5 and C5-6. This study demonstrated anterior subluxation of C4 on C5. She has completed a course of oral steroids and trigger point injections.

The patient has two levels of degenerative disc disease identified on MRI. She has right arm pain. It is unclear from the records whether C5-6 is the primary source of pain. ODG recommends an EMG in cases where clinical findings are unclear. The patient has not completed all forms of conservative care, including epidural steroid injections (ESI) prior to surgery. Flexion and extension views of the cervical spine are also required by ODG to determine whether there is true instability at C4-5.

Bilateral Anterior Cervical Fusion Discectomy C5-6 22551, 22845, 22851 with Inpatient LOS is not medically necessary at this point in time.

## PER ODG:

### **ODG Indications for Surgery™ -- Discectomy/laminectomy (excluding fractures):**

Washington State has published guidelines for cervical surgery for the entrapment of a single nerve root and/or multiple nerve roots. ([Washington, 2004](#)) Their recommendations require the presence of all of the following criteria prior to surgery for each nerve root that has been planned for intervention (but ODG does not agree with the EMG requirement):

- A. There must be evidence of radicular pain and sensory symptoms in a cervical distribution that correlate with the involved cervical level or presence of a positive Spurling test.
- B. There should be evidence of motor deficit or reflex changes or positive EMG findings that correlate with the cervical level. *Note:* Despite what the Washington State guidelines say, ODG recommends that EMG is optional if there is other evidence of motor deficit or reflex changes. EMG is useful in cases where clinical findings are unclear, there is a discrepancy in imaging, or to identify other etiologies of symptoms such as metabolic (diabetes/thyroid) or peripheral pathology (such as carpal tunnel). For more information, see [EMG](#).
- C. An abnormal imaging (CT/myelogram and/or MRI) study must show positive findings that correlate with nerve root involvement that is found with the previous objective physical and/or diagnostic findings. If there is no evidence of sensory, motor, reflex or EMG changes, confirmatory selective nerve root blocks may be substituted if these blocks correlate with the imaging study. The block should produce pain in the abnormal nerve root and provide at least 75% pain relief for the duration of the local anesthetic.
- D. Etiologies of pain such as metabolic sources (diabetes/thyroid disease) non-structural radiculopathies (inflammatory, malignant or motor neuron disease), and/or peripheral sources (carpal tunnel syndrome) should be addressed prior to cervical surgical procedures.
- E. There must be evidence that the patient has received and failed at least a 6-8 week trial of conservative care.

For hospital LOS after admission criteria are met, see [Hospital length of stay](#) (LOS).

### **Criteria for Cervical Fusion – Recommended Indications:**

- (1) Acute traumatic spinal injury (fracture or dislocation) resulting in cervical spinal instability.
- (2) Osteomyelitis (bone infection) resulting in vertebral body destruction.
- (3) Primary or metastatic bone tumor resulting in fracture instability or spinal cord compression.

- (4) Cervical nerve root compression verified by diagnostic imaging (i.e., MRI or CT myelogram) and resulting in severe pain OR profound weakness of the extremities.
- (5) Spondylotic myelopathy based on clinical signs and/or symptoms (Clumsiness of hands, urinary urgency, new-onset bowel or bladder incontinence, frequent falls, hyperreflexia, Hoffmann sign, increased tone or spasticity, loss of thenar or hypothenar eminence, gait abnormality or pathologic Babinski sign) and Diagnostic imaging (i.e., MRI or CT myelogram) demonstrating spinal cord compression.
- (6) Spondylotic radiculopathy or nontraumatic instability with All of the following criteria:
- (a) Significant symptoms that correlate with physical exam findings AND radiologist-interpreted imaging reports.
  - (b) Persistent or progressive radicular pain or weakness secondary to nerve root compression or moderate to severe neck pain, despite 8 weeks conservative therapy with at least 2 of the following:
    - Active pain management with pharmacotherapy that addresses neuropathic pain and other pain sources (e.g., an NSAID, muscle relaxant or tricyclic antidepressant);
    - Medical management with oral steroids or injections;
    - Physical therapy, documented participation in a formal, active physical therapy program as directed by a physiatrist or physical therapist, may include a home exercise program and activity modification, as appropriate.
  - (c) Clinically significant function limitation, resulting in inability or significantly decreased ability to perform normal, daily activities of work or at-home duties.
  - (d) Diagnostic imaging (i.e., MRI or CT myelogram) demonstrates cervical nerve root compression, or Diagnostic imaging by x-ray demonstrates Instability by flexion and extension x-rays; Sagittal plane translation >3mm; OR Sagittal plane translation >20% of vertebral body width; OR Relative sagittal plane angulation >11 degrees.
  - (e) Not recommend repeat surgery at the same level.
  - (f) Tobacco cessation: Because of the high risk of pseudoarthrosis, a smoker anticipating a spinal fusion should adhere to a tobacco-cessation program that results in abstinence from tobacco for at least six weeks prior to surgery.
  - (g) Number of levels: When requesting authorization for cervical fusion of multiple levels, each level is subject to the criteria above. Fewer levels are preferred to limit strain on the unfused segments. If there is multi-level degeneration, prefer limiting to no more than three levels. With one level, there is approximately a 80% chance of benefit, for a two-level fusion it drops to around 60%, and for a three-level fusion to around 50%. But not fusing additional levels meeting the criteria, risks having to do future operations.
  - (h) The decision on technique (e.g., autograft versus allograft, instrumentation) should be left to the surgeon.

#### **ODG hospital length of stay (LOS) guidelines:**

##### **Discectomy/ Corpectomy (icd 80.51 - Excision of intervertebral disc)**

Actual data -- median 1 day; mean 2.1 days ( $\pm$  0.0); discharges 109,057; charges (mean) \$26,219

Best practice target (no complications) -- 1 day

##### **Laminectomy (icd 03.09 - Laminectomy/laminotomy for decompression of spinal nerve root)**

Actual data -- median 2 days; mean 3.5 days ( $\pm$ 0.1); discharges 100,600; charges (mean) \$34,978

Best practice target (no complications) -- 1 day

##### **Cervical Fusion, Anterior (81.02 -- Other cervical fusion, anterior technique)**

Actual data -- median 1 day; mean 2.2 days ( $\pm$ 0.1); discharges 161,761; charges (mean) \$50,653

Best practice target (no complications) -- 1 days

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

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
- INTERQUAL CRITERIA**
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES**
- MILLIMAN CARE GUIDELINES**
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR**
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS**
- TEXAS TACADA GUIDELINES**
- TMF SCREENING CRITERIA MANUAL**
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**