

IRO#
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DATE OF REVIEW: 01/11/2010

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

IRO - C4-C5 C6-C7 Fusion/removal of plate AND 1-2 day LOS

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

This case was reviewed by a Texas licensed MD, specializing in Neurological Surgery. The physician advisor has the following additional qualifications, if applicable:

ABMS Orthopaedic Surgery

REVIEW OUTCOME:

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

Upheld

Health Care Service(s) in Dispute	CPT Codes	Date of Service(s)	Outcome of Independent Review
IRO - C4-C5 C6-C7 Fusion/removal of plate AND 1-2 day LOS	63075, 63076	-	Upheld

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

No	Document Type	Provider or Sender	Page Count	Service Start Date	Service End Date
1	IRO Record Receipt	ODG Neck Chapter	173		
2	IRO Record Receipt	ODG Pain Chapter	370		
3	IRO Record Receipt		15		
4	IRO Record Receipt		16		
5	IRO Record Receipt		18		
6	IRO Record Receipt		63		
7	IRO Record Receipt		8		
8	IRO Request		19		

PATIENT CLINICAL HISTORY [SUMMARY]:

IRO Case #:
 Description of services or services in dispute: C4-5, C6-7 fusion/removal of plate and 1-2 day LOS.

Review outcome: Upheld.

Information provided for review:

1. Preauthorization request.
2. Cervical spine radiographs dated 04/17/09.
3. Patient information sheet dated 04/06/09.
4. Clinic notes Dr.
5. Continuation progress notes dated 11/10/09 and 08/24/09 Dr. 6. Electro-Diagnostic interpretation dated 10/09/09.
7. Appeal request.
8. Request for review by an Independent Review Organization.
9. Carrier submission dated 12/28/09 regarding C4-5, C6-7 fusion/removal of plate/1-2 day LOS.
10. Facsimile coversheet dated 12/22/09.
11. Notice to xxxxx of case assignment dated 12/22/09.
12. Confirmation of receipt of request for review by and Independent Review Organization (IRO).
13. Peer review notification of determination dated 11/19/09 Dr.
14. Reconsideration review dated 12/08/09 Dr.
15. Examination dated 10/29/07 Dr.
16. Electroneuromyography report dated 10/29/07.
17. SOAP notes.
18. Report of Medical Evaluation dated 11/29/07 Dr.
19. Review of Medical History and physical exam dated 11/29/07.
20. Impairment rating report dated 11/29/07.
21. Clinic notes Dr. xxxxxx
22. CT spine with contrast (post myelogram) dated 03/17/08.
23. X-ray cervical spine dated 05/09/08.
24. Required Medical Examination Dr. dated 04/23/09.
25. Texas Workers' Compensation work status report dated 08/24/09.

Patient clinical history: The patient is a male whose date of injury is xx/xx/xx. Records indicate the patient was injured secondary to a fall at work, resulting in injury to the neck. The patient has a remote history of previous anterior cervical discectomy and fusion C5-6 performed in 2001.

The patient was seen by Dr. on 05/11/09, and he noted the patient to have evidence of cervical disc stenosis and radiculopathy at C4-5 and C6-7 with anterior cervical osteophytes. Dynamic films were done and showed good flexion of the neck at the level of C4-5 without any mechanical instability. There was positive Spurling's sign. DTRs were 2+ bilaterally and there was no evidence of Hoffman's. The patient had positive Lhermitte's. Dr. recommended the patient for anterior cervical discectomy and fusion at C4-5 and C6-7 considering adjacent level disease at the spine. Radiology report of cervical spine x-rays minimum 4-views done 04/17/09 reported post operative changes with fusion of C5-6, reversal of normal lordotic cervical curvature which may be related to the muscle spasm or positioning, no loss of height seen. There is no evidence of fracture or dislocation seen. Electrodiagnostic testing performed 10/08/09 reported evidence of subacute bilateral C5 cervical radiculopathy, with evidence of moderate bilateral median mononeuropathy (carpal tunnel syndrome) at the level of the wrist.

The patient was seen in follow up by Dr. on 11/10/09. The patient was reported to have intractable neck pain that does not improve with any type of exercise. Dr. noted that CT scan and MRI showed evidence of significant disc herniation pressing on the nerve root, and the patient was recommended to undergo anterior cervical discectomy and fusion at C4-5, C6-7.

Utilization review request for C4-5, C6-7 fusion/removal of plates/1-2 day LOS was reviewed by Dr. on 11/19/09. Dr. noted that the request was not recommended as medically necessary. Dr. noted that radiographs demonstrate a stable fusion at C5-6 level with no evidence of disc space narrowing at any level in the cervical spine. No other imaging studies were submitted for review demonstrating significant stenosis or stenosis at any level in the cervical spine that would benefit from a fusion procedure. Dr. noted there also was limited clinical documentation regarding prior conservative care and it was unclear if the patient has undergone ESIs. There also was no clinical documentation of any recent physical therapy. Dr. noted that most recent physical examinations could not be interpreted due to poor handwriting and copy quality.

A reconsideration request was reviewed by Dr. on 12/08/09. Dr. noted this was an appeal request for C4-5, C6-7 discectomy, decompression, fusion, removal of plate and 1-2 day inpatient stay. Dr. noted that issues raised from previous determination remained to be addressed. The patient was noted to complain of

intractable neck pain that does not improve with any kind of exercise. It was noted there was no comprehensive neck or neurologic examination submitted for review, and additional information is needed regarding treatment history. There was no evidence of motor or sensory changes referable to the involved segments. There was no objective documentation provided of prior conservative treatment including physical therapy, ESIs, or optimized medications. Imaging studies submitted were noted to demonstrate stable fusion with no evidence of instability, disc space narrowing, loss of height, stenosis, or disc herniation. Accordingly, Dr. recommended non certification of the proposed surgical procedure.

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

Analysis and explanation of decision:

The clinical data presented for review does not support a determination of medical necessity for the proposed C4-5, C6-7 fusion, removal of plate, and 1-2 day inpatient stay. The patient is noted to have sustained an injury secondary to a fall in xx/xx/xx. The patient has a history of previous ACDF at C5-6 performed in 2001. Records reflect that a designated doctor evaluation performed 11/29/07 determined the patient to have reached MMI as of that date with 6 percent impairment rating. The patient presented to Dr. Betancourt with complaints of intractable neck pain that does not improve with any kind of exercise. However, Dr. does not provide a comprehensive history of the nature and extent of conservative treatment such as formal supervised physical therapy, epidural steroid injections, or other conservative care. A CT myelogram performed 03/17/08 reported post operative changes with fusion at C5-6. There is a posterior osteophytic spurring with associated disc bulge at C3-4 which abuts the ventral spinal cord with no obvious cord deformity and no spinal stenosis, cord compression or foraminal narrowing. At C4-5 there is a central posterior osteophytic spur that abuts and indents the ventral spinal cord, with a generalized disc bulge at this level as well which also abuts the ventral spinal cord and causes slight cord flattening, but no evidence of spinal stenosis or neural foraminal narrowing. C6-7 there is posterior osteophytic spurring with an associated disc bulge that abuts and flattens the ventral spinal cord with no spinal stenosis or foraminal narrowing noted. On 05/11/09, Dr. Betancourt reported the patient had positive Spurling's sign and positive Lhermitte's; however, the patient underwent required medical evaluation by Dr. on 04/23/09. Dr. noted the patient had slightly decreased sensory examination to the C6 dermatomal level with no evidence of motor weakness. Dr. noted no evidence of positive Spurling or Lhermitte's on clinical examination. It appears that the previous denials were appropriately rendered and should be upheld on IRO.

Fusion, anterior cervical Recommended as an option in combination with anterior cervical discectomy for approved indications, although current evidence is conflicting about the benefit of fusion in general. (See [Discectomy/laminectomy/laminoplasty.](#)) Evidence is also conflicting as to whether autograft or allograft is preferable and/or what specific benefits are provided with fixation devices. Many patients have been found to have excellent outcomes while undergoing simple discectomy alone (for one- to two-level procedures), and have also been found to go on to develop spontaneous fusion after an anterior discectomy. ([Bertalanffy, 1988](#)) ([Savolainen, 1998](#)) ([Donaldson, 2002](#)) ([Rosenorn, 1983](#)) Cervical fusion for degenerative disease resulting in axial neck pain and no radiculopathy remains controversial and conservative therapy remains the choice if there is no evidence of instability. ([Bambakidis, 2005](#)) Conservative anterior cervical fusion techniques appear to be equally effective compared to techniques using allografts, plates or cages. ([Savolainen, 1998](#)) ([Dowd, 1999](#)) ([Colorado, 2001](#)) ([Fouyas-Cochrane, 2002](#)) ([Goffin, 2003](#)) Cervical fusion may demonstrate good results in appropriately chosen patients with cervical spondylosis and axial neck pain. ([Wieser, 2007](#)) This evidence was substantiated in a recent Cochrane review that stated that hard evidence for the need for a fusion procedure after discectomy was lacking, as outlined below:

(1) *Anterior cervical discectomy compared to anterior cervical discectomy with interbody fusion with a bone graft or substitute:* Three of the six randomized controlled studies discussed in the 2004 Cochrane review found no difference between the two techniques and/or that fusion was not necessary. The Cochrane review felt there was conflicting evidence of the relative effectiveness of either procedure. Overall it was noted that patients with discectomy only had shorter hospital stays, and shorter length of operation. There was moderate evidence that pain relief after five to six weeks was higher for the patients who had discectomy with fusion. Return to work was higher early on (five weeks) in the patients with discectomy with fusion, but there was no significant difference at ten weeks. ([Jacobs-Cochrane, 2004](#)) ([Abd-Alrahman, 1999](#)) ([Dowd, 1999](#)) ([Martins, 1976](#)) ([van den Bent, 1996](#)) ([Savolainen, 1998](#)) One disadvantage of fusion appears to be abnormal kinematic strain on adjacent spinal levels. ([Ragab, 2006](#)) ([Eck, 2002](#)) ([Matsunaga, 1999](#))

(Katsuura, 2001) The advantage of fusion appears to be a decreased rate of kyphosis in the operated segments. (Yamamoto, 1991) (Abd-Alrahan, 1999)
(2) *Fusion with autograft versus allograft*: The Cochrane review found limited evidence that the use of autograft provided better pain reduction than animal allograft. It also found that there was no difference between biocompatible osteoconductive polymer or autograft (limited evidence). (Jacobs-Cochrane, 2004) (McConnell, 2003) A problem with autograft is morbidity as related to the donor site including infection, prolonged drainage, hematomas, persistent pain and sensory loss. (Younger, 1989) (Sawin, 1998) (Sasso, 2005) Autograft is thought to increase fusion rates with less graft collapse. (Deutsch, 2007). See [Decompression, myelopathy](#).

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
- X 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)

TEXAS DEPARTMENT OF INSURANCE COMPLAINT PROCESS: The Texas Department of Insurance requires Independent Review Organizations to be licensed to perform Independent Review in Texas. To contact the Texas Department of Insurance regarding any complaint, you may call or write the Texas Department of Insurance. The telephone number is 1-800-578-4677 or in writing at: Texas Department of Insurance, PO Box 149104 Austin TX, 78714. In accordance with Rule 102.4(h), a copy of this Independent Review Organization (IRO) Decision was sent to the carrier, the requestor and claimant via facsimile or U.S. Postal Service from the office of the IRO on 01/11/2010.