INDEPENDENT REVIEWERS OF TEXAS, INC.

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Notice of Independent Review Decision

DATE OF REVIEW: 11/09/09

IRO CASE NO.:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Item in dispute: Ant Cervical Diskectomy and Fusion C5-6, C6-7/Posterior Fusion C5-7/ 2 day LOS

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

Texas Board Certified Orthopedic Surgeon
Practicing Neurosurgeon

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. IRO referral documents.
2. Office notes Dr. 09/16/09, 09/17/09.
3. X-ray cervical spine 09/16/09.
4. CT scan cervical spine 09/16/09.
5. MRI cervical spine 09/17/09.
6. Preauthorization review determination 09/23/09.
7. Letter Dr. 09/28/09.
8. Preauthorization review determination 10/05/09.
9. accident evaluation and vehicle damage analysis report 10/13/09.
10. Peer review report Dr. 10/14/09.
11. Notice of disputed issues and refusal to pay benefits 10/14/09.
12. Notice of denial of compensability/liability and refusal to pay benefits 10/27/09.
13. **Official Disability Guidelines**

PATIENT CLINICAL HISTORY (SUMMARY):

The employee is a male whose date of injury was listed as xx/xx/xx. Records indicate the employee was involved accident. The employee was when object was thrown from bridge striking his
windshield. The employee then struck a cement wall. The employee complained of neck pain.

Imaging studies of the cervical spine revealed multilevel cervical disc protrusion and stenosis at C6-C7. There was no evidence of cord impingement on radiology report. The employee reportedly had a junctional kyphosis at C5-C6 level per x-rays. There was also noted to be 3 mm spondylosis at that level with superior endplate fracture at C6.

Upon examination, the employee was noted to have severely decreased range of motion of cervical spine in all planes. Deep tendon reflexes were normal throughout the bilateral upper extremities. Sensory examinations of the arms and legs were normal. There was no clonus. There was no spasticity or long tract signs. Motor strength was graded 5/5 throughout the bilateral upper extremities. After obtaining imaging studies, Dr. recommended the employee undergo anterior cervical discectomy and fusion at C5-C6, C6-C7 with posterior fusion C5-C7.

A preauthorization request for this procedure was reviewed by Dr. on 09/23/09. Dr. determined the request for ACDF C5-6, C6-7/posterior fusion C5-7 with 2 day inpatient stay was not recommended as medically necessary. Dr. noted CT and MRI of cervical spine revealed multilevel cervical disc protrusions and stenosis at C6-C7 with large posterior hematoma. Examination was normal and MRI noted herniation without cord impingement per radiology report. Dr. further noted there was no documentation of conservative treatment for this injury to include physical therapy progress notes or evidence of injections.

A preauthorization reconsideration review by Dr. on 10/15/09 determined the appeal request for anterior cervical discectomy and fusion C5-6, C6-7 with posterior fusion C5-7 and 2 day inpatient stay was not medically necessary. Dr. noted the employee had only a 3 mm spondylolisthesis documented at C6-C7 with multiple levels of degenerative changes with disc bulges, spondylosis, and facet arthrosis. The employee was noted to have significant decrease in range of motion of the cervical spine; however, he has no radiculopathy noted and no fracture or instability of the cervical spine documented on imaging studies. Dr. noted that ***Official Disability Guidelines*** indicate cervical fusion for degenerative changes without radiculopathy is controversial. He noted no lower levels of care were documented, and no indication of instability was documented to substantiate need for fusion.

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

The request for ACDF C5-6, C6-7 with posterior fusion C5-7 and 2 day LOS is not recommended as medically necessary based on the clinical data provided.

The employee reportedly was injured secondary on xx/xx/xx. However, a report from dated10/13/09 determined the

relative lateral impact velocity of the vehicle was determined to be between 3 mph and 5 mph based on typical lane change speed as well as very minor damage to subject's vehicle and wall. The report concluded that this change of lateral velocity range is below threshold values associated with potential for injury for adult occupants.

A peer review performed by Dr. on 10/14/09 noted it was difficult to align the mechanism of injury and reported findings with extensive injuries the employee presented with. Dr. further noted findings on both CT scan and MRI were indicative of significant amounts of degenerative changes present in employee's cervical spine region evident by desiccation and evidence of spondylosis throughout the cervical spine. Dr. noted there was evidence of subacute hematoma at posterior subcutaneous aspect of C6-C7 level with major findings on diagnostics being extruded fragment at C6-C7 which exerts moderate mass effect on right anterior aspect of thecal sac. Dr. noted that given the minimal damage to vehicle, it would not indicate this mechanism of injury compensable for these findings. He opined the compensable injury would be limited to soft tissue strain of paravertebral musculature of cervical spine region, and degenerative findings would be non compensable in this instance.

Noting the data presented for review with no evidence of neurologic deficit on physical examination, extensive degenerative changes on imaging studies, and analysis by Forensic Engineering, the proposed surgical procedure is not seen as medically necessary and reasonable treatment for the injury sustained. Accordingly, the previous recommendations for non-authorization of the surgical procedure should be upheld.

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

Official Disability Guidelines Work Loss Data Institute, Online Version, Neck and Upper Back Chapter.
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.

Fusion, posterior cervical

Under study. A posterior fusion and stabilization procedure is often used to treat cervical instability secondary to traumatic injury, rheumatoid arthritis, ankylosing spondylitis, neoplastic disease, infections, and previous laminectomy, and in cases where there has been insufficient anterior stabilization. (Callahan, 1977) (Liu, 2001) (Sagan, 2005) Although the addition of instrumentation is thought to add to fusion rate in posterior procedures, a study using strict criteria (including abnormal motion between segments, hardware failure, and radiolucency around the screws) reported a 38% rate of non-union in patients who received laminectomy with fusion compared to a 0% rate in a group receiving laminoplasty. (Heller, 2001) In a study based on 932,009 hospital discharges associated with cervical spine surgery for degenerative disease, complications and mortality were more common after posterior fusions or surgical procedures associated with a primary diagnosis of cervical spondylosis with myelopathy. The overall percent of cases with complications was 2.40% for anterior decompression, 3.44% for anterior fusion, and 10.49% for posterior fusion. (Wang, 2007) Patients undergoing occipitocervical fusion or C1–2 (high cervical region) fusion is an absolute contraindication for returning to any type of activity with a risk of re-injury (such as contact sports), because the C-1 arch is relatively fragile and stability depends on the status of the periodontoid ligaments. (Burnett, 2006).