



Medical Review Institute of America, Inc.
America's External Review Network

DATE OF REVIEW: February 6, 2009

IRO Case #:

Description of the services in dispute:

Denied for medical necessity: Posterior Transforaminal Lumbar Interbody Fusion L4-5.

A description of the qualifications for each physician or other health care provider who reviewed the decision

The physician who provided this review is a fellow of the American Board of Orthopaedic Surgery. This reviewer is a fellow of the North American Spine Society and the American Academy of Orthopaedic Surgeons. This reviewer has been in active practice since 1990.

Review Outcome

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

Upheld

The proposed Posterior Transforaminal Lumbar Interbody Fusion L4-5 is not medically necessary pending a preoperative psychiatric evaluation.

Information provided to the IRO for review

Records Received from State:

Confirmation of Receipt of a Request for Review by an Independent Review Organization (IRO) – 8 pages

Literature (Fusion spinal) – 3 pages

Preauthorization Review Summary 11/11/08 – 3 pages

Preauthorization Advisor Review Form – 1 page

Fax Cover Sheet – 1 page

Email Correspondence – 1 page

Preauthorization Review Summary 12/15/08 – 3 pages

Records Received from Provider:

MRI Lumbar Spine 3/14/08 – 1 page

Initial Consultation 8/7/08 – 2 pages

MRI Lumbar spine 8/7/08 – 2 pages

New Patient Evaluation 10/15/08 – 3 pages

Records Received from the Patient:

Designated Doctor Evaluation 11/12/08 – 6 pages

Report of Medical Evaluation – 1 page

Patient clinical history [summary]

The patient is a xx year old male who is reported to have sustained an injury to his low back as a result of picking up a heavy pot on xx/xx/xx. The first available clinical record is an MRI of the lumbar spine without contrast dated 03/14/08. This study reported severe desiccation and disc space narrowing at L4-5. There are degenerative endplate changes seen on both sides of L4-5 disc space. There is a minimal 2-3 mm retrolisthesis of L4 on L5. Vacuum disc phenomenon is developing at the L4-5 disc space. There is a broad based circumferential disc bulge present at L4-5. The neural foramina and spinal canal are well maintained. There is moderate facet hypertrophy present. At L5-S1, there is a small circumferential disc bulge present and moderate facet hypertrophy. The neural foramina and spinal canal are well maintained.

On 08/07/08, the patient was evaluated by Dr.. The patient was reported to have sustained an injury as a result of lifting. The patient is currently prescribed Naproxen, Tylenol and Tramadol. MRI is discussed. He has been assessed by many physicians to include Dr., who recommended epidurals and pain management; Dr., who attempted to give the patient approval for epidural steroid injections but failed; and Dr., who felt the patient was a candidate for disc replacement and fusion surgery. The patient is reported to not smoke or utilize ethanol. He is 5'10" tall and weighs 185 pounds. He walks with a normal gait. He has difficulty with range of motion. Flexion is to 38 degrees with significant pain complaints. Extension is very painful at 10 degrees. Left and right side bend is to 18 degrees. His knee and ankle jerks are present and symmetric. He has a positive sitting root test, figure 4, and femoral stretch signs bilaterally, with no frank radiculopathies in the lower extremities. Dr. opines the patient has an internal disc disruption syndrome based on a heavy lifting episode. He indicated the patient is currently doing a home exercise program and has completed physical therapy. Dr. recommended epidural steroid injections, given the patient has not improved. Failing adequate response he recommended lumbar discography and surgical intervention. Dr. reported reading MRI dated 03/14/08. He reported a 50% loss of the disc space height at L4-5. He notes edema involving the inferior L4 vertebral body and posterior margin of the superior endplate of L4-5.

On 10/15/08 the patient was evaluated by Dr.. The patient is reported to have focal low back pain without extension into the lower extremities. It is reported he was referred for physical therapy, but this made his pain worse. The patient has been treated with medications including Tramadol. He currently takes Ultram, Naproxen, and Tylenol only. The patient is reported to chew tobacco. On physical examination, he is thin gentleman who appears uncomfortable when sitting on the table. He walks with small steps and keeps his lower back and hips slightly flexed. He is able to stand on his toes and heels without difficulty. Forward flexion of the lumbar spine is to 20 degrees, limited

by severe back pain at the level of the waistline. The spine appears to be clinically straight with hyperlordosis of the lumbar spine. No paraspinal muscle spasms are noted. Straight leg raise was negative. There is localized tenderness noted at the level of the waistline at L4-5. Strength is 5/5. Reflexes are 2+ and symmetrical, and there is a normal plantar response. Sensation is intact and symmetrical. Radiographs performed reported decreased disc height with osteophyte formation at L4-5. The remainder of the spine appears straight. Lateral view of the lumbar spine shows decreased disc height at L4-5, with retrolisthesis that measures approximately 7 mm. Flexion/extension films were reviewed and showed significant motion at the level of L4-5. On flexion, the retrolisthesis reduces to approximately 2-3 mm, where on extension it increases to 8 mm. Dr. noted the patient has a highly mobile spondylolisthesis, which correlates with location of pain and site of tenderness on physical examination. He noted the patient has undergone a long period of nonoperative care, consisting of rest, physical therapy, and medications. He subsequently recommended the patient undergo lumbar arthrodesis at L4-5.

On 11/12/08, the patient was evaluated by a designated doctor. Dr. found the patient not to be at clinical maximum medical improvement and recommended proceeding with the fusion as proposed by Dr.. He strongly encourages at least the posterior portion of the herniated disc at L4-5 be removed.

On 11/06/08, the case work was reviewed by Dr.. Dr. opined the patient is not a surgical candidate, noting that instability is not validated on independently verified imaging studies. The patient is a tobacco user, and he notes there are no abnormal neurologic findings other than mechanical back pain.

The case was subsequently reviewed by Dr. on 12/08/08. Dr. upheld Dr. initial determination.

Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.

The submitted clinical information indicates the patient sustained an injury to his low back onxx/xx/xx. The records clearly indicate significant pathology at the L4-5 level. MRI imagery indicated a 2-3 mm retrolisthesis at L4 on L5 in a supine position. The patient has undergone multiple orthopedic evaluations, who have concluded the L4-5 disc is symptomatic. The patient underwent a very thorough evaluation by Dr. on 10/15/08. Dr. records indicate that the patient has failed conservative treatment. He further appropriately performed lumbar extension and flexion radiographs, and noted the bone density is normal, and the lateral view shows decreased height with retrolisthesis of 7 mm, presumed to be in neutral position. Flexion and extension show the retrolisthesis reduces 2-3 mm and on extension it increases to approximately 8 mm, clearly documenting significant instability at this level. A note is made regarding the patient's use of tobacco. The patient is not a smoker. He chews tobacco, which does place him at slightly higher risk of development of pseudoarthrosis; however, given the length of the patient's disability, recommendation would be made for the patient to discontinue chewing tobacco at least 4 weeks prior to the postoperative intervention. There is adequate clinical information to indicate the

patient is unstable and has failed conservative treatment. The record does not document any psychiatric issues. However, to be in compliance with Official Disability Guidelines, the patient must be referred for a preoperative psychiatric evaluation. If this evaluation finds no confounding issues that would impact the patient's postoperative recovery, the recommendation is made for posterior transforaminal lumbar interbody fusion at L4–5.

However, to be in compliance with Official Disability Guidelines, the patient must have a preoperative psychiatric evaluation. This request is not medically necessary pending a preoperative psychiatric evaluation.

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.

Gibson JN, Waddell G. Surgery for degenerative lumbar spondylosis: updated Cochrane Review. *Spine*. 2005 Oct 15;30(20): 2312–20.

Atlas SJ, Delitto A. Spinal Stenosis: Surgical versus Nonsurgical Treatment. *Clin Orthop Relat Res*. 2006 Feb;443: 198–207.

Resnick DK, Choudhri TF, Dailey AT, Groff MW, Khoo L, Matz PG, Mummaneni P, Watters WC 3rd, Wang J, Walters BC, Hadley MN; American Association of Neurological Surgeons/Congress of Neurological Surgeons. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 7: intractable low-back pain without stenosis or spondylolisthesis. *J Neurosurg Spine*. 2005 Jun;2(6): 670–2.

Bambakidis N, Feiz-Erfan I, Klopfenstein J, Sonntag V. Indications for Surgical Fusion of the Cervical and Lumbar Motion Segment *SPINE* Volume 30, Number 16S, pp S2–S6 ©2005, Lippincott Williams & Wilkins, Inc.

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