C-IRO Inc.

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Review Outcome

Description of the service or services in dispute:

64490 – Right C4-C5 diagnostic facet injection
64491 – Right C6-C7 diagnostic facet injection
77003 – Fluoroscopic guidance
01991 or 01992 - Monitored anesthesia by an on-call certified registered nurse anesthetist (CRNA)
Right C4-C5, C6-C7 diagnostic facet injection with fluoroscopy and monitored anesthesia by an on-call certified registered nurse anesthetist (CRNA).

Description of the qualifications for each physician or other health care provider who reviewed the decision:

Board Certified Anesthesiology

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

☑ Overturned (Disagree)

☐ Upheld (Agree)

☐ Partially Overturned (Agree in part / Disagree in part)

Patient Clinical History (Summary)

XX who was diagnosed with neural foraminal stenosis (M99.71), cervical spondylolisthesis (M43.10) and status post posterior cervical fusion (M96.1). XX was employed as a XX and incurred a work-related injury on XXXX. XX was XX when XX had an acute onset of neck pain. Eventually, XX began to develop some pain going down the left arm. XX was off duty since XXXX.

On XXXX, XX was seen by XX for right neck pain. XX complained of headaches, right mid-posterior neck and right lower posterior neck pain. The pain was rated at 2-5/10. XX complained of headaches, for which XX provided some relief. XX reported the pain was somewhat better since the prior evaluation. XX also complained of pins and needles with some burning pain rated at 2/10 in the right first, second and third fingers. XX reported the pain was somewhat better since the prior evaluation. The ongoing treatment included medications and activity modification, which provided little and moderate relief of the symptoms. The associated symptoms included muscle spasms and insomnia. On examination, XX appeared to be in mild distress. Right biceps reflex (C5-C6) was 2+/5, right brachioradialis (C5-C6) reflex was 1+/5, right triceps (C7) reflex was 0+/5 and left triceps (C7) reflex was 1+/5. Hoffmann and Spurling was negative bilaterally and Waddell's signs were not present. There was no evidence of any weakness from C5 to T1. The cervical spine showed a point of maximum tenderness over the right mid-cervical paravertebrals and right lower cervical paravertebrals. XX noted XX had a needle phobia. XX was cleared to return to work light duty with XX.

The treatment to date included optimized conservative care including physical therapy, home exercise and nonsteroidal anti-inflammatory drugs (with no relief) and cervical transforaminal injections at right C6 and C7 spinal nerves (incomplete relief lasting for one day). Per the note dated XXXX, the ongoing regimen provided little to moderate relief of symptoms.

An MRI of the cervical spine dated XXXX documented central canal and moderate-to-severe bilateral neural foraminal narrowing at C6-C7. There was mild discogenic change, uncovertebral hypertrophy and facet arthropathy of the lower cervical spine. A transforaminal epidurogram at the right C6 and C7 on XXXX, demonstrated poor filling right C6 and C7. There was concordant provocation at right C7, shoulder and arm with 100% pain relief.

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Notice of Independent Review Decision

Case Number: XXXXXX Date of Notice: XXXX

Per a utilization review decision letter dated XXXX, the requested services were denied. It was documented that facet joint diagnostic blocks were recommended prior to facet neurotomy (a procedure that was considered "under study"). 1. One set of diagnostic medial branch blocks was required with a response of 70%. The pain response should be approximately two hours for XX. 2. Limited to patients with cervical pain that was non-radicular and at no more than two levels bilaterally. 3. There was documentation of failure of conservative treatment [including home exercise, physical therapy and XX] prior to the procedure for at least four to six weeks. The guidelines supported the utilization of facet joint injections for facetogenic pain and use of intravenous (IV) sedation should only be given in cases of extreme anxiety. Therefore, the guideline criteria had not been met. A peer-to-peer review was not reached. The request for right C4-C5 and C6-C7 diagnostic facet injections with fluoroscopic guidance and monitored anesthesia by on-call CRNA was not medically necessary.

An appeal form dated XXXX by XX was found in the medical records.

Per a utilization review decision letter dated XXXX, the original denial was upheld. Rationale: Per the ODG Neck and Upper Back facet joint diagnostic blocks guidelines, “the use of intravenous sedation may be grounds to negate the results of a diagnostic block, and should only be given in cases of extreme anxiety. There is no need for monitored anesthesia care by a CRNA, as sedation should be minimal at most for this procedure.” “Although anxiety is noted on peer-to-peer, which may indicate mild oral or intravenous sedation, monitored anesthesia care is excessive. The requested right C4-C5 and C6-C7 diagnostic facet injections with fluoroscopic guidance and monitored anesthesia by on call CRNA is not shown to be medically necessary.”

Analysis and Explanation of the Decision include Clinical Basis, Findings and Conclusions used to support the decision.

I am overturning the prior denial and approving the request for a right C4-C5 and right C6-7 diagnostic facet injection with monitored anesthesia by a certified registered nurse anesthetist.

Two prior reviews have comprehensively and accurately reviewed the records in this patient and correctly identified the failure of conservative treatment, and the inability of two prior cervical ESIs to provide long lasting relief. It is unclear from the record what the exact response to first ESI in XXXX was. The record indicates a failed response to the second cervical ESI in XXXX.

However, the reviewers have not discussed the relative probability of facetogenic pain in this patient, notwithstanding the lack of correlation between the clinical, radiologic and electrodiagnostic studies. While the review in XXXX correctly notes that ODG is not supportive of cervical diagnostic facet medial branch blocks, particularly in patients with radiculopathy and/or prior spine fusion surgery, we are left with a diagnosis of cervical facet arthropathy and facet pain by exclusion. So, the diagnostic facet injection is reasonable and necessary using this deductive approach.

The reviewers also state that monitored anesthesia care with a CRNA is unnecessary for a procedure of this type, suggesting that mild sedation is only necessary. This may be accurate for some patients, however the requirements for sedation, analgesia and anesthesia are highly variable. The provider noted that the patient had a needle phobia, and was highly intolerant of procedures with sedation. The provider used total intravenous anesthesia or TIVA which is akin to general anesthesia to complete the ESIs. This is simply accomplished with a sedative-hypnotic such as XX or XX. Both agents have no inherent analgesic effects, while being short-acting and well-suited for pain assessments, after the medication has dissipated. TIVA must be administered by a licensed professional such as a CRNA. So, it is reasonable to start the procedure with monitored anesthesia care, escalating this as necessary to TIVA. So, this technique will probably be necessary in this patient.

A description and the source of the screening criteria or other clinical basis used to make the decision:

☐ ACOEM-America College of Occupational and Environmental Medicine um knowledgebase

☐ AHRQ-Agency for Healthcare Research and Quality Guidelines DWC-Division of Workers

☐ Compensation Policies and Guidelines European Guidelines for Management of Chronic Low Back

☐ Pain Interqual Criteria

☑ Medical Judgment, Clinical Experience, and expertise in accordance with accepted medical standards

☐ Mercy Center Consensus Conference Guidelines

☐ Milliman Care Guidelines

☑ ODG-Official Disability Guidelines and Treatment Guidelines
ODG® 2018 Official Disability Guidelines® (23rd annual edition) & ODG® Treatment in Workers' Comp (16th annual edition)

ODG Treatment Integrated Treatment/Disability Duration Guidelines

Neck and Upper Back (Acute and Chronic) (updated 10/12/17)

Facet joint pain, signs & symptoms

The cause of this condition is largely unknown, although pain is generally thought to be secondary to either trauma or a degenerative process. Traumatic causes include fracture and/or dislocation injuries and whiplash injuries, with the most common cervical levels involved in the latter at C2-3 and C5-6. (Lord 1996) (Barnsley, 2005). The condition has been described as both acute and chronic, and includes symptoms of neck pain, headache, shoulder pain, suprascapular pain, scapular pain, and upper arm pain. (Clemans, 2005)

Symptoms: The most common symptom is unilateral pain that does not radiate past the shoulder. (van Eerd, 2010)

Physical findings: Signs in the cervical region are similar to those found with spinal stenosis, cervical strain, and discogenic pain. Characteristics are generally described as the following: (1) axial neck pain (either with no radiation or rarely past the shoulders); (2) tenderness to palpation in the paravertebral areas (over the facet region); (3) decreased range of motion (particularly with extension and rotation); and (4) absence of radicular and/or neurologic findings. If radiation to the shoulder is noted pathology in this region should be excluded. (Fukui, 1996) (van Eerd, 2010) (Kirpalani, 2008)

Diagnosis: There is no current proof of a relationship between radiologic findings and pain symptoms. The primary reason for imaging studies is to rule out a neurological etiology of pain symptoms. Diagnosis is recommended with a medial branch block at the level of the presumed pain generator/s. (Kirpalani, 2008)

Facet joint diagnostic blocks

Recommended prior to facet neurotomy (a procedure that is considered “under study”).

Criteria for the use of diagnostic blocks for facet nerve pain:

Clinical presentation should be consistent with facet joint pain, signs & symptoms.

1. One set of diagnostic medial branch blocks is required with a response of ≥ 70%. The pain response should be approximately 2 hours for Lidocaine.

2. Limited to patients with cervical pain that is non-radicular and at no more than two levels bilaterally.

3. There is documentation of failure of conservative treatment (including home exercise, PT and NSAIDs) prior to the procedure for at least 4-6 weeks.

4. No more than 2 joint levels are injected in one session (see above for medial branch block levels).

5. Recommended volume of no more than 0.5 cc of injectate is given to each joint, with recent literature suggesting a volume of 0.25 cc to improve diagnostic accuracy.

6. No pain medication from home should be taken for at least 4 hours prior to the diagnostic block and for 4 to 6 hours afterward.

7. Opioids should not be given as a “sedative” during the procedure.

8. The use of IV sedation may be grounds to negate the results of a diagnostic block, and should only be given in cases of extreme anxiety.

9. The patient should document pain relief with an instrument such as a VAS scale, emphasizing the importance of recording the maximum pain relief and maximum duration of pain. The patient should also keep medication use and activity logs to support subjective reports of better pain control.

10. Diagnostic facet blocks should not be performed in patients in whom a surgical procedure is anticipated.

11. Diagnostic facet blocks should not be performed in patients who have had a previous fusion procedure at the planned injection level.

12. It is currently not recommended to perform facet blocks on the same day of treatment as epidural steroid injections or stellate ganglion blocks or sympathetic blocks or trigger point injections as this may lead to improper diagnosis or unnecessary treatment.

Diagnostic blocks are performed with the anticipation that if successful, treatment may proceed to facet neurotomy at the diagnosed levels. Current research indicates that a minimum of one diagnostic block be performed prior to a neurotomy, and that this be a medial branch block (MBB). Although it is suggested that MBBs and intra-articular blocks appear to provide comparable diagnostic information, the results of placebo-controlled trials of neurotomy found better predictive effect with diagnostic MBB. In addition, the same nerves are tested with the MBB as are treated with the neurotomy. The use of a confirmatory block has been strongly suggested due to the high rate of false positives with single blocks (range of 27% to 63%) but this does not appear to be cost effective or to prevent the incidence of false positive response to the neurotomy procedure itself.

Technique: The described technique of blocking the medial branch nerves in the C3-C7 region (C3-4, C4-5, C5-6, and C6-7) is to block the named medial branch nerves (two injections). Authors have described blocking C2-3 by blocking the 3rd occipital nerve. Another technique of blocking C2-3 is to block at three injection points (vertically over the joint line, immediately above the inferior articular facet at C2 and immediately below the superior articular facet at C3). (Barnsley, 1993) The medial branch nerve innervates the facet joint, facet capsular ligaments, the interspinous and supraspinous ligaments, spinous processes and paraspinal muscles. Relief of pain could be due to blockade of nociceptive input from any combination of these. It is suggested that the volume of injectate for diagnostic medial branch blocks be kept to a minimum (a trace amount of contrast with no more than 0.5 cc of injectate) as increased volume may anesthetize these other potential areas of pain generation and confound the ability of the block to accurately diagnose facet pathology. A recent study has recommended that the volume be limited to 0.25 cc.

Epidemiology of involved levels: Using cadaver evidence facet arthrosis most commonly affects the upper cervical levels, and increased with age, and was very rare in patients less than 40 years of age. C4-5 is the most common level followed by C3-4 and C2-3. This study did not attempt to identify number of levels of involvement. (Lee, 2009)

Number of levels of involvement: In a randomized controlled trial of therapeutic cervical medial branch blocks it was stated that 48% of patients had 2 joints involved and 52% had three joints involved. (Manchikanti, 2008) These levels were identified by the pain pattern, local or paramedian tenderness over the area of the facet joint, and reproduction of pain to deep pressure. (Manchikanti, 2004) Other prevalence studies from this group also indicated that the majority of patients with cervical involvement were treated at three joints. Target joints were identified as noted above. (Manchikanti, 2004). There are no studies that have actually tested levels of involvement using individual injections for diagnostic verification.

(Lord, 1996) (Washington, 2005) (Manchikanti , 2003) (Dreyfuss, 2003) (Falco, 2009) (Nordin, 2009) (Cohen, 2010)

- ☐ Pressley Reed, the Medical Disability Advisor
- ☐ Texas Guidelines for Chiropractic Quality Assurance and 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)