



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

IRO Case #:

Description of the services in dispute:

Request is for surgery – carpal tunnel release (#29848). Is this surgery medically necessary?

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

The physician providing this review is board certified in Orthopaedic Surgery. The reviewer is a member of the American Academy of Orthopaedic Surgeons, the American Medical Association, the Pennsylvania Medical Society, and the Pennsylvania Orthopaedic Society. The reviewer is certified in impairment rating evaluations through the Bureau of Workers Compensation. The reviewer has research and publication experience within their field of specialty. This reviewer has been in active practice since 1996.

Review Outcome

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

Upheld

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

Carpal tunnel release (#29848) is not medically necessary.

Information provided to the IRO for review

Letter dated 8/24/07, 2 pages

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Letter dated 9/26/07, 4 pages
MRI, upper extremity dated 3/3/06, 2 pages
Arthrogram, wrist dated 10/25/06, 7 pages
Progress note, 2 pages
Fax to Veronica dated 7/31/07, 1 page
Patient information, 2 pages
EMG/nerve conduction study dated 9/18/07, 1 page
Letter to Dr. dated 9/18/07, 2 pages
Motor nerve conduction dated 9/18/07, 2 pages
Utilization Review Referral dated 9/19/07, 1 page
Utilization Reviewer Referral dated 8/13/07, 1 page

Duplicates:

Request for a review dated 10/2/07, 6 pages
MRI dated 8/3/06, 4 pages
Arthrogram, dated 10/25/06, 7 pages
Progress note, 2 pages
Fax dated 7/31/07, 1 page
Patient information, 2 pages
EMG/nerve conduction study dated 9/18/07, 1 page
Letter to Dr. dated 9/18/07, 2 pages
Motor nerve conduction study dated 9/18/07, 2 pages
Utilization Review Referral dated 9/19/07, 1 page

Patient clinical history [summary]

The patient is a right-handed male who sustained a neck, right shoulder, right wrist and right hand injury when a conveyor belt failed to stop and boxes full of jars came off the belt and hit the patient. There was reference to a right second finger distal interphalangeal joint amputation and laceration to the right third finger. A MRI evaluation of the right shoulder from 08/03/06 was within normal limits. MR/arthrogram study of the right wrist performed on 10/25/06 identified a triangular fibrocartilage complex tear. There were no physician-generated records provided from 2005 or 2006 and there was no reference made to management of the tear. Physical examination completed on 01/25/07 demonstrated normal cervical spine; decreased right shoulder motion; normal right elbow; decreased right grip with normal wrist motion. The patient was taking an unknown medication and was noted to be off work. There was reference made to attending physical therapy, apparently for both the shoulder and wrist, without benefit. Orthopedic evaluation conducted on 08/07/07 noted limited pronation and supination with positive carpal tunnel

compression, Tinel's, Phalen's, Finkelstein and piano key signs. Radiographs of the right wrist from 08/07/07 were essentially normal and right shoulder radiographs indicated acromioclavicular degenerative joint disease. Electrodiagnostic studies completed on 09/18/07 initially noted moderate to severe right ulnar neuropathy at the wrist with a follow up letter stating moderate to severe right median neuropathy at the wrist with no ulnar neuropathy and findings of possible C8 radiculopathy that were hard to determine as the study was incomplete. Right carpal tunnel release has been recommended.

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

The patient is a male who has had physical therapy, medicines and activity modification. However, there is no mention of any splinting or injections given with focus towards carpal tunnel symptomatology. It is also mentioned that this patient has a triangular fibrocartilage complex tear crush injury with laceration of the third finger and DIP amputation noted as well as a positive Tinel's and Phalen's, carpal tunnel compression test and Finkelstein. Along with this, there is ulnar sided wrist tenderness and positive piano key test. An EMG nerve conduction study demonstrates moderate to severe right ulnar neuropathy at the wrist. There is also a question of whether or not there is a neck or shoulder problem causing radiculopathy.

Given the complexity of this case and the question regarding radiculopathy of the affected extremity, carpal tunnel release is not medically appropriate and necessary. There is no clear-cut pain generator that is predominant but there are several pain generators of which only one would be addressed with carpal tunnel release surgery.

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

Official Disability Guideline-7 Carpal Tunnel Syndrome- Surgery

ODG Indications for Surgeryä -- Carpal Tunnel Release:

I. Severe CTS, requiring ALL of the following:

A. Symptoms/findings of severe CTS, requiring ALL of the following:

1. Muscle atrophy, severe weakness of thenar muscles
2. 2-point discrimination test > 6 mm

B. Positive electrodiagnostic testing

--- OR ---

II. Mild/moderate CTS, requiring ALL of the following:

A. Symptoms (pain/numbness/paresthesia/impaired dexterity), requiring TWO of the

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following:

1. Abnormal Katz hand diagram scores
 2. Nocturnal symptoms
 3. Flick sign (shaking hand)
- B. Findings by physical exam, requiring THREE of the following:
1. Durkan's compression test
 2. Semmes–Weinstein monofilament test
 3. Phalen sign
 4. Tinel's sign
 5. Decreased 2–point discrimination
 6. Mild thenar weakness (thumb abduction)
- C. Comorbidities: no current pregnancy
- D. Initial conservative treatment, requiring FOUR of the following:
1. Activity modification \geq 1 month
 2. Wrist splint \geq 1 month
 3. Nonprescription analgesia (i.e., acetaminophen)
 4. Physical therapy referral for home exercise training
 5. Successful initial outcome from corticosteroid injection trial (optional)
- E. Positive electrodiagnostic testing [note that successful outcomes from injection trial or conservative treatment may affect test results]