

DRE vs. ROM Spine Evaluation Methods

Chapter 15 of the *Guides to the Evaluation of Permanent Impairment, 5th Ed.*, describes the principles of assessment for the spine (vertebral bodies, and associated muscles, ligaments, disks and neural elements). To determine impairments of the spine, the *Guides* provides two methods of evaluation: the Diagnosis Related Estimate (DRE) Method and the Range of Motion (ROM) Method. The *Guides* specify the DRE method is the primary method to determine spine impairment in an injured worker who has had a distinct injury. Please note, **the examiner cannot simultaneously apply both methods to the same spine region.** When an injured worker has claim allowances for more than one spinal region, the DRE method or the ROM method can be applied to a particular region as appropriate. The spine impairment percentages from the different spine regions are then **combined.**

There are multiple DRE Categories for each of the three spinal regions. For instance, a DRE Lumbar Category I defines a lumbar spine injury with no significant clinical findings and represents 0% whole person impairment. DRE Lumbar Category III defines radiculopathy, and indicates a 10%-13% whole person impairment. A one-level fusion is described by DRE IV, with a 20%-23% WPI (Table 15-3, p.384). Within this range, the examiner can assign a higher percentage if residual symptoms or objective findings impact the ability to perform Activities of Daily Living (p. 381).

When a condition cannot be classified in a DRE Category, the ROM method may be used in certain situations:

- Impairment of the spine caused by illness
- Multi-level involvement in the same spinal region
- Two or more fusions in the same spinal region
- Recurrent radiculopathy from recurrent HNP in the same spinal region
- Multiple episodes of other pathology producing alteration of motion segment integrity and/or radiculopathy



The ROM Method consists of combining impairments from four areas: diagnosis (p.404), range of motion, motor and sensory impairments. (However, range of motion impairments **within a spinal region** are added together).

An injured worker may have multiple, similar allowed conditions within a spinal region distributed over various BWC claims. The challenge is to determine the overall whole person impairment of all the allowed conditions related to the spinal region which can be accomplished by selecting the DRE Category that describes the most severe impairment documented by medical history and physical exam.

R. Stanko MD, MS

Did You Know?

The word "resolved" has different meanings with respect to medical and legal issues in an IC PTD exam. Referring to an allowed condition as "resolved", in the legal sense, implies the allowed condition no longer exists. Physicians use "resolved" to indicate that a physiologic or anatomic repair process has returned to baseline. For example, the ecchymosis of a knee contusion may fade, but the allowed condition remains in the claim. Physicians must accept and evaluate all allowed conditions when doing a PTD exam and opining on permanent impairment. Consequently, avoid the use of "resolved" when referring to an allowed condition. Instead, simply state the allowed condition has a zero percent whole person permanent impairment based on the physical exam findings at the time of the permanent Total Disability examination.

MediScene's Continuing Medical Education

All providers doing musculoskeletal physical exams or psychological exams for an Industrial Commission PTD exam



will undergo a reappointment process every five years. As part of this process, providers need to document 8 hours of continuing medical evaluation pertaining to specialty impairment evaluation. To assist in this endeavor, *MediScene* will provide IME case presentations that can earn you 1 hour (Category II) of CME credit toward your IC education requirement. The following pages contain a case presentation for you to complete. Analyze the case, provide a discussion, impairment rating, opinion and physical strength rating and submit it to the IC Medical Services department. Submissions can be emailed to wanda.mullins@ic.ohio.gov, sara.castle@ic.ohio.gov or faxed to 614-466-1051. An answer sheet will be provided after submission of your CME.

CASE PRESENTATION

Ohio Industrial Commission - Specialist Report

CLAIMANT

Paul Beagle

ALLOWED CONDITIONS

SPRAIN RIGHT SHOULDER; ROTATOR CUFF TEAR-RIGHT; RIGHT A/C JOINT INJURY WITH CARTILAGE TEAR; BURSITIS RIGHT SHOULDER; IMPINGEMENT SYNDROME RIGHT SHOULDER; ADHESIVE CAPSULITIS RIGHT SHOULDER, SPRAIN OF NECK; CERVICAL HERNIATION AT C6-7.

HISTORY

In 1994, he was forcefully wrenching a nozzle off a press, pulling and stretching his neck, right shoulder and arm. Mr. Beagle reports no recent therapy for his allowed conditions. He states his neck is painful which is "pretty much constant". Mr. Beagle states he gets pain in the right shoulder if he tries to lift a coffee cup. Consequently, he states he tries to do most of his activity with his left arm. He states no further surgery is planned for the right shoulder. Mr. Beagle states he can drive short distances to the grocery store.

Medical records indicate Dr. Weimaraner performed the following surgeries: Right distal clavicle resection (4/24/95); Right shoulder open decompression, inferior acromioplasty, excision of coracoacromial ligament, bursectomy, modified Mumford, rotator cuff repair (4/01/09); Arthroscopy of the right shoulder with removal of multiple adhesions (5/23/10). An MRI of the cervical spine (6/11/11) noted minimal cervical spondylosis with minimal osteophyte disc effacement of the thecal sac at C56 and C67. An MRI of the right shoulder, (2/16/13), showed extensive post-surgical changes, a small tear of the distal supraspinatus tendon, post acromioplasty changes and degenerative changes within the superior labrum, and cystic changes within the superior posterior lateral humeral head. EMG testing in March 2014 reported no acute cervical radiculopathy.

MEDICAL HISTORY REVIEW

Medications: Rarely takes Tylenol #3 (twice in last week), Prilosec

Past Medical History: +hypertension

Review of systems: Reports occasional epigastric pain

Social History: Smokes ¼ PPD, last worked 3/1/95

Family History: +Diabetes, father

Surgery: Multiple shoulder surgeries

Allergies/Reactions: NSAIDs.

PHYSICAL EXAM

The IW is alert and in no acute distress. There is 5/5 strength for all muscle groups in the left upper extremity. There is 5/5 strength noted for right finger abduction, wrist extension, elbow flexion and extension; and 5-/5 strength or right shoulder abduction, external rotation and internal rotation limited by pain. DTR testing shows 1+ reflexes for the bicep, brachioradialis and triceps bilaterally. Sensation to light touch is decreased over the scars and over the proximal right deltoid, but otherwise intact in the upper extremities bilaterally. Mid-arm circumference measures 37 cm right; and 38 cm left. A cervical compression test is negative. Neck range of motion shows 30° flexion, 20° extension, 20° right lateral flexion, 20° left lateral flexion, 40° right rotation and 0° left rotation. There is moderate tenderness noted with palpation of the right cervical paraspinals and trapezius.

There is tenderness with palpation of the right anterior shoulder, acromioclavicular joint and glenohumeral joint space. There is a 6 cm, 10 cm over the right shoulder. There is tenderness with palpation of the right proximal bicipital tendon. Right shoulder range of motion shows 95° forward flexion, 40° extension, 90° abduction, 5° adduction, 35° external rotation and 15° internal rotation. Radial pulses are intact bilaterally, 80 per minute and regular. The skin shows normal color and temperature in the upper extremities bilaterally. Extremity temperature is 34 °C bilaterally. He is right handed.

DISCUSSION

SPRAIN RIGHT SHOULDER; ROTATOR CUFF TEAR - RIGHT; RIGHT A/C JOINT INJURY WITH CARTILAGE TEAR; BURSITIS RIGHT SHOULDER; IMPINGEMENT SYNDROME RIGHT SHOULDER; ADHESIVE CAPSULITIS RIGHT SHOULDER.

How do you assess right shoulder impairment?

What Tables / Figures in the *Guides, 5th Edition* do you use to calculate impairment?

Does his shoulder surgery affect the impairment?

SPRAIN OF NECK; CERVICAL HERNIATION AT C5-6.

What method do you use to calculate cervical spine impairment?

What Tables / Figures in the *Guides, 5th Edition* do you use to calculate impairment?

How do calculate impairment for neck and shoulder conditions?

PHYSICAL STRENGTH RATING:

What impairments on physical exam affect strength?

What impairments on physical exam affect ADL activities?

With respect to allowed conditions, what is your PSR? Why?

PROVIDE OPINIONS ON THE FOLLOWING ISSUES:

1. Has the Injured Worker reached maximum medical improvement with regard to each specified allowed condition? Briefly describe the rationale for your opinion. If "yes," then please continue to items #2 and #3.
2. Based on the *AMA Guides, 5th Edition*, and with reference to the Ohio Industrial Commission Medical Examination Manual, provide the estimated percentage of whole person impairment arising from each allowed condition. Please list each condition and whole person impairment separately, and then provide a combined whole person impairment. If there is no impairment for an allowed condition, indicate zero (0) percent.
3. Complete the enclosed Physical Strength Rating. In your narrative report, provide a discussion setting forth physical limitations resulting from the allowed condition(s).

Case presentation submissions should be emailed to wanda.mullins@ic.ohio.gov, sara.castle@ic.ohio.gov or faxed to 614-466-1051.

