

Designated Doctor and MMI/IR Doctor Pre-course Cases

Upper Extremity MMI and Impairment Rating

Case 1 - Upper Extremity MMI/IR

History of Injury

- 25-year-old male working as painter lifted five gallon bucket partially full of paint
- Heard pop and experienced immediate right shoulder pain

Treatment History

- Saw PCP date of injury and diagnosed with shoulder strain
- Treated with ibuprofen and PT
- Initial 6 visits of PT over 3 weeks
 - Codman's and other passive ROM
 - Scapular stabilization/control exercises
 - Rotator cuff resistance exercises with minimal shoulder abduction
- PCP follow-up 3 weeks post injury
 - "Not better"
 - Restricted painful shoulder ROM
 - Shoulder flexion and abduction approximately 80°, IR/extension thumb to L5
 - RTW with restrictions – restricted duty work unavailable
- Orthopedic surgeon referral
- Orthopedic surgeon 5 weeks post injury
 - Active shoulder abduction and flexion approximately 90 degrees
 - Inability to actively resist abduction (4/5)
 - Positive impingement signs
 - X-rays negative for fracture, dislocation, but Type III acromion
 - Ordered shoulder MR arthrogram right shoulder
- MR arthrogram 6 weeks post injury
 - Partial thickness rotator cuff (supraspinatus) tear
 - Type III acromion
 - Subacromial effusion
- Orthopedic surgeon 7 weeks post injury

- Symptoms, activity tolerance and PE unchanged
- Restricted duty work unavailable
- Inability to actively resist abduction (4/5)
- Subacromial corticosteroid and concurrent PT
- PT 8-11 weeks post injury
 - 6 additional visits
 - Concurrent with 2 subacromial corticosteroid injections
 - Progression of scapular and rotator cuff strengthening
 - Shoulder flexion 120°, extension 30°, adduction 30°, abduction 100°, IR 20°, ER 30° at discharge
 - (12th visit of PT)
 - Restricted duty work still unavailable
- Orthopedic surgeon 12 weeks post injury
 - Symptoms, activity tolerance improved
 - Shoulder abduction and flexion approximately 120°
 - Mildly positive impingement signs
 - Restricted duty work unavailable
 - Recommended continued 6 visits of PT
 - PT preauthorization denied, appealed
 - Insurance carrier “accepts shoulder sprain, denies partial thickness rotator cuff tear”

DD Exam - 20 Weeks Post Injury

Medical History

- States cannot use right arm well at all, especially above shoulder level
- Right arm “really weak”
- Right shoulder “stiff”
- PT and injections helped, but no PT in about 8 weeks
- Doing some exercises at home
- Wants to work “but my boss won’t let me”

DD Physical Exam

- Shoulder flexion 110°, extension 30°, abduction 90°, adduction 20°, ER 20°, IR 10°

- 4/5 strength right shoulder abduction, flexion and external rotation when performed at
>45°- 60° of abduction or flexion
- UE DTRs and sensation normal

Based on medical records and physical exam, what is the compensable injury for certifying MMI and IR?

- A. Right shoulder strain
- B. Partial thickness right rotator cuff (supraspinatus) tear complicated by pre-existing Type III acromion
- C. A and B
- D. None of above

Question for DD to consider in the exam: Has MMI been reached? If so, on what date? (May not be greater than statutory MMI date shown on DWC Form-032)

- A. Yes, 11 weeks post injury, date of 12th PT visit
- B. Yes, 12 weeks post injury, date of ortho follow-up
- C. Yes, 20 weeks post injury, date of DD exam
- D. No, not at MMI

Case 1 - Upper Extremity MMI/IR - The Sequel

DD Exam - 52 Weeks Post Injury

Medical History

- Arthroscopic rotator cuff repair with acromioplasty at 22 weeks post injury
- Completed 24 visits weeks 34-48 post injury following post-op immobilization
- RTW full time at new job 50 weeks post op with 50# lifting restriction no lifting > 25# above shoulder height
- PT discharge 48 weeks post injury
- 5/5 UE strength
- Progression of resisted rotator cuff/scapular strengthening exercises
- Shoulder ROM
 - flexion 170°
 - abduction 160°
 - adduction/IR thumb to T10

- Ortho follow up 49 weeks post injury
 - “Much better, finished with PT, doing home exercises”
 - “Full ROM and strength”
 - Follow up prn

DD Physical Exam

- Shoulder ROM
- Flexion 170°
- Extension 40°
- Abduction 160°
- Adduction 40°
- IR 60°
- ER 60°
- Constant AC joint crepitation with active right shoulder range of motion
- 5/5 strength right shoulder with manual muscle testing
- Normal UE DTRs and sensation

Based on medical records and physical exam, what is the compensable injury for certifying MMI and IR?

Question for DD to consider in the exam: Has MMI been reached? If so, on what date? (May not be greater than statutory MMI date shown on DWC Form-032)

- A. Yes, 48 weeks post injury, date of PT discharge
- B. Yes, 49 weeks post injury, date of ortho follow-up
- C. Yes, 50 weeks post injury, date began working with restrictions at new job
- D. Yes, 52 weeks post injury, date of DD exam
- E. No, not at MMI

Question for DD to consider in the exam: On MMI date what is whole person IR?
Show your work!

- A. 3%
- B. 5%
- C. 9%
- D. 15%

Case 2 - Upper Extremity MMI/IR

History of Injury

- 25 year-old male oil field worker sustained a crush injury to left hand

Treatment History

- Seen in ER date of injury and underwent surgery date of injury
- Traumatic amputation of left index finger at metacarpal phalangeal joint
- Fractures of proximal phalanx of left thumb and proximal phalanx of middle finger treated with pin fixation
- 24 post op OT visits
- OT discharge 40 weeks post injury
 - Well healed index finger amputation
 - Thumb ROM
 - IP flexion 60° and extension 10°
 - MP flexion 50° and extension 0°
 - Abduction 70°
 - Adduction and opposition “essentially full”
- OT discharge 40 weeks post injury
 - Middle finger ROM
 - DIP flexion 50° and extension -10°
 - PIP flexion 60° and extension -10°
 - MP flexion 70° and extension 0°
 - Sensation decreased over the palmar surface of the entire middle finger
- Treating doctor follow-up 40 weeks post injury
 - Healed thumb and finger fractures and index finger wound site

- More time needed for spontaneous healing of digital nerve injury to middle finger
- Treating doctor follow-up 52 weeks post injury
 - Healed middle finger and thumb fractures and index finger wound site
 - Numbness of the middle finger unchanged over the last 3 months
 - Thumb and middle finger ROM “same as prior visit after completing OT”
 - Returned to work at new job
 - Continue gabapentin, follow-up 3 months

DD Physical Exam 60 Weeks Post-Injury

- Taking gabapentin
- Working full time at new job
- Continued numbness middle finger
- Well healed scars, no redness/swelling
- Left thumb
 - IP flexion 70°, extension 10°
 - MP flexion 50°, MP extension 0°
 - Abduction 70°
 - Lack of adduction = 1cm
 - Able to oppose to 7cm from the palm
 - 6 mm 2 point discrimination entire palmar aspect
- Amputation left index finger at MP joint
- Middle finger ROM
 - DIP flexion 50° and extension -10°
 - PIP flexion 60° and extension -10°
 - MP flexion 70° and extension 0°
- Middle finger sensation >15 mm 2 point discrimination entire palmar aspect of entire finger from MP joint distally

Based on medical records and physical exam, what is the compensable injury for certifying MMI and IR?

Question for DD to consider in the exam: Has MMI been reached? If so, on what date?

(May not be greater than statutory MMI date shown on DWC Form-032)

- A. Yes, 40 weeks post injury, date of OT discharge and treating doctor follow-up
- B. Yes, 52 weeks post injury, date of treating doctor follow-up
- C. Yes, 60 weeks post injury, date of DD exam
- D. No, not at MMI

Question for DD to consider in the exam: On MMI date what is whole person IR?

Show your work!

- A. 36%
- B. 32%
- C. 19%
- D. 17%

Case 3 - Upper Extremity MMI/IR

History of the Injury

- 25-year-old male waiter tripped and fell at work landing on outstretched left arm
- Sustained fracture of left distal radius and ulna
- Underwent open reduction and internal fixation (ORIF) with plating by orthopedist
- Fracture healed
- 12 visits of post-op PT with increased ROM and strength
- Subsequently complained of loss of pain and sensation in left hand
- Electrodiagnostic studies consistent with very severe compression of median nerve
- Underwent nerve decompression 12 months post injury
- Reached clinical plateau with no reasonable anticipation of further material recovery or lasting improvement
- Saw Designated Doctor for MMI and IR

DD Medical History

- Loss of sensation left thumb and index finger which interferes but does not prevent sleep, playing guitar and other ADLs
- RTW as waiter

DD Physical Exam

- Well healed surgical scar left wrist
- ROM left wrist
 - Flexion 28°
 - Extension 18°
 - Radial deviation 5°
 - Ulnar deviation 15°
- ROM left forearm
 - Pronation 42°
 - Supination 58°
- 5/5 strength of fingers, wrist and forearm muscles bilaterally
- 12 mm 2 point discrimination of palmar surface of radial and ulnar portions of left thumb and radial side of index finger
- 6 mm 2 point discrimination over all other parts of left hand

Based on medical records and physical exam, what is the compensable injury for certifying MMI and IR?

Question for DD to consider in the exam: On MMI date what is whole person IR?

- A. 28%
- B. 23%
- C. 18%
- D. 15%