


Neck and Shoulder Pain

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History

- 44 year old baseball coach
- Complains of left shoulder and neck pain
- MVA 14 years ago when rear ended and had neck pain that was significant but improved
- 6 months ago neck began to get worse and worse



History

What do I want to ask him?

History

- History of previous Right Rotator Cuff tear and surgery
- Current 2 cm Rotator Cuff tear on Left
- Since neck pain began 6 months ago Left shoulder pain has increased – surgery to be scheduled

Complaint History

- Neck Disability Rating is 58%
 - Severe pain, pain prevents lifting wts that are not conveniently placed, frequent headaches, difficulty concentrating, 2-3 hrs sleepless
- 6 months ago he woke up with a stiff neck, he couldn't move it
- This has never happened like this before
- Pain in neck is primarily Left side and into Left shoulder(top) and lateral humerus
- Pain is burning pain and over the last 6 months it has continued to worsen
- He feels his arm is weak and has elbow pain at times

Pain Complaint

- His pain increases to a 7/10



Data Collection



What data do I want to collect?



Posture



- Forward Head Position
- Head in forward position and slight right Rotation
- Dorsal glide- 90% mobility



Cervical Range of Motion



- Forward Flexion- limited ~20% deviation to right Pain down center of his spine
- Extension- 50% limited with deviation to right- pain neck and shoulder
- Right rotation- ~20% limited pain on right
- Left rotation- ~ 70% limited stiff and pain on Left



Question 1



The patient has decreased range of motion in extension (with R deviation) and decreased L cervical rotation. You suspect:

- A. Right closing restriction
- B. Right opening restriction
- C. Left closing restriction
- D. Left opening restriction



Question 2



You plan to confirm your hypothesis with range of motion special testing. You expect the greatest deficit in:

- A. Forward flexion with right rotation
- B. Forward flexion with left rotation
- C. Extension with right rotation
- D. Extension with left rotation



Cervical Range of Motion



- Forward Flexion- limited ~20% deviation to right Pain down center of his spine
- Extension- deviation to right- pain neck and shoulder
- Right rotation- ~20% limited pain on right
- Left rotation- ~ 70% limited stiff and pain on Left
- Extension with LR- ~50% limited painful
- Flexion with RR- pain relief



Strength Testing



	Right	Left
• Shoulder Abd	5/5	4-/5
• Biceps	5/5	4/5
• Bracioradialis	5/5	4/5
• Triceps	5/5	5/5
• Wrist Flexion	5/5	5/5
• Wrist Extension	5/5	5/5



Question 3



Based on the muscle testing values of diminished shoulder abd, biceps and bracioradialis You suspect nerve involvement of:

- A. C5
- B. C7
- C. C8
- D. T1



Special Testing



- C5 - Biceps (strength/reflex) Lateral humerus
- C6- Biceps, wrist extension, bracioradialis, radial forearm
- C7- Triceps, wrist flexion, radial fingers
- C8- Ulnar forearm, Finger Intrinsic Abd
- T1- Finger Ab/add, Ulnar humerus(arm pit)



Palpation Left



- Teres negative
- Upper Trap negative
- Rhomboid – recreates pain he gets with fatigue
- Infraspinatus- local pain, significant



Question 4



Based on the findings to date, which special test do you expect to be positive:

- A. Spurling's
- B. Alar ligament
- C. O'Brian's
- D. Load and shift test



Cervical Special Tests



- Reflex – no change
- Spurling's- + on Left



Joint Play



- C2 -Normal
- C3- Increased
- C4- Increased
- C5- Increased
- C6- Normal
- C7- Hypomobile



Shoulder Special Tests



- ?



Shoulder Special Tests



- Drop Arm +
- Neer's +
- Hawkin's/Kennedy +
- Full Can/Empty Can +
- Resisted ER +



Question 5



Rotator Cuff Surgery is planned. You educate the patient that he will need to avoid stretching which motion for 6 wks to protect the primary repair:

- A. Shoulder Horizontal Adduction
- B. Shoulder Internal Rotation
- C. Scapular Retraction
- D. Scapular Abduction



Question 6



During this Rotator Cuff Surgery muscle is cut for visualization. To protect this area, which resisted motion is limited for 8 weeks:

- A. Resisted Elbow flexion
- B. Resisted Shoulder Abduction
- C. Resisted Shoulder Adduction
- D. Resisted Scapular Elevation



L Elbow



- Elbow pain has not been recreated by Cervical or shoulder testing – what should you do?



L Elbow



- Lateral epicondyle – negative
- Radial head – recreates his pain

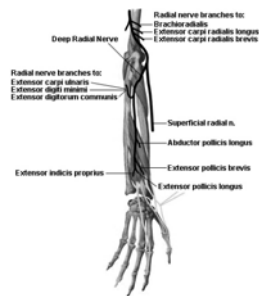


Question #7 - L Elbow



Double crush? Which nerve?

- A. Ulnar
- B. Median
- C. Radial
- D. Anterior interosseous



Neural Tension Testing – negative- What now?



L Elbow



- Distraction - improved
- Compression - worsen



Physical Therapy Diagnosis



What is the patient's problem?

Why do you think this happened?



Patient Problem



- C5 cervical radiculopathy
- Increased mobility at involved level
- Shoulder pain due to compensation from rotator cuff tear
- Elbow pain at radiohumeral joint

Physical Therapy Diagnosis

What can physical therapy do for him?

Patient Problem

- C5 cervical radiculopathy
 - Mobs to increase fluid flow
 - Traction to increase space
- Increased mobility at involved level
 - Introduce stabilization
- Shoulder pain due to compensation from rotator cuff tear
 - Direct treatment to irritated muscles
- Elbow pain at radiohumeral joint (capsulitis)

Medical Intervention

- What medical treatment could be done for cervical symptoms?

Question #8 Medical Intervention

- A. Epidural
- B. Selective Nerve Root Block
- C. Facet Nerve Root Ablation
- D. Posterior Element Block

Response to Treatment

- After joint mobilizations patient can forward flex with less pain, increased ROM with L max closing with less pain
- After traction, increased range in both with less pain (even better than after mobilizations)
- Immediate resolution of forward head with first treatment

Question #9

- You have diagnosis of Rotator cuff tear- you order which diagnostic report for review?
 - A. CT
 - B. Bone Scan
 - C. MRI
 - D. PET Scan



Question #10



You are able to return this coach to pain-free throwing for the rest of the season. In the ICF guidelines this is an example of improvement in:

- A. Impairments of Body Function
- B. Impairments of Body Structure
- C. Environmental Factors
- D. Activity limitations and Participation



Thank You

