

Shoulder Panel Case Study

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*Work Related Injuries Workshop
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Case 1

- E.M. is a 58 year old right hand dominant female ultrasound technician presents for second opinion regarding the need for cervical spine surgery.
- CC: Right neck pain localized in the cervical paraspinal, trapezial, posterior shoulder/proximal arm pain/discomfort x 6 months.
- Associated symptoms: Right hand paresthesias and weakness.
- Saw other physician at other Boston Hospital. Ordered MRI of cervical spine.
- Cervical MRI: Multilevel degenerative disc disease, uncovertebral spurring. Multilevel disc osteophyte complex, foraminal stenosis, mostly C5/6, C6/7.

Case 1 Cont'd

- Physical Exam:
- Cervical ROM: Full, slightly restricted on end range rotation bilaterally. Spurling's maneuver negative for reproduction of arm/hand symptoms. No abnormal reflexes.
- Shoulder Exam: Abduction to 130 degrees reproduces pain, IR 30 degrees reproduces pain.
- Positive Neer's and Hawkin's impingement signs.
- Shoulder X rays: Mild subacromial spurring, AC arthritis, no other abnormalities.

Diagnosis: Shoulder Impingement

- Recommend: Physical therapy to work on postural persicapular RTC stabilization and strengthening.
- Performed a subacromial injection (75% relief).
- Great!
- Does that explain everything?

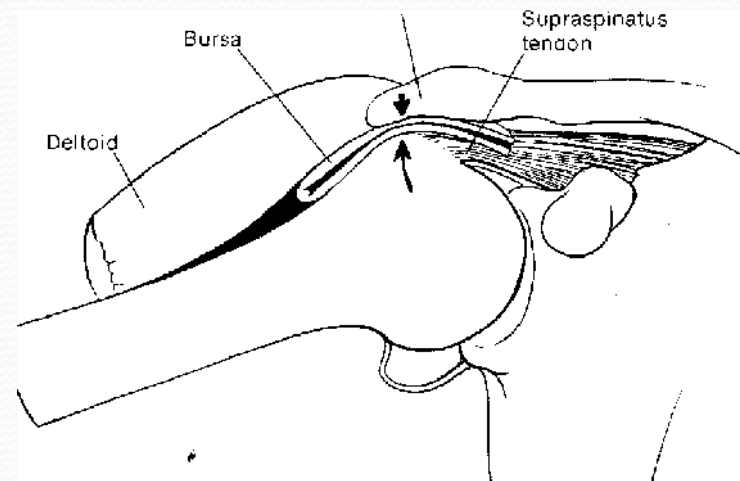
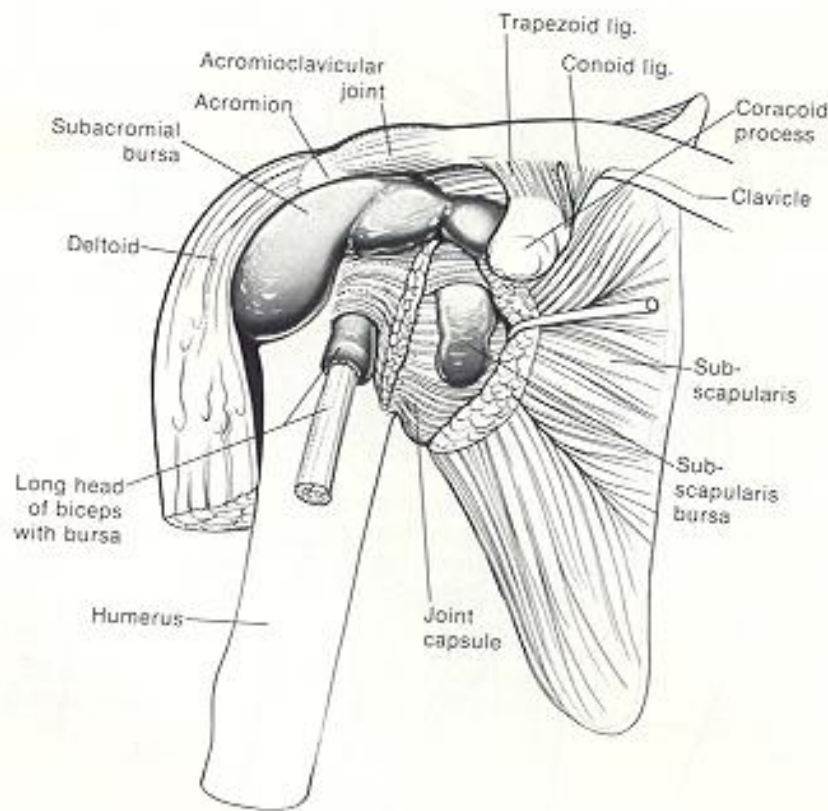
Go back to your History and PE

- Do symptoms travel down the arms or do they stop at the shoulder?
- Where exactly is the numbness and tingling?
- Does it occur on the other side?
- When do they occur?
- How long have you had those symptoms?
- Exam: Wrist: Positive Tinel's Phalen's for paresthesias in first 3 digits

Plan:

- EMG/NCS Right upper extremity: Moderate to severe median neuropathy at wrist (ie CTS), no evidence of cervical radiculopathy.
- Referred to hand surgeon, underwent carpal tunnel release.
- Continued PT for shoulder.
- No cervical spine surgery.
- Improved to baseline.
- What can we learn from this?

Impingement



Impingement

- Typically seen in > 40 years.
- Narrowing of subacromial space causing compression and inflammation of the bursa, biceps tendon, and rotator cuff.
- Neer's 3 stages" 1. Hemorrhage and edema, 2: Tendonitis and fibrosis, 3. Tendon degeneration of rotator cuff and biceps.
- Most commonly involves the supraspinatus.
- Functional: Superior migration of humeral head from caused by weakness or muscle imbalance. Structural: When subacromial space is too narrow due to bone growth or soft tissue inflammation. (Can have both combined).
- Primary versus secondary. Primary: Older overuse, tendon degeneration. Secondary: RTC impingement secondary to functional decrease in supraspinatus outlet space. Ie instability.
- 3 types of acromium shapes type 1 (flat), Type 2(curved), type 3 hooked.