# Joint Examination and Injection Course

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#### DIAGNOSING AND MANAGING UPPER LIMB CONDITIONS

Shoulder Elbow Wrist Hand





## **SHOULDER AREA**

- Acromioclavicular joint
- Adhesive capsulitis
- Rotator cuff (SITS)
- Supraspinatus
- Infraspinatus
- Teres minor
- Subscapularis





## **SHOULDER AREA**

- Biceps tendonitis
- OA
- Pyrophosphate disease
- RA
- Other inflammatory arthropathies

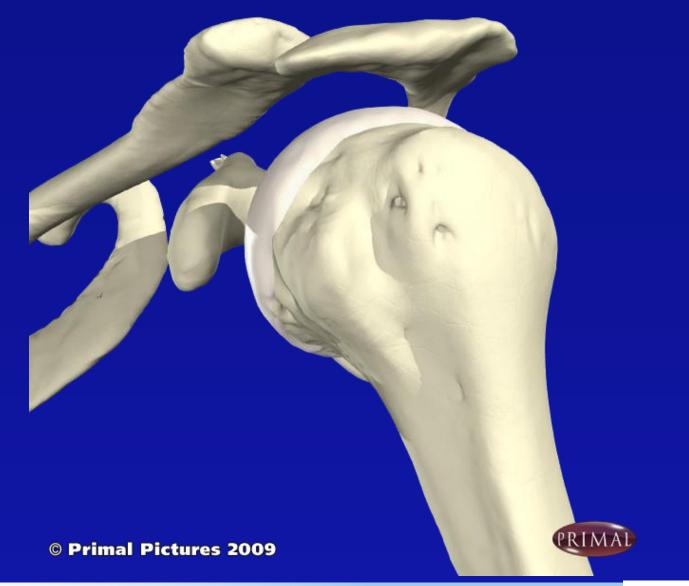












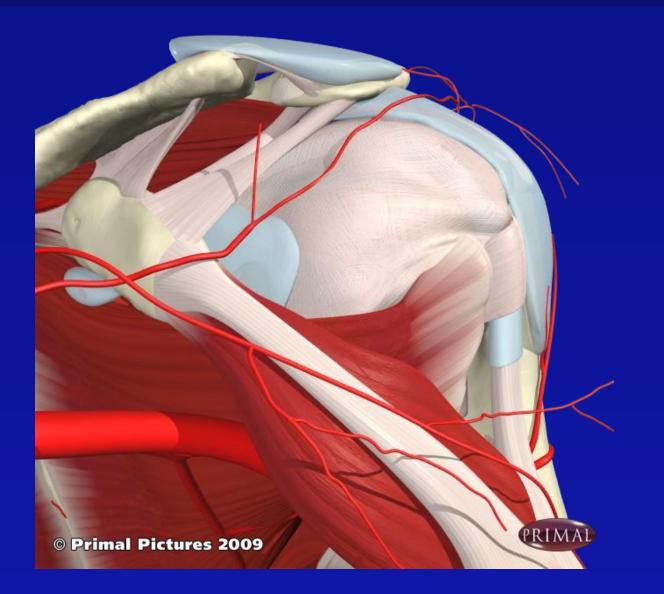






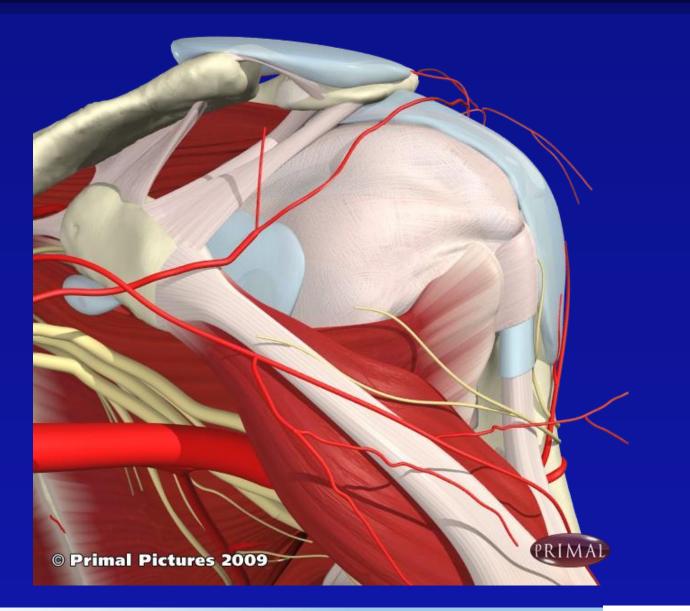






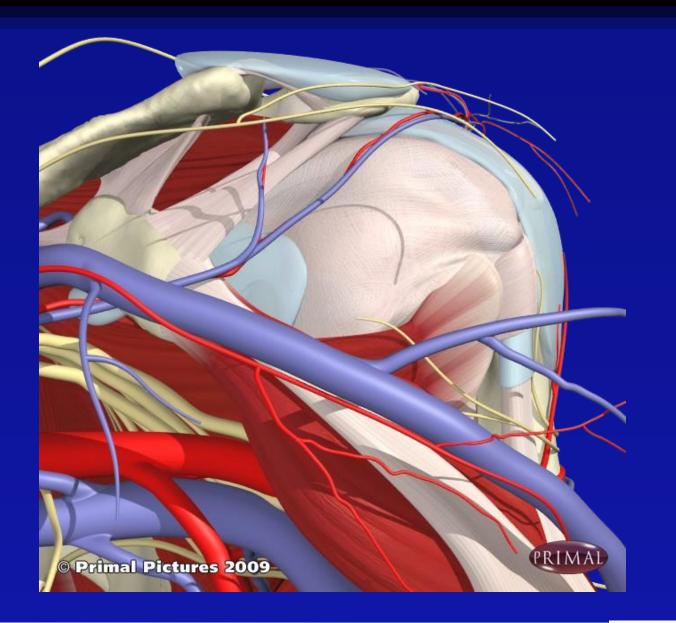








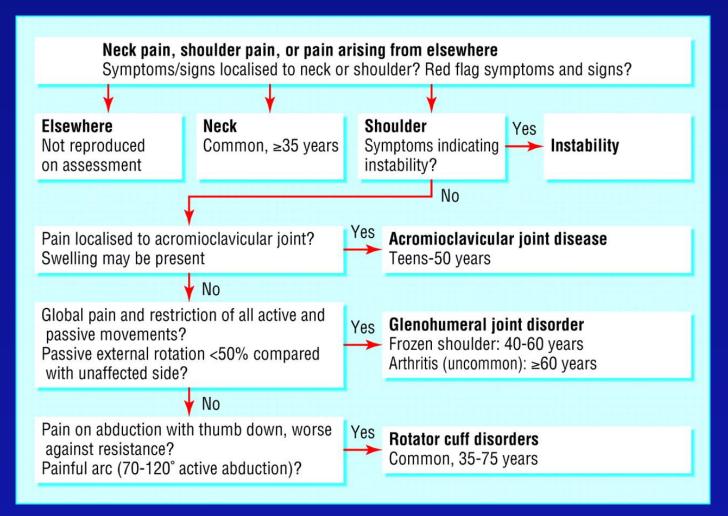








Diagnosis of shoulder problems. Adapted with permission from shoulder pain algorithm: www.oxfordshoulderandelbowclinic.org.uk



Mitchell, C. et al. BMJ 2005;331:1124-1128





#### SHOULDER EXAM

- LOOK at skin, contour, compare both sides, muscle atrophy
- FEEL for heat, tenderness
- MOVE
   Active movement
   Passive movement





#### Simple 'rules' for soft tissue problems

- Pain on active movement between 40-80 deg in flexion or abduction will involve cuff
- Pain on active movement, mainly with abduction 40-80 deg likely to be supraspinatus tendonitis
- All of above will have almost normal passive movement
- Pain and loss of movement, active and passive in all planes of movement indicates adhesive capsulitis





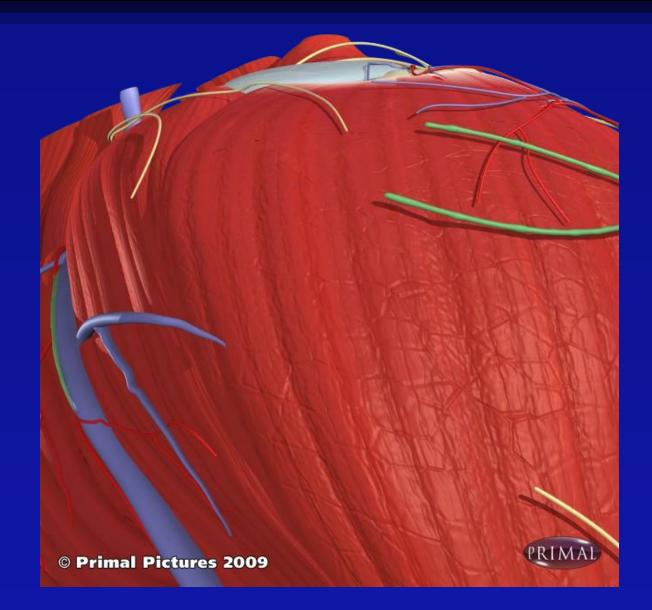
#### **Subacromial Impingement**

Pain caused by impingement Supraspinatus tendinitis

Painful arc of movement
Positive Impingement Test
Hawkins
Inject under the acromion process with 40mg
Depomedrone and Lidocaine

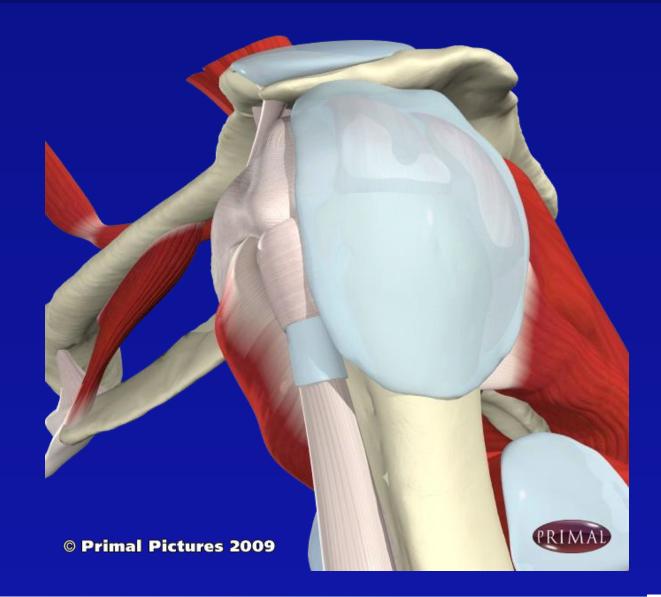






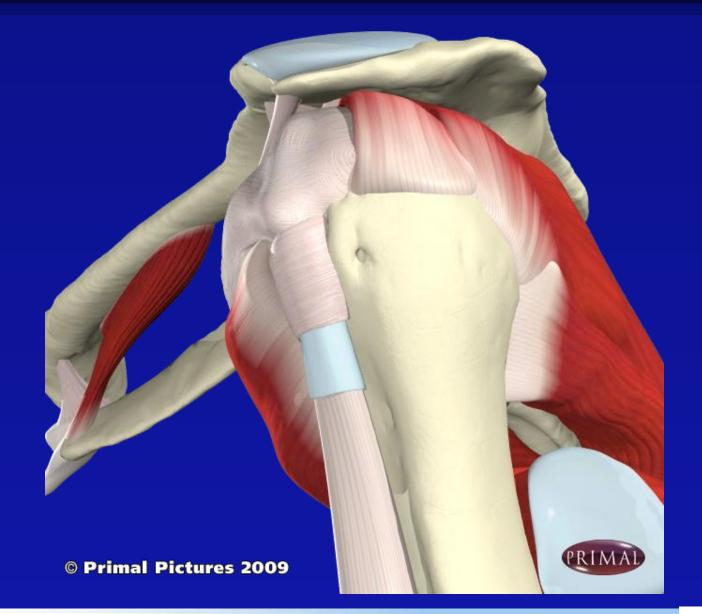






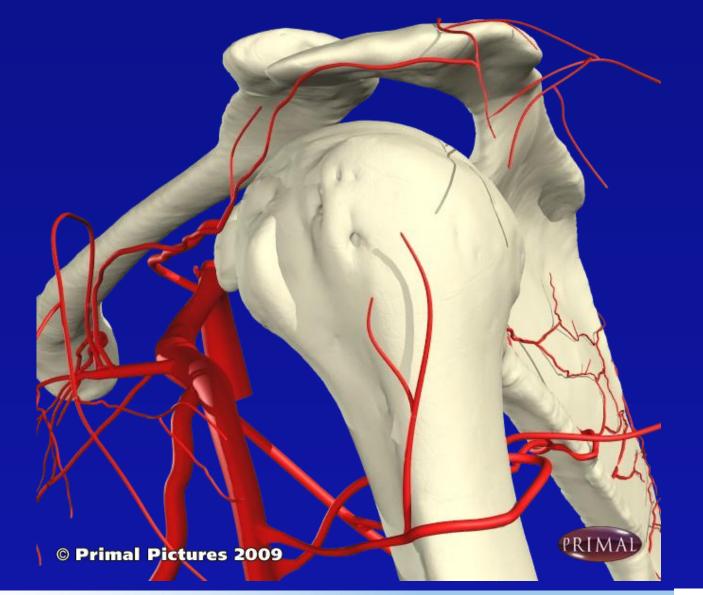






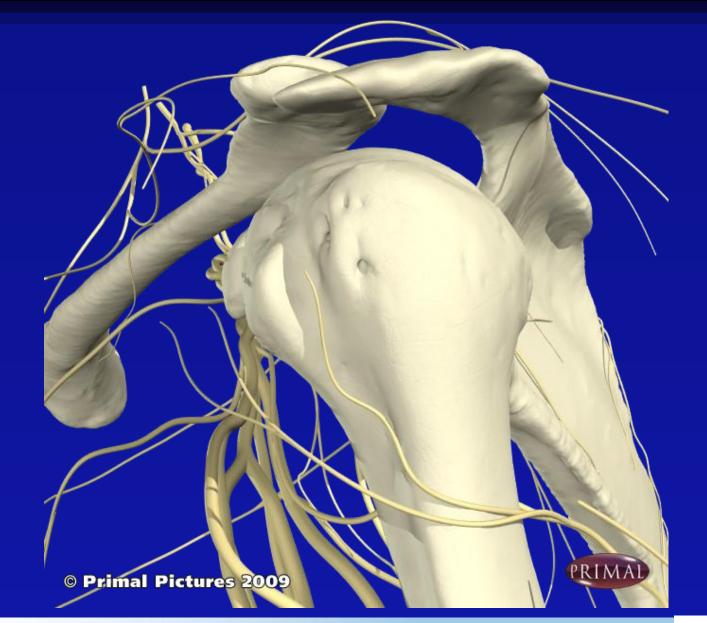






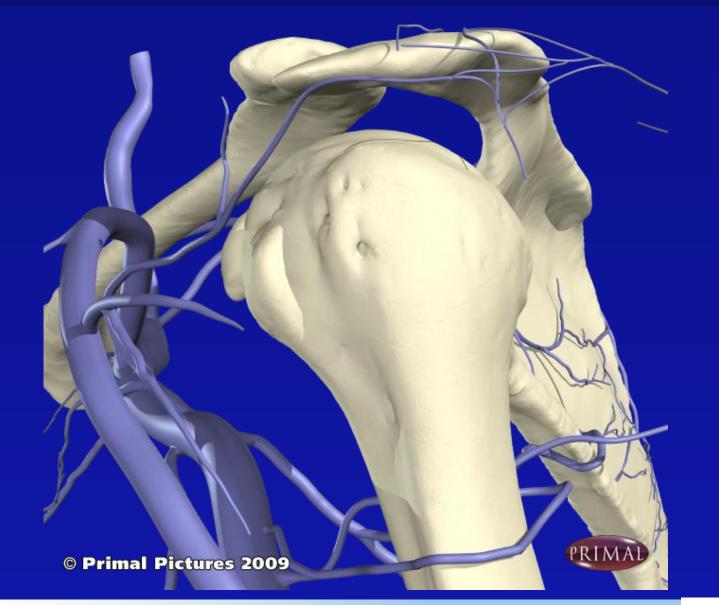






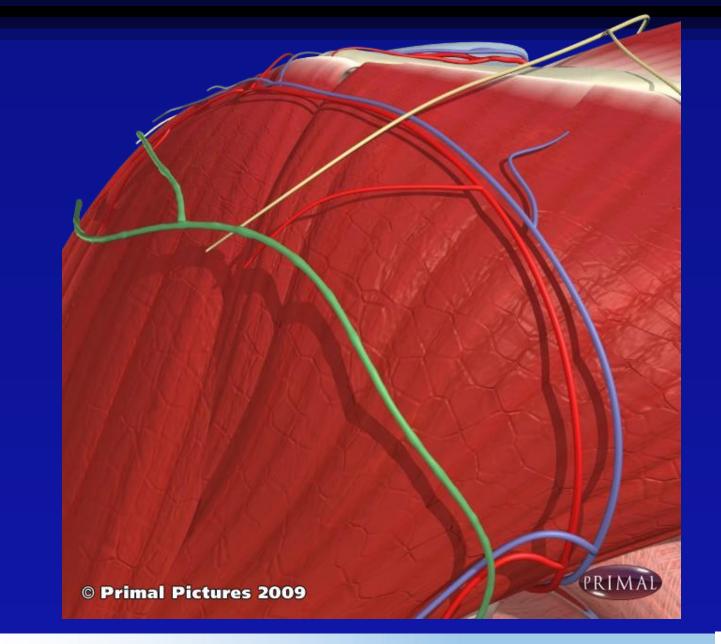






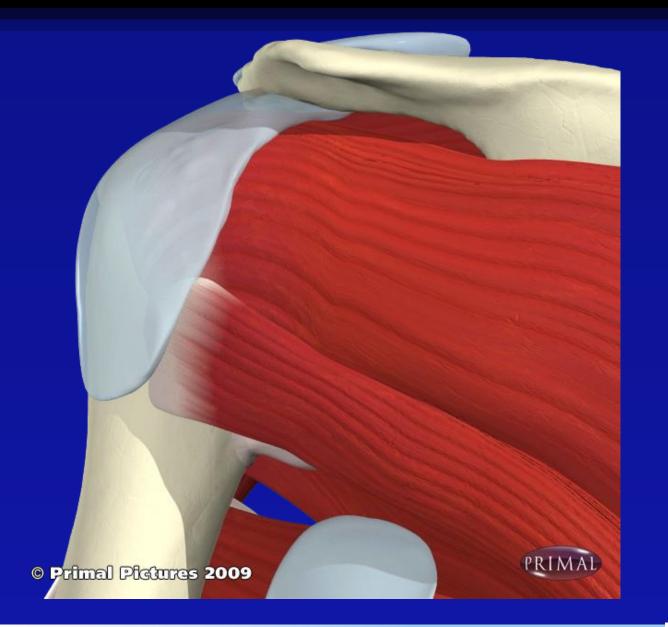














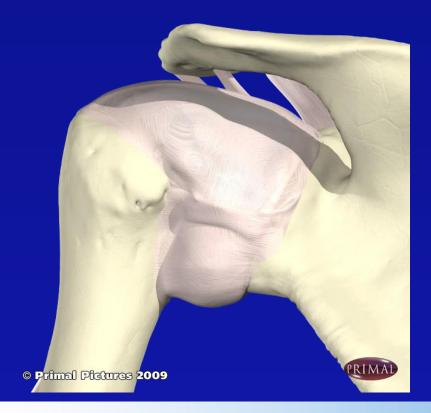








# Subacromial Bursa - Posterolateral Approach



- Landmarks: Posterolateral border acromion; aim upwards and slightly medially
- Position: Arm hanging by side to distract humerus from acromion
- Needle : green
- Steroid : 40mg
- LA: 5-10 mls total volume





## Shoulder pain unresponsive to injection

- Exclude other causes:
- **Breast carcinoma**
- Pancoast tumour upper lobe lung
- Referred from cervical spine
- Thoracic outlet syndrome
- Referred from viscera:- MI, Pleurisy, Gall bladder, pericarditis
- If pathology excluded can help relieve pain with supra scapular nerve block.





# Adhesive capsulitis (Frozen shoulder)

- Capsular thickening and restriction, with low grade inflammation
- Loss or range of movement in all planes both active and passive, particularly rotation
- Pain felt over lateral aspect of arm (C5) often worse at night
- Common in middle aged and elderly and diabetics





## Adhesive capsulitis

Course of three injections 6 weeks apart, started as soon as possible after onset of symptoms

3 phases: Painful Adhesive Recovery





# Glenohumeral joint - posterior approach



- Landmarks: Posterior angle acromion, inject below acromion, obliquely toward coracoid process
- Position: Arm on lap, medially rotated
- Needle: Green
- Steroid: 40mg
- LA: 8-10mls

Uses: Capsulitis





# Glenohumeral joint - anterior approach



- Landmarks: Lateral to coracoid process, medial to humeral head; joint line. Aim posterior
- Position: Arm by side, externally rotated
- Needle: Green
- Steroid : 40mg
- LA: 8-10mls 0.5%
- Uses: Capsulitis





## Acromioclavicular joint

- Commonly affected in OA
- More common in manual workers, sports players eg. Rugby players
- Pain over point of shoulder, crepitations on movement
- Pain from approx 80 deg Abd/Flex to end of range
- Pain if touching opposite shoulder





## Acromio-clavicular joint



- Landmarks: Follow clavicle laterally to A-C joint.
   Superior or anterosuperior approach, perpendicular to joint line, angle medially.
- Position: Arm hanging by side
- Needle : Orange
- Steroid : 40mg
- LA: 2ml or none





## **Bicipital tendonitis**

Pain and tenderness in bicipital groove on front of shoulder

Pain in cubital fossa with Resisted supination and flexion



