Shoulder Examination



Introduction

- <u>W</u>ash hands, Introduce self, ask Patients name & DOB & what they like to be called, Explain examination and get consent
- Undress upper body. Ask about pain. Start on good side.
- General inspection: patient e.g. age, mobility, trauma, risk factors; around bed e.g. mobility aids.

Look

From front, sides & behind.

- Alignment & posture: asymmetry of shoulders
- Arm position: rotation (internal = posterior shoulder dislocation)
- Bony prominences: ACJ and SCJ
- Skin: scars, bruising, sinuses, swelling
- Muscles: wasting (deltoid, supraspinatus, infraspinatus, pectorals)
- Axilla: lymphadenopathy, large joint effusions

Feel

Check pain first and start on normal side.

- Skin: Palpate general area for temperature & effusions
- Bony landmarks: run hand from SCJ along clavicle to ACJ. Then over greater and lesser tuberosities and around glenohumoral joint. Next feel spine of scapula then around inferior part back to ACJ. Watch patients face for tenderness.
- Muscle bulk: supraspinatus, infraspinatus, deltoid
- Tendons: flex biceps and feel tendon; push arm back and feel just anterior for supraspinatus tendon

Move

Actively first...

- Forward flexion (180°): raise arms forward
- Extension (65°): swing arms back
- Abduction (180°): raise each arm up sideways (separately) while you hold the inferior pole of the scapula
 If any pain, note which angle this occurs at (high arc pain = ACI pathology e.g. arthritis; middle arc pain = rotator cuff pathology
 e.g. supraspinatus tendinitis or partial rotator cuff tear) and try passive movement (no pain = muscular; still painful = mechanical)
- Adduction (50°): move arms to midline and across body
- External rotation (70°): place patient's elbows flexed to 90° and firmly against their chest, then ask them to turn their arms laterally (loss of external rotation = frozen shoulder)
- Internal rotation: patient try to touch their scapula with their fingers behind their back (normal to base of scapula (T6/7))
- **PASSIVE MOVEMENTS**: hold shoulder and move in all directions passively (feel for crepitus).
- SPECIAL TESTS
 - Muscle power
 - Serratus anterior: patient push against wall and look for scapula winging
 - Deltoid (C5/6, axillary n.): abduct against resistance at 90 degrees
 - 1. Supraspinatus: resisted empty can test
 - 2. Teres minor/ infraspinatus: resisted external rotation
 - 3. Subscapularis: hand behind back and then move away from body
 - Neers impingement test: from behind, stabilise the scapula with one hand, and use the other hand to internally rotate the patient's straight arm and passively forward flex it as high as possible. Pain is a positive test (impingement syndrome).
 - Hawkin's test: forward flex arm to 90°, pronate hand ("empty can of coke") and flex elbow to 90degrees. Now passively
 internally rotate shoulder (i.e. push hand downward while holding patient's elbow). Pain is a positive test (impingement
 syndrome).
 - **Crank shoulder apprehension test**: patient hold hand out like high 5, then pull back elbow and push proximal humerus forward. Positive if patient shows fear of instability (shoulder stabilisation problems i.e. dislocation or subluxation).
 - Scarf ACJ test: patient place hand over opposite shoulder. Pain is a positive test (AC joint pathology).

Function

• SCREENING: getting hands behind head and behind back

To complete exam

- "To complete my examination I would examine the joint above and joint below, and also do a full neurovascular exam distal to the joint would you like me to do this now?"
- Summarise and suggest further investigations you would do after a full history

Common pathology

- Supraspinatus tendinitis (impingement syndrome)
 - Supraspinatus tendon becomes inflamed due to impingement below acromium and coraco-acromial ligament
 - Signs: painful mid arc (60-120°), positive impingement test
 - o Treated with physio, analgesia, sterioid injection, arthroscopic acromioplasty

Rotator cuff tears

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- o Rotator cuff muscle tear, usually associated with impingement and tendinitis
- Signs: supraspinatus wasting, weakness of abduction initiation
- o Incomplete tears managed conservatively, complete tears may require surgical
 - repair
- Frozen shoulder (adhesive capsulitis)
 - o Idiopathic
 - o Severe pain initially, then persisting stiffness
 - o Signs: loss of active and passive movement in all directions
 - Physio helps to maintain movement
- Anterior shoulder instability (dislocation)
 - Trauma or ligamentous laxity decreases stability and increases risk of dislocation or subluxation
 - Physio helps strengthen supporting muscles but in some cases surgery may be required in persisting instability
- Osteoarthritis
 - \circ \qquad Often secondary to chronic shoulder instability or chronic rotator cuff tear
 - o Signs: painful movement restriction in all directions
 - o Managed with analgesia, steroid injection or surgery