

The Shoulder

Assessment and Management of Common Shoulder Problems in General Practice

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Shoulder Problems

Third most common musculoskeletal complaint for consulting a GP

Incidence and impact increase with age. Prevalence 7% in middle age

Red Flags/Systemic Referral

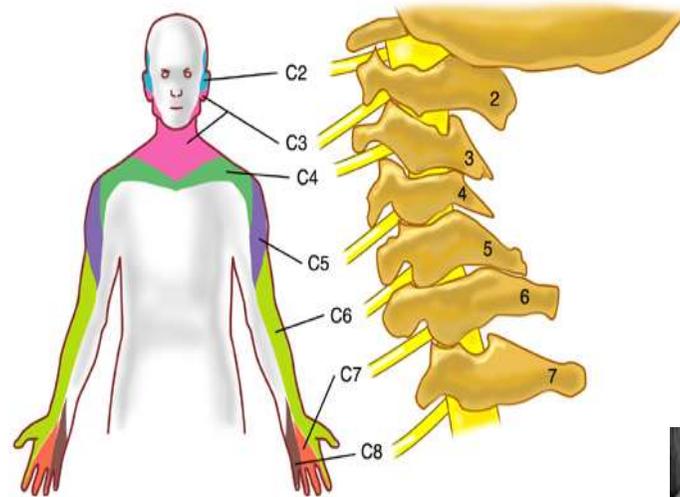
- Myocardial Ischaemia
- Referred diaphragmatic pain e.g. gall bladder
- Polymyalgia Rheumatica – bilateral over age 65
- Malignancy. Apical lung cancers. Pancoast tumour. Metastases; nagging ache in shoulder, can refer into scapula.
- Infection; post injection, infective arthritis or post joint surgery

Red Flags

- Fever/systemically unwell
- Night sweats
- Weight loss
- Respiratory symptoms
- Unexplained mass or swelling
- History of cancer
- Non mechanical pain

Cervical spine/neurological referral

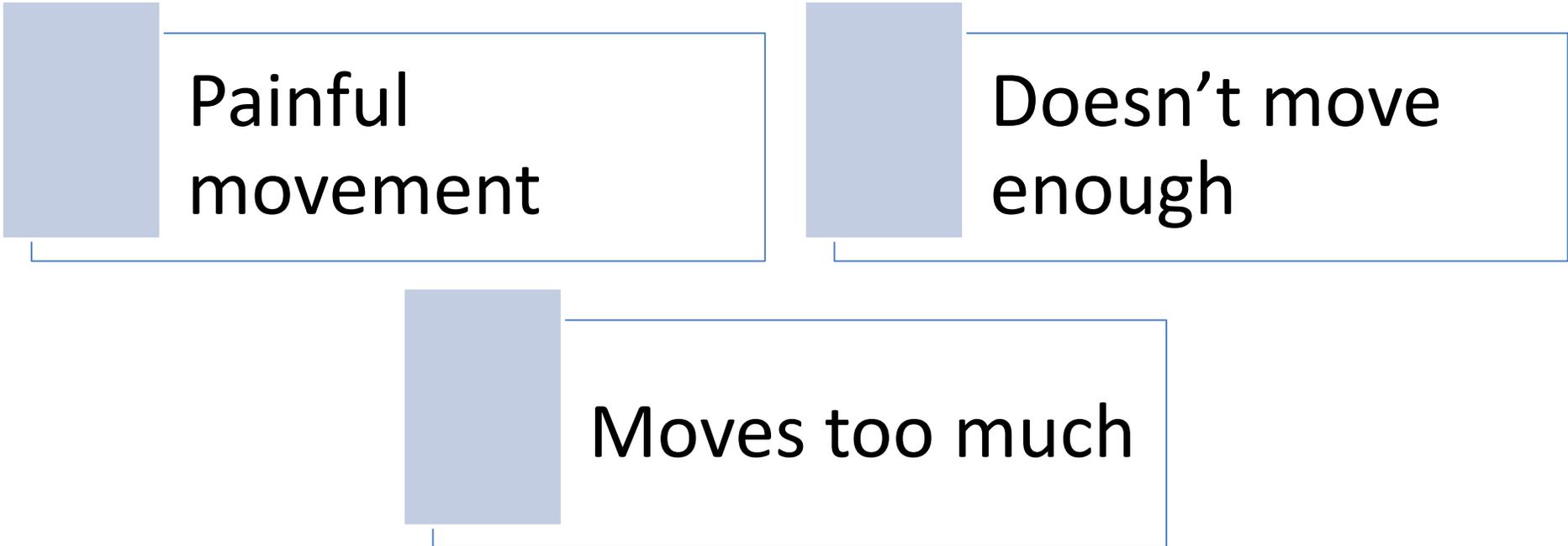
- Cervical Radiculopathy
- Nerve root compression
- Brachial plexus traction
- Suprascapular nerve palsy/Facioscapulohumeral muscular dystrophy/long thoracic nerve palsy



Common Shoulder Pathologies

- Sub-acromial Impingement Syndrome +/- Rotator Cuff lesions
- Contracted Shoulder (frozen shoulder)
- Osteoarthritis of GHJ
- Instability: Traumatic and Non Traumatic

Simplified....

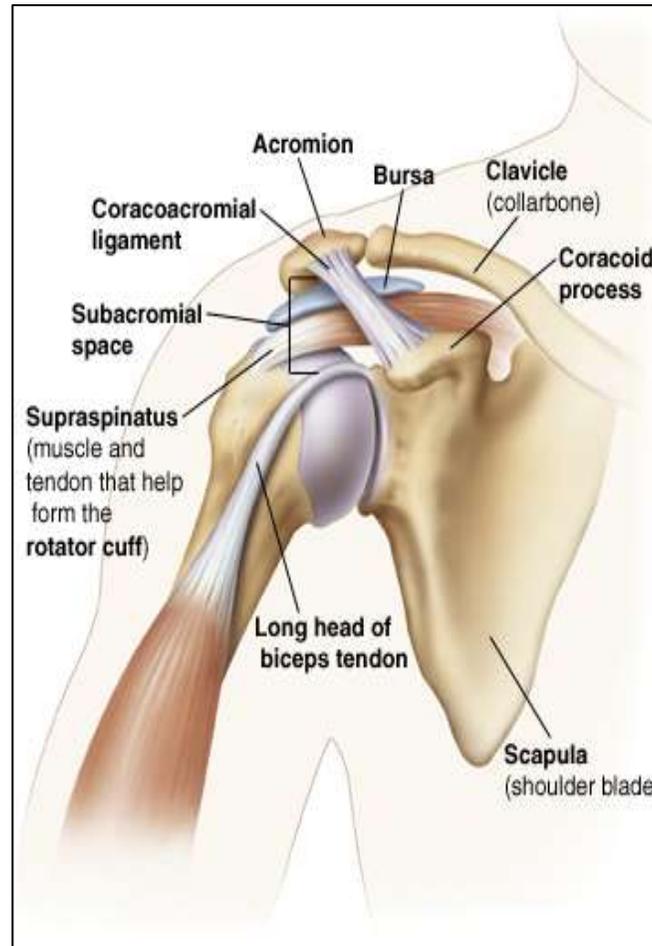


Painful
movement

Doesn't move
enough

Moves too much

Sub-acromial Impingement Syndrome



Sub-acromial Impingement syndrome

Most common shoulder diagnosis. 80% of patients are over 40

Compression or encroachment of the bursa, tendons of the rotator cuff, LHB in the sub-acromial space

Multifactorial;

Intrinsic factors: age related changes within the rotator cuff tendons, calcification

Extrinsic factors: Posture, decreased GHJ extensibility, thoracic stiffness, ACJ OA, poor rotator cuff activation, scapula dyskinesis

Sub-acromial Impingement Syndrome - Presentation

- Gradual or sudden onset
- Pain lateral shoulder and lateral upper arm (palm sign)
- Intermittent or constant
- Pain lying on affected side
- AROM variable depending on pain
- Pain on abduction, painful arc
- PROM preserved
- No focal weakness but may have inhibitory weakness

Sub-acromial Impingement Syndrome- Testing

Testing

- Clinical presentation
- Hawkins Kennedy and Neer compression with sensitivity of 72% and 79% respectively
- Jobs empty can test for pain

Diagnostics

- X-ray: AP and axial views
- Look for any missed OA
- Look for OA ACJ and calcification

Sub-acromial Impingement Syndrome- Management

- Pain relief in line with agreed formularies/guidance (NSAID's)
- Activity modification i.e. relative rest
- Ice therapy
- Pt information leaflets with simple exercises aimed at reducing extrinsic factors
- If pain persists and ADL's limited consider SA cortisone injection

Manage for 6 weeks within primary care before referring to MSK service

Threshold: no response to treatment or limited improvement 2 weeks following CSI

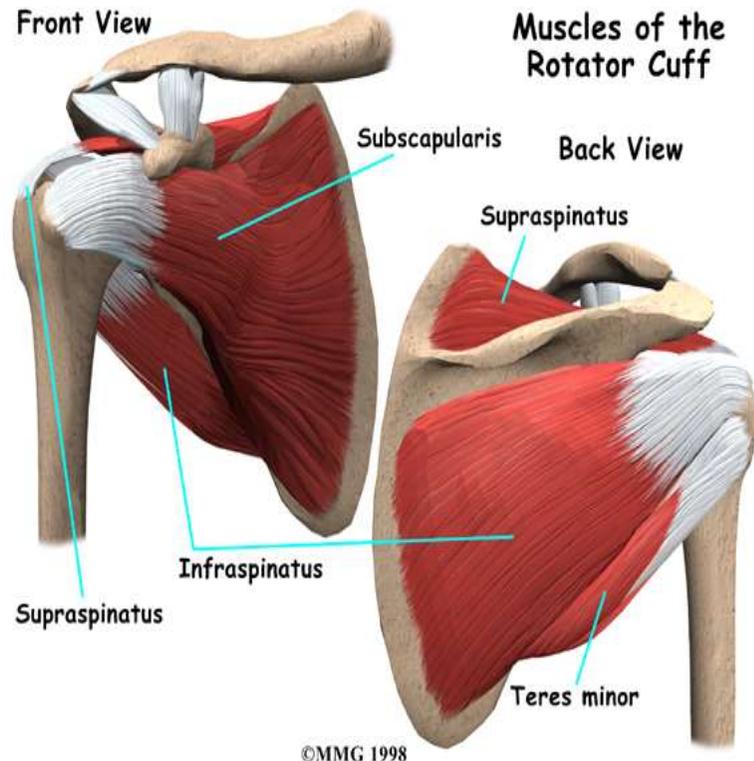
Will be triaged to physiotherapy first.

If limited improvement at 3 months will be referred to ICATS for further examination, investigation and injection therapy. Failure of conservative treatment (approx. 20%) is threshold for referral to surgeons for ASAD

Sub-acromial Pain syndrome - Calcification



Rotator Cuff tears



- Can be degenerate or traumatic (1 in 4 over 60's have degenerate cuff tear)
- Large scale of tears from partial tears to massive (greater 5cm) with retraction
- Leads to large variance of symptoms and functional impairment

Rotator Cuff Tears- Presentation

- For acute tears a specific episode eg FOOSH or repetitive loading especially overhead
- Level of trauma may be disproportionately minor in the elderly
- Area of symptoms similar to SIS. Lateral upper arm pain.
- May be worse pain at night
- AROM may be significantly limited into elevation but PROM preserved
- Overhead movements most problematic

Rotator Cuff Tears- Testing

Testing for *weakness...*

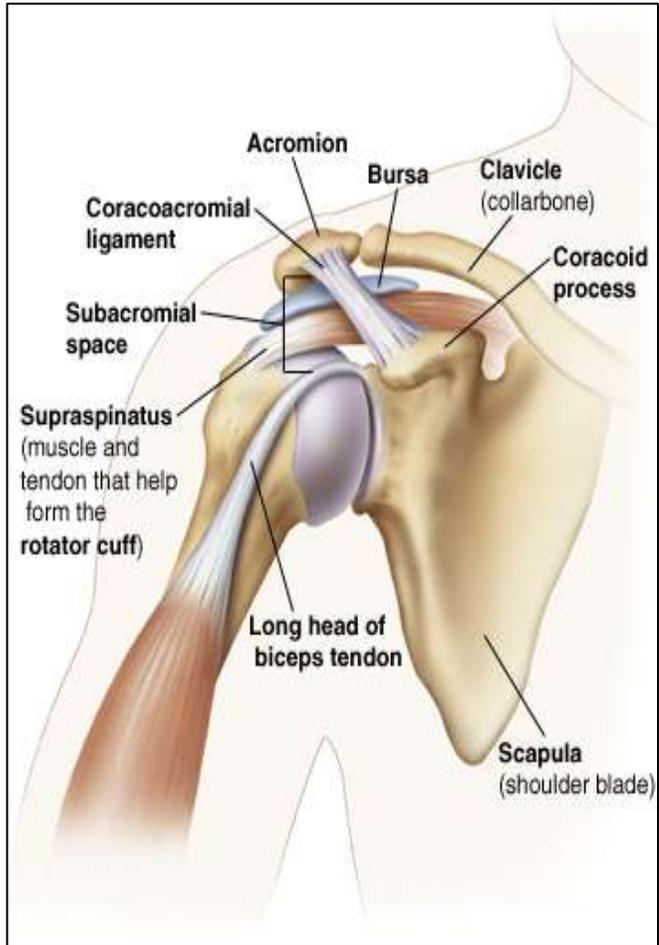
- Jobs empty and full can tests bias supraspinatus. Drop arm sign strongly positive for Supraspinatus tear.
- Resisted external rotation and external rotation bias Infraspinatus and Teres Minor
- Gerber Lift off and belly press bias Subscapularis

Rotator Cuff Tears- Management

- Pain relief (NSAID's)
- Activity modification and relative rest
- Ice therapy
- Refer to physiotherapy via MSK service

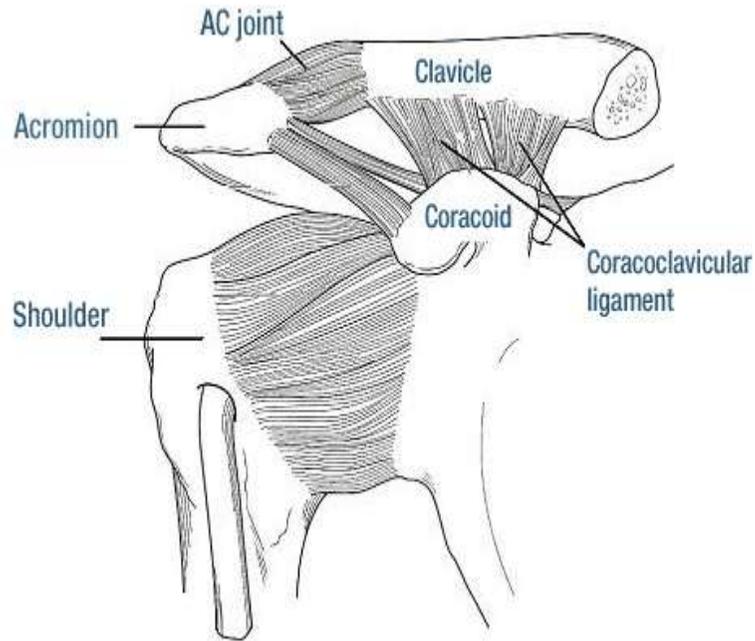
- **For suspected acute traumatic rotator cuff tears, especially in the younger patient, need urgent referral to MSK service when limited improvement 2 weeks from onset.**
- **Will be urgently triaged to MSK ICATS for investigation and onward referral to surgeons**
- **Early surgical intervention for these patients gives best long term outcome**

Long Head Biceps Rupture



- Traumatic. Loaded biceps.
- Often acute on degenerate
- Local pain, anterior shoulder over bicpital groove
- Popeye sign
- Positive Speeds test
- Most settle within a year
- Physio helpful if secondary shoulder problems
- Surgery (tenodesis) only for minority which do not improve

ACJ Pain



•History

- Trauma: FOOSH, direct blow (cyclists injury)
- Degenerate: Repeated overhead or cross body movements
- Pain locally over ACJ (finger to shoulder). Can refer diffusely down clavicle or into scapula

ACJ pain

TESTING

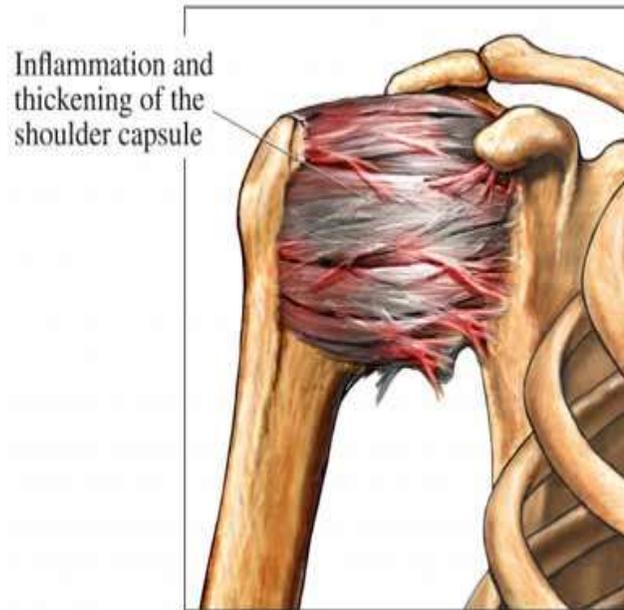
Pain over ACJ on forced high elevation

Pain and possible reduction of movement on passive horizontal flexion i.e. Scarf test

• MANAGEMENT

- Activity modification
- Pain relief in line with guidance
- Self management with exercises to maintain shoulder movement.
- If chronic may need to restore movement around AC joint into HF, HBB and elevation
- Consider Cortisone injection
- X-ray to confirm/exclude OA
- **Refer to MSK service** if symptoms persist. May need guided injection +/- referral to surgeon for lateral clavicle excision

Contracted Shoulder (frozen shoulder)



Contracted Shoulder

- One of the most painful shoulder conditions
- **Age 40-65**
- Largely self-limiting condition lasting approximately 2 years. Long term follow-up study shows some have impairment at 7 years
- Inflammation of GHJ capsule leading to contracture (not adhesions) of the capsule, particularly anterior/inferior capsule. Pain dominant and stiff dominant phases
- Volume of capsule may shrink from 30 ml to 4 ml

Contracted Shoulder- Presentation

- Traumatic or apparently insidious
- Associations with Diabetes, Hypothyroidism, Dypytrens and to a lesser extent cardiovascular disease and raised cholesterol
- Pain +++
- Night pain
- Global shoulder pain, may affect whole arm
- AROM and PROM reduced globally. Capsular pattern: Lateral rotation, **A**bduction, **M**edial rotation
- HBB noticeably reduced

Contracted Shoulder

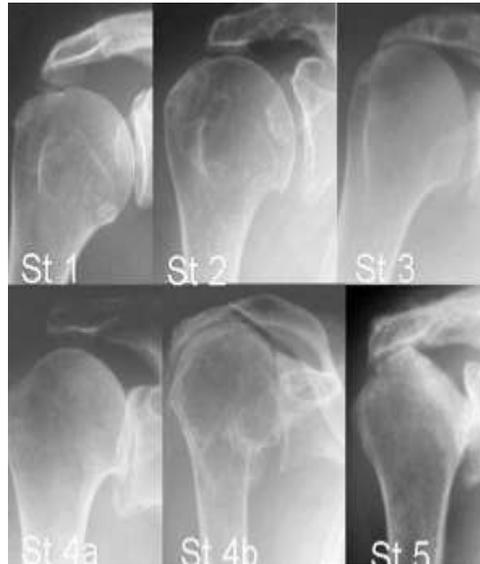
•TESTS

- Clinical signs and symptoms
- PROM of GHJ specifically:
ER
- X-ray to exclude out OA

•MANAGEMENT

- Pain relief (NSAID's)
- Reassurance and education
- Consider GHJ injection (after XR to exclude OA)
- If not coping at 6 weeks **refer to MSK service** for guided GHJ injection
- Physiotherapy most effective in stiff dominant phase

Glenohumeral Joint Osteoarthritis



GHJ OA- Presentation

- Older patient 65+
- Global shoulder pain
- Often insidious onset of symptoms
- Painful AROM and limited PROM GHJ especially ER
- GH joint crepitus
- Morning stiffness

GHJ OA- Management

- Patient education
- ADL modification
- Analgesia
- X-ray to confirm diagnosis (AP and axial views)

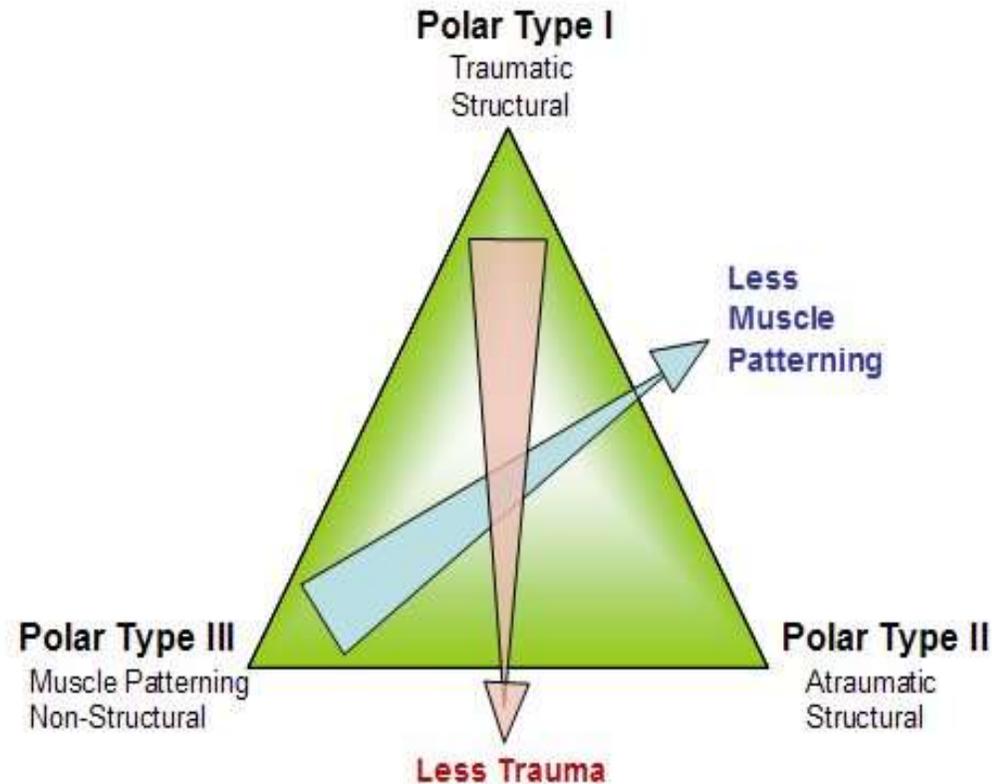
Refer to MSK service if flare-ups not settling. Patient not coping

Will be triaged to physio for OA education group or 1:1 sessions

Will be referred onto surgeon for: established OA and not coping, patient wants surgery.
Surgical options of surface replacement, total shoulder replacements, reverse shoulder replacements for cuff arthropathy

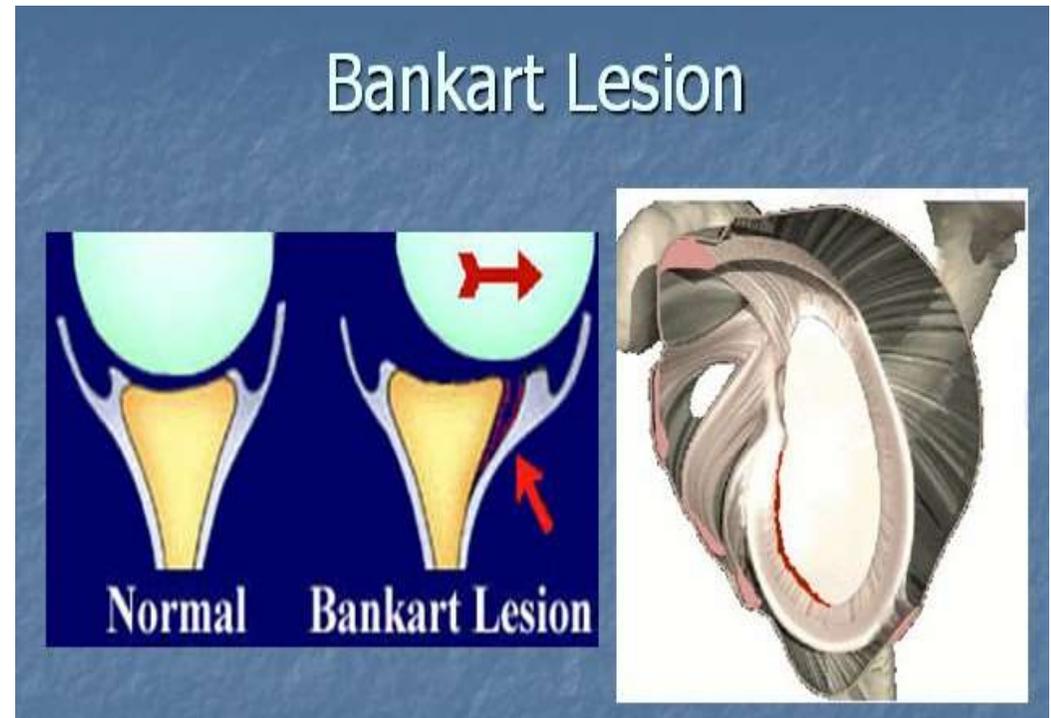
Instability

- Less common
- Younger patient
- Traumatic or non-traumatic
- Stanmore classification, either structural or non-structural muscle patterning
- Vague symptoms, not always consistent
- 'Slipping out' of joint
- Apprehension in combined ER/Abd



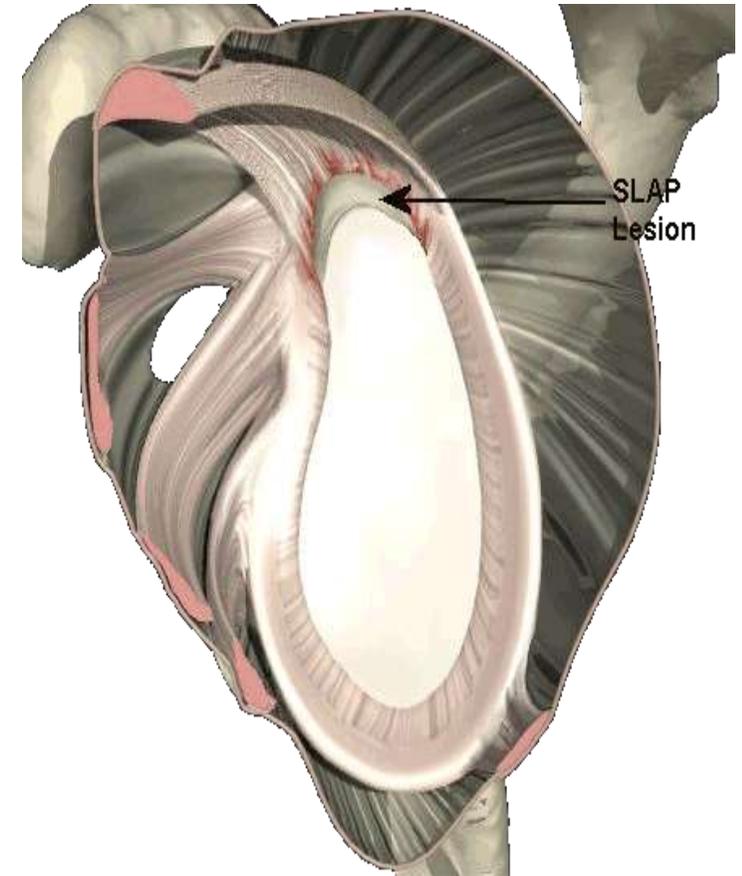
Instability- Traumatic

- 90% of dislocations are anterior
- Posterior dislocations less common but can be missed; trauma or epileptic fits
- Most common pathology is a Bankart lesion where anterior labrum torn from underlying glenoid
- Test for Bankart lesion with apprehension/relocation test
- **If positive refer to MSK service** for investigation (MR arthrogram) and onward surgical referral



Instability-Atraumatic structural

- Instability causing secondary impingement. Often overhead use-thrower/swimmer causing microtrauma to cuff and articular surfaces
- SLAP lesions: **S**uperior **L**abrum **A**nterior to **P**osterior. Traction injury. High eccentric load of biceps.
 - Lots of tests, not very good! O'Briens and Biceps load 2
- **Refer to MSK service** for assessment and physiotherapy



Instability-Muscle Patterning

- Balance between static and dynamic structures. Learnt abnormal muscle activation.
- Hypermobility
- Heritable connective tissue disorders eg. Ehlers-Danlos
- Psychological component
- Insidious onset. Gradually worsens so loses control. Initially 'party trick' within control. Progresses to involuntary subluxation on movement
- Often posterior subluxation

Refer to MSK service for specific physiotherapy including biofeedback and motor relearning exercises.

Good prognosis