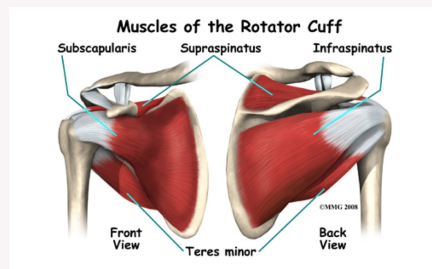


### Rotator Cuff



- Made up of supraspinatus, infraspinatus, teres minor and subscapularis
- Stabilises shoulder during movement - helps stop superior translation during abduction by compressing the humeral head

### Causes

- Injury (falling, pushing, pulling, throwing, lifting)
- Repetitive injury (overhead movements)
- Age (decrease of vascularity, increase of degenerative spurring)
- Hypercholesterolemia
- Genetics
- DM
- Hx of corticosteroid injections
- impingement and hyperperfusion
- Hypovascularity during overhead activity -compresses zone of injury
- Supraspinatus undergoes tensile and compressive overload during arm elevation = Tendon matrix degradation
- More common in dominant arm
- People with UCS and scapula dyskinesis

### Hx

- Acute = falls, throws
- Tearing/snapping feeling + severe pain and weakness in shoulder abduction
- Chronic - silently over time - gradual pain and weakness + crepitus
- Located to anterolateral shoulder and radiates down arm
- Difficultly raising arm overhead
- Worse at night

### DASH



### PE

- Atrophy of deltoid, infraspinatus, supraspinatus
- Crepitus on palpation on acromion
- Limited PROM int rot decreased elevation/abduction
- +ve apley's scratch
- May have diminished ROM in dominant shoulder
- **consider Adhesive capsulitis if limited PROM in flexion and abduction**
- Strength test of rotator cuffs - pain/weakness
- +ve Jobes
- +ve MHK and impingement arch sign
- +ve drop arm test
- +ve Neers
- Bicep tears should be assessed as they can occur with rotator cuffs
- Look for UCS and scapula dyskinesis

**At least three of the following to diagnosis a full thickness rotator cuff tear (98% accuracy):**

- Age >60
- Supraspinatus weakness
- Weakness in external rotation
- +ve impingement signs

### DDx

- Scapula dyskinesis
- Shoulder anterior impingement syndrome
- Cx radiculopathy
- Biceps tendinitis
- Calcific tendinitis
- A/C joint injury
- Labral tear
- OA
- Instability
- Fibromyalgia
- Adhesive capsulitis
- Bursitis
- MFPS
- TOS
- F#
- Infection
- Neoplasm
- Somatovisceral referral -Cardiac



### Imaging

- Usually not needed unless acute injury in young patient with suspected rupture, significant loss of strength, significant disruption
- MRIa most sensitive

### Management

- Activity modification (avoid carrying heavy objects, overhead activity)
- Sleep on unaffected side with pillow between arm and trunk on affected side
- Overweight = diet and exercise
- Stretching/STW of pecs, infraspinatus, teres minor, subscapularis, traps, LS and posterior capsule
- Cross friction massage over area
- Scapulothoracic, GH joint, Cx Tx spine mobilisation/manipulation
- Slow loading - moderate effort, low reps
- Assess night pain
- Exercise - Codman pedulum, towel
- Stretching - restoration of adduction internal rot and ext rot (cross body, sleeper stretch)
- Resistance exercises for rotator cuff, periscapular, ext rot, serratus, lower traps
- Address scapula dyskinesia/UCS
- Sx if failure of conservative therapy

Poor prognosis:

1. Full thickness tear >1cm (Sx option is usually considered first)
2. Symptoms lasting more than 1 year
3. Functional impairment/weakness

