Shoulder Pain

Rotator Cuff Pathology
- Calcifying Tendonitis
- Tendinopathy
- Rotator Cuff Tear - Partial
- Rotator Cuff Tear - Massive

Shoulder Instability
- 1st Time Traumatic Subluxation / Dislocation
- Recurrent Subluxation / Dislocation
- Atraumatic instability - Overuse
- Atraumatic instability - Multidirectional

Adhesive Capsulitis
- Primary
- Secondary

AC Joint Dysfunction
- Osteolysis
- Osteoarthritis
- AC Joint Disruption

Labral Tear

Red Flags
- Unexplained deformity or swelling
- Significant weakness not due to pain
- Suspected malignancy
- Fever/chills/malaise
- Significant/unexplained sensory/motor deficit
- Pulmonary or vascular compromise

Indications for Urgent Referral
- Displaced or unstable fracture
- Failed attempt (x2) reduction of dislocation
- Massive tear of rotator cuff (>5cm)
- Suspicion of dislocation GH, AC or SC joint
- Undiagnosed severe shoulder pain

Indications for Early Referral
- Suspected full thickness tear after 4-6 weeks with no improvement
- 2 or more traumatic dislocations
  - >=30 years
- First time dislocation aged <25 years
- Recurrent posterior/other instabilities
- Unusual presentation of shoulder pain
- Failure to improve within expected timeframe

(NZGG, 2004)
Rotator Cuff Pathology

- Calcifying Tendonitis
  - Acute: Resorptive Phase of Healing
    - Sudden onset of severe shoulder pain
    - Significant reduction of AROM/PROM due to pain
    - Can last days/weeks
    - +ve x-ray findings

- Tendinopathy
  - Chronic:
    - +ve x-ray findings
    - Pain & functional restriction > 6/12

- Rotator Cuff Tear - Partial
  - Painful arc
  - Pain>weakness
  - <50 years
  - +ve impingement tests

- Rotator Cuff Tear - Massive
  - Gross weakness into elevation via flexion and/or abduction
  - Muscle atrophy
  - +ve lag signs
  - Gross functional alteration
  - Radiological findings in more progressive states e.g. superior humeral head migration, rotator cuff arthropathy

Presentation

Management

- Acute:
  - Analgesia
  - Rest/Graded ROM
  - Education (Advice leaflet)
  - Capsular Stretching

- Chronic:
  - Orthopaedic Referral

- Referral from Non-Orthopaedic Source:
  - Immediate urgent onward referral to Orthopaedics if younger age group/ high functional level
  - Routine referral onto Orthopaedics + rehabilitation for 3-6 months

- Referral Orthopaedic Source:
  - Anterior deltoid program and information leaflet
  - Pain management program
Shoulder Instability

1st Time Traumatic Subluxation/Dislocation

- History of trauma
- Usually anterior
- Pain & muscle spasm
- Limited ROM
- Potential x-ray findings
  - Bankhart
  - Hill sachs
  - Light bulb sign
- +ve apprehension

Recurrent Subluxation/Dislocation

- As above
- Can occur with reducing amount of trauma

Atraumatic instability – Overuse

- Overhead work / sports
- Catching pain on activity
- +/- impingement signs
- +ve instability test(s)
- +ve laxity test(s)

Atraumatic instability – Multidirectional

Involuntary

- Symptomatic on instability tests
- >2 directions

Voluntary

- As above
- Habitual/party tricks

**Presentation**

**Management**

- Reduction
- Sling & Analgesia (2/52)
- Advice activity modification
- Ortho referral – high risk groups
  - <30 years
  - Male>female
  - High level activity
- Rehab / advice – low risk groups – refer to Appendix

- Reduction
- Sling & Analgesia
- >= 2 episodes refer to Orthopaedics
- If not for surgical intervention
  - Advice
  - Self Management

- Rehabilitation 3-6 months
- Advice
- Refer to Orthopaedics if ongoing functional limitations and functional instability

- Advice
- Rehabilitation 3-6 months (midrange focus)
- Referral to Orthopaedics if ongoing functional limitations and functional instability

- Advice re stopping voluntary subluxation
- Rehabilitation
- If ongoing habitual instability, consider psychology

**Instability/Laxity Tests:**

<table>
<thead>
<tr>
<th>Instability</th>
<th>Laxity</th>
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<tbody>
<tr>
<td>Anterior apprehension</td>
<td>AP Draw</td>
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<tr>
<td>+/- relocation</td>
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<tr>
<td>Posterior apprehension</td>
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<td>Sulcus</td>
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**Laxity alone is not an indication for Orthopaedic Review**

**Objective tests alone revealing instability is NOT a criterion for onward referral, patient also has to have functional instability**
Adhesive Capsulitis

Primary

• Three defined stages

• Stage 1 – increasing pain and restriction of movement (2-9 months)
• Stage 2 – increasing restriction in ROM, ongoing pain (4-12 months)
• Stage 3 – pain settling and range slowly improving (5-26 months)

• Insidious onset
• Female > Male
• Usually >40 years
• Normal x-ray
• Significant limitation to passive external rotation and elevation
• +/- associated night pain
• Unilateral, but in rare cases can be bilateral
• May have associated Diabetes, Dupuytrens, high cholesterol or heart disease
• Pain can be in sub-deltoid region or radiate down arm (past elbow)

Secondary

• Stages as above
• Occurs after traumatic event or surgery

Presentation

Management

Managing/Functioning with Condition

• Physiotherapy
  • 1st Appointment –
  • Advice
  • Stretching
  • Leaflet
  • Review 4-6 weeks
  • D/C

• Analgesia
• Corticosteroid injection

Not Managing/Functioning with Condition: Pain Dominant Feature

• Physiotherapy not indicated – onward referral to Orthopaedics
• Corticosteroid Injection
• Distension Arthrogram
• Capsular release

Key Indicators for Determining Patient Managing:

• Relative sleep disturbance
• Work status
• ADL’s
• Patient perception of problem
• Pain levels
AC joint dysfunction

Osteolysis

• Younger <40 years
• Repetitive extreme loading
• Common in strength & power athletes and heavy overhead vocations
• Pain localised to AC joint or C5 dermatome
• Scarf test +ve
• Painful arc
• Pain on strength tests
• X-ray shows lysis (erosion) distal end of clavicle

Management

• Specific advice re training
  • Load
  • Technique
  • Frequency
• Graded exercise program
  • Advice
  • Posture re-ed
• Analgesia
• Corticosteroid Injection
• Onward referral to Orthopaedics if no improvement >6/12

Osteoarthritis

• Older population > 40 years
• Repetitive loading / overuse
• May have had old traumatic event e.g. dislocation
• Pain localised to AC joint or C5 dermatome
• Scarf test +ve
• Painful arc
• OA / degenerative changes on x-ray

Management

• Physiotherapy Advice Sheet
• Analgesia
• Corticosteroid Injection
• Onward referral to Orthopaedics if no improvement >6/12

AC joint Disruption

• Traumatic event
• Localised symptoms as above
  • +ve scarf test
• Palpable step
• X-ray evidence of disruption

Management

• Physiotherapy if any concurrent problems
  • Scapular dyskinesis
  • RC impairment
• NSAID’s & analgesia
• Conservative failure and >6 months of ongoing pain may require surgery

Grade I-III

• Early surgical reduction and fixation

Grade IV-VI