

## SHOULDER ASSESSMENT

The assessment of the shoulder should include careful history taking, observation and examination of the relevant areas and appropriate use of tests. It should be taken into account that the reliability of many of these tests is limited.

- May et al (Physiotherapy 2010) tells us that: “There is no consistent evidence that any exam procedure used in shoulder assessment has acceptable levels of reliability.”
- Lewis 09 “Although tests have a high sensitivity they have a low specificity...should be considered to be pain or symptom provocation tests”

Gold Standard assessment tools

- Arthroscopic assessment
- USS
- MRI

These investigations are not required in order to manage many shoulder patients successfully in primary care, but may be required in specific circumstances or if the outcome will change the management.

### Patient assessment

- History
- age
- Onset ?trauma
- Progression of symptoms
- Location of pain/symptoms
- Behaviour of symptoms

Plan examination

- Most likely diagnosis
- Differential diagnosis (including non-MSK conditions)

### GH joint

- Active ROM
- Flexion



Picture 1

- Lateral rotation



Picture 4

- Medial rotation



Picture 14 (without title)

- Passive ROM
- Flexion



Picture 2

- Lateral rotation



Picture 4

### Rotator Cuff Assessment

- Active ROM
- Passive ROM
- Resisted tests
  - Medial Rotation



Picture 6

- Lateral Rotation



Picture 5

- Abduction



Picture 3

- Jobe's test
- Neer's sign
- Hawkins test
- Lag tests
  - External lag sign
  - Drop sign
  - Lift off sign or belly-press test

### **Jobe's Test**

Impingement test: Jobe (empty can): both shoulders are put in 90° of elevation in the scapular plane in maximal internal rotation (empty can position) and manual resistance is given against further elevation. Cools et al 2008



Picture 8

### Full-Can Test

Full-can test: both shoulders are put in 90° of elevation in the scapular plane in maximal external rotation (full-can position) and manual resistance is given against further elevation. Cools et al 2008



Picture 9

### Neer's Test

Impingement test: Neer: the examiner performs forced maximal forward flexion with the scapula fixed into depression. Cools et al 2008



Picture 10

### **Hawkin's Test**

Impingement test: Hawkins: passive internal rotation is performed with the shoulder in 90° of forward flexion.

Cools et al 2008



Picture 11

### **External Rotation Lag Sign**

The dropping sign. With the patient seated the shoulder is placed in 0° of abduction and 45° of external rotation with the elbow flexed to 90°. The examiner holds the patient's forearm in this position and instructs the patient to maintain it when he lets go of the forearm.

On releasing the forearm a positive test is recorded when the patient's forearm drops back to 0° of external rotation, despite efforts to maintain external rotation.



Picture 3

### **Dropping sign**

LR in 90° scaption. The patient will be unable to hold this position if the Supra spinatus tendon is torn. Weakness of resisted LR or inability to maintain the LR position may indicate a Teres Minor tear.



Picture 12

### **Gerber's lift off test**

Passively IR the shoulder so the hand is lifted from the lumbar spine. The patient is asked to maintain this position without extending the elbow as the clinician's supporting hand is removed indicating a Subscapularis tear.



Picture 14



### **Belly-press test**

The patient presses the abdomen with the elbow in the coronal plane. If the elbow pulls backwards when patient presses the abdomen (MR) the test is positive.



Picture 15

### **SLAP tests**

- Crank test
- O'Brien's active compression test
- Speeds test
- Biceps Load2
- SLAPrehension test

### **Crank test**

This is performed with the patient lying and elevating the shoulder with the elbow flexed at 90°. An axial load is applied while the arm is rotated internally and externally and circumducted. A click associated with pain makes the test positive.



Pictures 16 and 17

### **O'Briens test**

The patient is instructed to flex their arm to 90° with the elbow fully extended and then adduct the arm 10-15° medial to sagittal plane.

The arm is then maximally internally rotated and the patient resists the examiner's downward force. The procedure is repeated in supination. The test is positive if painful in MR and eased in LR.



Pictures 18 and 19

### **Speed's test**

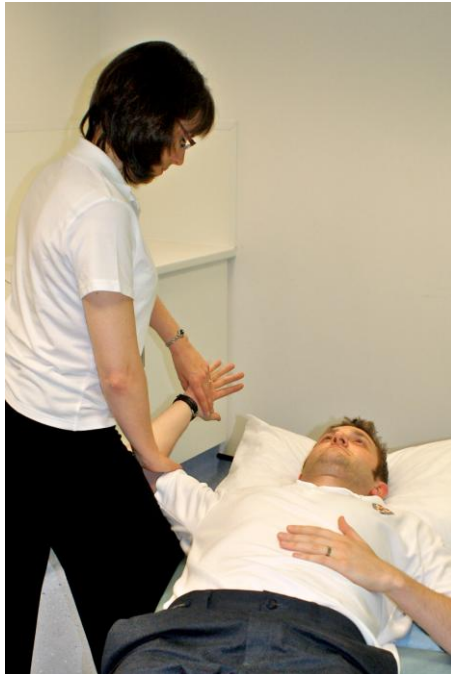
The patient's elbow is extended, forearm supinated and the humerus elevated to 60°. The examiner resists humeral forward flexion. The test is positive if pain is located to bicipital groove.



Picture 20

### **Biceps load 2**

The patient is tested in supine. The arm is abducted to 120°, externally rotated maximally, elbow in 90° flexion and forearm supinated. If this test position reproduces pain then perform active elbow flexion against resistance. The active elbow flexion component of the test should increase pain (or elicit pain) reproduced in the first part of the test.



Picture 21

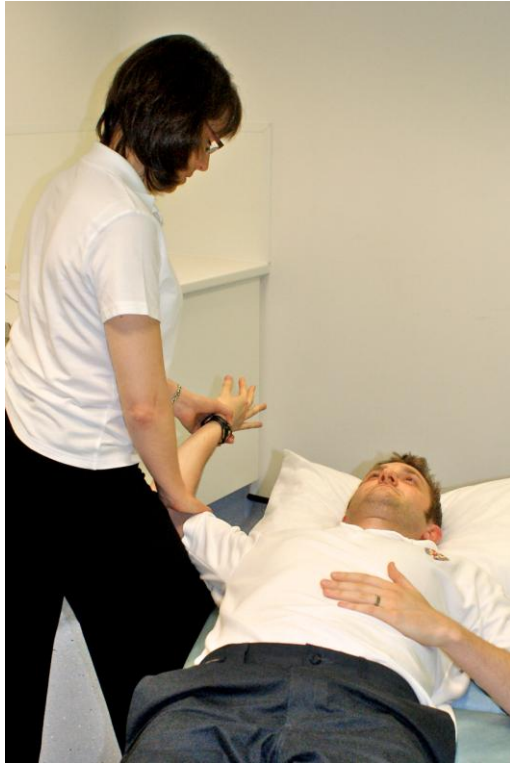
### **SLAPprehension Test**

The arm is horizontally flexed across the chest with the elbow extended and the forearm pronated (thumb down). This may cause pain in the area of the bicipital groove with or without an audible or palpable click. It should then be repeated with the arm supinated. This test is positive if the shoulder pain is reproduced with MR and painless in LR.



### **PAIN PROVOCATION TEST**

The shoulder is abducted to 90-100°, is passively laterally rotated to the end of range and the forearm is passively pronated. The test is positive if the patients shoulder pain is provoked when the forearm is pronated and relieved when supinated.



Picture 22