How I do a 5 minute Comprehensive Examination of the Shoulder

C. Benjamin Ma, M.D.
Professor in Residence
UCSF Department of Orthopaedic Surgery
Chief, Sports Medicine and Shoulder

Physical Examination-5 minute office exam

- Visual inspection
- Palpation
- Motion
- Cuff-Specific testing
- Biceps Testing
Shoulder examination

**Inspection**
- Patient in gown
- Palpation
- ROM
- Strength
  - Supraspinatus
  - Infraspinatus & Teres minor
  - Subscapularis
  - Biceps
- Other tests

**Visual Inspection**
- Remove shirt
- Systematic
  - Deltoid
  - Supraspinatus
  - Infraspinatus
  - Biceps
  - AC joint
  - Skin changes
  - Scars
Shoulder examination

- Inspection
- **Palpation**
- ROM
- Strength
  - Supraspinatus
  - Infraspinatus & Teres minor
  - Subscapularis
  - Biceps
- Other tests

---

Palpation

Press where it hurts

<table>
<thead>
<tr>
<th>Location</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clavicle</td>
<td>Clavicle fracture</td>
</tr>
<tr>
<td>AC joint</td>
<td>AC joint arthritis</td>
</tr>
<tr>
<td>Trapezius/Neck</td>
<td>Muscle strain</td>
</tr>
<tr>
<td>Front of shoulder</td>
<td>Biceps pathology</td>
</tr>
<tr>
<td>Back of shoulder</td>
<td>Arthritis</td>
</tr>
</tbody>
</table>
**RANGE OF MOTION**

Active Range of Motion “What can you do?”

- No problem with passive
  - Think CUFF TEAR
- No problem with passive
  - Think Shoulder OA or Frozen Shoulder
- Difficulty with active check passive
  - Think Shoulder OA or Frozen Shoulder
- No arthritis
  - No cuff tear
  - No frozen shoulder

**Rotator Cuff Testing**

**Impingement**
-- Neer’s/Hawkins tests

**Muscle Strength**
-- Teres Minor
-- Infraspinatus
-- Supraspinatus
-- Subscapularis
Pain test: Painful arc

If painful, positive LR 3.7 for RCD.
If not painful, negative LR 0.36 for RCD.

JAMA. Rational clinical exam: Does this patient have rotator cuff disease? Aug 2013.

Pain test: Impingement signs

Hawkin’s
Neer’s

Photos from Dr. Christina Allen

UCSF Health
Sports Medicine

UCSF Medical Center
UCSF Benioff Children’s Hospitals
Rotator Cuff Impingement

- **Hawkins' Test**
  - 75% sensitive
  - 49% specific

- **Neer's Test**
  - 85% sensitive
  - 44% specific

Supraspinatus

- **Jobe's test**
  - 90° abduction
  - 30° anterior flexion
  - Internal rotation (palms down)
  - Pain/weakness

  - 53% sensitive/82% spec.
  - (Park, et al. JBJS 12)
**Infraspinatus**

- External rotation strength
- 0° abduction & 45° ER

Pain/strength test: Drop arm test

Positive LR 3.3, negative LR 0.82 for rotator cuff disease.

JAMA. Rational clinical exam: Does this patient have rotator cuff disease? Aug 2013.
Subscapularis

Lift off test
About 70% reliable (JAMA 2013)

Bear Hug test
About 70% reliable (JAMA 2013)

Pain & Strength test:
Subscapularis = internal rotation lag test aka ‘lift off’

Positive LR 5.6, negative LR 0.04 for full thickness rotator cuff tear.

JAMA. Rational clinical exam: Does this patient have rotator cuff disease? Aug 2013.
Biceps

- Bicipital Tendonitis
  - TTP at biceps groove
    - Compare to other side

AC arthritis

- Pain with palpation
- Pain with cross chest adduction tests
- Pain located at the AC joint
Superior Labrum Anterior Posterior Lesion

- O’Brien’s Test
- Adduction 15-20 deg
- Forward Flexion 90 deg
- Thumbs down
- Resisted forward flexion
- Positive test only when:
  - Pain with the above position
  - Pain diminishes when palm is supinated
  - Otherwise equivocal test

Superior Labrum Anterior Posterior Lesion

- SLAP lesion is a disease of the young individual
- Sensitive test
- Not a specific test
  - Labral pathology
  - Rotator cuff tendon tears
Stability examination

- Translational tests
  - Anterior translation
  - Posterior translation
  - Inferior translation

- Grading
  - I – to the rim not over
  - II – over the rim but spontaneously reduce
  - III – locked dislocation

Load and Shift test

- Slight joint compression
- Anterior / posterior translation
- Inferior pull for sulcus sign
- Relax patient
Instability tests

- **Apprehension sign**
  - Arm 90 deg abducted, 90 deg external rotation
  - Dislocation position for anterior instability

- **Relocation sign**
  - Relieve of pain with a posteriorly directed force

- **‘Jerk’ sign**
  - Posteriorly directed force of the shoulder
  - Pain with posterior instability

Physical examination

- Examine the cervical spine
  - Referred pain!!
  - Range of motion
  - Strength

- Examine distal motor strength
  - Peripheral nerve examination

- Remember zebras
  - Pain out of proportion
    - Lung CA – Pancoast tumor

---

11/27/2017
Thank you

- C. Benjamin Ma, M.D.
  Professor in Residence
  UCSF Department of Orthopaedic Surgery
  Chief, Sports Medicine and Shoulder

(415) 353-7566
maben@ucsf.edu