

*Session 5 Symposium: Physical exam of shoulder disorder - No. 2*

## Physical Examination of Shoulder Instability

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### Anterior Instability

#### A. History

##### 1. Traumatic

- a. Significant traumatic event
- b. Period of disability
- c. Manipulative reduction
- d. Radiographic documentation

##### 2. Atraumatic

- a. Insignificant traumatic event
- b. Minimum disability
- c. Spontaneous reduction
- d. No radiographic demonstration

#### B. HistoryPhysical Examination

##### 1. Generalized ligamentous evaluation

- a. Thumb to forearm
- b. Elbow recurvatum
- c. MP hyperextension
- d. Knee recurvatum

##### 2. Apprehension test

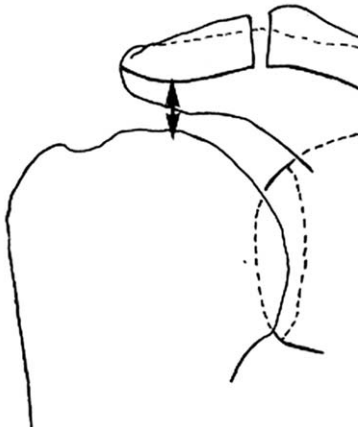
##### 3. Relocation test (positive for apprehension, not pain)

##### 4. Anterior release test

##### 5. Load and shift

- a. Anterior
- b. Posterior

## 6. Sulcus test



## 7. Neurologic exam

- a. Axillary
- b. Musculocutaneous

## C. Examination Under Anesthesia

- A. EUA should not generally override clinical impression
- B. Compare to opposite side
- C. Anterior laxity
  1. Arm at side: superior and middle capsule
  2. Arm 90° /humerus neutral: inferior capsulolabral complex
  3. Arm 90/humerus ER: anterior band IGHL

## Posterior Dislocation

### A. General

1. Uncommon
2. Frequently missed

### B. Diagnosis

1. History
2. Physical exam

3. Radiographs

C. History/Mechanism

1. Indirect trauma: fall outstretched arm
2. Direct trauma
3. Seizure, electric shock, LOC, multiple trauma

D. Physical Exam

1. Prominent coracoid
2. Posterior fullness
3. Arm adducted, internally rotated
4. Painful, blocked external rotation
5. Limited supination with arm forward flexed
6. Document neurological exam

## Recurrent Posterior Subluxation/Instability

A. General

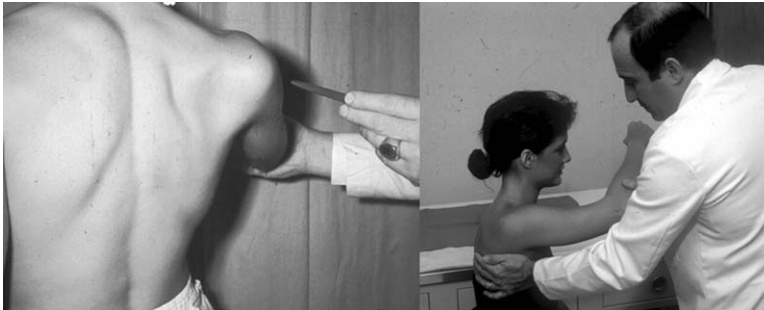
1. More common than dislocation
2. Heightened awareness of problem
3. Athletic population: throwing, swimming, tennis

B. Etiology

1. Macrotrauma
  - Direct vs indirect
  - Repetitive high loading: bench press, blocking
2. Microtrauma
  - Throwing, swimming
  - Increased translation
3. Atraumatic
  - Generalized ligamentous laxity

### C. History

1. Chief complaint
  - Pain variable
  - Instability: often not initially
2. Voluntary instability (>50%)



3. Sports, activities: level of participation



4. Arm position with symptoms (flex/add/IR)

### D. Examination

1. Normal ROM
2. Impingement sign-cuff failure
3. Stability testing (anterior, inferior, posterior)
4. Apprehension uncommon compared to anterior subluxation

5. Generalized ligamentous laxity
6. EUA (confirmatory)

## Multidirectional Instability

### A. General

1. Symptomatic instability in more than one direction
2. Not excessive glenohumeral translation in multiple directions
3. Overly diagnosed

### B. Etiology

1. Generalized ligamentous laxity
2. Atraumatic
3. Bilateral signs and symptoms
4. Microtrauma (gymnasts, swimmers)

### C. History

1. Overhead athletes
2. Stretch out over time
3. Often no overt trauma

### D. Physical Examination

1. Signs of generalized ligamentous laxity
  - a. Thumb to forearm
  - b. Elbow recurvatum





c. MP hyperextension



d. Knee recurvatum

e. Skin hyperelasticity

2. Load and shift (anterior, posterior, inferior)
3. Sulcus sign



4. Anterior apprehension/relocation
5. Posterior stress (flexion, adduction, internal rotation)
6. Neurovascular examination

#### E. Radiographic Evaluation

1. Scapular AP neutral rotation
2. Scapular lateral
3. Axillary
4. MRI arthrogram (demonstrate capsular volume)