# Recognition, Treatment & Reconditioning of Shoulder Instability

Taylor Purchio MS, LAT, ATC



## **OBJECTIVES**

- Recall basic anatomy of the shoulder
- 2. Discuss athletic injuries related to each case
- Examine evaluations, treatments and pertinent taping & bracing techniques



## CONFLICT OF INTEREST

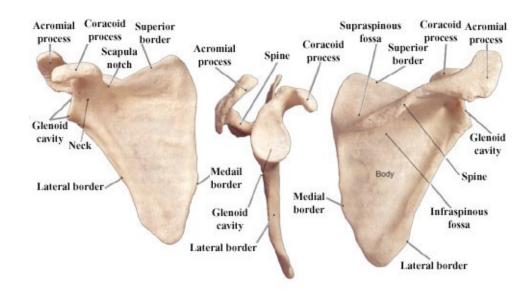
- I am an employee at Ortho Montana & Athletic Medicine and Performance (AMP)
- No financial compensation to disclose



# SHOULDER ANATOMY

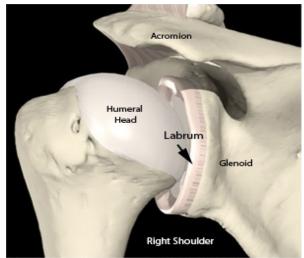
## **Shoulder Girdle**

- Formed by 4 bones:
  - 1. Clavicle
  - 2. Scapula
  - 3. Sternum
  - 4. Humerus





# SHOULDER ANATOMY



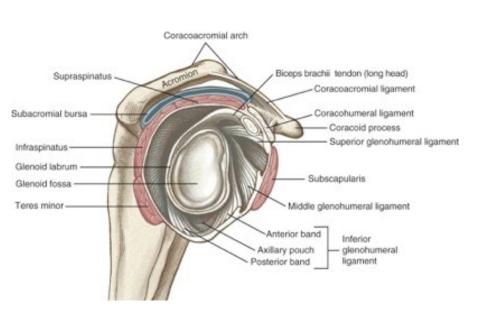
Interactive Shoulder ∨1.0 © 2000 Primal Pictures Ltd.

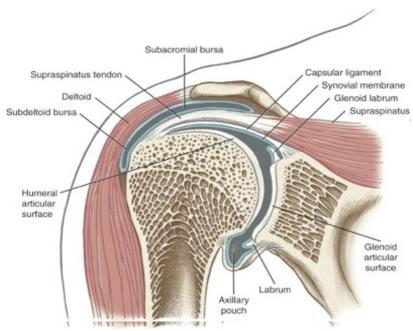
## 4 Joints of the Shoulder Complex

- Glenohumeral
- 2. Scapulothoracic
- 3. Acromioclavicular
- 4. Sternoclavicular



# SHOULDER ANATOMY







# SHOULDER EVALUATION — KEY HISTORY ?'S

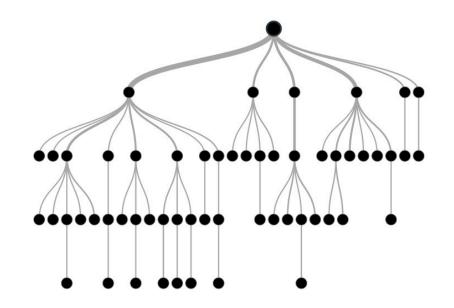
- Chief Complaint
- Side of Dominance
- Mechanism
  - FOOSH?
- Pain
  - Location, type, severity
  - Radiates, refers, radicular
- Neurological Symptoms

- Movements and Activities that cause pain
  - Specific motion or phase of activity?
- Previous Injury
  - Recurrent dislocation/subluxation
    - Specific MOI/Onset?
    - What Direction? Difficulty Relocating?
- Imaging and Treatment



## SHOULDER EVALUATION — BRANCHING DECISION TREE

- Glenohumeral Instability
- Rotator Cuff
- Labral Pathology
- Impingement
- Scapular Pathology
- Biceps Pathology





## SHOULDER EVALUATION — ON-FIELD EVALUATION

## **Inspection & Palpation**

- Position of GH joint/Humeral Head
- Gross deformity
- Muscle tone/spasm
- Step-off deformity/Piano Key Sign

## Range of Motion & Muscle Testing

- Apley's Scratch Test
- Flexion & Extension
- Abduction & Horizontal Adduction
- Internal & External Rotation
- Deltoid
  - Anterior, Middle, Posterior
- Trapezius
  - Upper, Middle, Lower



## SHOULDER EVALUATION — SIDELINE/CLINICAL EVALUATION

## **Special Tests – GH Instability**

- Anterior Apprehension & Relocation
- Anterior Release
- Posterior Apprehension
- Jerk Test
- Load & Shift
- Posterior Clunk
- Feagin's Test
- Sulcus Sign

#### Special Tests – RTC & Labral Pathology

- Anterior Slide
- O'Brien's Test
- Compression-Rotation Test
- Gerber Lift-Off
- Belly Press



# CASE PRESENTATIONS — PATIENT #1

#### 16-year-old Female Athlete

- 2 Sport Athlete
  - CC: Right Shoulder Instability
- Timeline
  - DOI: (1/11/2019)
    - Referred out to ER immediately
  - DOS: (2/11/2019)
  - Cleared to Return: (11/21/2019)





# CASE PRESENTATION — PATIENT #1



#### 17-year-old Female Athlete

- Day 1 of Basketball Tryouts
  - Posterior Dislocation
- Timeline
  - DOI: (11/26/2019)
    - Referred out to Dr. Klepps
  - DOS: (5/25/2020)



# CASE PRESENTATIONS — PATIENT #2

#### 14-year-old Male Athlete

2 Sport Athlete

CC: Right Shoulder Instability

Timeline

• DOII: (7/21/2017)

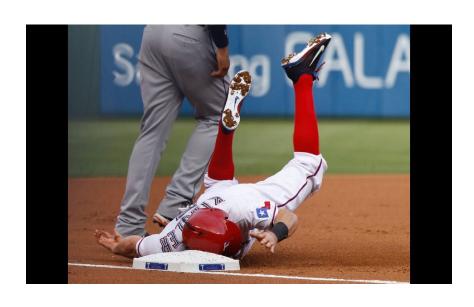
• DOSI: (8/4/2017)

Date of Surgery: (8/12/2017)





# CASE PRESENTATION — PATIENT #2



#### 17-year-old Male Athlete

- Anterior Dislocation sliding into 2<sup>nd</sup> base
- Subsequent Dislocations Throughout Remainder of Baseball Season
- Timeline
  - DOII: (5/22/2020)
    - Referred out to Dr. Klepps
  - DOSI: (8/9/2020)
  - Date of Surgery: (11/9/2020)



# POSSIBLE TAPING & BRACING SOLUTIONS

