

# Normal Anatomy

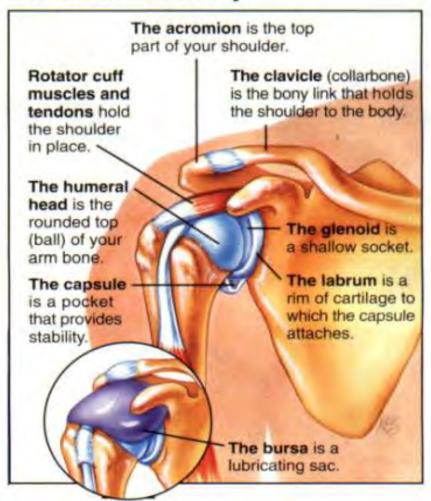
Shoulder is a ball and socket type joint

 Joint is surrounded by many ligaments and muscles to support the joint

■ The labrum is a structure that attaches to the socket to help increase stability of the joint

# Normal Anatomy

#### **Shoulder Anatomy**

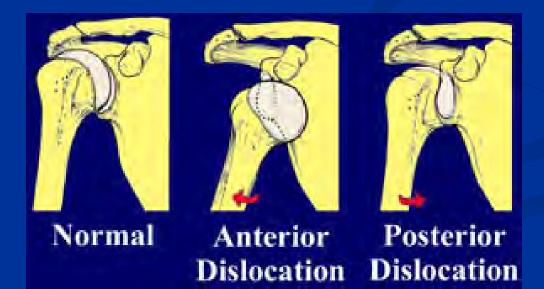




### Injury

- With trauma to the shoulder the joint may dislocate
- Most commonly dislocated joint in the body

Most common direction of dislocation is anterior

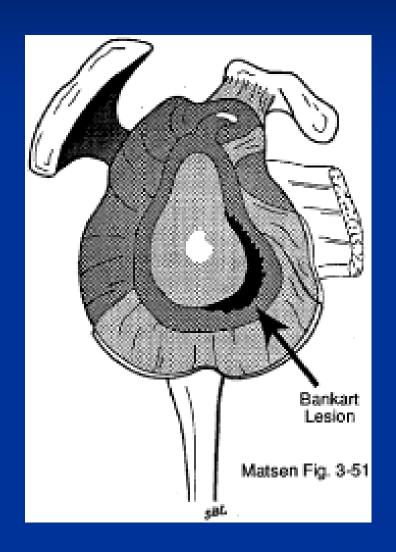


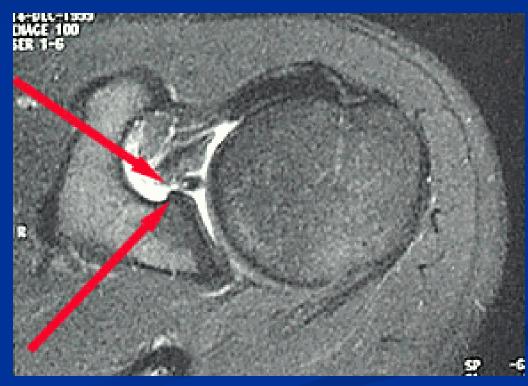
As the humerus dislocates the labrum may be torn

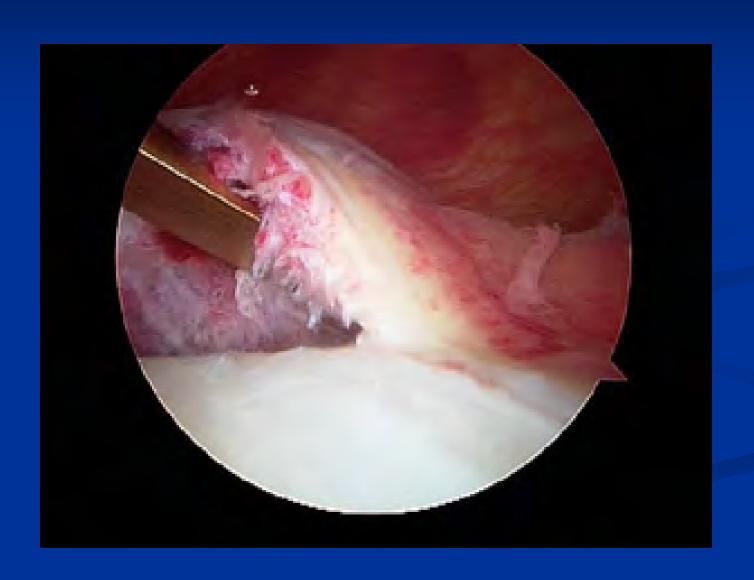
■ This is referred to as a Bankart Lesion

 Named for the English surgeon who originally described it







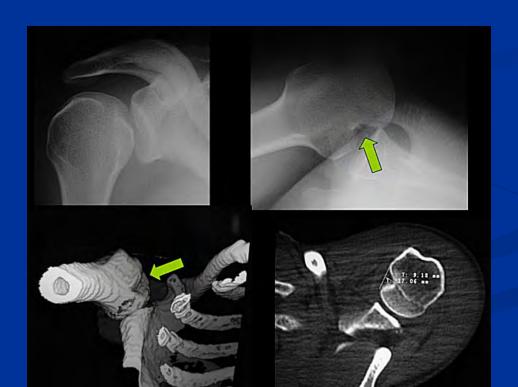


 Occasionally a bony piece of the socket will fracture off with the labrum; called a "bony Bankart" lesion



#### Hill-Sachs lesion

- After anterior dislocation can also have damage to the humeral head as glenoid drives into it
- This is called a Hill-Sachs lesion



These lesions can make shoulder unstable and lead to recurrent instability and repeat dislocations

- Incidence of repeat dislocations is related to age
  - -patient < 20 yrs old 80-90%
  - -patients 20-30 yrs old 50-75%
  - -patients >40 yrs old lower rates of repeat dislocations, higher rate of rotator cuff tear

#### Treatment

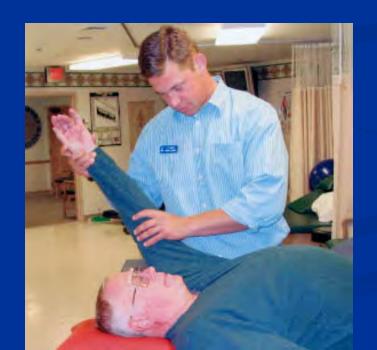
Can try non-operative treatment initially
-Immobilization in external rotation brace can allow labrum to potentially heal in its normal

position



#### Treatment

- Must wear brace for 3 weeks continuously
- After 3 weeks in the brace will begin physical thearpy to regain ROM and strenghten shoulder



### Recurrence of Instability

- Despite non-operative treatment may have a recurrence of instability
- Can lead to multiple dislocations and wear of the anterior glenoid
- Recurrent dislocations can effect quality of life
  - -lead to apprehension and pain
  - -inability to work
  - -inability to participate in hobbies or sports

### Operative Treatment

- If having recurrent instability surgery is indicated
- Benefits of surgery:
  - -allows for stabilization of shoulder and reduce chance of dislocations
  - -less apprehension and more confidence in range of motion
  - -can improve quality of life and return to normal activities

### Operative Treatment

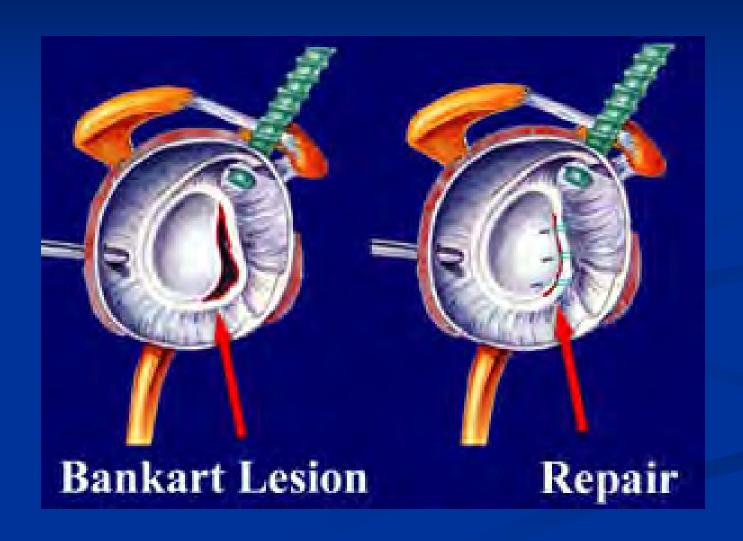
Surgery is done arthroscopically

-small incisions with limited morbidity

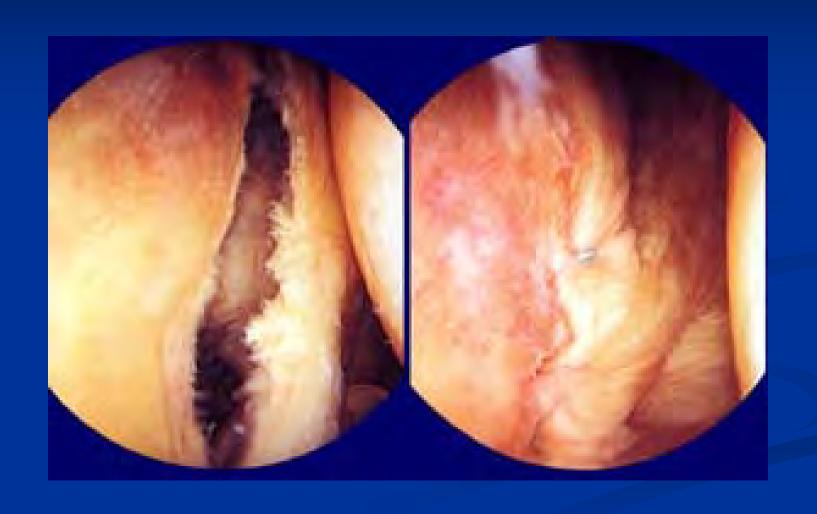
-labrum is repaired using anchors and sutures

-same day surgery

### Operative Treatment



## Operative Repair



### Post-op

- After surgery you are placed in external rotation brace for 3 weeks
- Come out of brace only to work on pendulum exercises





### Post-op

 At 3 weeks begin working on active assisted range of motion with physical therapy

■ 10 weeks post op can begin gentle lifting

At 6 months can return to activity as tolerated

### Results of Surgery

Most patients do well after surgery

- Satisfactory outcomes occur in greater then 90% of patients in most studies
- Majority of patients are able to return to pre-injury activities

### Results of Surgery

■ Rate of recurrence after surgery estimated between 5%-15%

Recurrence is higher in:

- -patients with bony bankart
- -patients with large Hill-Sachs lesion
- -patients with generalized laxity

(Boileau)

### Complications

- Loss of motion-most commonly external rotation
- Infection
- Nerve injury
- Cartilege injury
- Arthritis
- Arterial Injury
- Risks of Anesthesia