

# Total Shoulder and Reverse Shoulder Replacement



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# Shoulder Arthroplasty

- 50, 000 Annual TSA's and rising
- Nearly a million Hip and Knees



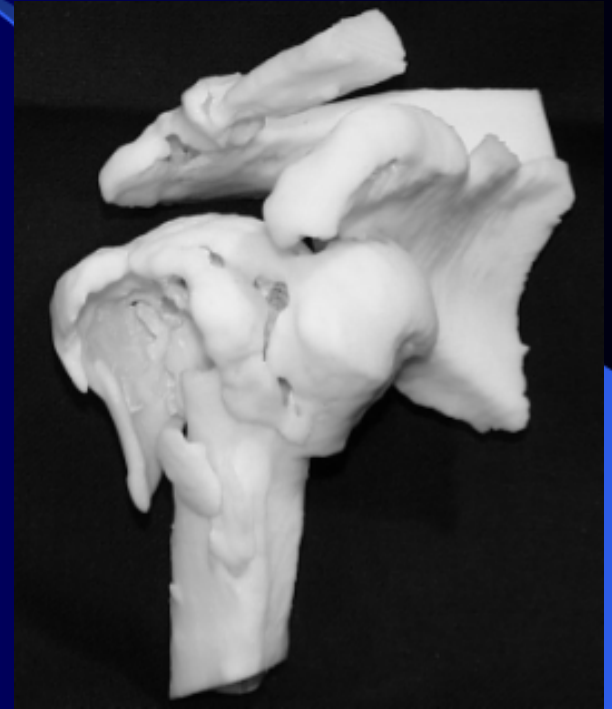
# Shoulder Arthroplasty

- Restore function
- Diminish Pain



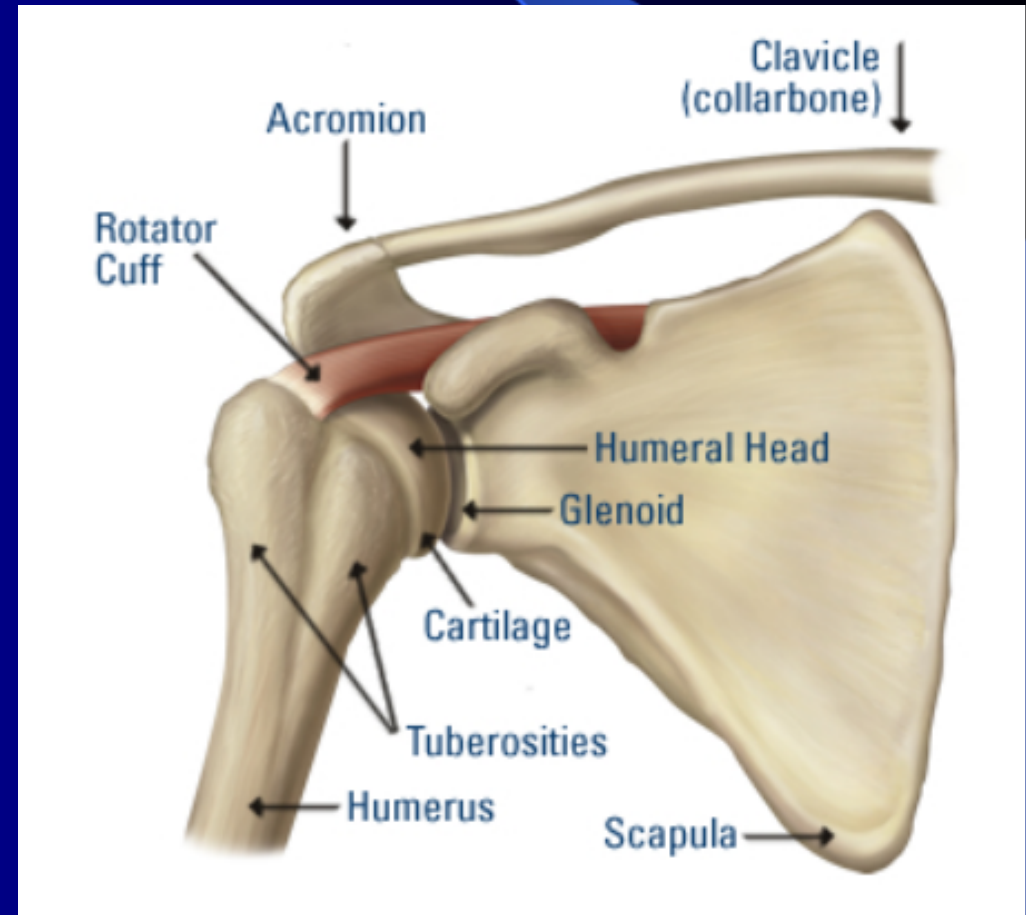
# Common Diagnoses

- Glenohumeral arthritis
  - Osteo
  - Rheumatoid
- Cuff Tear Arthropathy
  - Irreparable rotator cuff tear
  - Advanced Arthropathy
- Fractures - proximal humerus/elderly

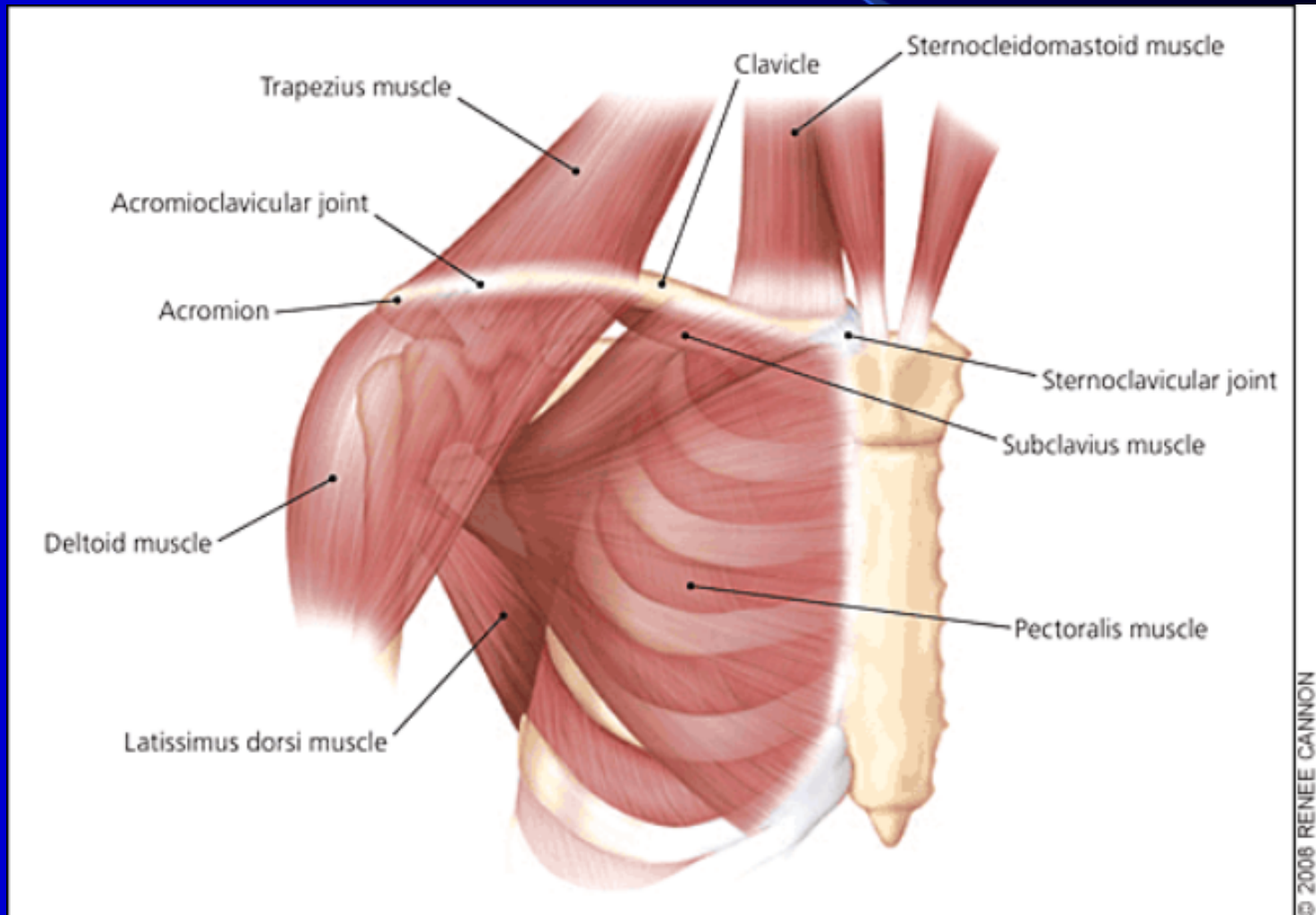


# Anatomy of the Shoulder

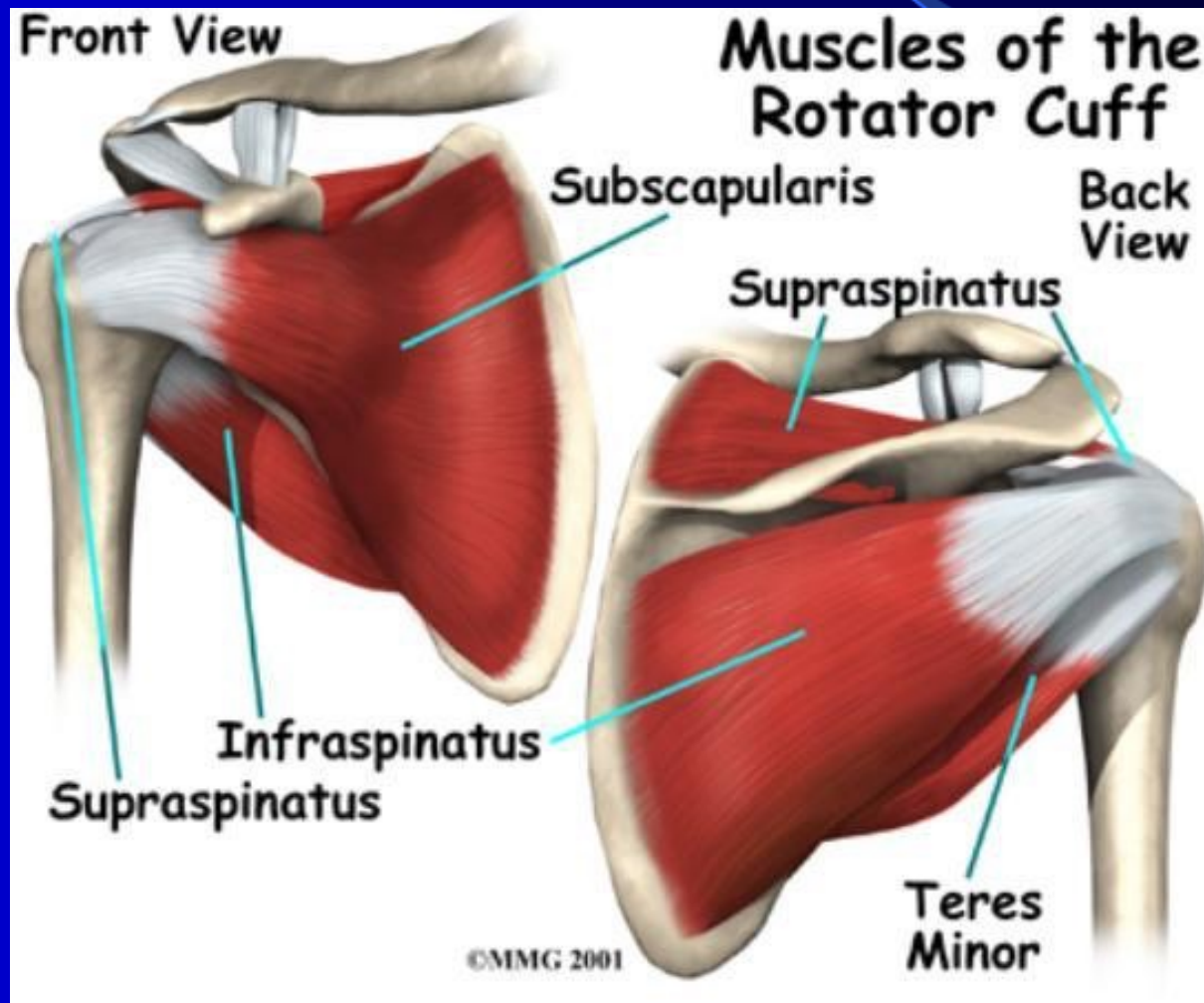
- Bony Structures
- Ligament Structures
- Tendon Structures



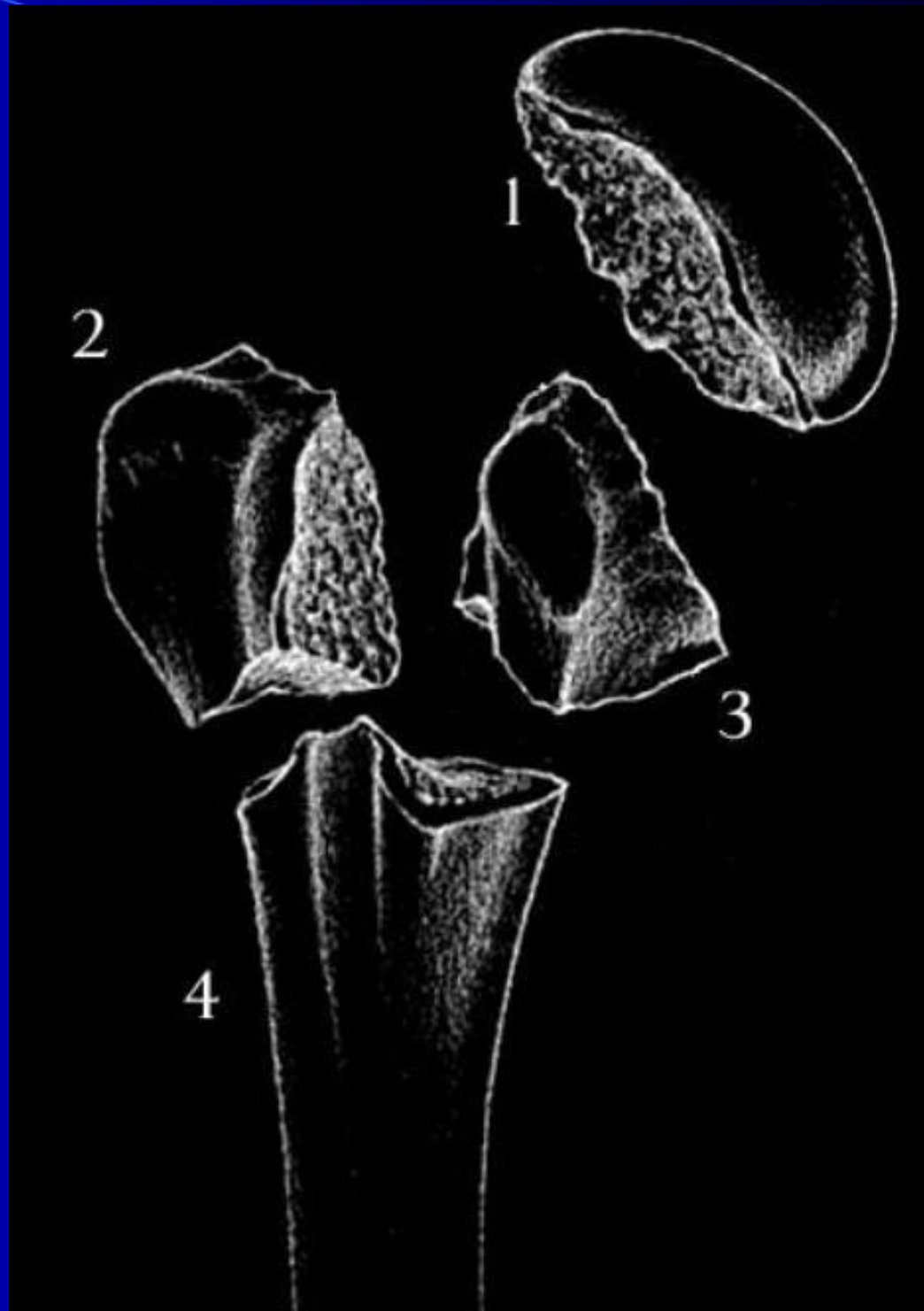
# Deltoid



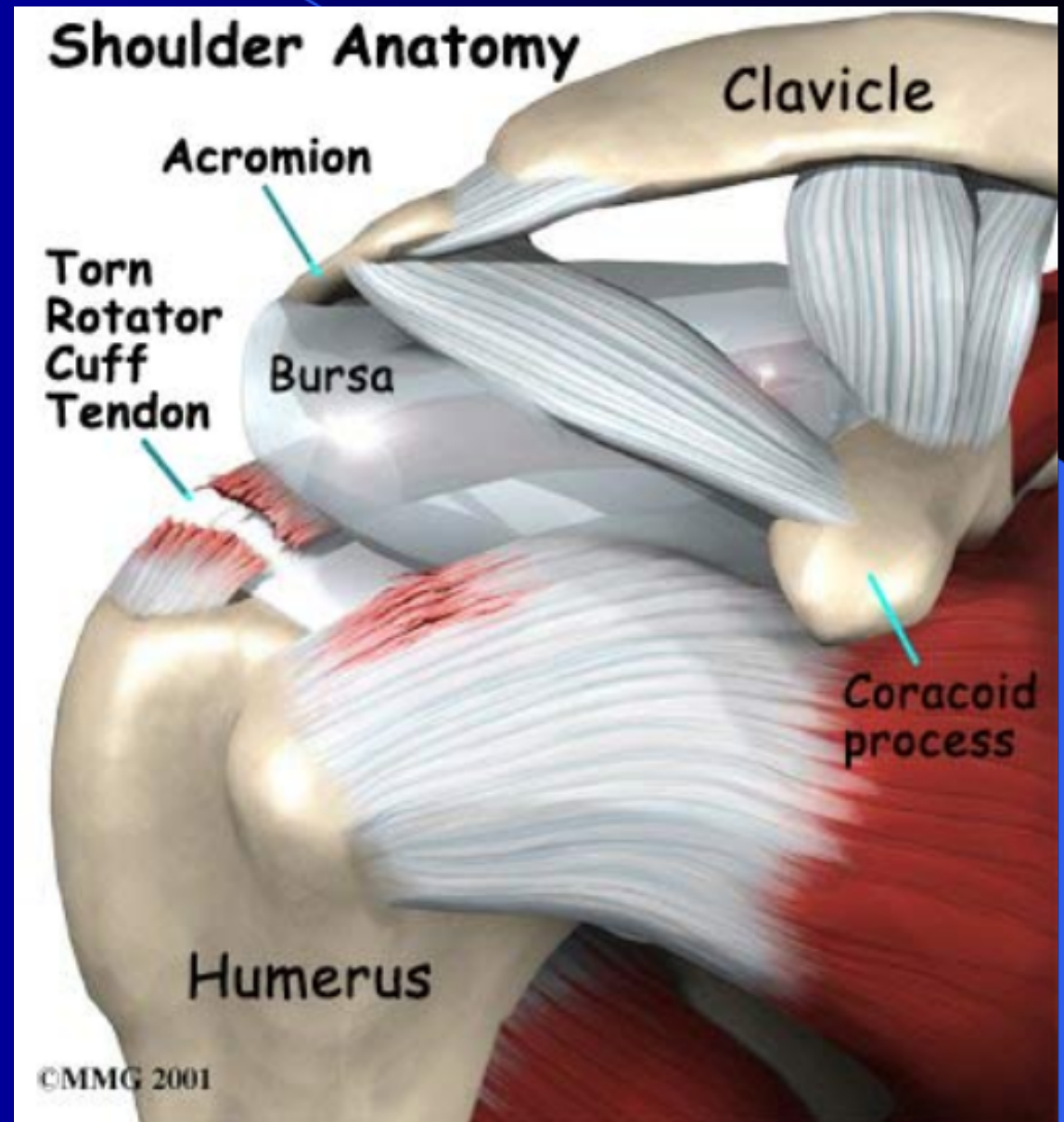
# Rotator Cuff



# Humerus



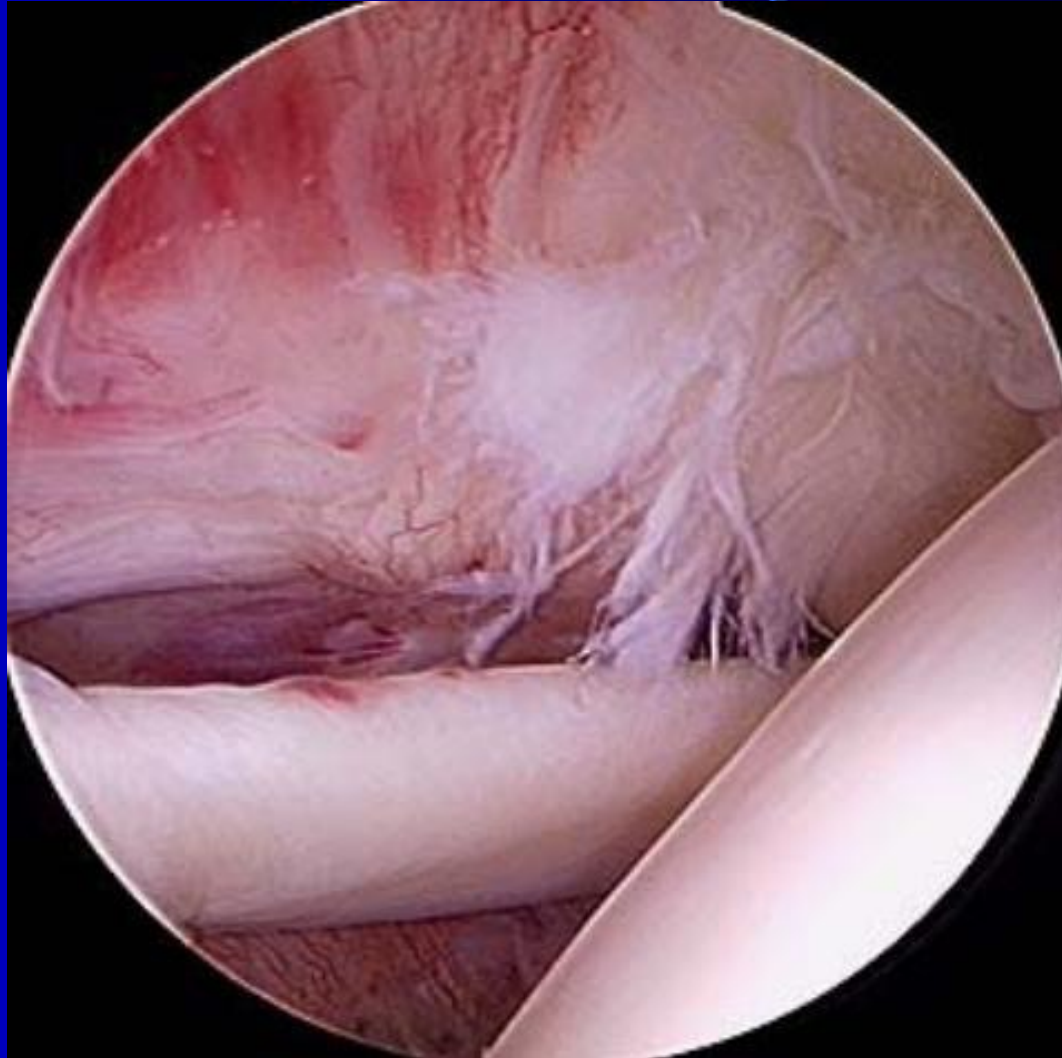
# ● Rotator Cuff Tear



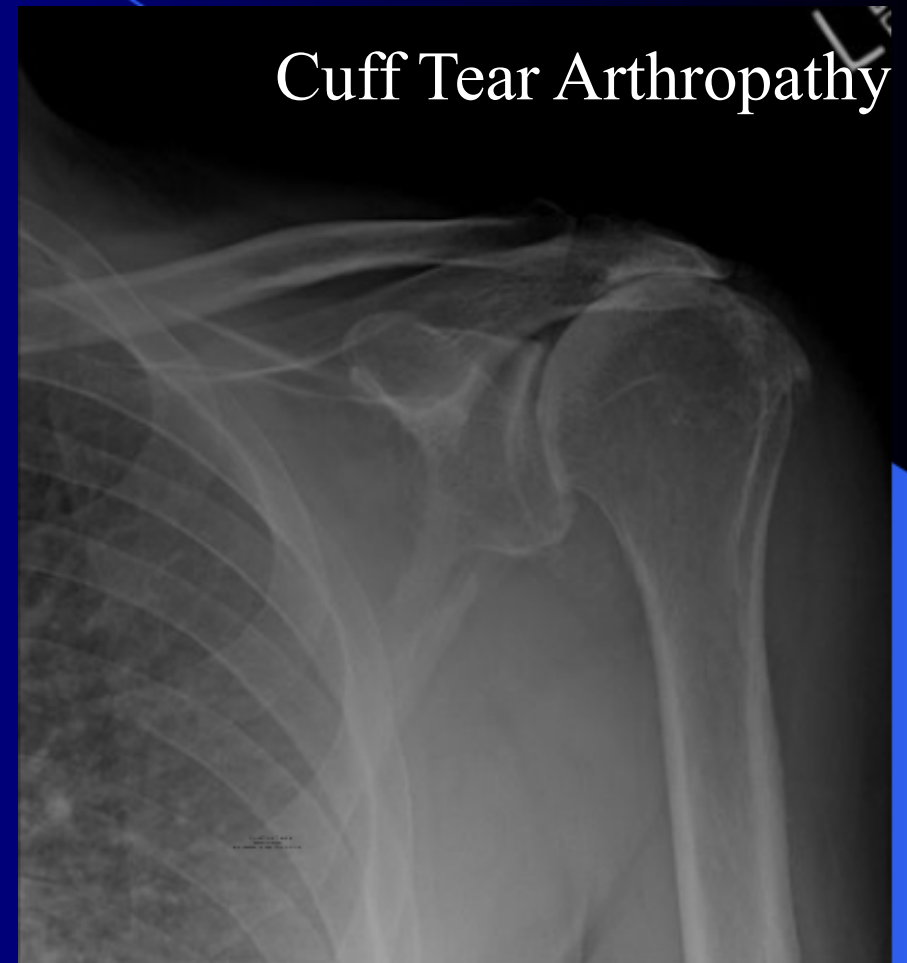
# MRI



- Partial Rotator Cuff Tear



# Tear Propagation



# Cuff Tear Arthropathy

Chronic progressive rotator cuff tear that is beyond repair.

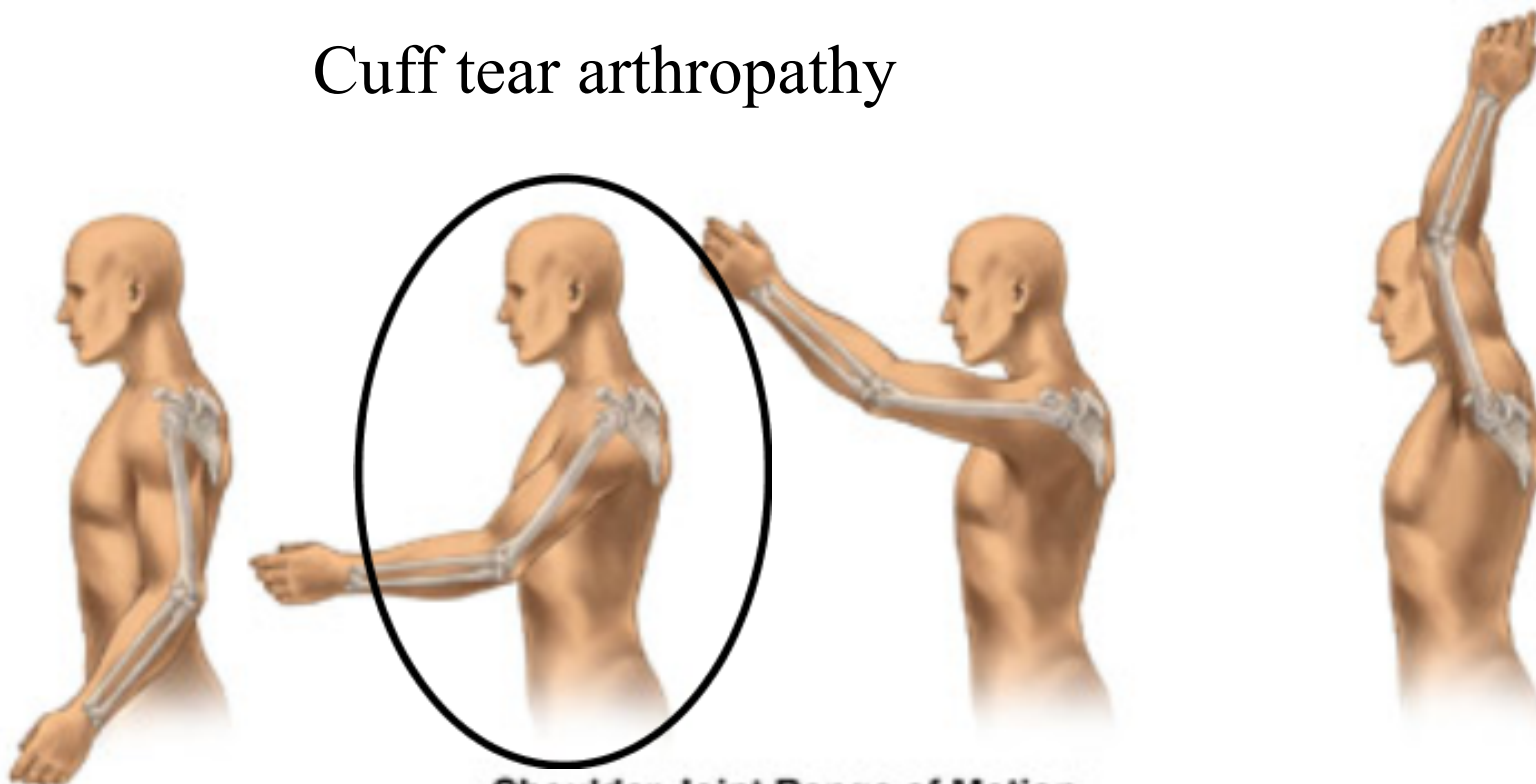
Leads to arthritic condition and severe loss of motion/  
function

# History

- Night pain
- Loss of motion
- Grinding
- Trauma- usually not!
- Progression over time

# Pseudoparalysis

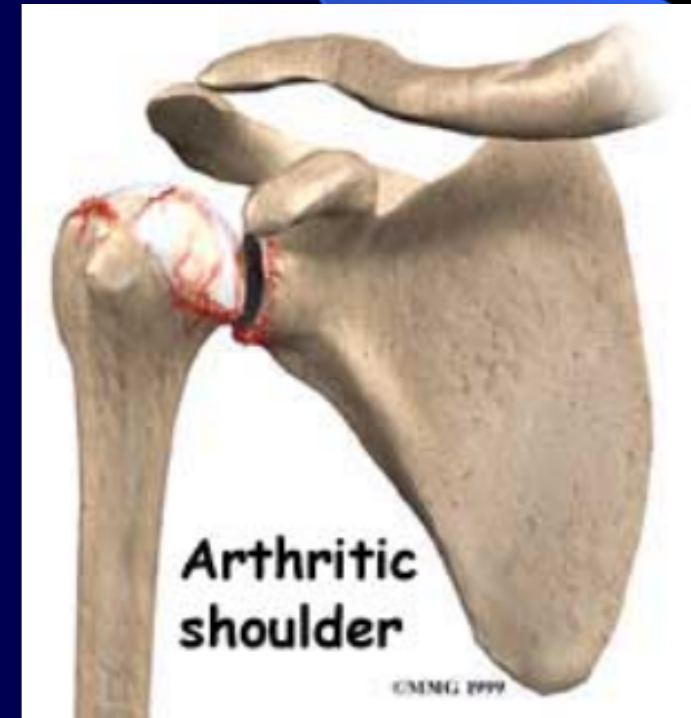
Cuff tear arthropathy



Shoulder Joint Range of Motion

# Glenohumeral Arthropathy

- Slow/Insidious
- Rotator cuff is intact
- Loss of motion not quite as severe
- Easier to treat

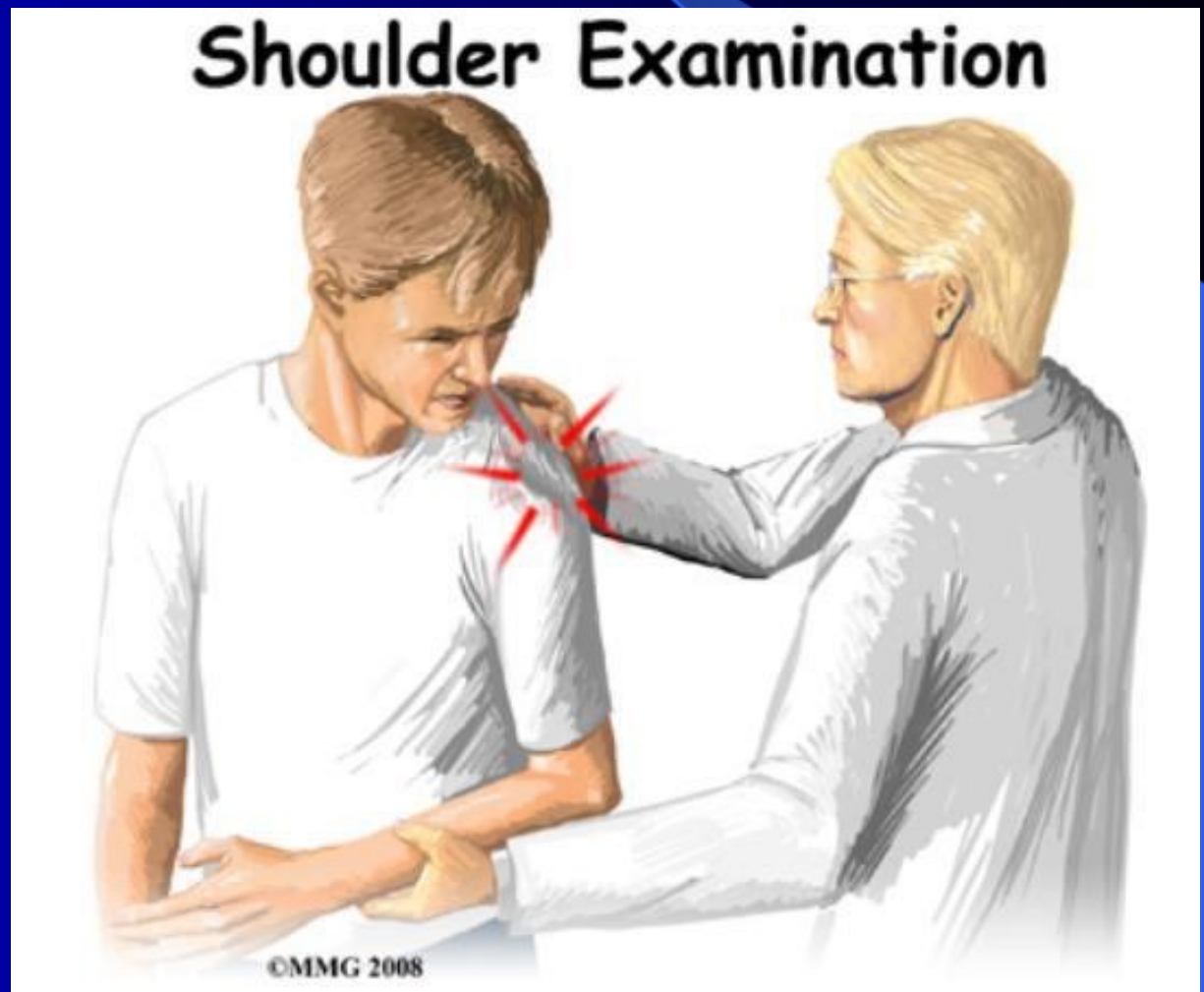


# Tests / Maneuvers

- Apprehension Test



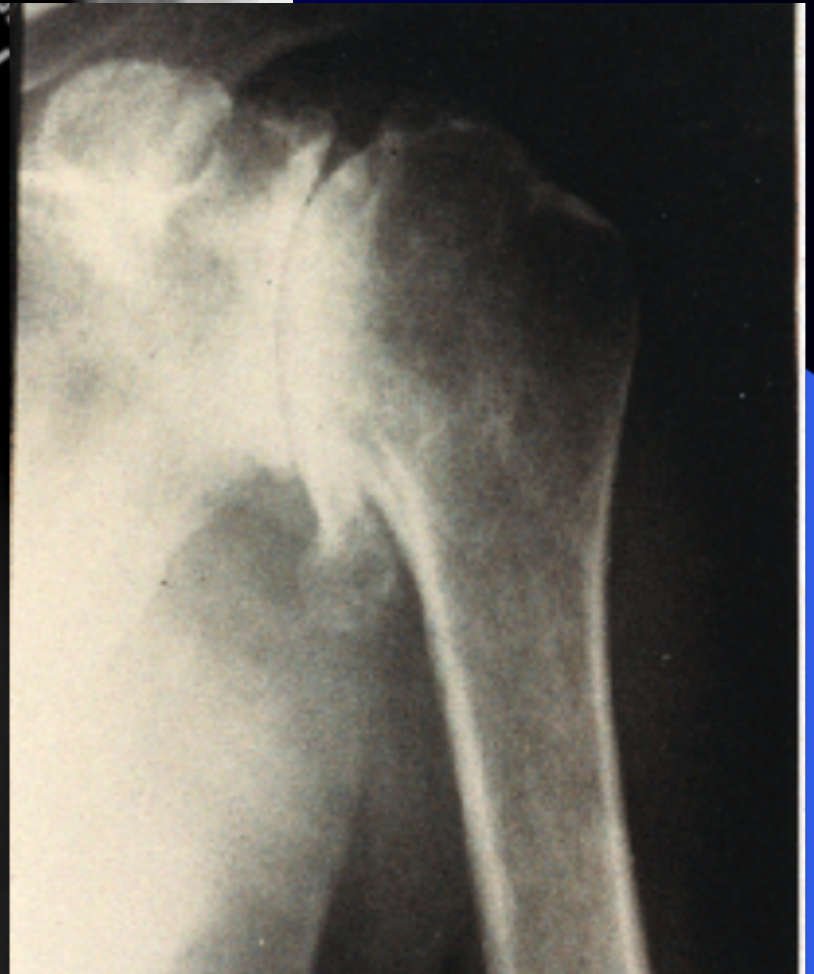
- Codman Sign



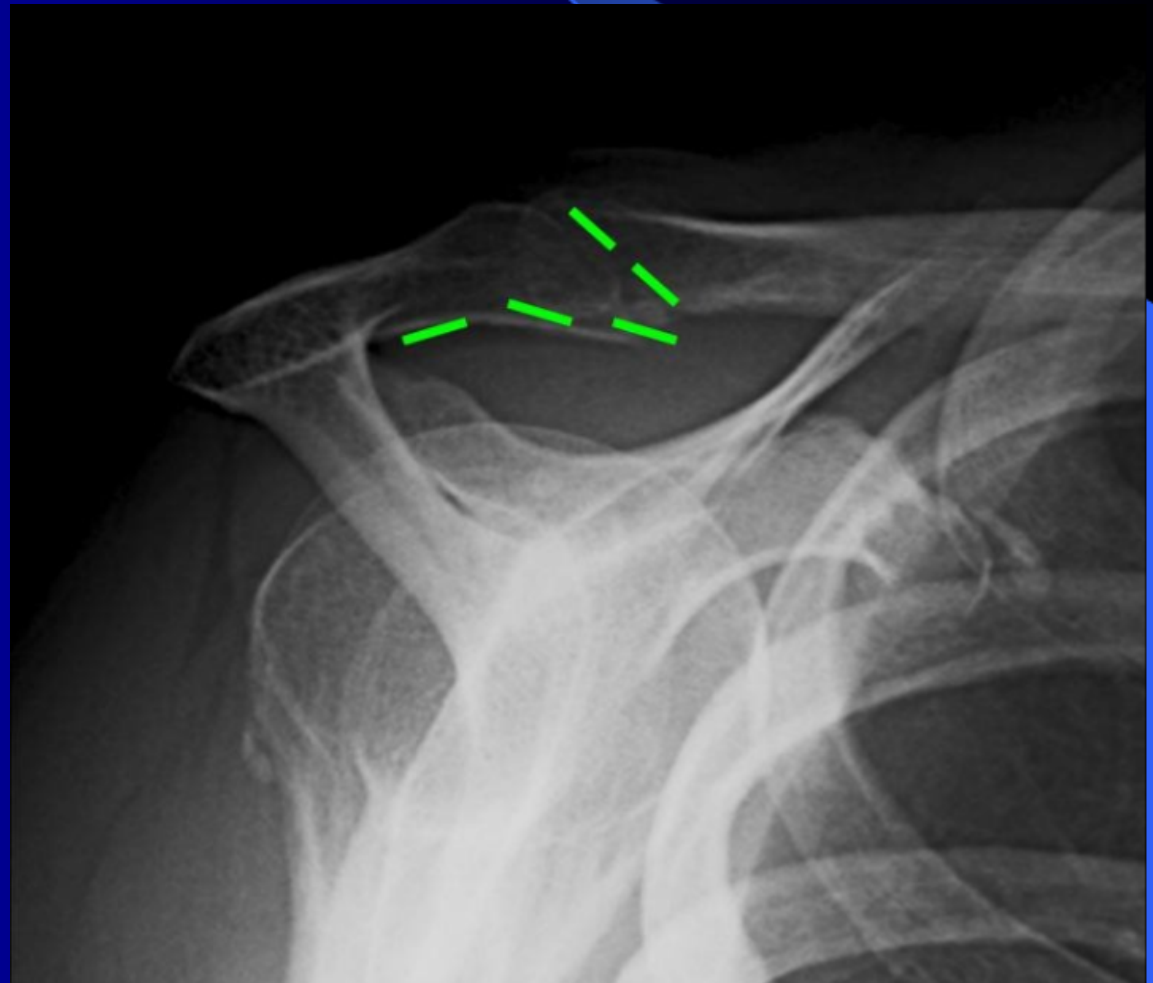
- Drop-Arm Test



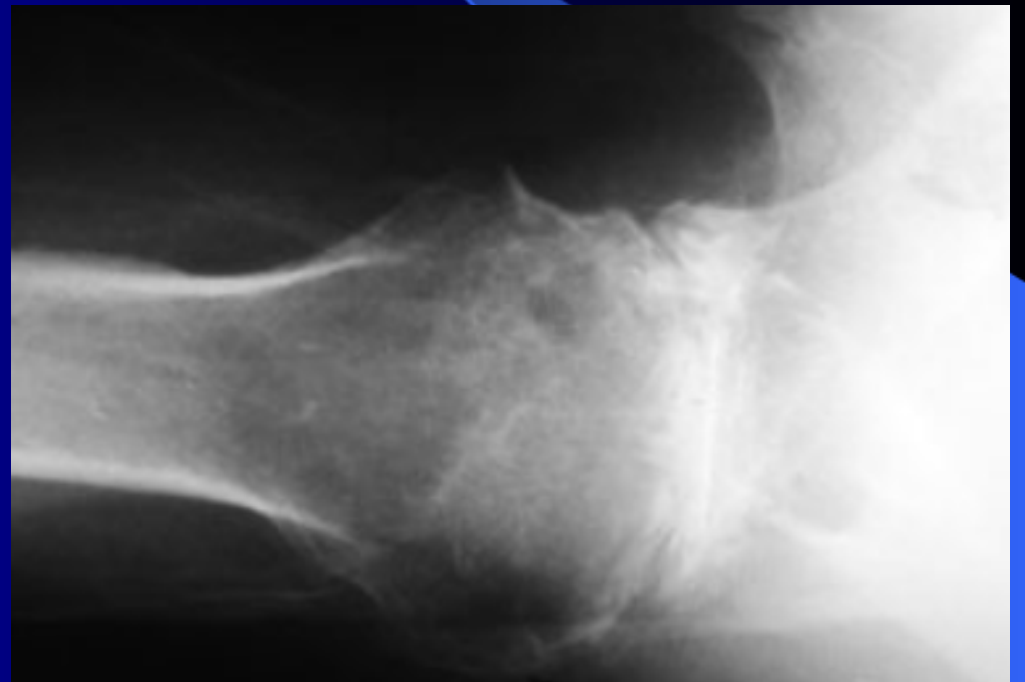
# X-Ray Views



# X-Ray Views



# X-Ray Views



# MRI Findings

Figure: Courtesy of Joyce A. Tarbet, MD

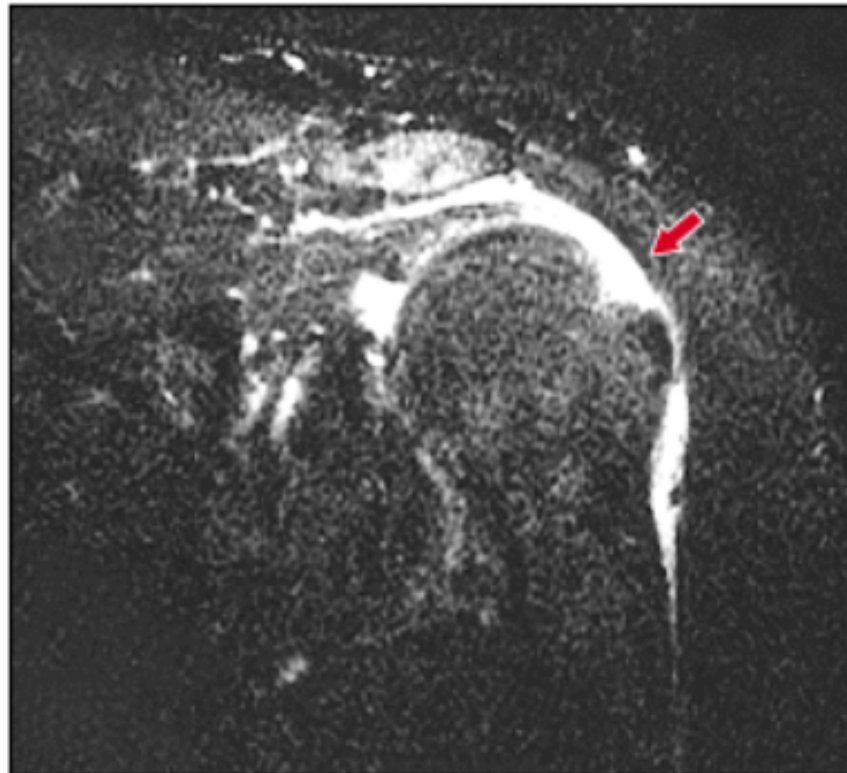
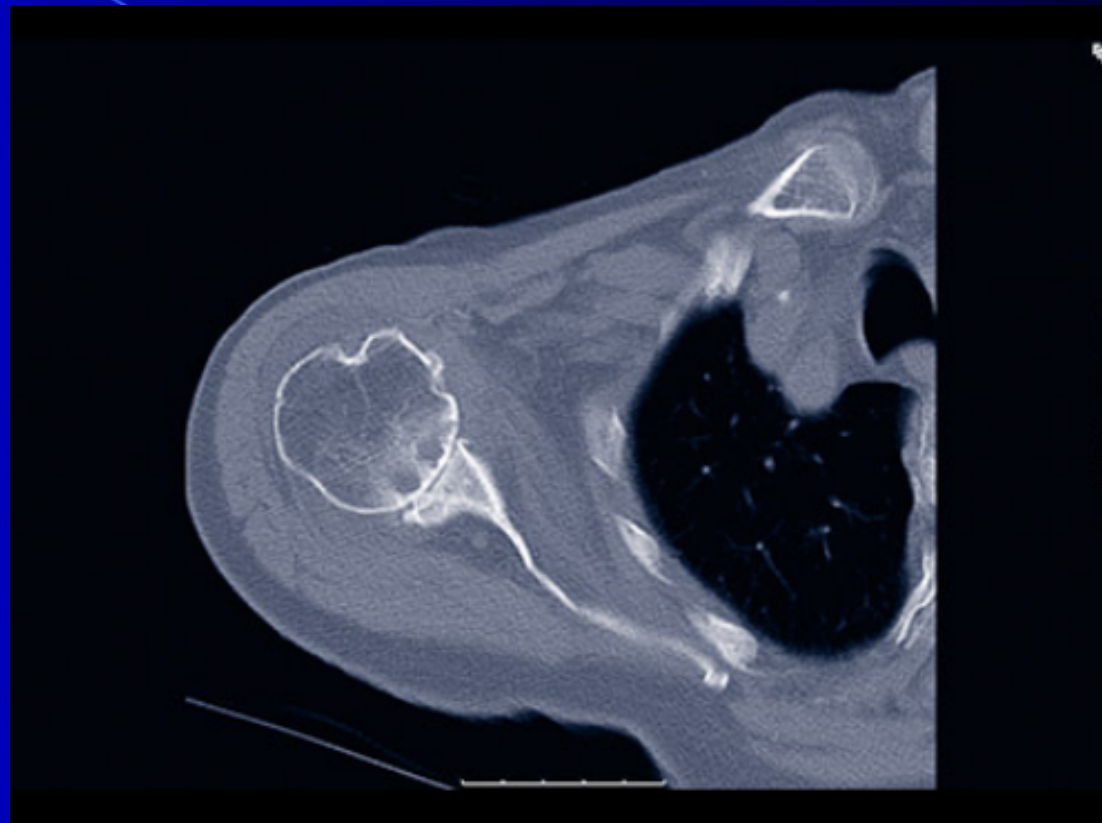


Figure 6. MRI of the shoulder of a 59-year-old male tennis pro and avid golfer. The MRI demonstrates a full-thickness tear (arrow) of the supraspinatus tendon.

# CT Scan



- Avascular Necrosis



- Rheumatoid Arthritis

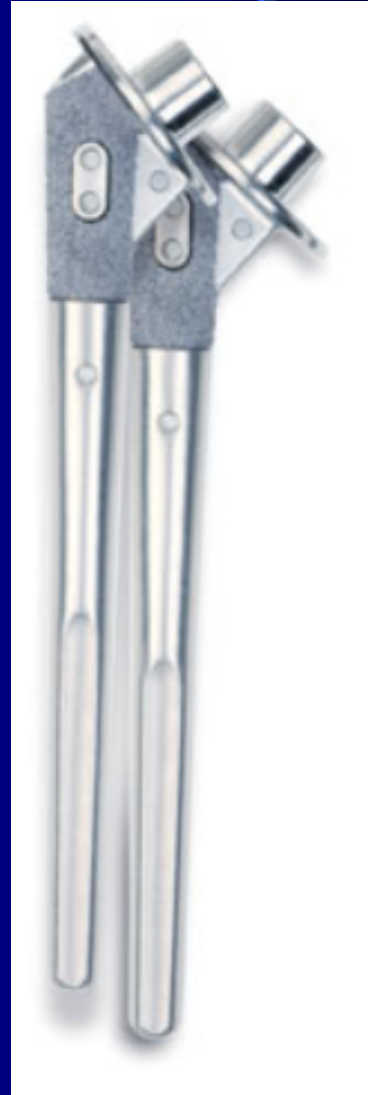


# Treatment Options

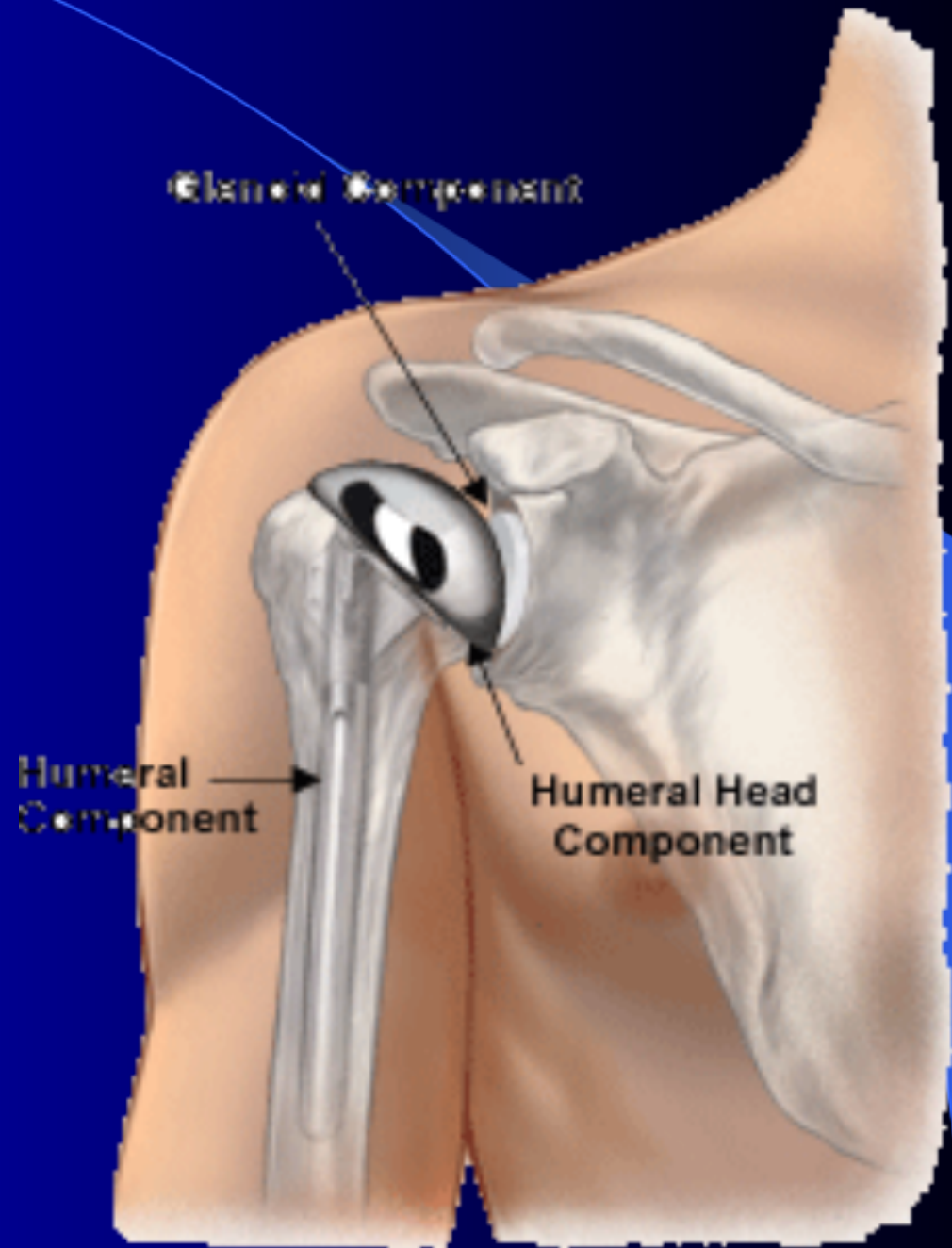
- NSAIDs
- Corticosteroids
- Therapy
- Arthroplasty
- Benign Neglect

# Total Shoulder Prosthesis

- Humeral Stem



- Humeral Head



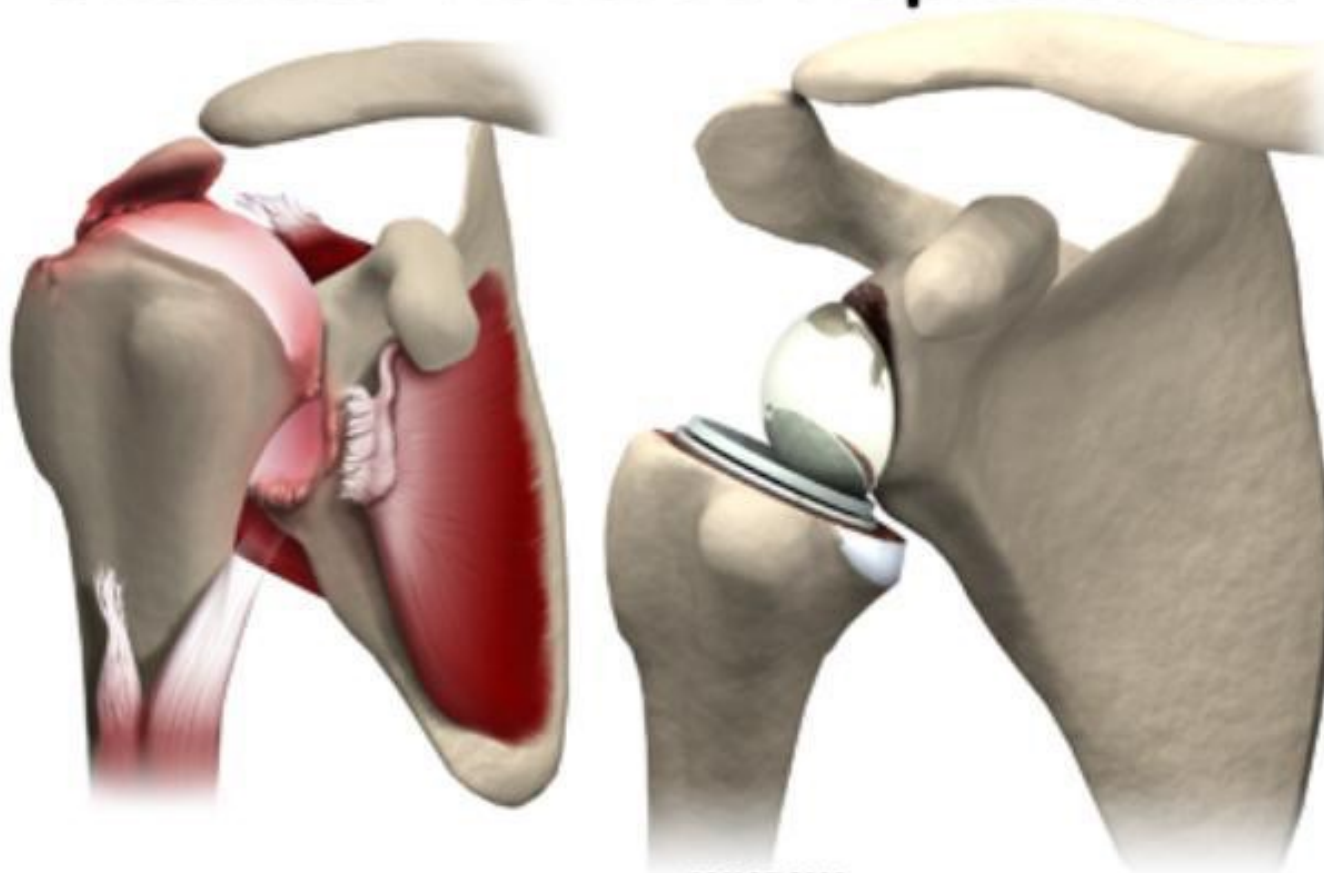
- Glenoid



- Primary Shoulder X-ray

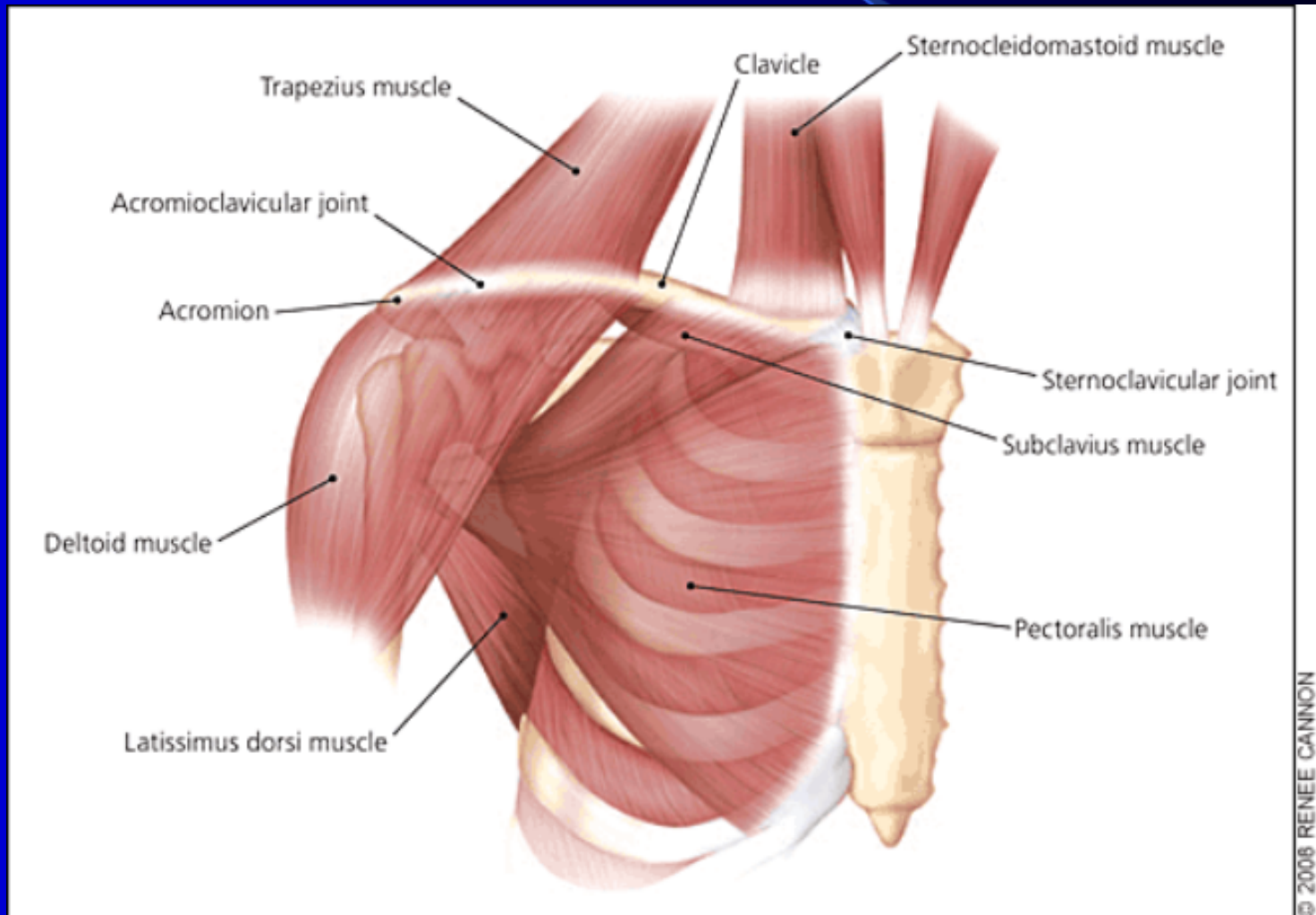


# Shoulder Reverse Replacement



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# Deltoid



# Reverse Total Shoulder

- Humeral Stem



- Glenoid



- Reverse Shoulder X-ray



# Post-Op Plan



- Physical / Occupational Therapy
  - Range of Motion
  - Exercise and Strengthening
  - Activities of Daily Living (ADL)
- Anti-coagulation Prophylaxis

# Post-Op Plan

- SLING

- 2 weeks 24/7

- 2 weeks outside of the house

- Home Therapy 2 -4 weeks

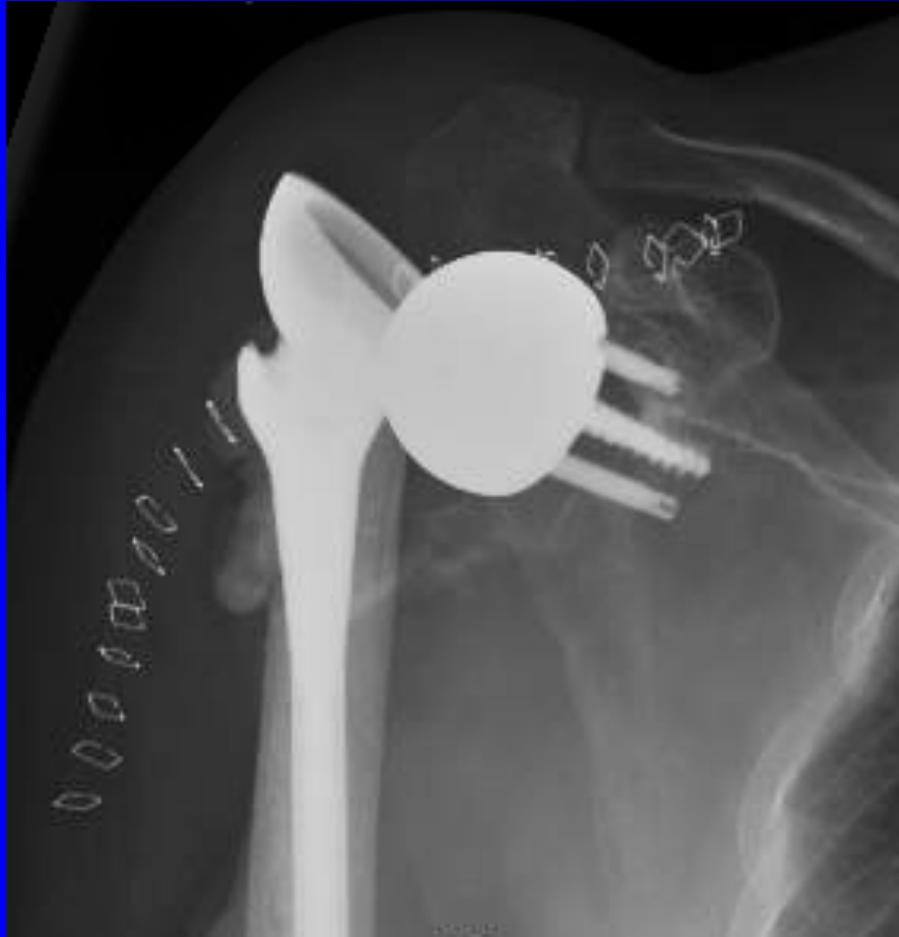
- Active range at 6 weeks

- Most activities at 3 months



# Reverse Total Shoulder

## Complications



# Total Shoulder Expectations

- Range of motion improved an average of 40°
- More than 90 % Patients have mild or no pain postoperatively.
- The probability of prosthesis survival is approximately 90% after 15 years.
- No major restrictions on activities (PUSHUPS!)



# Reverse Total Shoulder

## Expectations

- Frankle et al evaluated 60 patients treated with RTSA for glenohumeral arthritis and rotator cuff deficiency.
- Active forward elevation improved from 55.0° to 105.1°.
- Forty-one patients rated their result as good or excellent, 16 as satisfactory, and 3 as unsatisfactory.
- The complication rate following RTSA was higher than that reported after minimally constrained TSA.
- More restricted goals with range, strength, appearance and success

The background of the slide is a light blue and white abstract design. It features several large, stylized blue question marks of varying sizes. Overlaid on these are thin, light blue lines forming a grid and circles, some with arrows at their ends, suggesting a technical or scientific theme. The overall aesthetic is clean and modern.

# Questions and Answers



Thank You!