

Arthroscopic Rotator Cuff Repairs

Presentation Designed For Patient Education

Updated 2/09

Ohio Valley Orthopaedics & Sports Medicine

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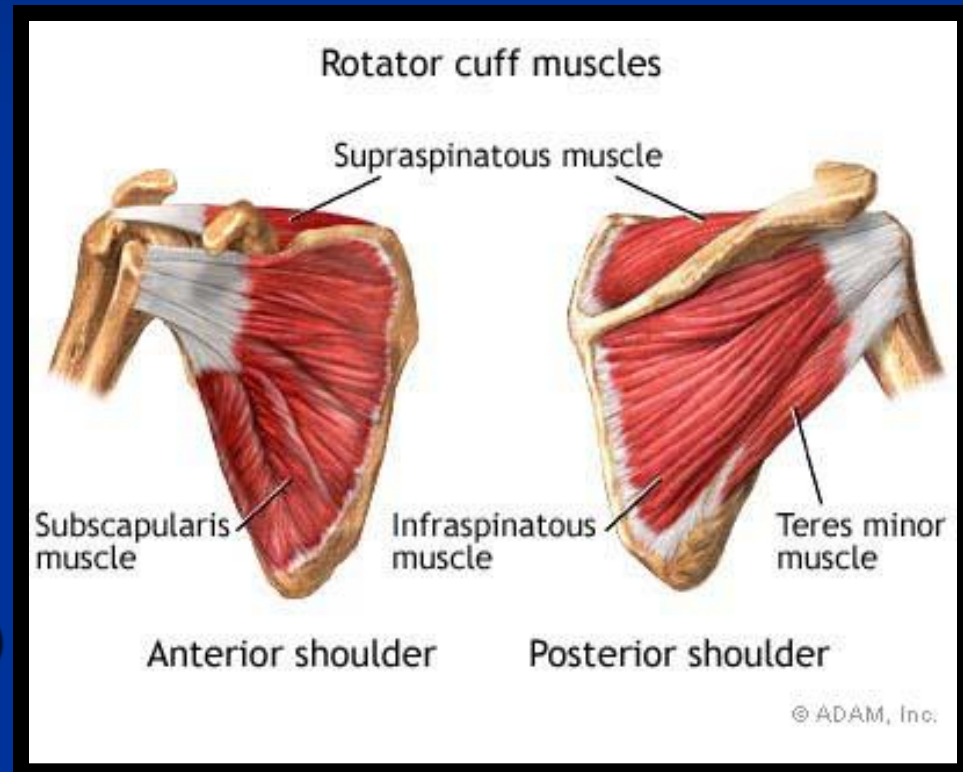
Ohio Valley Orthopaedics & Sports Medicine

Surgery

- Bethesda North
 - Main
 - Amb Surgery Center
- Mercy Fairfield
 - Main
 - Amb Surgery Center
- Greater Cincinnati
Surgery Center

Anatomy

- What is the rotator cuff?
 - Supraspinatus
 - Infraspinatus
 - Teres Minor
 - Subscapularis
- What does the rotator cuff do?
 - Holds the humeral head(ball) in glenoid (cup)
 - Stabilizes the shoulder joint



Rotator Cuff Tears

■ Incidence

- How common is it?
→ Very
- Rare in patients younger than 40
- Incidence steadily increases with age

■ Signs and symptoms

■ Pain

- Shoulder
- Side of arm
- Often worse at night
- Often worse with overhead activities

■ Weakness

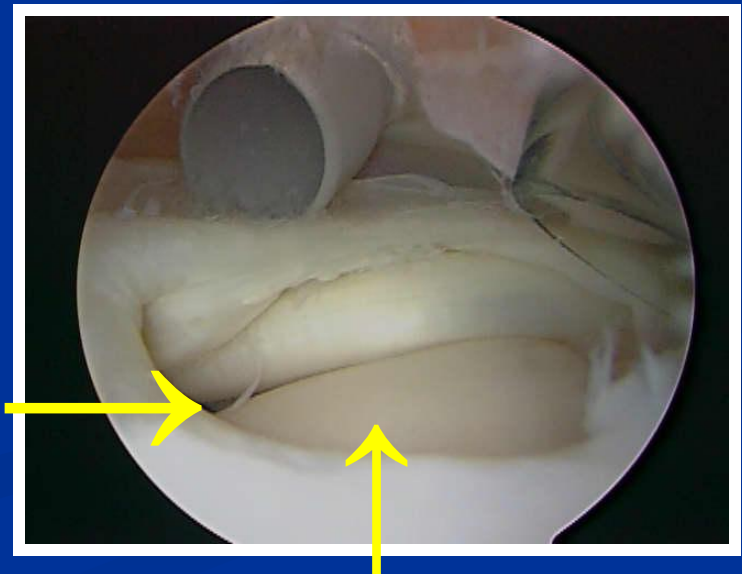
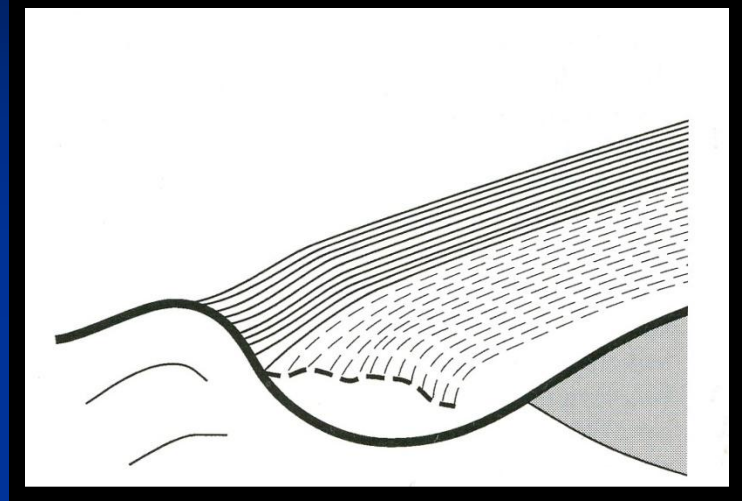
- Very large tears

What causes Rotator Cuff Tears?

- Sometimes they are simply degenerative
- Patients who perform a lot of repetitive overhead activities may develop rotator cuff tears
- Traumatic-fall on the shoulder, or pull on the arm
- Incidence increases with age

Natural History of RCTs

- Usually begins in anterior insertion of supraspinatus tendon
- Usually begins on articular surface as partial tear and progresses to full thickness tears
- Progresses from tendon to tendon enlarging like a “hole in a sock”
- Once full thickness tear occurs it does not heal back to bone without help

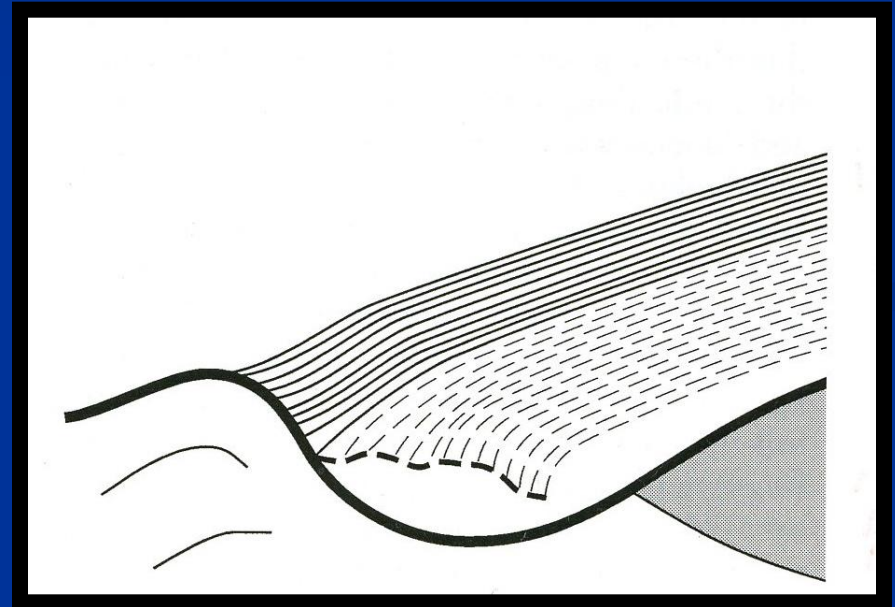


Rotator Cuff Tear

Exposed cartilage on the humerus bone (ball)

“Footprint” of cuff

- Broad area of greater tuberosity (supraspinatus)
- Other tendons are similar
- From the articular margin to the “shoulder” of the greater tuberosity
- NOT just a linear stripe!

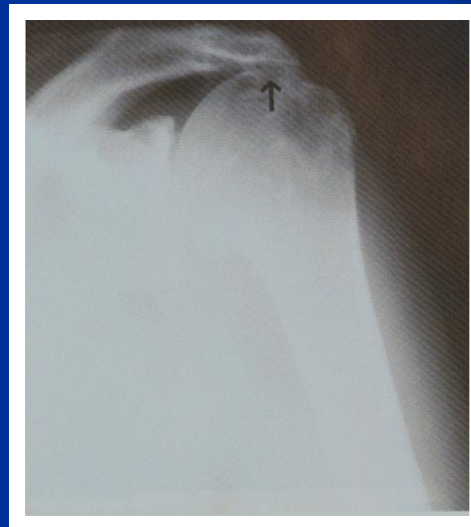


Rotator Cuff Tears-Diagnosis

- History
- Physical Exam
- X-rays
 - Often normal
- MRI
 - Best test



Rotator Cuff Tear

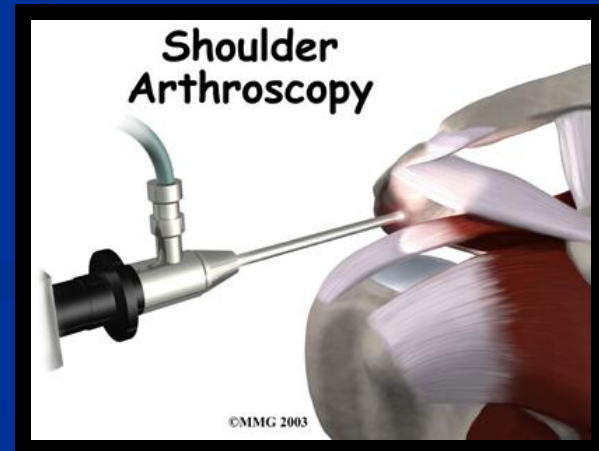
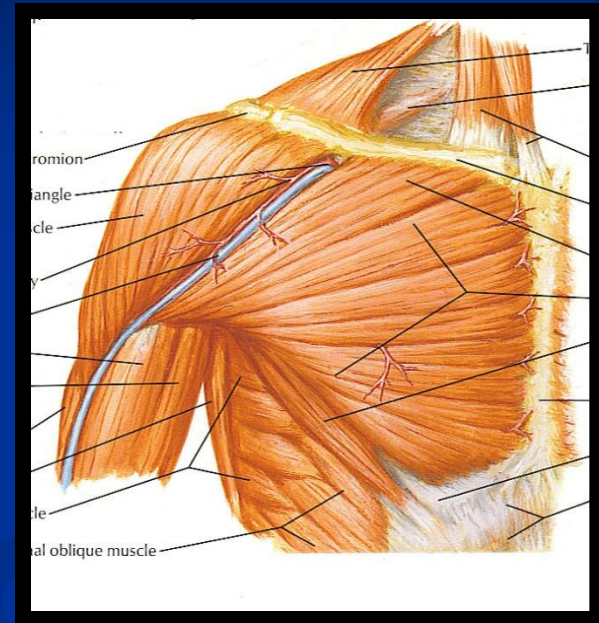


Rotator Cuff Tears-Treatment

- Anti-inflammatories-decreasing inflammation causes decreased pain
- Selective cortisone shots-steroids are very potent anti-inflammatories and go directly to the source with little systemic absorption
- Physical Therapy-strengthening the remaining intact rotator cuff stabilizes the shoulder. Treatment of choice for partial thickness tears
- Surgery-most full thickness tears of significant size should be surgically repaired. The fully torn cuff will not heal down to bone without help and will likely get bigger.

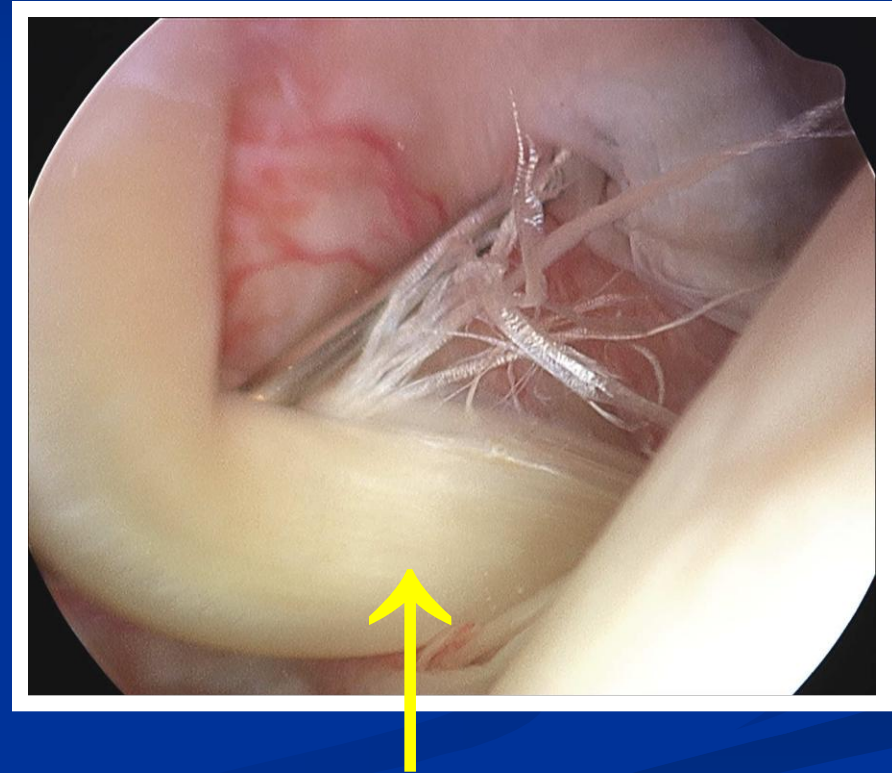
Surgery

- Open
 - Make incisions and move muscle out of the way in order to expose the torn tissue
- Arthroscopic
 - Arthro → joint
 - Scope → camera
 - “Look around joint with camera



Arthroscopic Repair-Advantages

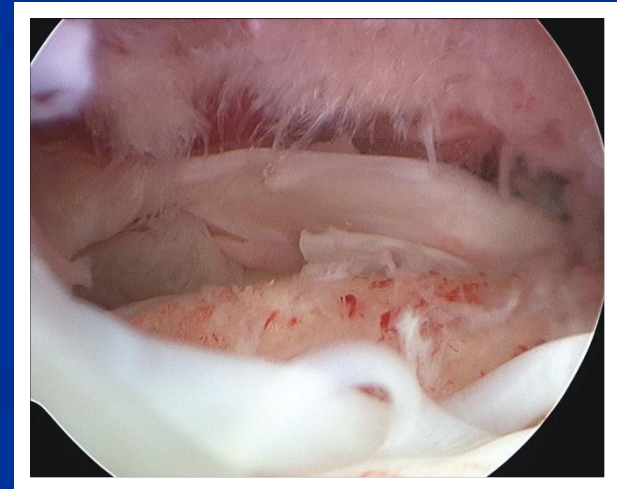
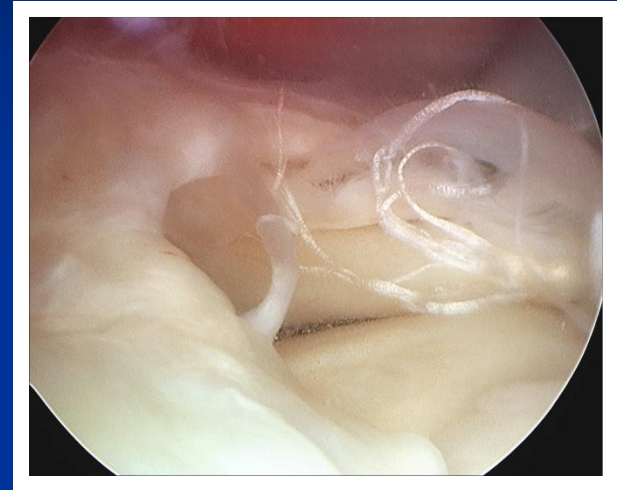
- Less dissection = less stiffness
- Preserves deltoid muscle
- Lower infection rate
- Better visualization
- Ability to evaluate/address other pathologies
 - “Shopping Spree”
- Less pain in early post-op period
- **DECREASE RISK OF MAKING PATIENT WORSE**



Torn biceps tendon that can be addressed arthroscopically at the time of surgery

Arthroscopic Repair-Advantages

- Small tears easily repaired
- Biggest advantage is with larger tears
 - Can see better
 - Easier to mobilize torn tissue
 - Determining if it can be fixed
 - Avoid big muscle dissection

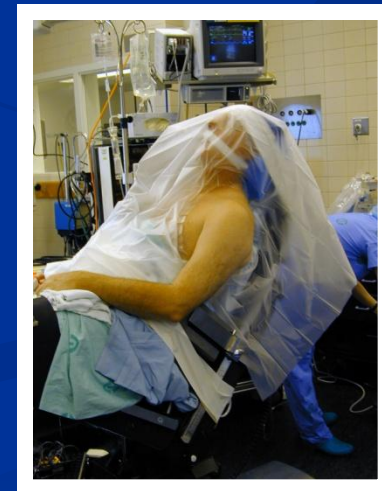


Arthroscopic Rotator Cuff Repair

- First performed in mid 90's
- Techniques and equipment continue to evolve such that it is an excellent option

Anesthesia

- Anesthesiologist administers nerve block in pre-op holding area after giving some IV medications
 - Typically lasts about 18 hours
- General anesthesia
 - Patient then placed under general anesthesia
 - Patient is positioned such that can get full access to shoulder
 - Skin cleaned with sterilizing prep



Portals

- Surgery done thru poke holes called portals
- Typically 4-5 portals are utilized
- Cannulas are placed thru the portals for easier passage of instruments and sutures

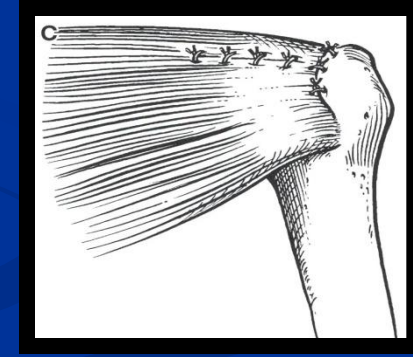
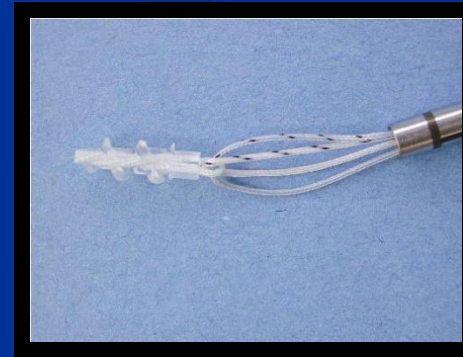
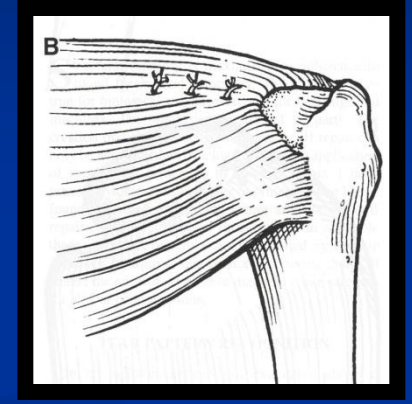
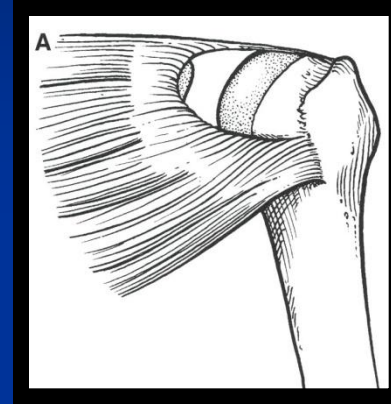


Technique

- Complete inventory of the shoulder is performed with the camera
- Goal is to fix the rotator cuff to its anatomic position
- Therefore, the pattern (personality) of the tear is evaluated
- Next the cuff is fixed to bone with various techniques depending on the tear pattern

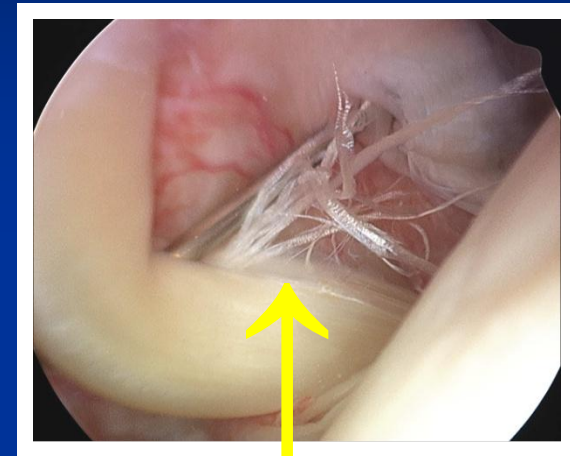
Repair

- Sutures can be used to close the tear side to side like a zipper
- Finally, suture anchors (screws with sutures attached) are used to fix the cuff to bone
 - Screw goes in bone
 - Suture passed thru the cuff and tied to bring the tissue back to bone



Address Associated Pathology

- Sometimes other parts of the shoulder also cause pain and can be addressed at the time if surgery
 - Biceps tendon
 - The tendon can simply be cut (tenotomy) or cut and sewn down to bone (tenodesis)
 - End of the collarbone (clavicle)
 - Take out end of collarbone (distal clavicle resection)
 - Bone spurs on the shoulder blade bone (acromion)
 - Smooth bone (subacromial decompression)



Torn biceps tendon



Smooth shoulder blade bone

Surgery

- Most surgeries can be done with all arthroscopic techniques
- Sometimes incisions must be made to address pathology that cannot be fixed with the camera
- This decision is often made at the time of surgery after the shoulder is evaluated with the camera

Post op

- Wake up in a sling
- If pre-op block was successful then you should be pretty comfortable with a numb arm
- Go home same day
- Start taking your pain medications as soon as you get home prior to your block wearing off.
- It can be very difficult to “catch up” if you have no pain medication in your system when your block wears off.

Post-op-Medications

- Pain medications
 - Take these as needed
 - Not well tolerated on an empty stomach so make sure you eat something first even if just crackers
- Nausea medications
 - Sometimes patients are nauseated after surgery from the anesthesia
 - Usually wears off in 24 hours
 - Can take medication if needed

Post op

- Leave dressing intact for first 72 hours after surgery. Reinforce if needed
- May remove and shower at 72 hours post op
- Do not scrub your wounds
- Simply wash your neck with soap and water and let the soap and water run off
- Do not soak your wounds until permitted to do so by your physician. **NO BATH, SWIMMING OR HOT TUBS.**
- If your wounds are dry, may leave open to the air
- If oozing then put a clean dry dressing and call your doctor
- Do not put any ointments on your wounds. This includes antibiotic ointments (Neosporin, Polysporin, etc)
- It is easiest to wear a button shirt
- Wear your sling all the time except to shower

Post op

- Your first follow-up appointment should be 5-7 days post op
- Please make an appointment to go to physical therapy immediately after your first post op appointment.

Post-Op Rehab

- Start passive range of motion at 1 week
- Sling for 4-6 weeks
- Start active range of motion when sling comes off
- Start strengthening at 8-12 weeks
- No sports, lifting for 4-6 months



Frequently Asked Questions

- Will I have therapy post op?
 - Yes. Initially 2-3 times per week then less often. Exercises must be done at home to
- How long do I have to wear the sling?
 - 4-6 weeks. Longer when in an uncontrolled environment
- When can I go back to work?
 - This is highly variable depending on what you do
 - For desk jobs it could be as early as a couple days
 - Labor jobs with lifting, 4-6 months

Questions

- Any further questions should be directed to your therapist or surgeon
- Please call the office with questions or concerns
- 513-985-3700
- www.ohiovalleyortho.com

Thank You

