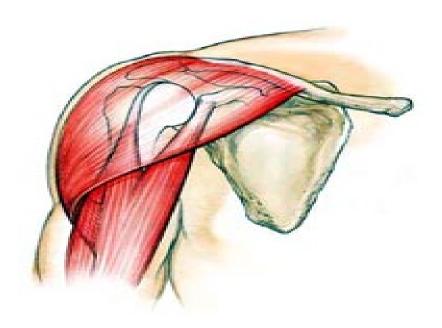
Kaiser Fremont Shoulder Class



Rehabilitation Department: Physical Therapy

Class Structure and Goals

- Learn how your shoulder works
- What goes wrong with the shoulder

- Learn how to care for your shoulder
- Learn how exercise can help your shoulder

Question and Answers

Tell me about you

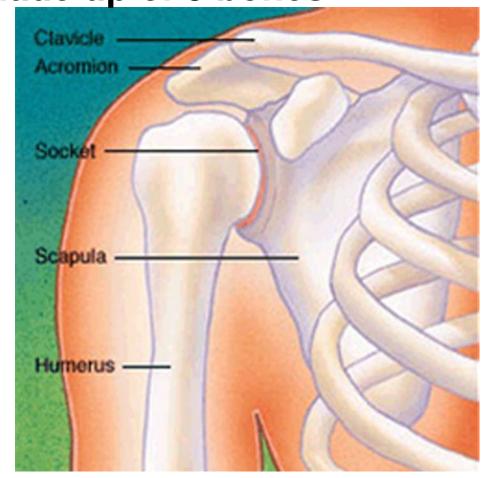
■ Take 30 seconds to tell me about your shoulder problem:

- Where does it hurt?
- What is your most painful movement?
- What do you do to make it feel better?

Shoulder Anatomy: Bones

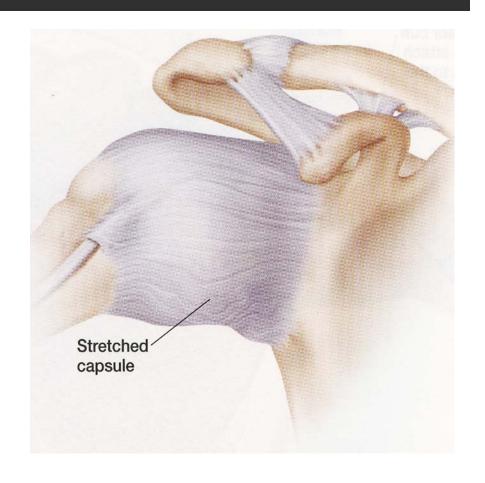
The shoulder is made up of 3 bones

- ☐ The Humerus (arm bone)
- ☐ The Scapula (shoulder blade)
- The Clavicle (collar bone)



Shoulder Anatomy: Ligaments

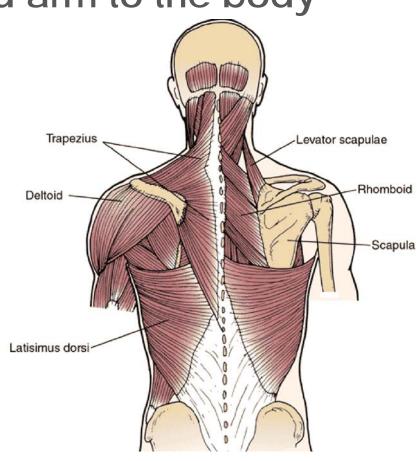
□ The shoulder is surrounded by a capsule which is made up of several ligaments.



Shoulder Anatomy: Muscles

Several muscles connect the shoulder blade and arm to the body

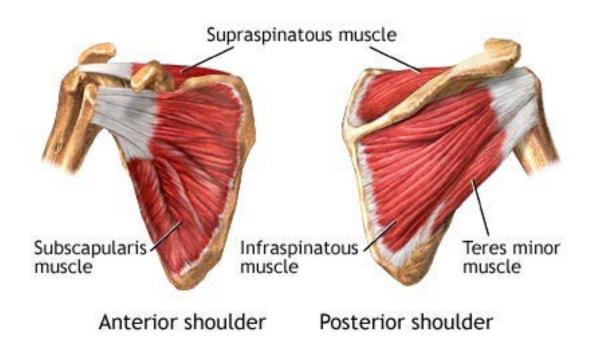
- Deltoid
- Rhomboid
- Trapezius(Traps)
- Levator Scapula
- Latisimus Dorsi(Lats)



Shoulder Anatomy: Muscles

The <u>rotator cuff muscles</u> connect the arm to the shoulder blade. The muscle turns into a <u>tendon</u> where it attaches to the bone.

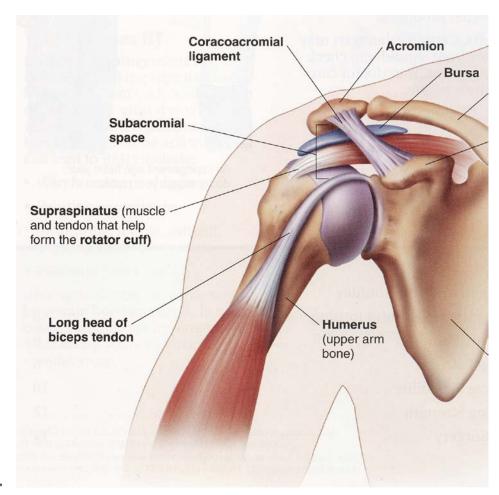
Rotator cuff muscles



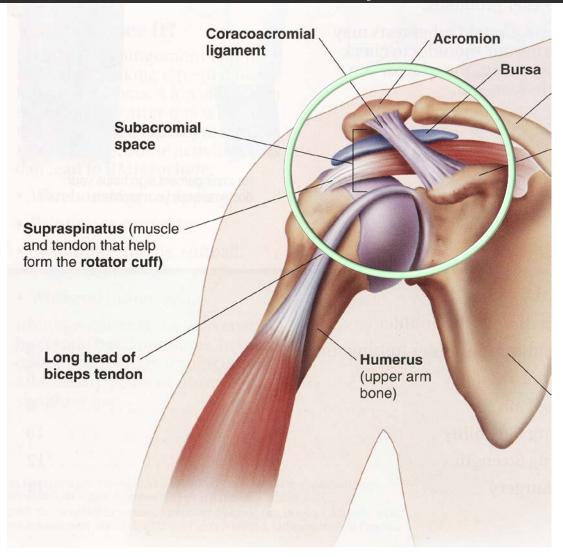


Shoulder Function – Rotator Cuff

- ☐ The rotator cuff muscles are very important for healthy shoulder function.
- ☐ They keep the ball of the humerus (the long arm bone) securely within the socket as you raise your arm.
- ☐ The rotator cuff tendons pass under a ligament and through an area called the Subacromial Space.



Shoulder Function – Subacromial space



Shoulder Function: Your Shoulder is Always Working

Comb your hair

Reach for seat belt

■ Tuck in a shirt

Put on Deodorant

Hook a bra

■ Reach for coffee cup

Reaching up

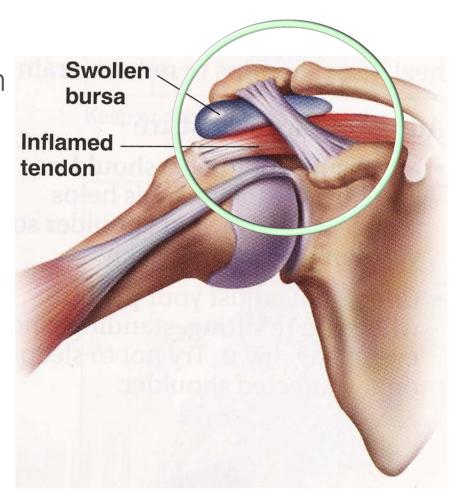
Lifting

Carrying groceries

Lying on your side

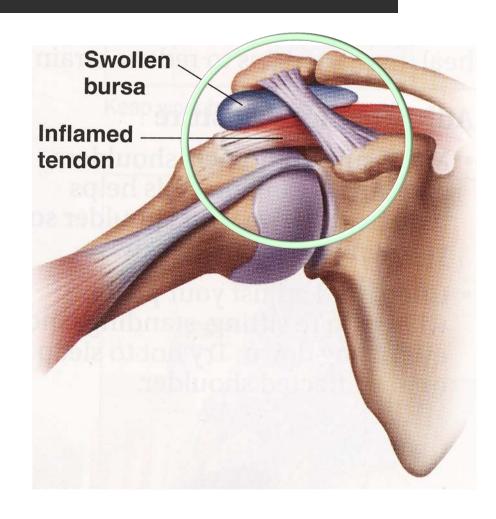
What Goes Wrong – Impingement

- Impingement occurs when there is not enough room in the sub-acromial space for all the structures to move properly
- Common causes
 - **Tendinitis** irritation and swelling of the rotator cuff tendons
 - **■** Bursitis
 - Arthritis



What causes Impingement – Tendonitis and Bursitis

- Repetitive tasks
 - especially those done with the thumb pointing down
- Overhead sports
 - baseball, volleyball, tennis, swimming
- Poor Ergonomics
 - Working with slumped posture
 - Reaching too far for mouse, other objects
- Forceful tasks
 - Lifting, pushing and pulling
- Weakness

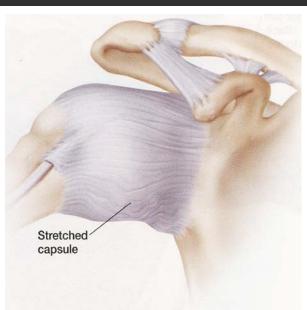


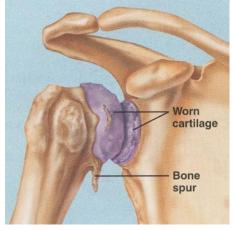
Other conditions that cause pain and stiffness

Frozen shoulder or Adhesive Capsulitis (changes in the capsule that make it stiff and painful)

Arthritis (wearing down of the cartilage over time)

It is very important to keep moving the shoulder even though it is painful





How To Care For Your Shoulder

- "First Aid"
 - Rest
 - Ice vs Heat
 - Medication
 - Activity Modification
- Therapeutic Exercise
 - Level 1
 - Level 2

"First Aid"

The first goal is to rest the painful tissues and reduce swelling

- Apply cold packs to your shoulder for 10-15 minutes,
 3-4 times each day to reduce pain.
- If your shoulder is more stiff than painful, you can apply heat.
- Take your medications as prescribed by your doctor.
- Modify your activities, avoid positions or movements that are painful
 - (except to gently stretch to maintain your range of motion)

Activity Modification: Don't

- Work with arms overhead for more than a few minutes at a time.
- Lift heavy loads.
- Reach with the palm down.
- Support yourself on the painful shoulder.
- Rest your painful arm on the windowsill when driving.
- Sleep on your painful shoulder.
- Carry your purse, backpack, or other items over one shoulder.
- Work at the computer for long periods of time without taking a break.
- Sit with Slumped posture

Do

- Lift and carry items close to your body.
- □ Distribute items between 2 bags when carrying.
- Point thumb up when reaching for something.
- Take regular breaks from activities you do over and over again.
- Use a footstool or ladder to reach overhead.
- Sit upright with your back supported when working at the computer or desk.

Sleeping and Sitting posture

Sleeping position

■ If sleeping on your side is painful, sleep on your back with a pillow under your arm or sleep on your unaffected side and place a pillow under your painful arm.



Use good sitting posture

- Sit with your buttocks scooted to the back of the chair so that your spine is supported by the chair back.
- Place a small towel roll between your lower back and chair back. Feet firmly on ground

Computer/Workstation Setup

- Shoulder position
- Mouse



Therapeutic Exercise

- The long term goal is to improve the strength and flexibility of your shoulder.
- As your shoulder becomes stronger and more flexible, it will function better and your pain will be reduced
- It may take 6 or more weeks of regular exercise to see significant improvements

Therapeutic Exercise Level 1

- Pendulums
- ■Shoulder Blade Squeezes
- External Rotation
- ■Shoulder blade press ups
- Range of Motion (assisted)

Pendulums

- □ Shift your weight from front to back foot allowing your arm to swing back and forth or in a circle
- Repeat for 30 to 60 seconds several times per day



Shoulder Blade Squeezes

- Bring shoulder together
- Hold for 5 seconds
- Work up to 15 seconds
- Repeat 2-3 times
- Repeat several times per day



Shoulder rotation

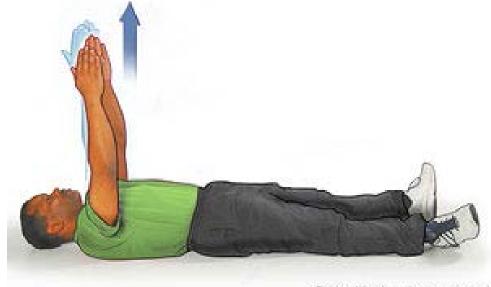
- Keep you elbows at your sides, thumbs facing up.
- Squeeze your shoulder blades and rotate your shoulders to bring your hands outward
- Repeat 10-15 times, several times throughout the day





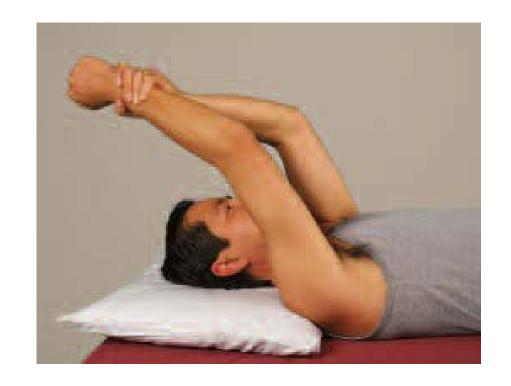
Shoulder blade press ups

- Raise your arms to a comfortable position.
- Press your hands up to the ceiling allowing your shoulder blades to slide forward
- Repeat 10 15 times



Shoulder stretch

- assist using your non painful arm
- Hold for 10-20 seconds
- Repeat 2-3 times



Therapeutic Exercise Level 2

- Row (with band)
- Extension (with band)
- External Rotation (with band)
- Scaption
- Doorway Stretch

Criteria for progression to Level 2

- ■You must be able to perform these exercises with NO PAIN
- ■If painful, modify or discontinue the exercise

Row with band

- Hold exercise band with your thumbs pointing up.
- Squeeze your shoulder blades together, bringing elbows towards sides.
- Do not allow hands to move behind your hips. Return to start.
- Hold for 2-3 seconds
- Repeat 10 times





Extension with band

- Hold exercise band with your thumbs pointing up.
- Squeeze your shoulder blades together, bringing hands towards hips.
- Do not allow hands to move behind your hips. Return to start.
- Hold for 2-3 seconds
- Repeat 10 times

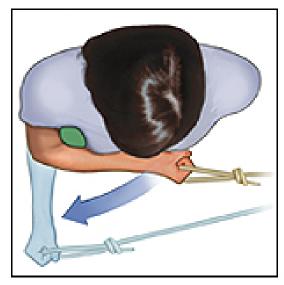




External Rotation with band

- Place a rolled towel between your elbow and your body.
- Hold one end of the exercise band and rotate your arm, bringing your hand out to the side.
- ☐ Hold for 2-3 seconds
- Repeat 10 times

View from above





Scaption

- ■Gently squeeze your shoulder blades together to prepare for exercise.
- ■Keep your elbows straight as you raise your arms forward and away from your body, forming a 'Y'.
- ■Stop when your arms reach chest level, or sooner if you begin to feel shoulder pain. Hold for 2-3 seconds
- ■Lower your arm slowly to return to the start position.
- ■Repeat 10 times



Doorway Stretch

- Stand with forearm placed on edges of door.
- Step forward with foot on the same side as the arm you are stretching
- Hold stretch for 20-30 seconds, repeat 2 times



Exercise Guidelines

- Refer to handout for specific guidelines for each exercise level
- Generally start with 10 repetitions daily for the strengthening and 1 minute for the stretching
- Build up to 30 repetitions for the strengthening and 2-3 minutes for the stretching
- Pain free during the strengthening (ALWAYS)
- Monitor your pain during the stretching muscle stretch pain vs your shoulder pain

What if I have more pain with exercise?

■ Have I performed the exercise correctly?

Have I performed too many repetitions?

■ Have I exercised too vigorously?

Conclusion

- The shoulder is a complex joint
- Shoulder problems are common
- Self treatment can be very effective:
 - Posture
 - Avoid pinching the shoulder structures
 - Stretch and strengthen shoulder
- No pain during the strengthening progress your exercises slowly. Improvements will happen over time.

Kaiser Fremont Shoulder Class

Questions and Answers