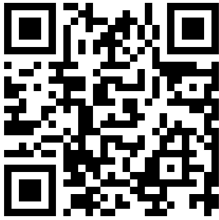


Shoulder Osteoarthritis



Scan this QR Code to access a detailed video that enhances the information in this handout. It includes step by step guidance and visual demonstrations for each exercise.

What is shoulder osteoarthritis?

Osteoarthritis is caused by the progressive loss of articular cartilage in the glenohumeral joint. Cartilage helps protect our bones and create a smooth frictionless environment. Loss of cartilage results in grinding of the bones which leads to pain and inflammation. Osteoarthritis is a progressive disease that cannot be cured or reversed.

How does osteoarthritis occur?

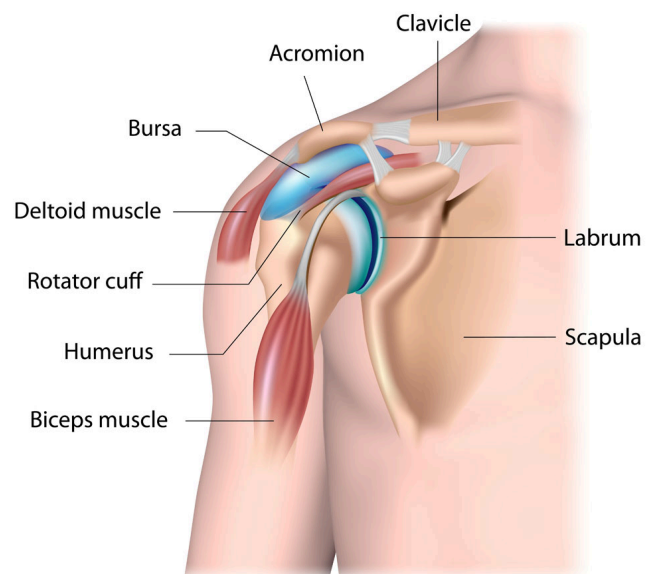
Risk factors for osteoarthritis include age, genetics, trauma, injury, repetitive high impact activities, and metabolic factors such as high blood pressure, elevated blood sugar, excess body fat, increased triglycerides, and high cholesterol.

Chronic inflammation weakens articular cartilage resulting in joint dysfunction. Damage to cartilage leads to the release of harmful enzymes and proteins which further degrades cartilage in a self perpetuating cycle. The ultimate result is stiffness, reduced mobility, swelling, and pain.

How is osteoarthritis treated?

Anti-inflammatory medications such as ibuprofen or naproxen can help alleviate pain. A shoulder rehabilitation program emphasizing strength, mobility, and balance around the shoulder is crucial in preventing arthritis from getting worse.

Injections of medications into the shoulder can often reduce pain and symptoms related to shoulder arthritis.



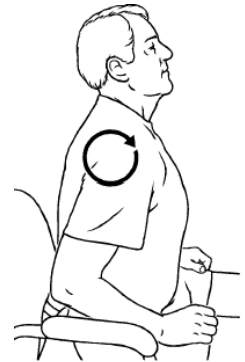
Shoulder Osteoarthritis Rehabilitation Exercises

Consistent rehabilitation can accelerate recovery and prevent recurrence. The following strengthening program should be done 3 times per week for at least 6-8 weeks.

Active Shoulder Warm Up

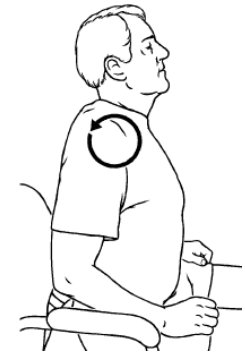
Shoulder Roll Forward

- Objective: improve shoulder mobility and relieve tension
- Keep your arms relaxed at your side. Lift your shoulders up towards your ears and then gently roll your shoulders forward making a circular motion. Continue the motion back down and then back to the starting position.
- Do this 10 times.



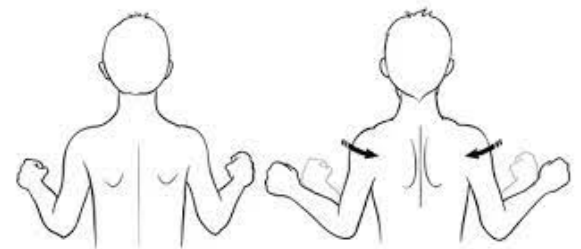
Shoulder Roll Backward

- Objective: improve shoulder mobility and relieve tension
- Keep your arms relaxed at your side. Lift your shoulders up towards your ears and then gently roll your shoulders backwards making a circular motion. Continue the motion back down and then back to the starting position.
- Do this 10 times.



Scapular Squeezes

- Objective: strengthen scapular stabilizer muscles
- Start with your arms at your side. Pull your shoulder blades towards each other and squeeze for 1-2 seconds before returning to the starting position.
- Do this 10 times.

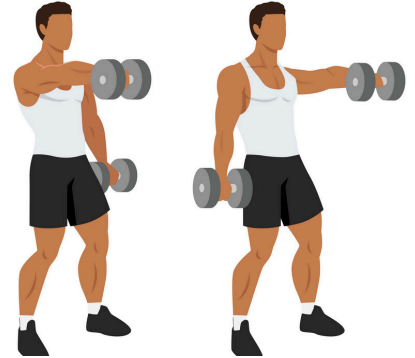


Shoulder Strengthening Exercises

If you have a severely painful shoulder, you may need to start with fewer repetitions or lighter weights. The goal is to add heavier weights as your shoulder pain improves.

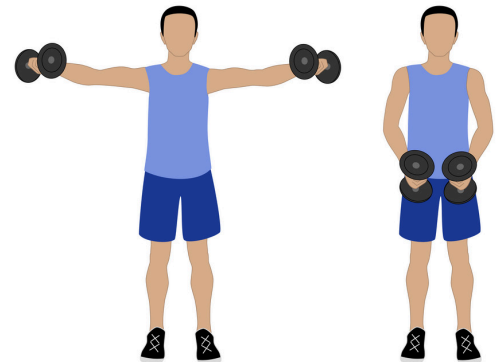
Shoulder Forward Flexion

- Objective: strengthen anterior deltoid and rotator cuff
- Stand with feet shoulder width apart. Hold a dumbbell or resistance band and slowly lift upwards in front of you. Raise the weights until at shoulder level, pause briefly at the top, and then gradually lower to the starting position.
- Perform 3 sets of 10 repetitions.



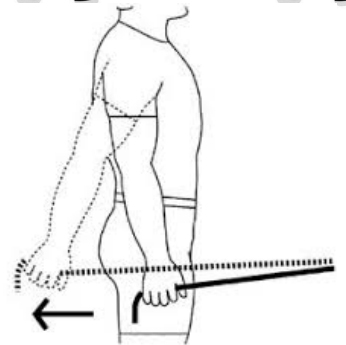
Shoulder Abduction

- Objective: strengthen lateral deltoid and rotator cuff
- Stand with feet shoulder width apart. Hold a dumbbell or resistance band and slowly lift them out to the sides. Raise the weights until at shoulder level, pause briefly at the top, and then gradually lower to the starting position.
- Perform 3 sets of 10 repetitions.



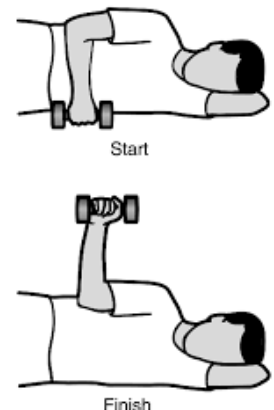
Shoulder Extension

- Objective: strengthen latissimus dorsi, teres major, and posterior deltoid muscles
- Stand with feet shoulder width apart. Hold a dumbbell or resistance band and slowly lift behind you. Move as far back as your shoulder allows, pause briefly, and then gradually return to the starting position.
- Perform 3 sets of 10 repetitions.



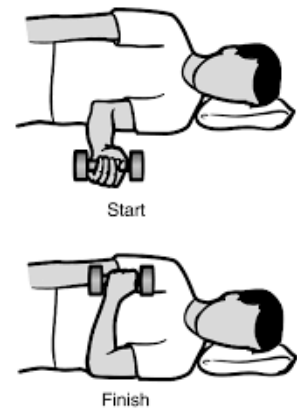
Shoulder External Rotation

- Objective: strengthen the rotator cuff, especially the infraspinatus and teres minor muscles
- Lie down on your unaffected shoulder. Bend your elbow to 90 degrees. Keep the elbow pressed to your side and raise the dumbbell or resistance band by rotating the shoulder outwards. Pause briefly at the top and then gradually lower to the starting position.
- Perform 3 sets of 10 repetitions.



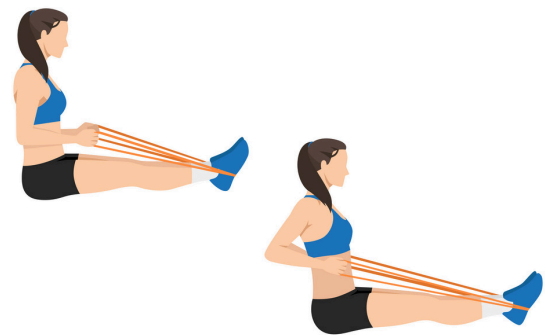
Shoulder Internal Rotation

- Objective: strengthen the rotator cuff, especially the subscapularis muscle
- Lie on your affected shoulder. Bend the elbow to 90 degrees. While keeping the elbow close to your body, raise the dumbbell or resistance band by rotating the shoulder inwards. Pause briefly at the top and then gradually lower to the starting position.
- Perform 3 sets of 10 repetitions.



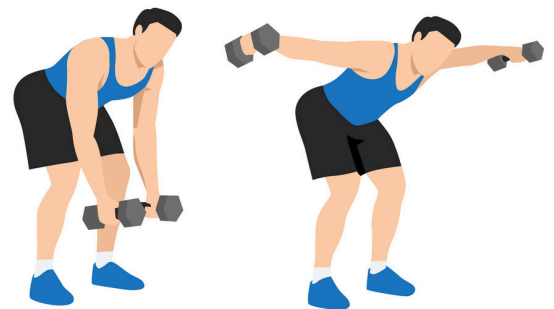
Seated Rows

- Objective: strengthen the latissimus dorsi, rhomboids, and trapezius muscles
- Sit on the floor with your legs extended. Wrap a resistance band around your feet. Pull your elbows backwards and try to squeeze your shoulder blades together. Hold this briefly then return to the starting position.
- Perform 3 sets of 10 repetitions.



Bent Over Reverse Fly

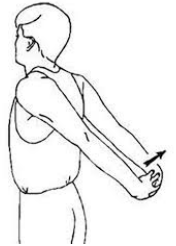
- Objective: strengthen the upper back and posterior shoulder
- Stand with feet shoulder width apart. Slightly bend your knee and hinge at the hips so that your back is straight and almost parallel to the floor. Raise your arms straight out to the side until they are in line with your shoulders. Hold briefly at the top and then gradually lower to the starting position.
- Perform 3 sets of 10 repetitions.



Shoulder Stretches should be done daily to improve mobility. Depending on the severity of your arthritis, you may need to modify many of these stretches.

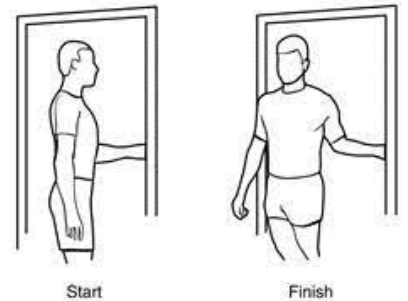
Anterior Shoulder Stretch

- Objective: improve flexibility of chest and anterior shoulder
- Clasp your hands behind your back and lift backwards and upwards. Pull your shoulders back to deepen the stretch.
- Hold this position for 30 seconds.



External Rotation Shoulder Stretch

- Objective: improve flexibility of external rotators
- Stand at a doorway or use the edge of a desk or counter. Place the inside of your forearm against the hard surface. Gently lean your body away until you feel a stretch in the outer back shoulder.
- Hold this position for 30 seconds.



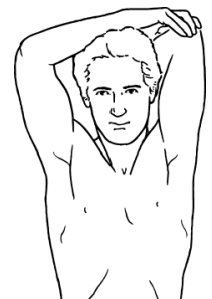
Posterior Shoulder Stretch

- Objective: improve flexibility of posterior shoulder
- Bring your arm across your chest and bend at the elbow. Use your other hand to press the arm closer to your chest. You should feel a stretch in the back of the shoulder.
- Hold this position for 30 seconds.



Inferior Shoulder Stretch

- Objective: improve flexibility of the inferior capsule of the shoulder
- Lift your arm overhead and bend at the elbow. Use your other hand to press downwards. You should feel a stretch at the bottom of the shoulder.
- Hold this position for 30 seconds.



Internal Rotation Shoulder Stretch

- Objective: improve flexibility for internal rotation
- Hold a towel or belt in one hand behind your back. Grab onto it with the hand of your affected shoulder. Gently pull upwards with the top hand which will in turn lift the bottom hand higher up the back. You should feel a stretch in the lower front of the shoulder.
- Hold this position for 30 seconds.

