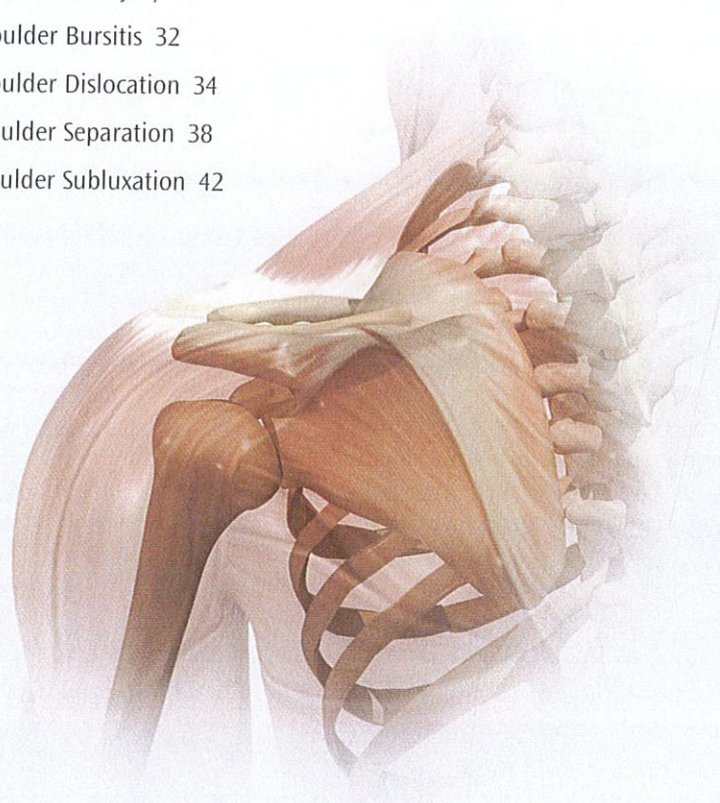


The Shoulder

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BICEPS TENDINOPATHY AND STRAIN

SHOULDER

What is biceps tendinopathy and strain?

Tendons are strong bands of connective tissue that attach muscle to bone. When a tendon is acutely injured it is called a strain. Tendonitis is when a tendon is inflamed. When there are micro-tears in a tendon from repeated injury it is called tendinosis. The term tendinopathy refers to both inflammation and micro-tears.

The biceps muscle is located in the front part of the upper arm. The biceps tendons attach the muscle to the elbow and in two places at the shoulder. When the biceps tendons are inflamed it usually causes pain in the front part of the shoulder or upper arm.

How does it occur?

Biceps tendinopathy occurs from overuse of the arm and shoulder or from an injury to the biceps tendon. A biceps strain can occur when the arm is pulled in a sudden awkward motion or from overuse.

What are the symptoms?

You feel pain when you move your arm and shoulder, especially when you move your arm forward over shoulder height. You feel pain when you touch the front of your shoulder or during certain activities, such as throwing.

How is it diagnosed?

Your healthcare provider will examine your arm and shoulder for tenderness along the biceps muscle and biceps tendons. He or she will check for pain with movement and check the strength of your biceps.

How is it treated?

Treatment may include:

- placing ice packs on your shoulder for 20 to 30 minutes every 3 to 4 hours for 2 or 3 days or until the pain goes away
- taking anti-inflammatory medicine (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)
- getting an injection of a corticosteroid medicine to reduce the inflammation and pain
- doing rehabilitation exercises.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you

return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your activity will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when:

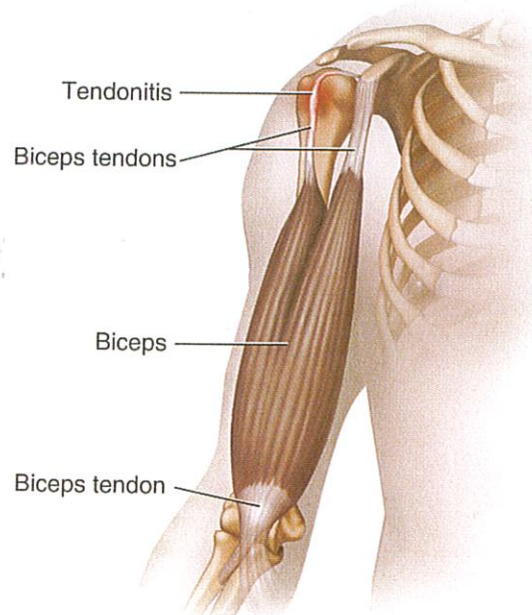
- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually rebuild your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch and contact should progress from minimal contact to harder contact.

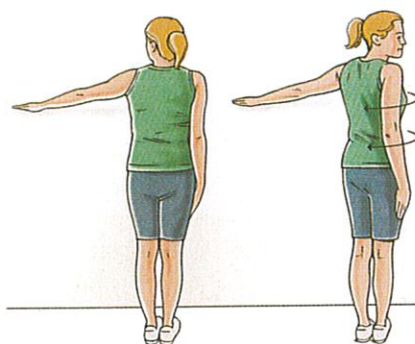
How can I prevent biceps injury?

You can best prevent a biceps injury by doing a proper warm-up and stretching exercises for your arm and shoulder before your activity.

BICEPS TENDINOPATHY AND STRAIN



BICEPS TENDINOPATHY REHABILITATION EXERCISES



BICEPS STRETCH

1. BICEPS STRETCH:

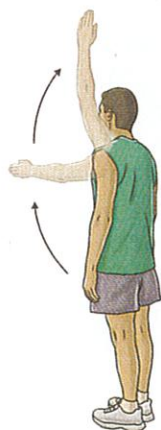
Stand facing a wall (about 6 inches away from the wall). Raise your arm out to your side and place the thumb side of your hand against the wall (palm down). Keep your elbow

straight. Rotate your body in the opposite direction of the raised arm until you feel a stretch in your biceps. Hold 15 seconds, repeat 3 times.

2. BICEPS CURLS: Stand and hold some kind of weight (soup can or hammer) in your hand. Bend your elbow and bring your hand (palm up) toward your shoulder. Hold 5 seconds. Slowly return to your starting position and straighten your elbow. Do 3 sets of 10.



BICEPS CURLS

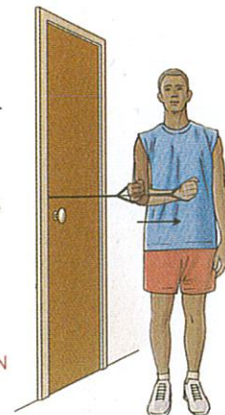


SINGLE-ARM SHOULDER FLEXION

3. SINGLE-ARM SHOULDER FLEXION: Stand with one arm hanging down at your side. Keeping your elbow straight, bring your arm forward and up toward the ceiling. Hold this position for 5 seconds. Do 3 sets of 10. As this exercise becomes easier, add a weight.

4. RESISTED SHOULDER INTERNAL ROTATION: Holding tubing connected to a door knob at waist level, keep your elbow in at your side and rotate your arm inward across your body. Make sure you keep your forearm parallel to the floor. Do 3 sets of 10.

RESISTED SHOULDER INTERNAL ROTATION



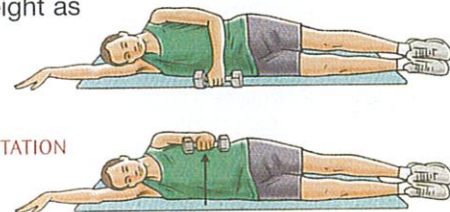
5. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



RESISTED SHOULDER EXTERNAL ROTATION

6. SIDE-LYING EXTERNAL ROTATION: Lie on your one side with your top arm at your side and your elbow bent to 90°. Keep your elbow against your side, raise your forearm and hold for 2 seconds. Slowly lower your arm. Do 3 sets of 10. You can start doing this exercise holding a soup can or light weight and gradually increase the weight as long as there is no pain.

SIDE-LYING EXTERNAL ROTATION



FROZEN SHOULDER (ADHESIVE CAPSULITIS)

What is a frozen shoulder?

A frozen shoulder is stiffness and pain in the shoulder.

How does it occur?

A frozen shoulder usually develops after a shoulder injury that causes pain and does not allow you to move your shoulder enough. Sometimes, however, a frozen shoulder may occur for no known reason. If you have limited movement of your shoulder for weeks, months, or years because of an injury, the capsule surrounding the shoulder joint may become very stiff. Your shoulder may develop scar tissue, or adhesions, in the joint.

What are the symptoms?

Your shoulder will lose its normal ability to move in all directions. You may not be able to lift your arm above your head or be able to scratch your back. Movement of the shoulder may be very painful. You may feel grinding when moving your shoulder.

How is it diagnosed?

Your healthcare provider will examine your shoulder and may take X-rays. You may also have an MRI (magnetic resonance imaging). In some cases, you may have an arthrogram (an X-ray of your shoulder after dye is injected into your shoulder joint).

How is it treated?

Your healthcare provider will probably send you to physical therapy for a supervised exercise program. You will also be given exercises to do at home. Your provider may prescribe an anti-inflammatory medicine and may give you a shot of a corticosteroid medicine into your shoulder joint (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval). When your shoulder is painful, it is important to use ice packs on your shoulder for 20 to 30 minutes 3 or 4 times a day.

In cases that do not respond to therapy, your provider may talk to you about doing a "manipulation under anesthesia." In this procedure, you are put to sleep with a general anesthetic and your provider moves your shoulder in various directions to break up the adhesions (bands of scar tissue) in your shoulder capsule. You may need arthroscopic surgery to see if there are other causes for your frozen shoulder.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your activity will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when:

- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually rebuild your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch. Contact should progress from minimal contact to harder contact.

How can I prevent a frozen shoulder?

After you have had an injury to your shoulder it is important that you do not limit your shoulder motion for a prolonged period of time. It is important to do your shoulder rehabilitation exercises as they have been prescribed. If you feel that you are losing range of motion in your shoulder you should see your healthcare provider.

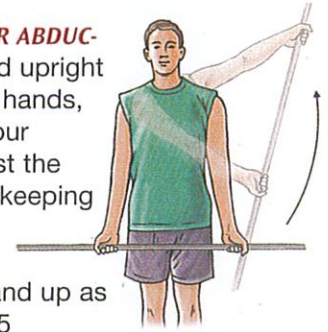
FROZEN SHOULDER REHABILITATION EXERCISES

1. WAND EXERCISE: FLEXION: Stand upright and hold a stick in both hands, palms down. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.



WAND EXERCISE: FLEXION

6. WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION: Stand upright and hold a stick with both hands, palms facing away from your body. Rest the stick against the front of your thighs. While keeping your elbows straight, use one arm to push your other arm out to the side and up as high as possible. Hold for 5 seconds. Repeat 10 times.



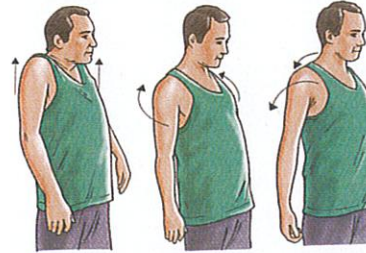
WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION

2. WAND EXERCISE: EXTENSION: Stand upright and hold a stick in both hands behind your back. Move the stick away from your back. Hold the end position for 5 seconds. Relax and return to the starting position. Repeat 10 times.



WAND EXERCISE: EXTENSION

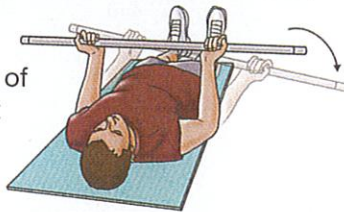
7. SCAPULAR ACTIVE RANGE OF MOTION: Stand and shrug your shoulders up and hold for 5 seconds. Then squeeze your shoulder blades back and



SCAPULAR ACTIVE RANGE OF MOTION

together and hold 5 seconds. Next, pull your shoulder blades downward as if putting them in your back pocket. Relax. Repeat this sequence 10 times.

3. WAND EXERCISE: EXTERNAL ROTATION: Lie on your back and hold a stick in both hands, palms up. Your upper arms should be resting on the floor, your elbows at your sides and bent 90°. Using one arm, push your other arm out away from your body while keeping the elbow of the arm being pushed at your side. Hold the stretch for 5 seconds. Repeat 10 times.



WAND EXERCISE: EXTERNAL ROTATION

8. PECTORALIS STRETCH: Stand in a doorway or corner with both arms on the wall slightly above your head. Slowly lean forward until you feel a stretch in the front of your shoulders. Hold 15 to 30 seconds. Repeat 3 times.



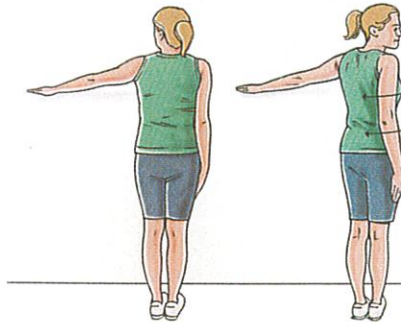
PECTORALIS STRETCH

4. WAND EXERCISE: INTERNAL ROTATION: Stand with one arm behind your head holding the end of a stick. Put your other arm behind your back at waist level and grab the stick. Move the stick up and down your back by bending your elbows. Hold the bent position for 5 seconds and then return to the starting position. Repeat 10 times.



WAND EXERCISE: INTERNAL ROTATION

9. BICEPS STRETCH: Stand facing a wall (about 6 inches away from the wall). Raise your arm out to your side and place the thumb side of your hand against the wall (palm down). Keep your elbow straight. Rotate



your body in the opposite direction of the raised arm until you feel a stretch in your biceps. Hold 15 seconds, repeat 3 times.

BICEPS STRETCH

LABRAL TEAR OF THE SHOULDER

What is a labral tear?

The shoulder joint is a ball-and-socket joint. The socket of the shoulder blade holds the ball of the upper arm bone. The socket is called the glenoid. The labrum is a lip of connective tissue located where the shoulder ligaments, which make up the joint capsule, connect to the edge of the socket. Ligaments are strong bands of tissue that attach bone to bone, helping to hold the ball in the socket. The tendon of the biceps muscle in the upper arm attaches to the shoulder just above the labrum. A tear in the labrum can occur during a shoulder or arm injury.

How does it occur?

The labrum can be torn by:

- dislocating your shoulder
- falling onto your arm
- a forced movement of your arm or shoulder
- using your arm to break a fall
- lifting a heavy object
- use of your shoulder in sports with a repetitive, high velocity overhead movement, such as throwing a ball or serving in tennis

What are the symptoms?

The symptoms of a labral tear are:

- arm and shoulder pain
- arm and shoulder weakness
- painful overhead movements of the shoulder
- clicking or grinding sounds or sensations when you move your shoulder

How is it diagnosed?

Your healthcare provider will check your shoulder for pain, tenderness, loss of motion, or joint looseness as you move your arm in all directions. He or she will ask if your shoulder pain began suddenly or gradually. You may have an X-ray to see if there are any fractures in the shoulder.

Your healthcare provider may recommend that you get an MRI (magnetic resonance imaging) of your shoulder. An MRI is a special scan that shows bone, ligaments, cartilage, and muscle. The MRI may be done with an arthrogram. In an arthrogram, a special dye is injected into the shoulder to outline the structures within the joint, providing a better look at the labrum and other shoulder structures.

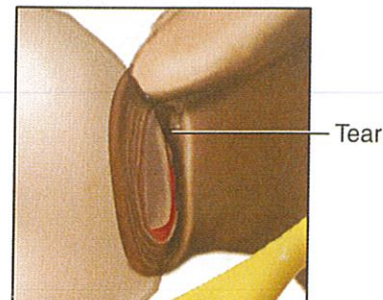
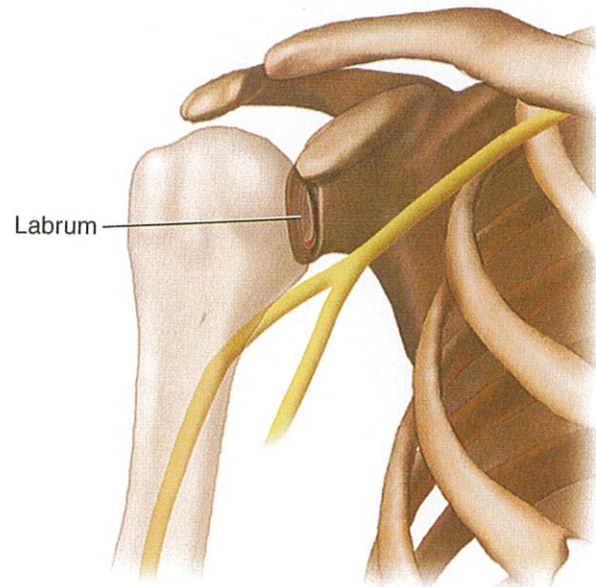
You may have an arthroscopy, a surgical procedure in which a small fiber-optic scope is inserted into your shoulder joint so your doctor can see all the structures in your shoulder. Many times, labral tears are finally diagnosed when arthroscopy is performed to look inside a shoulder that has persistently caused pain and other symptoms.

How is it treated?

At first treatment may include:

- putting ice packs on your shoulder for 20 to 30 minutes 3 to 4 times a day
- taking anti-inflammatory medicines such as ibuprofen (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)

LABRAL TEAR OF THE SHOULDER



- doing shoulder rehabilitation exercises

Large labral tears usually need to be fixed in surgery. The tear in the labrum may be repaired or the torn parts trimmed away. Any scar tissue may be removed. If you have torn shoulder ligaments, they may be reattached. If you have a small labral tear you may choose to avoid activities that cause shoulder pain rather than have surgery.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon, you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity is determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred.

You may safely return to your sport or activity when:

- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

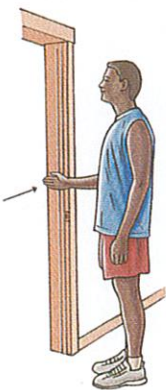
In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch, and contact should progress from minimal contact to harder contact.

How can I prevent a labral tear?

Many labral tears are caused by accidents that cannot be prevented. However, it is important to use good form while throwing, playing racquet sports, or lifting heavy objects.

LABRAL TEAR OF THE SHOULDER REHABILITATION EXERCISES

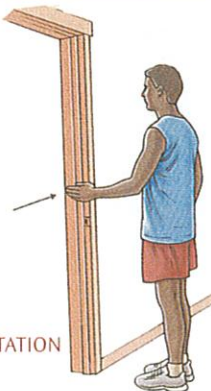
You may do all of these exercises right away.



1. ISOMETRIC SHOULDER EXTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the back of your wrist pressing against the door frame, try to press your hand outward into the door frame. Hold for 5 seconds. Do 3 sets of 10.

ISOMETRIC SHOULDER EXTERNAL ROTATION

2. ISOMETRIC SHOULDER INTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the front of your wrist pressing against the door frame, try to press your palm into the door frame. Hold for 5 seconds. Do 3 sets of 10.



ISOMETRIC SHOULDER INTERNAL ROTATION



3. WAND EXERCISE: FLEXION: Stand upright and hold a stick in both hands, palms down. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.

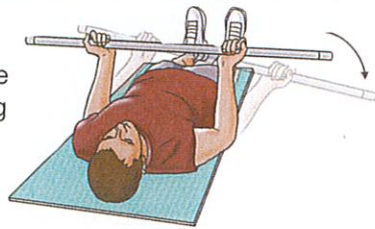
WAND EXERCISE: FLEXION

4. WAND EXERCISE: EXTENSION: Stand upright and hold a stick in both hands behind your back. Move the stick away from your back. Hold the end position for 5 seconds. Relax and return to the starting position. Repeat 10 times.



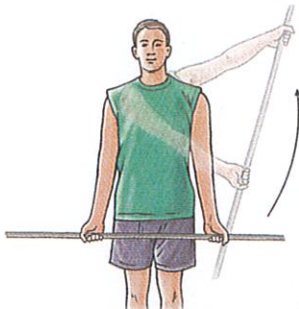
WAND EXERCISE: EXTENSION

5. WAND EXERCISE: EXTERNAL ROTATION: Lie on your back and hold a stick in both hands, palms up. Your upper arms should be resting on the floor, your elbows at your sides and bent 90°. Using one arm, push your other arm out away from your body while keeping the elbow of the arm being pushed at your side. Hold the stretch for 5 seconds. Repeat 10 times.



WAND EXERCISE: EXTERNAL ROTATION

6. WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION: Stand upright and hold a stick with both hands, palms facing away from your body. Rest the stick against the front of your thighs. While keeping your elbows straight, use one arm to push your other arm out to the side and up as high as possible. Hold for 5 seconds. Repeat 10 times.

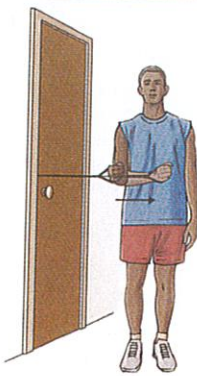


WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION

7. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



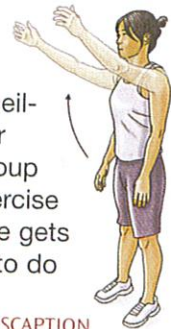
RESISTED SHOULDER EXTERNAL ROTATION



8. RESISTED SHOULDER INTERNAL ROTATION: Holding tubing connected to a door knob at waist level, keep your elbow in at your side and rotate your arm inward across your body. Make sure you keep your forearm parallel to the floor. Do 3 sets of 10.

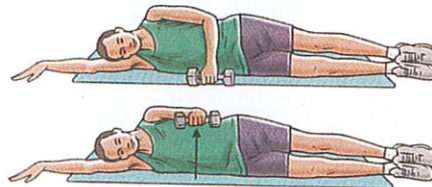
RESISTED SHOULDER INTERNAL ROTATION

9. SCAPTION: Stand with your arms at your sides and with your elbows straight. Slowly raise your arms to eye level. As you raise your arms, they should be spread apart so that they are only slightly in front of your body (at about a 30 degree angle to the front of your body). Point your thumbs toward the ceiling. Hold for 2 seconds and lower your arms slowly. Do 3 sets of 10. Hold a soup can or light weight when doing the exercise and increase the weight as the exercise gets easier. Your provider may instruct you to do this exercise with your thumbs down.



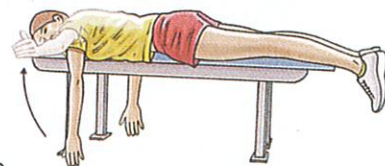
SCAPTION

10. SIDE-LYING EXTERNAL ROTATION: Lie on your one side with your top arm at your side and your elbow bent to 90°. Keep your elbow against your side, raise your forearm and hold for 2 seconds. Slowly lower your arm. Do 3 sets of 10. You can start doing this exercise holding a soup can or light weight and gradually increase the weight as long as there is no pain.



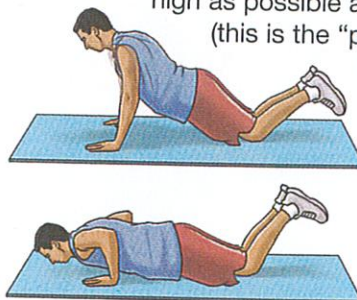
SIDE-LYING EXTERNAL ROTATION

11. HORIZONTAL ABDUCTION: Lie on a table or the edge of a bed face down with one arm hanging down straight to the floor. Raise your arm out to the side, with your thumbs pointed toward the ceiling until your arms are parallel to the floor. Hold for 2 seconds and then lower it slowly. Start this exercise with no weight. As you get stronger add a light weight or hold a soup can. Do 3 sets of 10.



HORIZONTAL ABDUCTION

12. PUSH-UP WITH A PLUS: Begin on the floor on your hands and knees. Keep your arms a shoulder width apart and lift your feet off the floor. Arch your back as high as possible and round your shoulders (this is the "plus" part of the exercise). Bend your elbows and lower your body to the floor. Return to the starting position and arch your back again. Do 3 sets of 10.



PUSH-UP WITH A PLUS

LITTLE LEAGUER'S SHOULDER (PROXIMAL HUMERAL EPIPHYSITIS)

What is Little Leaguer's shoulder?

Little Leaguer's shoulder is an overuse injury to the growth area of the upper arm bone (humerus) at the shoulder joint. This growth area, or growth plate, is called the proximal humeral physis. Little Leaguer's shoulder is also called proximal humeral epiphysitis. It happens to young athletes who are still growing.

How does it occur?

Little Leaguer's shoulder occurs from overuse. Repeated throwing causes wear and tear to the growth plate, so that it becomes irritated or inflamed.

Little Leaguer's shoulder is most often seen in young baseball pitchers between the ages of 11 and 16. It can also occur in baseball players playing other positions, as well as tennis players or participants in other throwing sports. Youngsters who play baseball year-round are more likely to have overuse injuries.

What are the symptoms?

The main symptom is pain in the upper arm at the shoulder during throwing. Your child may keep having pain and tenderness after the throwing is over. The shoulder muscle may be weak. The more a young athlete throws and the faster he or she throws, the more likely it is that the pain will get worse. Some pitchers complain that they can no longer throw as fast or as accurately.

How is it diagnosed?

Your healthcare provider will ask about your child's medical history and symptoms and examine your child's shoulder. Many times a young athlete will complain of pain but have a normal physical exam.

An X-ray may be done of your child's shoulder. The X-ray may show a widening of the growth plate of the humerus at the shoulder joint. This X-ray is often compared to an X-ray of the uninjured opposite shoulder to look for differences in the growth plate.

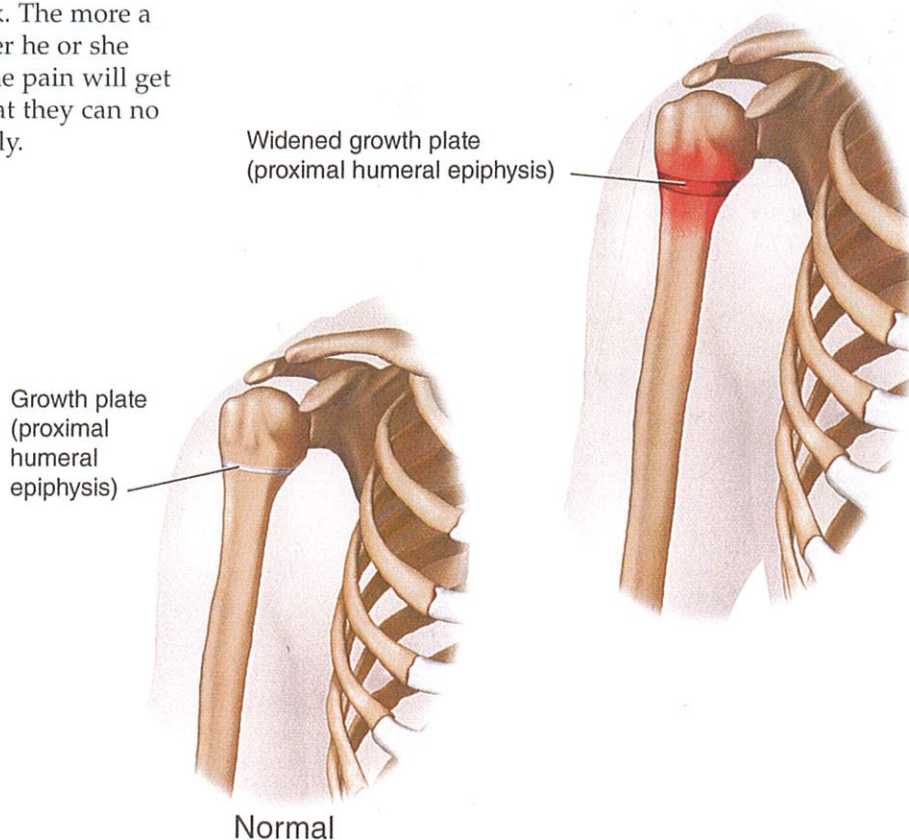
How is it treated?

The most important treatment is rest. Depending on the severity of the injury, your child may need to rest the shoulder by not throwing at all for 1 to 3 months. During that time your child should have a supervised rehab program with a physical therapist or an athletic trainer.

When can my child return to their sport or activity?

The goal of rehabilitation is to return your child to his or her sport or activity as soon as is safely possible. If your child returns too soon the injury may be worsened, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your child's sport or activity will be determined by how soon the shoulder recovers, not by

LITTLE LEAGUER'S SHOULDER (PROXIMAL HUMERAL EPIPHYSITIS)



how many days or weeks it has been since your child's injury occurred. In general, the longer your child has symptoms before starting treatment, the longer it takes to get better.

Your child may begin throwing again when there is no pain or tenderness at the injured shoulder and the shoulder has regained its normal strength compared to the uninjured shoulder. Your child must have full range of motion of the shoulder. Throwing should be gradually increased but stopped if the shoulder becomes painful. It is very important for the rehabilitation and progression of throwing to be supervised. As the shoulder gets better, your child may be able to play other positions such as designated hitter or first base if it does not cause pain.

How can Little Leaguer's shoulder be prevented?

The best way to prevent Little Leaguer's shoulder is to limit the amount of throwing a child does. Since this problem occurs most often in pitchers, guidelines have been established for how many pitches or innings a child can throw in a week. In general, children 9 through 12 years old should pitch no more than 6 innings a week and no more than 250 pitches a week. Youngsters 13 through 15 years old should pitch no more than 9 innings a week and no more than 350 pitches. When they are not pitching, they need to be sure they are not throwing hard in their backyard and that they are not in another position that requires hard throwing (like shortstop).

It is also very important for children to learn proper pitching technique.

And children should **not** play through pain. If there is pain, a child should stop throwing.

RHOMBOID MUSCLE STRAIN OR SPASM

What is a rhomboid muscle strain or spasm?

Your rhomboid muscles are in your upper back, connecting the inner edges of your shoulder blades to your spine. A strain is an injury in which muscle fibers or tendons are stretched or torn. A muscle spasm is an involuntary contraction of the muscle.

How does it occur?

A rhomboid muscle strain or spasm is usually caused by overuse of your shoulder and arm, especially during overhead activities like serving a tennis ball or reaching to put objects on a high shelf.

It can also occur from activities such as:

- rowing
- carrying a heavy backpack, especially over one shoulder
- poor posture, especially from prolonged use of a computer.

What are the symptoms?

A rhomboid strain causes pain in your upper back between your shoulder blades and your spine. A spasm feels like a knot or tightness in the muscle. You may have pain when you move your shoulders or when you breathe.

How is it diagnosed?

Your healthcare provider will examine your back and shoulder and will find that these muscles are tender or tight.

How is it treated?

The injury should initially be treated with ice packs for 20 to 30 minutes every 3 to 4 hours for 2 to 3 days or until the pain goes away. You can place crushed ice (in a plastic bag) or a frozen gel pack on the floor, put a towel over the bag or gel pack, and then lie down with your rhomboid muscles against the ice. Your healthcare provider may prescribe an anti-inflammatory medicine. Adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval.

Massage is also very helpful. You can do a form of self-massage by putting a tennis ball on the floor, lying down with your rhomboid muscles against the ball, and gently rolling the ball against your rhomboid muscles.

You will be given a set of rehabilitation exercises to help you return to your sport or activity. While you are recovering from your injury you will need to

change your sport or activity to one that does not make your condition worse. For example, you may need to run or bicycle instead of playing tennis or rowing.

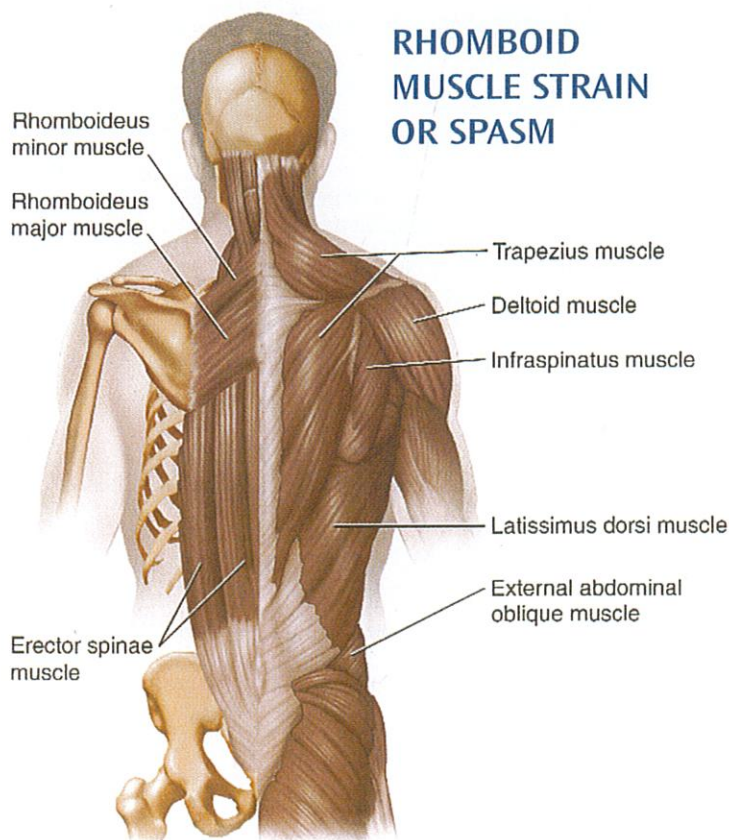
When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your back recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when the muscles are no longer in spasm and you can move your shoulders and arms without pain.

How can I prevent a rhomboid muscle strain or spasm?

Rhomboid strains and spasms are best prevented by warming up properly and doing stretching exercises before activities such as tennis, rowing, or overhead movements.



RHOMBOID MUSCLE STRAIN OR SPASM REHABILITATION EXERCISES

You may do all of these exercises right away.

1. PECTORALIS STRETCH: Stand in a doorway or corner with both arms on the wall slightly above your head. Slowly lean forward until you feel a stretch in the front of your shoulders. Hold 15 to 30 seconds. Repeat 3 times.



PECTORALIS STRETCH

5. MID-TRAP EXERCISE: Lie on your stomach on a firm surface and place a folded pillow underneath your chest. Place your arms out straight to your sides with your elbows straight and thumbs toward the ceiling. Slowly raise your arms toward the ceiling as you squeeze your shoulder blades together. Lower slowly. Do 3 sets of 15. Progress to holding soup cans or small weights in your hands.



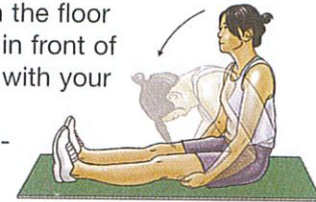
MID-TRAP EXERCISE



2. THORACIC EXTENSION: While sitting in a chair, clasp both arms behind your head. Gently arch backward and look up toward the ceiling. Repeat 10 times. Do this several times per day.

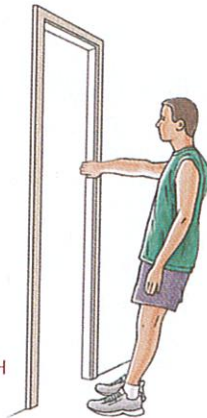
THORACIC EXTENSION

6. THORACIC STRETCH: Sit on the floor with your legs out straight in front of you. Hold your mid-thighs with your hands. Curl your head and neck toward your belly button. Hold for a count of 15. Repeat 3 times.



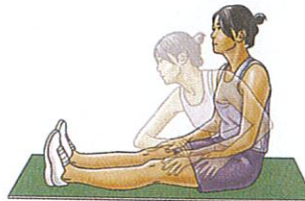
THORACIC STRETCH

3. DOOR FRAME STRETCH: Stand near a door frame. Lift the arm on your injured side straight out in front of you and grasp the door frame. Lean back, letting the pull of your body weight stretch the muscles near your shoulder blade. Hold for 15 to 30 seconds. Repeat 3 times.

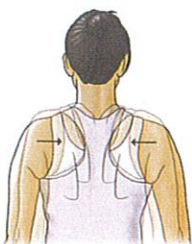


DOOR FRAME STRETCH

7. THORACIC SIDE STRETCH: To stretch your right upper back, point your right elbow and shoulders forward while twisting your trunk to the left. Hold for a count of 15. Repeat 3 times. To stretch your left upper back, point your left elbow and shoulder forward while twisting your trunk to the right. Hold for a count of 10. Repeat 3 times.



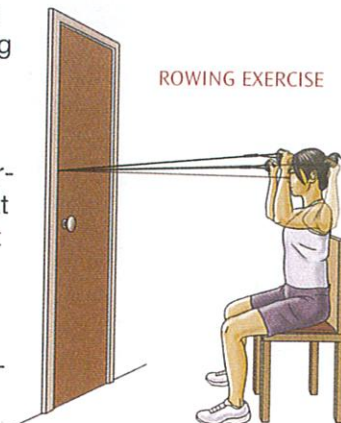
THORACIC SIDE STRETCH



4. SCAPULAR SQUEEZE: While sitting or standing with your arms by your sides, squeeze your shoulder blades together and hold for 5 seconds. Do 3 sets of 10.

SCAPULAR SQUEEZE

8. ROWING EXERCISE: Tie a piece of elastic tubing around an immovable object and grasp the ends in each hand. Keep your forearms vertical and your elbows at shoulder level and bent to 90 degrees. Pull backward on the band and squeeze your shoulder blades together. Repeat 10 times. Do 3 sets.



ROWING EXERCISE

ROTATOR CUFF INJURY

What is a rotator cuff injury?

A rotator cuff injury is a strain or tear in the group of tendons and muscles that hold your shoulder joint together and help move your shoulder.

How does it occur?

A rotator cuff injury may result from:

- using your arm to break a fall
- falling onto your arm
- lifting a heavy object
- use of your shoulder in sports with a repetitive overhead movement, such as swimming, baseball (mainly pitchers), football, and tennis, which gradually strains the tendon
- manual labor such as painting, plastering, raking leaves, or housework

What are the symptoms?

The symptoms of a torn rotator cuff are:

- arm and shoulder pain
- shoulder weakness
- shoulder tenderness
- loss of shoulder movement, especially overhead

How is it diagnosed?

Your healthcare provider will examine you and check your shoulder for pain, tenderness, and loss of motion as you move your arm in all directions. Your provider will ask if your shoulder pain began suddenly or gradually. You may have an X-ray to make sure there are not any fractures or bone spurs.

Based on these results, you may have other tests or procedures right away or later, such as:

- magnetic resonance imaging (MRI), which creates images of your shoulder and surrounding structures with sound waves
- an arthrogram, which is an X-ray or MRI that is taken after a special dye has been injected into your shoulder joint to outline its soft structures
- arthroscopy, a surgical procedure in which a small instrument is inserted into your shoulder joint so your provider can look directly at your rotator cuff.

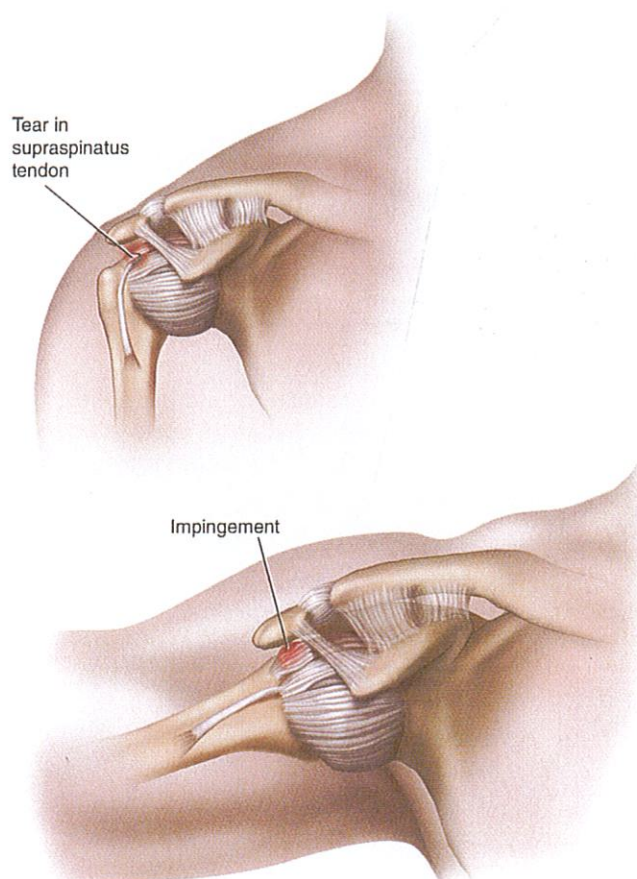
What is the treatment?

A tendon in your shoulder can be inflamed, partially torn, or completely torn. What is done about it depends on how torn it is and how much it hurts.

If your tear is a minor one, it can be left to heal by itself if it does not interfere with your everyday activities. Your treatment plan should include:

- proper sitting posture, in which your head and shoulders are balanced
- rest for your shoulder, which means avoiding strenuous activity or any overhead motion that causes pain
- ice packs at least once a day, and preferably 2 or 3 times a day
- doing the exercises your healthcare provider gives you

ROTATOR CUFF INJURY



- anti-inflammatory drugs (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)
- physical therapy to strengthen your shoulder as it heals

If you have a bad tear, you may need to have it repaired by arthroscopy. Arthroscopy can be used to perform surgery on a joint as well as to see inside the joint. The rough edges of a torn tendon can be trimmed and left to heal. Larger tears can be stitched back together. After surgery, your treatment plan will include physical therapy to strengthen your shoulder as it heals.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your shoulder

recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it takes to get better.

You may safely return to your sport or activity when:

- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

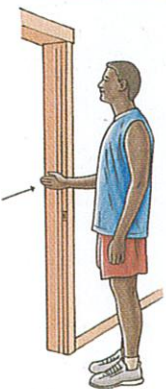
In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch and contact should progress from minimal contact to harder contact.

What can be done to help prevent this from recurring?

The best way to prevent a recurrence is to strengthen your shoulder muscles and keep them in peak condition with shoulder exercises.

ROTATOR CUFF INJURY REHABILITATION EXERCISES

You may do all of these exercises right away.



1. ISOMETRIC SHOULDER EXTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the back of your wrist pressing against the door frame, try to press your hand outward into the door frame. Hold for 5 seconds. Do 3 sets of 10.

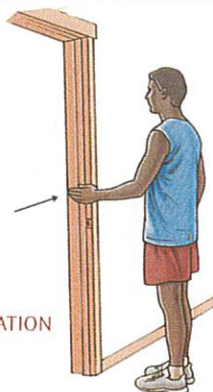
ISOMETRIC SHOULDER EXTERNAL ROTATION



3. WAND EXERCISE: FLEXION: Stand upright and hold a stick in both hands, palms down. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.

WAND EXERCISE: FLEXION

2. ISOMETRIC SHOULDER INTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the front of your wrist pressing against the door frame, try to press your palm into the door frame. Hold for 5 seconds. Do 3 sets of 10.



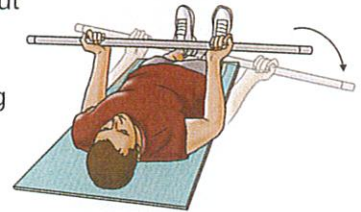
ISOMETRIC SHOULDER INTERNAL ROTATION

4. WAND EXERCISE: EXTENSION: Stand upright and hold a stick in both hands behind your back. Move the stick away from your back. Hold the end position for 5 seconds. Relax and return to the starting position. Repeat 10 times.



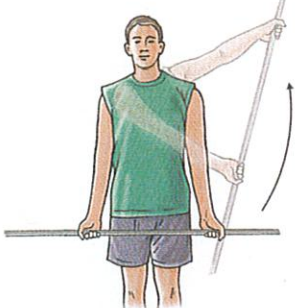
WAND EXERCISE: EXTENSION

5. WAND EXERCISE: EXTERNAL ROTATION: Lie on your back and hold a stick in both hands, palms up. Your upper arms should be resting on the floor, your elbows at your sides and bent 90°. Using one arm, push your other arm out away from your body while keeping the elbow of the arm being pushed at your side. Hold the stretch for 5 seconds. Repeat 10 times.



WAND EXERCISE: EXTERNAL ROTATION

6. WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION: Stand upright and hold a stick with both hands, palms facing away from your body. Rest the stick against the front of your thighs. While keeping your elbows straight, use one arm to push your other arm out to the side and up as high as possible. Hold for 5 seconds. Repeat 10 times.



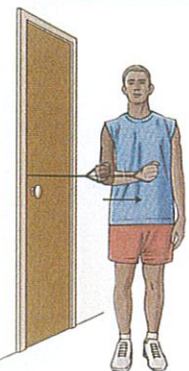
WAND EXERCISE: SHOULDER ABDUCTION AND ADDUCTION

7. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



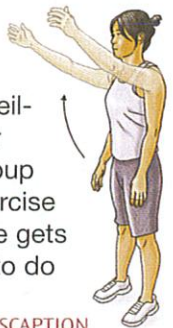
RESISTED SHOULDER EXTERNAL ROTATION

8. RESISTED SHOULDER INTERNAL ROTATION: Holding tubing connected to a door knob at waist level, keep your elbow in at your side and rotate your arm inward across your body. Make sure you keep your forearm parallel to the floor. Do 3 sets of 10.



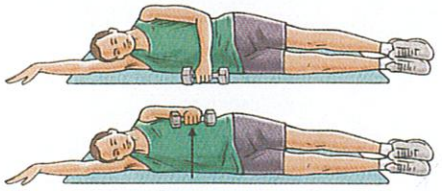
RESISTED SHOULDER INTERNAL ROTATION

9. SCAPTION: Stand with your arms at your sides and with your elbows straight. Slowly raise your arms to eye level. As you raise your arms, they should be spread apart so that they are only slightly in front of your body (at about a 30 degree angle to the front of your body). Point your thumbs toward the ceiling. Hold for 2 seconds and lower your arms slowly. Do 3 sets of 10. Hold a soup can or light weight when doing the exercise and increase the weight as the exercise gets easier. Your provider may instruct you to do this exercise with your thumbs down.



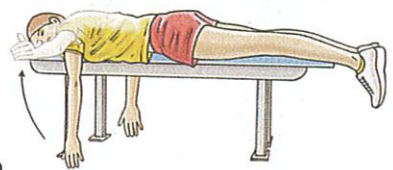
SCAPTION

10. SIDE-LYING EXTERNAL ROTATION: Lie on your one side with your top arm at your side and your elbow bent to 90°. Keep your elbow against your side, raise your forearm and hold for 2 seconds. Slowly lower your arm. Do 3 sets of 10. You can start doing this exercise holding a soup can or light weight and gradually increase the weight as long as there is no pain.



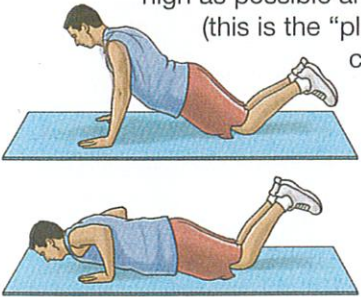
SIDE-LYING EXTERNAL ROTATION

11. HORIZONTAL ABDUCTION: Lie on a table or the edge of a bed face down with one arm hanging down straight to the floor. Raise your arm out to the side, with your thumbs pointed toward the ceiling until your arms are parallel to the floor. Hold for 2 seconds and then lower it slowly. Start this exercise with no weight. As you get stronger add a light weight or hold a soup can. Do 3 sets of 10.



HORIZONTAL ABDUCTION

12. PUSH-UP WITH A PLUS: Begin on the floor on your hands and knees. Keep your arms a shoulder width apart and lift your feet off the floor. Arch your back as high as possible and round your shoulders (this is the "plus" part or the exercise). Bend your elbows and lower your body to the floor. Return to the starting position and arch your back again. Do 3 sets of 10.



PUSH-UP WITH A PLUS

SHOULDER BURSITIS

What is shoulder bursitis?

Shoulder bursitis is an irritation or inflammation of the bursa in your shoulder. A bursa is a fluid-filled sac that acts as a cushion between tendons, bones, and skin.

How does it occur?

The shoulder bursa can become inflamed from repetitive motion of the shoulder. Shoulder bursitis often occurs in sports with overhead activities such as swimming, tennis, or throwing. It may also occur in occupational activities such as painting or carpentry.

What are the symptoms?

You have pain on the outer front side of your shoulder. Your shoulder may hurt when you lift your arm above your head. The outer side of your shoulder may become swollen and may at times feel warm.

How is it diagnosed?

Your healthcare provider will review your symptoms and examine your shoulder.

How is it treated?

Treatment may include:

- ice packs on your shoulder for 20 to 30 minutes every 3 to 4 hours for 2 to 3 days or until the pain goes away
- anti-inflammatory medicine or other pain medicines (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)
- a shot of a corticosteroid medicine into the bursa to reduce the inflammation and pain
- exercises to help in your recovery

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when:

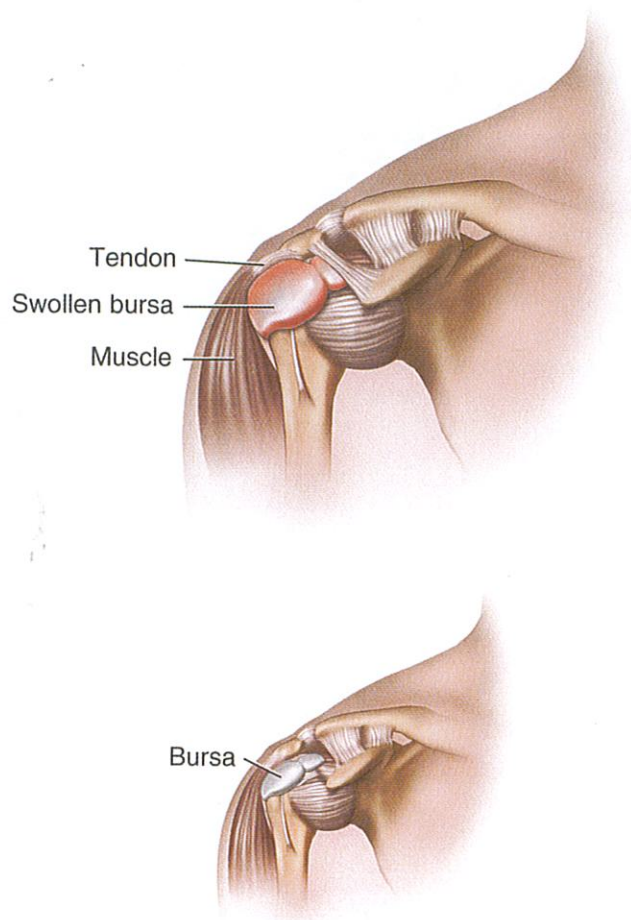
- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually rebuild your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch. Contact should progress from minimal contact to harder contact.

How can I prevent shoulder bursitis?

Be sure to warm up properly and stretch your shoulder before such activities as throwing, playing tennis, or swimming. If your shoulder begins to hurt during these activities, you may need to slow down until the pain goes away.

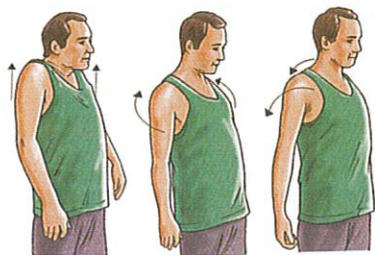
SHOULDER BURSITIS



SHOULDER BURSITIS REHABILITATION EXERCISES

You may do these exercises when your pain has improved.

1. SCAPULAR ACTIVE RANGE OF MOTION: Stand and shrug your shoulders up and hold for 5 seconds. Then squeeze your shoulder blades back and



SCAPULAR ACTIVE RANGE OF MOTION

together and hold 5 seconds. Next, pull your shoulder blades downward as if putting them in your back pocket. Relax. Repeat this sequence 10 times.

2. WAND EXERCISE: FLEXION: Stand upright and hold a stick in both hands, palms down. Stretch your arms by lifting them over your head, keeping your elbows straight. Hold for 5 seconds and return to the starting position. Repeat 10 times.



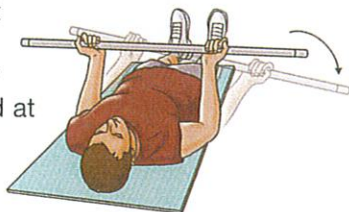
WAND EXERCISE: FLEXION



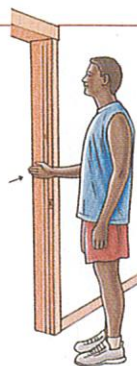
3. WAND EXERCISE: EXTENSION: Stand upright and hold a stick in both hands behind your back. Move the stick away from your back. Hold the end position for 5 seconds. Relax and return to the starting position. Repeat 10 times.

WAND EXERCISE: EXTENSION

4. WAND EXERCISE: EXTERNAL ROTATION: Lie on your back and hold a stick in both hands, palms up. Your upper arms should be resting on the floor, your elbows at your sides and bent 90°. Using one arm, push your other arm out away from your body while keeping the elbow of the arm being pushed at your side. Hold the stretch for 5 seconds. Repeat 10 times.



WAND EXERCISE: EXTERNAL ROTATION



5. ISOMETRIC SHOULDER EXTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the back of your wrist pressing against the door frame, try to press your hand outward into the door frame. Hold for 5 seconds. Do 3 sets of 10.

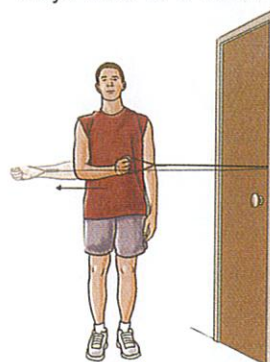
ISOMETRIC SHOULDER EXTERNAL ROTATION

6. ISOMETRIC SHOULDER INTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the front of your wrist pressing against the door frame, try to press your palm into the door frame. Hold for 5 seconds. Do 3 sets of 10.



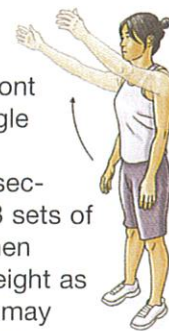
ISOMETRIC SHOULDER INTERNAL ROTATION

7. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



RESISTED SHOULDER EXTERNAL ROTATION

8. SCAPTION: Stand with your arms at your sides and with your elbows straight. Slowly raise your arms to eye level. As you raise your arms, they should be spread apart so that they are only slightly in front of your body (at about a 30 degree angle to the front of your body). Point your thumbs toward the ceiling. Hold for 2 seconds and lower your arms slowly. Do 3 sets of 10. Hold a soup can or light weight when doing the exercise and increase the weight as the exercise gets easier. Your provider may instruct you to do this exercise with your thumbs down.



SCAPTION

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PAGE 2 OF 2 PAGES

DISLOCATED SHOULDER

What is a dislocated shoulder?

A dislocation of the shoulder joint happens when the bones making up your shoulder joint are moved apart so that the joint no longer functions.

Your shoulder is made up of two bones: the ball (the end of the arm bone, or humerus) and the socket (part of your shoulder blade, or scapula). When the ball part of the joint is dislocated in front of the socket, it is called an anterior dislocation. When it is dislocated behind the socket, it is called a posterior dislocation. In severe cases, ligaments, tendons, and nerves also can be stretched and injured.

How does it occur?

The most common type of dislocation is an anterior dislocation. It can be caused by a fall onto your outstretched hand or your shoulder. It may happen if your arm is forced into an awkward position.

A posterior dislocation may occur as a result of a powerful direct blow to the front of your shoulder. It may also be caused by a violent twisting of your upper arm, such as that caused by an electric shock or seizure.

Dislocated shoulders are common in contact sports such as football, rugby, hockey, and lacrosse. Other sports that may cause the injury include downhill skiing, volleyball, and soccer.

You also may be genetically susceptible to a dislocation, particularly if your shoulder goes out often or easily. Other members of your family may have the same problem.

What are the symptoms?

The main symptom is pain in your shoulder and upper arm that is made worse by movement.

If you have an anterior dislocation, you will find yourself holding your arm on the dislocated side slightly away from your body with your opposite hand. This will keep your dislocated shoulder in the least uncomfortable position. Your shoulder will have a large bump rising up under the skin in front of your shoulder. Your shoulder will look square instead of round.

If you have a posterior dislocation, you will hold your arm on the dislocated side tightly against your body. You will have a large bump on the back of your shoulder.

How is it diagnosed?

Your healthcare provider will ask about your medical history, including your symptoms, previous treat-

ment, and family history. During your physical exam, he or she will check for:

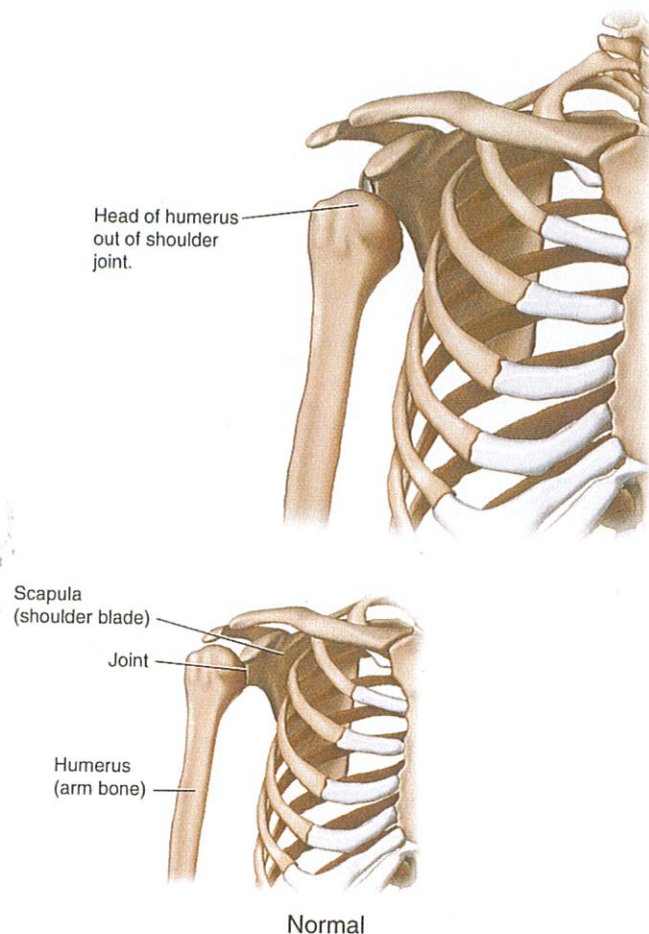
- shoulder tenderness and weakness
- numbness in the shoulder area, arm, or hand
- pain when you move your shoulder or loss of normal shoulder movement
- shoulder instability and deformity

You will have an X-ray of the joint and surrounding areas to confirm the dislocation and check for broken bones.

What is the treatment?

You should go to your healthcare provider's office or the hospital emergency room right away if your shoulder becomes dislocated. Put ice on your shoulder. Cold reduces swelling by controlling internal bleeding and the buildup of fluids in and around the injured area.

DISLOCATED SHOULDER



Your provider will reposition the head or ball of the joint back into the joint socket. This can sometimes be done without an anesthetic if it is done within a few minutes after the dislocation occurs. If you have recurrent dislocations, you may be able to learn how to put your shoulder back into place by yourself. However, even in such cases you should see a healthcare provider promptly to make sure the repositioning has been done properly.

Fifteen to thirty minutes after the injury, your dislocated shoulder will probably be quite swollen and painful. You may then need to be given an intravenous (IV) pain medicine and muscle relaxant or general anesthesia before the doctor repositions your shoulder. Sometimes a local anesthetic can be injected into the joint to help the doctor reposition the bones. After the repositioning, your shoulder will be X-rayed to make sure it is in the correct position.

Your healthcare provider will place your shoulder and arm in a type of sling called a shoulder immobilizer. It will aid healing by keeping your arm next to your body and stopping you from moving your shoulder. You will keep your shoulder and arm in the immobilizer for 2 to 3 weeks. You may begin shoulder rehabilitation exercises during this time or after you are no longer wearing the immobilizer.

Your provider may prescribe an anti-inflammatory medicine or other pain medicine (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval). You should continue to place ice packs on your shoulder for 20 to 30 minutes every 3 to 4 hours until the pain and swelling are gone.

In some cases, surgery may be needed to get the shoulder repositioned correctly or if it continues to dislocate. If your shoulder joint becomes weak because of repeated dislocations, your healthcare provider may recommend an operation to tighten the ligaments that hold the joint together.

How long will the effects last?

The healing process may take 4 to 12 weeks, depending on the extent of your injury. With proper healing, you should regain full movement of your shoulder.

How can I take care of myself?

Follow your healthcare provider's instructions when you begin to use your arm and shoulder again, or you may reinjure it. Do the rehabilitation exercises that are given to you by your provider or therapist. Avoid participation in sports until the shoulder has had time to heal.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred.

You may safely return to your sport or activity when:

- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch. Contact should progress from minimal contact to harder contact.

If you feel your arm popping out of the shoulder joint, contact your healthcare provider.

What can be done to help prevent a dislocated shoulder?

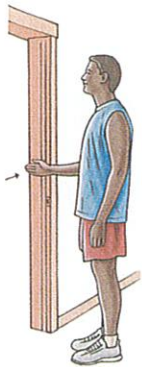
Avoid situations in which you could suffer another dislocation.

Do not return to sports until you have full recovery of motion and strength in your arm.

DISLOCATED SHOULDER REHABILITATION EXERCISES

Do these exercises as soon as your healthcare provider says you can.

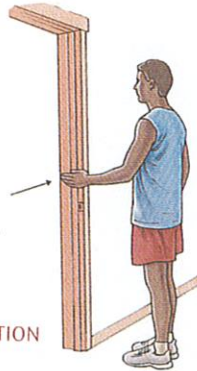
Part I



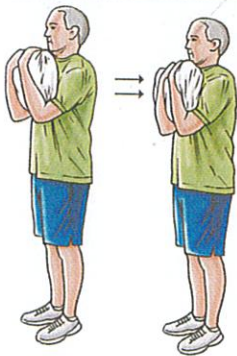
1. ISOMETRIC SHOULDER EXTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the back of your wrist pressing against the door frame, try to press your hand outward into the door frame. Hold for 5 seconds. Do 3 sets of 10.

ISOMETRIC SHOULDER EXTERNAL ROTATION

2. ISOMETRIC SHOULDER INTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the front of your wrist pressing against the door frame, try to press your palm into the door frame. Hold for 5 seconds. Do 3 sets of 10.



ISOMETRIC SHOULDER INTERNAL ROTATION



3. ISOMETRIC SHOULDER ADDUCTION: With a pillow between your chest and your arms, squeeze the pillow with your arms and hold 5 seconds. Do 3 sets of 10.

ISOMETRIC SHOULDER ADDUCTION

4. ISOMETRIC SHOULDER FLEXION: Stand facing a wall with your elbow bent at a right angle and held close to your body. Press your fist forward against the wall, hold this for 5 seconds, then rest. Do 3 sets of 10.



ISOMETRIC SHOULDER FLEXION



5. ISOMETRIC SHOULDER EXTENSION:

Standing facing away from the wall with your elbow touching the wall, press the back of your elbow into the wall and hold for 5 seconds. Rest. Do 3 sets of 10.

ISOMETRIC SHOULDER EXTENSION

6. ISOMETRIC SHOULDER ABDUCTION: Standing with one side towards the wall and your elbow bent at a 90-degree angle, press the side of your arm into the wall as if attempting to lift it. Hold for 5 seconds. Rest. Do 3 sets of 10.



ISOMETRIC SHOULDER ABDUCTION



7. SHOULDER FLEXION: Stand with your arms hanging down at your side. Keep your elbow straight and lift your arms up over your head as far as you can reach. Hold the end position for 5 seconds. Do this 10 times.

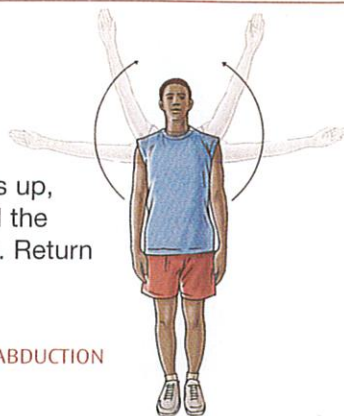
SHOULDER FLEXION

8. SHOULDER EXTENSION: Stand with your arms at your sides. Move the arm on one side back, keeping your elbow straight. Hold this position for 5 seconds. Return to the starting position and repeat 10 times.



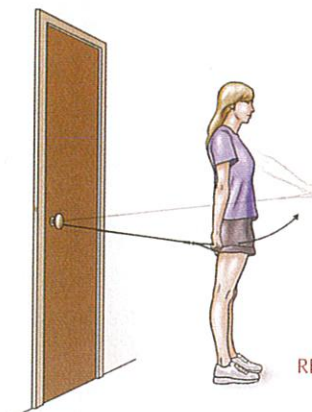
SHOULDER EXTENSION

9. SHOULDER ABDUCTION: Stand with your arms at your sides. Bring your arms up, out to the side, and toward the ceiling. Hold for 5 seconds. Return to the starting position. Repeat 10 times.



SHOULDER ABDUCTION

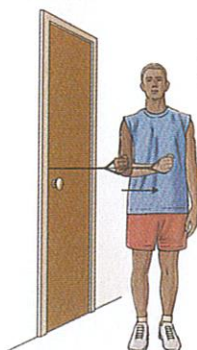
13. RESISTED SHOULDER FLEXION: Holding tubing connected to a door knob at waist level, face away from the door, keep your elbow straight and pull your arm forward. Do 3 sets of 10.



RESISTED SHOULDER FLEXION

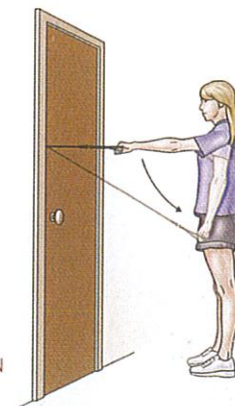
Part II

10. RESISTED SHOULDER INTERNAL ROTATION: Holding tubing connected to a door knob at waist level, keep your elbow in at your side and rotate your arm inward across your body. Make sure you keep your forearm parallel to the floor. Do 3 sets of 10.



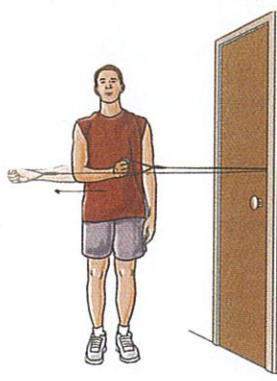
RESISTED SHOULDER INTERNAL ROTATION

14. RESISTED SHOULDER EXTENSION: Face a door holding tubing connected to the door knob at waist level, pull your arm back. Be sure to keep your elbow straight. Do 3 sets of 10.



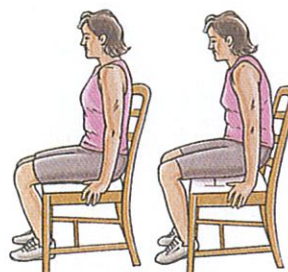
RESISTED SHOULDER EXTENSION

11. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



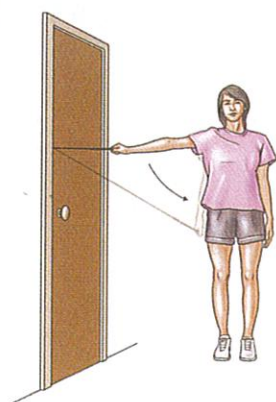
RESISTED SHOULDER EXTERNAL ROTATION

15. LATISSIMUS DORSI STRENGTHENING: Sit on a firm chair. Place your hands on the seat on either side of you. Lift your buttocks off the chair. Hold this position for 5 seconds and then relax. Repeat 10 times. Do 3 sets of 10.



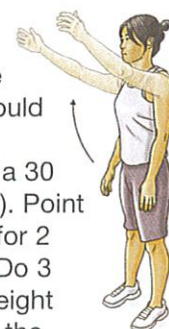
LATISSIMUS DORSI STRENGTHENING

12. RESISTED SHOULDER ADDUCTION: Stand sideways next to a door. With the hand closest to the door, hold tubing connected to a door knob at waist level. Stand away from the door approximately 8 to 10 inches. Slowly bring your arm with tubing next to your body. Do 3 sets of 10.



RESISTED SHOULDER ADDUCTION

16. SCAPTION: Stand with your arms at your sides and with your elbows straight. Slowly raise your arms to eye level. As you raise your arms, they should be spread apart so that they are only slightly in front of your body (at about a 30 degree angle to the front of your body). Point your thumbs toward the ceiling. Hold for 2 seconds and lower your arms slowly. Do 3 sets of 10. Hold a soup can or light weight when doing the exercise and increase the weight as the exercise gets easier. Your provider may instruct you to do this exercise with your thumbs down.



SCAPTION

SHOULDER SEPARATION

What is a shoulder separation?

A shoulder separation occurs when you tear the ligaments that hold your collarbone (clavicle) to the joint where it meets the shoulder blade. Your collarbone may move out of its normal place and push up the skin on the top of your shoulder. Another term for shoulder separation is acromioclavicular (AC) separation or sprain.

Shoulder separations, or sprains, are graded I, II, or III, depending on how far the collarbone is separated from the shoulder. A grade I sprain has tenderness but no actual separation. A grade II sprain has slight separation of the clavicle from the shoulder, and grade III has a greater separation.

How does it occur?

A shoulder separation can result from a blow to your shoulder or a fall on your shoulder. It also can result from a fall on your outstretched hand or arm. It is a common injury in contact sports such as football, rugby, hockey, or lacrosse. It may occur from falling onto a hard surface, such as might happen during downhill skiing, volleyball, rock climbing, and soccer.

What are the symptoms?

Symptoms include the following:

- severe pain at the moment the injury occurs
- limited shoulder movement and tenderness on top of your shoulder at the end of your collarbone
- swelling and bruising of your shoulder
- a misshapen shoulder

How is it diagnosed?

Your healthcare provider will examine your shoulder for tenderness and a bump over the tip of your collarbone. You will need to have X-rays to make sure it is an AC separation and not a fracture.

How is it treated?

Right after your injury put an ice pack on your shoulder for 20 to 30 minutes. Keep putting ice on your shoulder every 3 to 4 hours for the first 2 to 3 days, then as needed for the next several weeks. Cold helps reduce the pain, swelling, and inflammation.

The treatment of your separated shoulder depends on the severity. Grade I separations and some grade II and grade III separations may be placed in a sling or shoulder immobilizer. The sling or immobilizer will keep you from lifting

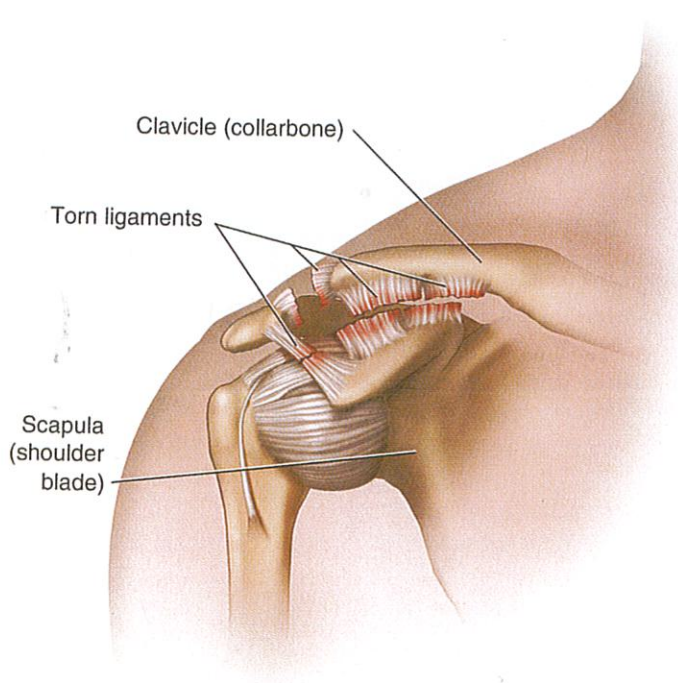
your arm away from your chest and help the ligaments heal. Your shoulder will be kept immobile until you are pain free. Then you will begin rehabilitation exercises. Your healthcare provider may prescribe an anti-inflammatory medicine or other pain medicine (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval).

For most grade II and grade III separations, treatment is the same. However, in some cases surgery may be needed to reposition the bones or repair torn ligaments. Your arm will then be in a sling for up to 6 weeks to allow healing before you begin rehabilitation exercises. You should consult an orthopedic surgeon if you have a severe grade III injury.

How long will the effects last?

Some separations heal by themselves in 2 to 4 weeks without any loss of shoulder use. However, sometimes slight stiffness or loss of movement in the shoulder may occur, which may be temporary or, rarely, long-lasting. A severe separation may take 2 months or more to heal, particularly if you have surgery to repair it.

SHOULDER SEPARATION



You may have a permanent bump over your shoulder joint after a separation regardless of treatment. The bump does not normally cause other medical problems.

How can I take care of myself?

Avoid participating in sports until the injury has healed.

You should move your shoulder as the pain subsides to prevent a frozen or stiff shoulder.

With your healthcare provider's permission, work with a trainer or physical therapist to strengthen your shoulder.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport will be determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred.

You may safely return to your sport or activity when:

- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder. In contact sports, your shoulder must not be tender to touch. Contact should progress from minimal contact to harder contact. You may be given a special pad to put over your AC joint to protect it from further injury.

What can I do to help prevent recurring shoulder separation?

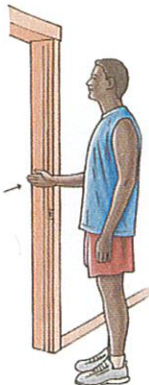
Exercise and lift weights under the supervision of a trainer or physical therapist to strengthen your shoulder muscles. Muscle-strengthening exercises will also help strengthen your ligaments and tendons. If you have symptoms, you should avoid activities that aggravate your pain, use ice packs, and take anti-inflammatory medicine if needed.

SHOULDER SEPARATION REHABILITATION EXERCISES

Do these exercises as soon as your healthcare provider says you can.

SHOULDER

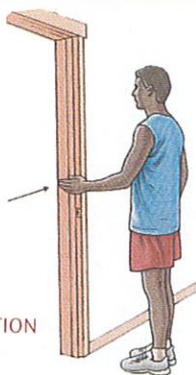
Part I



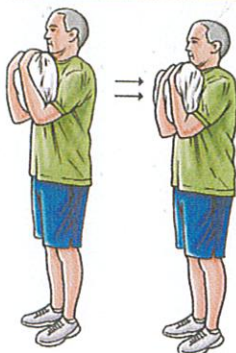
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ISOMETRIC SHOULDER EXTERNAL ROTATION

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ISOMETRIC SHOULDER INTERNAL ROTATION



3. ISOMETRIC SHOULDER ADDUCTION: With a pillow between your chest and your arms, squeeze the pillow with your arms and squeeze your elbows into your sides and hold 5 seconds. Do 3 sets of 10.

ISOMETRIC SHOULDER ADDUCTION

4. ISOMETRIC SHOULDER FLEXION: Stand facing a wall with your elbow bent at a right angle and held close to your body. Press your fist forward against the wall, hold this for 5 seconds, then rest. Do 3 sets of 10.



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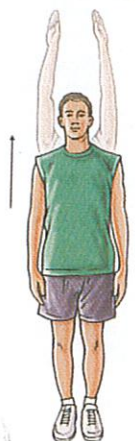
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ISOMETRIC SHOULDER EXTENSION

6. ISOMETRIC SHOULDER ABDUCTION: Standing with one side towards the wall and your elbow bent at a 90-degree angle, press the side of your arm into the wall as if attempting to lift it. Hold for 5 seconds. Rest. Do 3 sets of 10.



ISOMETRIC SHOULDER ABDUCTION



7. SHOULDER FLEXION: Stand with your arms hanging down at your side. Keep your elbow straight and lift your arms up over your head as far as you can reach. Hold the end position for 5 seconds. Do this 10 times.

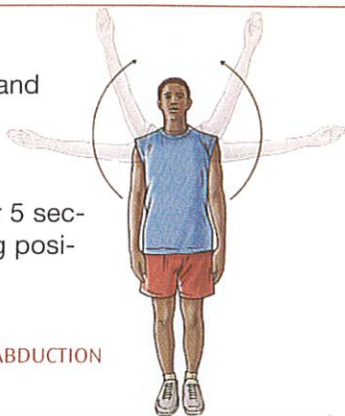
SHOULDER FLEXION

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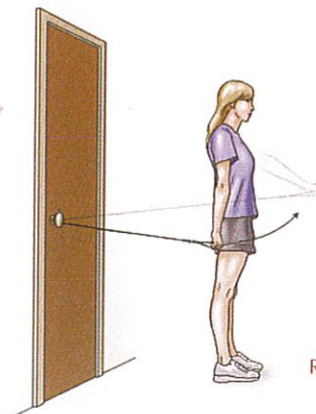
SHOULDER EXTENSION

9. SHOULDER ABDUCTION: Stand with your arms at your sides. Bring your arms up, out to the side, and toward the ceiling. Hold for 5 seconds. Return to the starting position. Repeat 10 times.



SHOULDER ABDUCTION

14. RESISTED SHOULDER FLEXION: Holding tubing connected to a door knob at waist level, face away from the door, keep your elbow straight and pull your arm forward. Do 3 sets of 10.



RESISTED SHOULDER FLEXION

Part II

10. RESISTED SHOULDER INTERNAL ROTATION: Holding tubing connected to a door knob at waist level, keep your elbow in at your side and rotate your arm inward across your body. Make sure you keep your forearm parallel to the floor. Do 3 sets of 10.



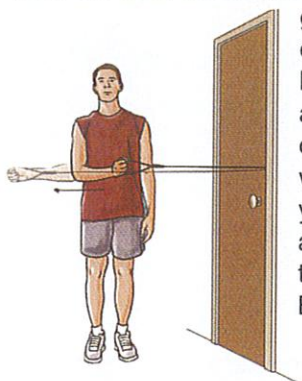
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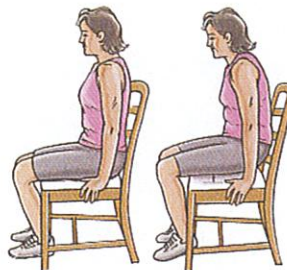


RESISTED SHOULDER EXTENSION

12. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



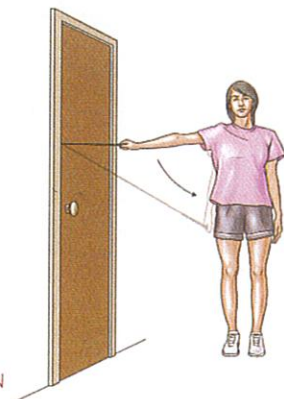
RESISTED SHOULDER EXTERNAL ROTATION



LATISSIMUS DORSI STRENGTHENING

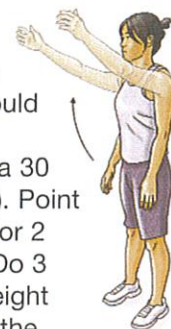
16. LATISSIMUS DORSI STRENGTHENING: Sit on a firm chair. Place your hands on the seat on either side of you. Lift your buttocks off the chair. Hold this position for 5 seconds and then relax. Repeat 10 times. Do 3 sets of 10.

13. RESISTED SHOULDER ADDUCTION: Stand sideways next to a door. With the hand closest to the door, hold tubing connected to a door knob at waist level. Stand away from the door approximately 8 to 10 inches. Slowly bring your arm with tubing next to your body. Do 3 sets of 10.



RESISTED SHOULDER ADDUCTION

17. SCAPTION: Stand with your arms at your sides and with your elbows straight. Slowly raise your arms to eye level. As you raise your arms, they should be spread apart so that they are only slightly in front of your body (at about a 30 degree angle to the front of your body). Point your thumbs toward the ceiling. Hold for 2 seconds and lower your arms slowly. Do 3 sets of 10. Hold a soup can or light weight when doing the exercise and increase the weight as the exercise gets easier. Your provider may instruct you to do this exercise with your thumbs down.



SCAPTION

SHOULDER SUBLUXATION

What is a shoulder subluxation?

A shoulder subluxation is a temporary, partial dislocation of the shoulder joint. The shoulder is a ball-and-socket joint. The ball of the upper arm bone is normally held in the socket of the shoulder blade by a group of ligaments. Ligaments are strong bands of tissue that connect the bones. In a subluxation, the ball of the upper arm bone slips partially out of the shoulder socket.

How does it occur?

A shoulder subluxation can be caused by:

- a fall onto your outstretched arm
- a direct blow to your shoulder
- having your arm forced into an awkward position

If you have had a previous injury or if your shoulder ligaments are naturally loose, you may sublux your shoulder doing simple activities like throwing or putting on a jacket.

What are the symptoms?

Symptoms of a shoulder subluxation include:

- the feeling that your shoulder has gone “in and out of joint”
- looseness in your shoulder joint
- pain, weakness, or numbness in your shoulder or arm

How is it diagnosed?

Your healthcare provider will ask about your symptoms and examine you. Many times the diagnosis of a shoulder subluxation is based on your description of the injury. When your provider examines you, he or she may find that your shoulder is loose and may partially slip out of joint during the exam. Your provider may order X-rays to see if you have had any fractures.

How is it treated?

The pain from a shoulder subluxation is treated by:

- putting ice packs on your shoulder for 20 to 30 minutes 3 to 4 times a day
- taking anti-inflammatory medicines such as ibuprofen (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider’s approval)
- avoiding activities that cause pain

The most important treatment for the shoulder looseness that causes a subluxation is shoulder strengthening exercises. If your shoulder continues to sublux and cause pain and other symptoms, you may need surgery to correct the joint looseness.

When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon, you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity is determined by how soon your shoulder recovers, not by how many days or weeks it has been since your injury occurred.

You may safely return to your sport or activity when:

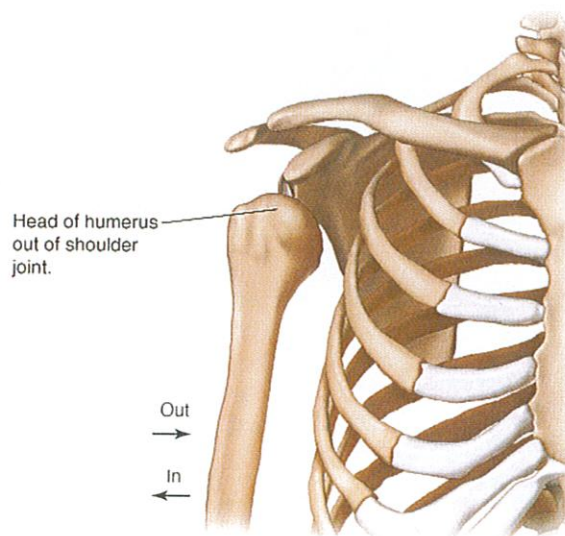
- your injured shoulder has full range of motion without pain
- your injured shoulder has regained normal strength compared to the uninjured shoulder

In throwing sports, you must gradually build your tolerance to throwing. This means you should start with gentle tossing and gradually throw harder.

How can I prevent a shoulder subluxation?

Shoulder subluxations are often caused by accidents that cannot be prevented. It is important to keep your shoulders strong, especially if you have had a previous shoulder injury.

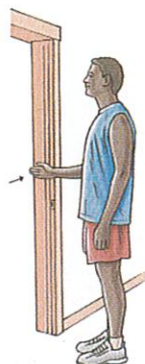
SHOULDER SUBLUXATION



SHOULDER SUBLUXATION REHABILITATION EXERCISES

Do these exercises as soon as your healthcare provider says you can.

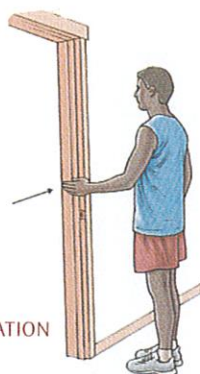
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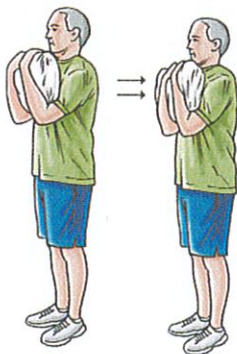
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ISOMETRIC SHOULDER EXTERNAL ROTATION

2. ISOMETRIC SHOULDER INTERNAL ROTATION: Standing in a doorway with your elbow bent 90° and the front of your wrist pressing against the door frame, try to press your palm into the door frame. Hold for 5 seconds. Do 3 sets of 10.



ISOMETRIC SHOULDER INTERNAL ROTATION



3. ISOMETRIC SHOULDER ADDUCTION: With a pillow between your chest and your arms, squeeze the pillow with your arms and squeeze your elbows into your sides and hold 5 seconds. Do 3 sets of 10.

ISOMETRIC SHOULDER ADDUCTION

4. ISOMETRIC SHOULDER FLEXION: Stand facing a wall with your elbow bent at a right angle and held close to your body. Press your fist forward against the wall, hold this for 5 seconds, then rest. Do 3 sets of 10.



ISOMETRIC SHOULDER FLEXION



5. ISOMETRIC SHOULDER EXTENSION: Standing facing away from the wall with your elbow touching the wall, press the back of your elbow into the wall and hold for 5 seconds. Rest. Do 3 sets of 10.

ISOMETRIC SHOULDER EXTENSION

6. ISOMETRIC SHOULDER ABDUCTION: Standing with one side towards the wall and your elbow bent at a 90-degree angle, press the side of your arm into the wall as if attempting to lift it. Hold for 5 seconds. Rest. Do 3 sets of 10.



ISOMETRIC SHOULDER ABDUCTION



7. SHOULDER FLEXION: Stand with your arms hanging down at your side. Keep your elbow straight and lift your arms up over your head as far as you can reach. Hold the end position for 5 seconds. Do this 10 times.

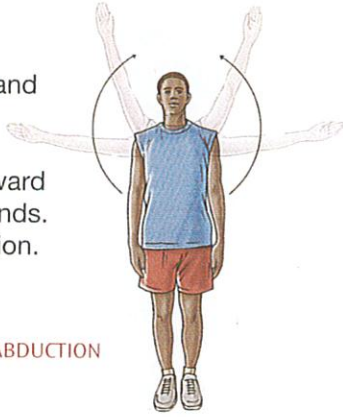
SHOULDER FLEXION

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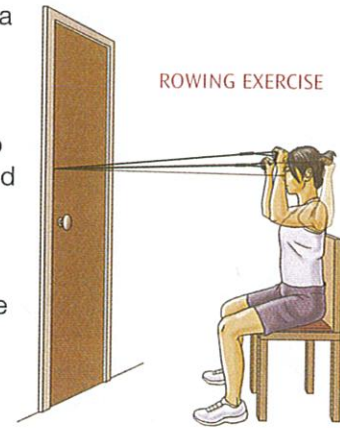
SHOULDER EXTENSION

9. SHOULDER ABDUCTION: Stand with your arms at your sides. Bring your arms up, out to the side, and toward the ceiling. Hold for 5 seconds. Return to the starting position. Repeat 10 times.



SHOULDER ABDUCTION

13. ROWING EXERCISE: Tie a piece of elastic tubing around an immovable object and grasp the ends in each hand. Keep your forearms vertical and your elbows at shoulder level and bent to 90 degrees. Pull backward on the band and squeeze your shoulder blades together. Repeat 10 times. Do 3 sets.



ROWING EXERCISE

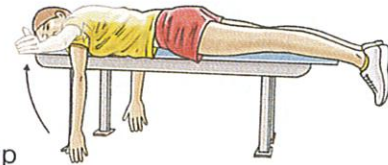
Part II

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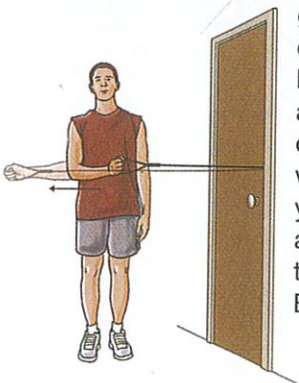
RESISTED SHOULDER INTERNAL ROTATION

14. HORIZONTAL ABDUCTION: Lie on a table or the edge of a bed face down with one arm hanging down straight to the floor. Raise your arm out to the side, with your thumbs pointed toward the ceiling until your arms are parallel to the floor. Hold for 2 seconds and then lower it slowly. Start this exercise with no weight. As you get stronger add a light weight or hold a soup can. Do 3 sets of 10.



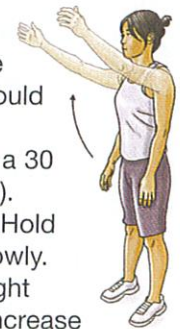
HORIZONTAL ABDUCTION

11. RESISTED SHOULDER EXTERNAL ROTATION: Stand sideways next to a door. Rest the hand farthest away from the door across your stomach. With that hand grasp tubing that is connected to a doorknob at waist level. Keeping your elbow in at your side, rotate your arm outward and away from your waist. Make sure you keep your elbow bent 90 degrees and your forearm parallel to the floor. Repeat 10 times. Build up to 3 sets of 10.



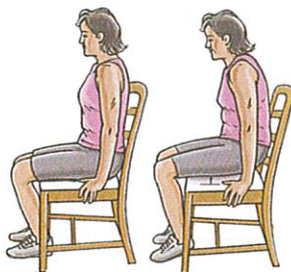
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SCAPTION

12. LATISSIMUS DORSI STRENGTHENING: Sit on a firm chair. Place your hands on the seat on either side of you. Lift your buttocks off the chair. Hold this position for 5 seconds and then relax. Repeat 10 times. Do 3 sets of 10.



LATISSIMUS DORSI STRENGTHENING