

Shoulder Instability Surgery

Labrum and
Capsule
Repair



Understanding Shoulder Instability

The shoulder is the most flexible joint in the body. It allows you to throw a ball, scratch your back, and reach in almost any direction. But the shoulder does have its limits. If parts of the joint are injured, the shoulder can become unstable. This can cause pain and hinder movement. The good news is that with proper care, your shoulder can feel stable again.

When Your Shoulder Doesn't Feel Right

Symptoms of instability often occur when the arm is placed in certain positions—such as reaching behind you. These symptoms include:

- **Apprehension**, or the feeling your shoulder is going to pop out of place.
- Pain, especially with overhead activities.
- A catching, locking, popping, or grinding sensation.
- Weakness or stiffness.



Reaching into the back seat of a car can make an unstable shoulder feel as if it's popping out of place.

What Causes Instability?

There are two main causes of instability:

- **Injury** is the leading cause, especially a shoulder dislocation. This often occurs when the arm is forced or twisted into an awkward position. Shoulder injuries can also result from a blow to the shoulder, heavy lifting, or by falling on an outstretched arm.
- **Laxity** is looseness in the shoulder joint. This may be a natural condition present at birth. Or, it can develop over time—especially in athletes who perform overhead activities, such as throwers or swimmers.



Shoulder instability may result from a twisting fall on an outstretched arm.

Making Your Shoulder Stable Again

Restoring shoulder stability doesn't happen overnight. It's a process that takes time and teamwork. First, you'll need to be evaluated by an **orthopaedic surgeon** (bone and joint specialist). You and your doctor can then decide on a treatment that suits your lifestyle and goals. Finally, rehabilitation is needed to restore your shoulder's strength and range of motion. Following is an overview of what to expect.

Evaluation

An evaluation helps your doctor learn the cause of your shoulder problem. You'll be asked questions about your health, symptoms, and any previous shoulder injuries. Your shoulder is then examined. The evaluation also includes imaging tests, such as x-rays or an MRI. These help show problems inside the joint.



X-rays can help reveal injuries to the shoulder joint.

Treatment

Your treatment will depend on your shoulder problem. In most cases you'll start with physical therapy. However, for certain types of injuries—or if therapy doesn't improve how you feel—your doctor may recommend surgery. This can help repair the shoulder and restore a comfortable range of motion.

Rehabilitation

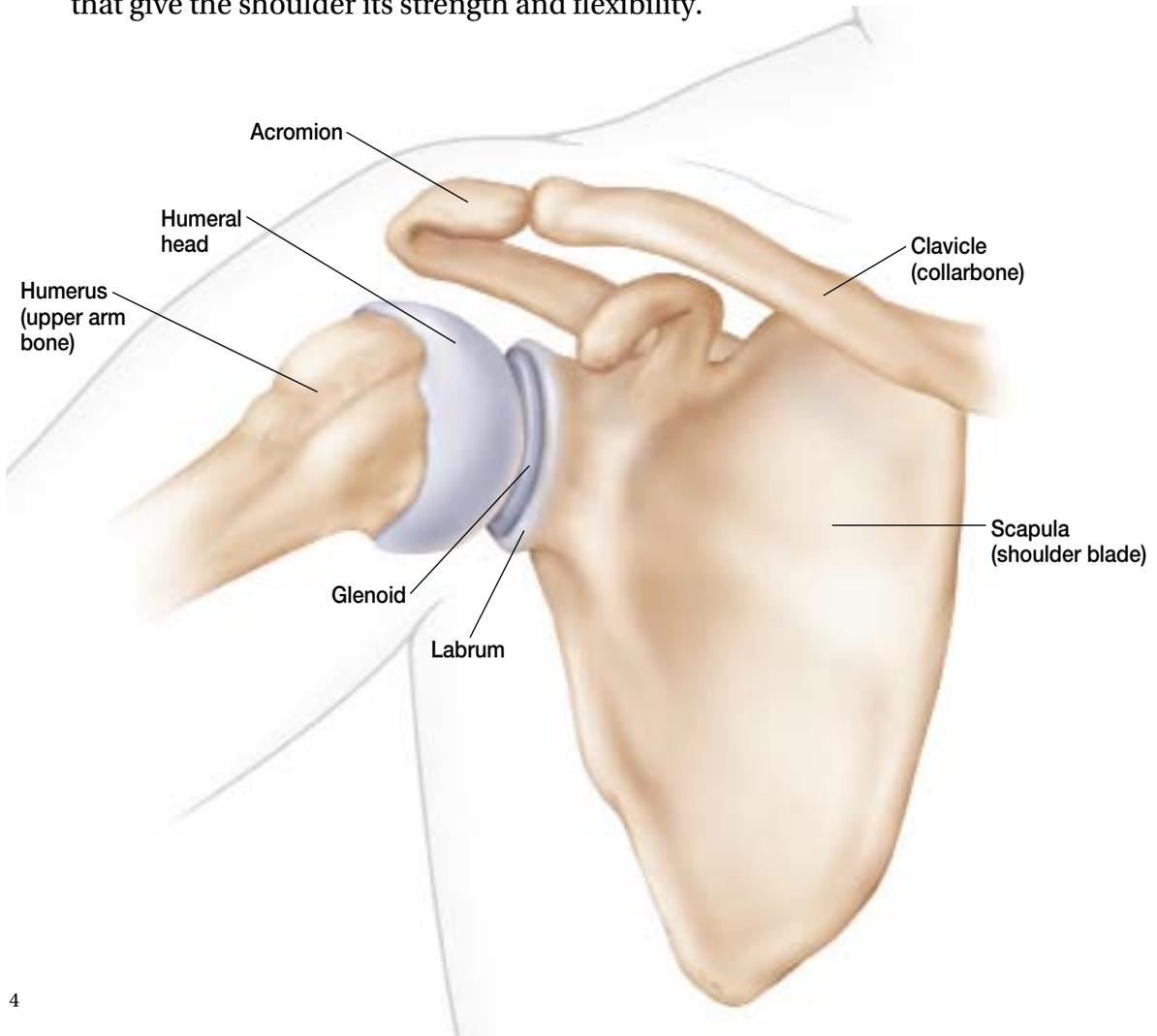
Rehabilitation is important whether or not you have surgery. Under the guidance of a **physical therapist** (rehabilitation specialist), you'll work on decreasing pain and improving shoulder function. You'll also be given exercises that strengthen the muscles that support the joint.

A Healthy Shoulder

The shoulder is built on a foundation of bones that are connected by layers of ligaments, muscles, and other strong tissues. When the shoulder is healthy, these parts work together to let you reach, swing, and lift in comfort. But if any parts are damaged, shoulder movement can become painful or difficult.

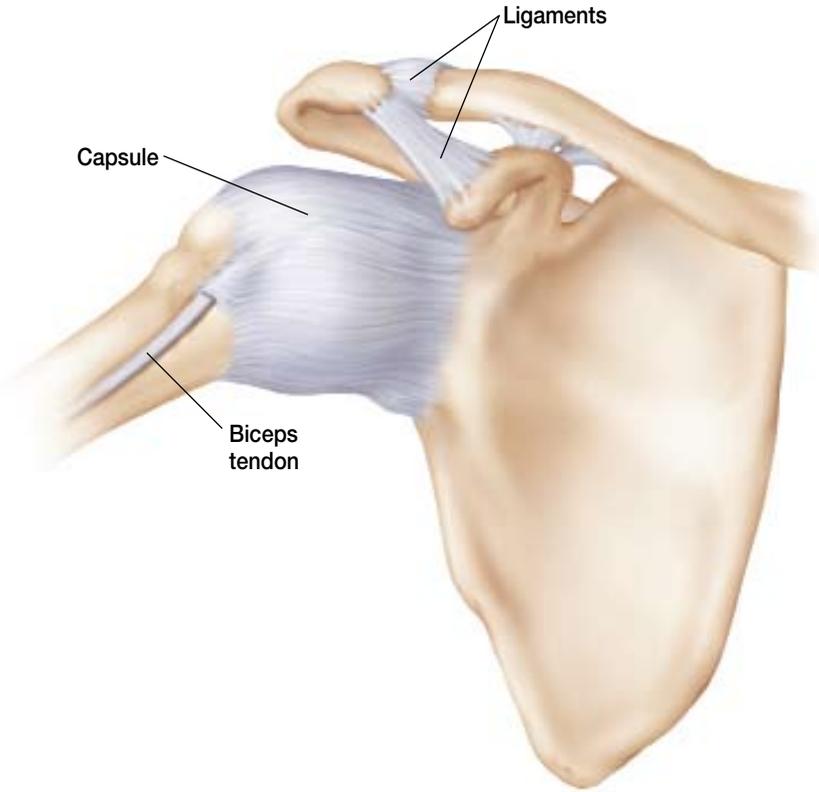
The Bones and Labrum Provide the Foundation

The shoulder joint is where the upper arm bone (humerus) meets the shoulder blade (scapula). The outer rim of the scapula forms a shallow socket called the **glenoid**. The socket helps the head of the humerus rest in the joint, much like a golf ball fits on a tee. To help make the socket deeper, the outer rim of the glenoid is ringed by tough, flexible tissue called the **labrum**. Along with the collarbone (clavicle), these structures provide the foundation for soft tissues that give the shoulder its strength and flexibility.

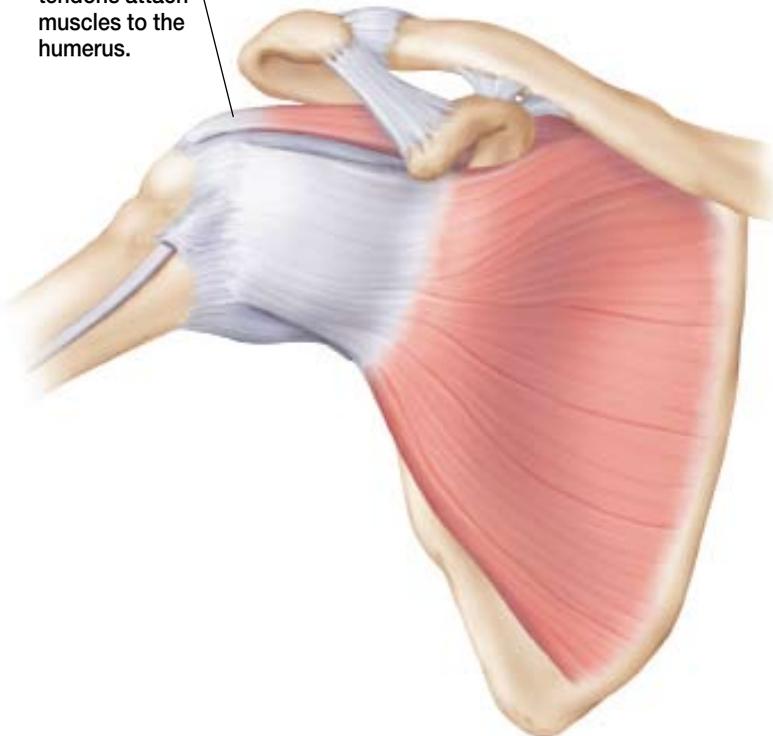


The Capsule Encloses the Joint

The **capsule** is a sheet of ligaments and other tough fibers that connect the head of the humerus to the glenoid. It is called a “static stabilizer” because the ligaments wrap around the humeral head and help keep the bone from popping out of place. Other ligaments nearby help attach the collarbone to the shoulder blade.



The rotator cuff tendons attach muscles to the humerus.



The Rotator Cuff Stabilizes Movement

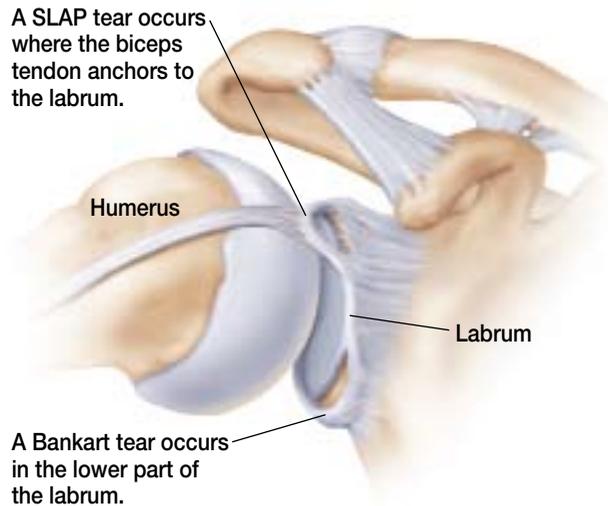
The **rotator cuff** is made up of muscles and tendons that stretch between the upper arm and shoulder blade. It gets its name because the tissues form a stabilizing “cuff” around the head of the humerus. In addition to keeping the humeral head in place, the rotator cuff also helps control the shoulder’s movement. For this reason, the cuff is called a “dynamic stabilizer.”

An Unstable Shoulder

The leading cause of instability is an injury that forces the humeral head out of its socket. If the humerus pushes completely out of the joint, it's called **dislocation**. If it only pushes partway out, it's called **subluxation**. These injuries can tear the labrum or stretch the capsule—or both. An injury can also result from repeated stress on the joint, especially in overhead athletes or people with loose joints.

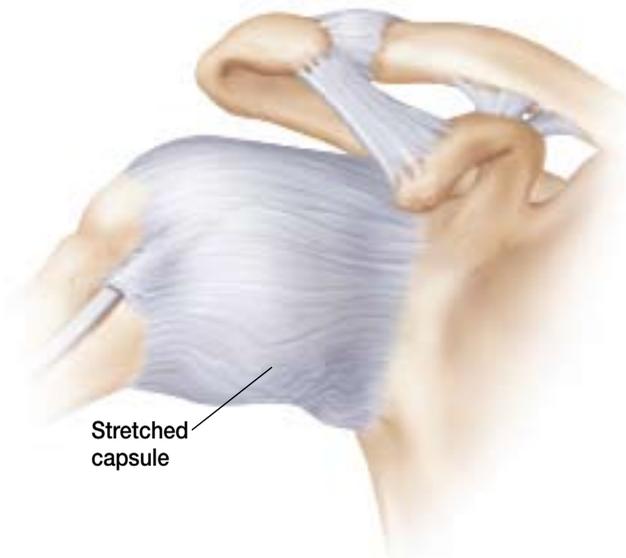
A Torn Labrum

Many of the ligaments in the capsule attach to the labrum. So if the humerus is forced out of place, these tissues can pull on the labrum and cause it to tear. Most often, tears occur in the lower part of the labrum (a “Bankart tear”). They can also occur in the upper part (a “SLAP tear”). Once the labrum is torn, it's much easier for the humerus to slip out of its socket.



A Stretched Capsule

Dislocation or subluxation of the shoulder joint stretches the capsule fibers that enclose the joint. The capsule can also be stretched by repetitive motions, such as throwing. Once the capsule is stretched, it remains loose. This can make the joint feel as if it's slipping out of place.



Where Instability Occurs

The shoulder can become unstable in one or many directions. Most often, instability allows the humerus to move too far toward the front of the joint. This makes the shoulder feel unstable when you reach above and behind you. A loose capsule can sometimes cause instability no matter which direction the arm is moved.

Your Evaluation

An evaluation helps your doctor learn the cause of your shoulder problem. It includes a medical history and a shoulder exam. You'll also have imaging tests. These let your doctor view injuries not visible during the exam.

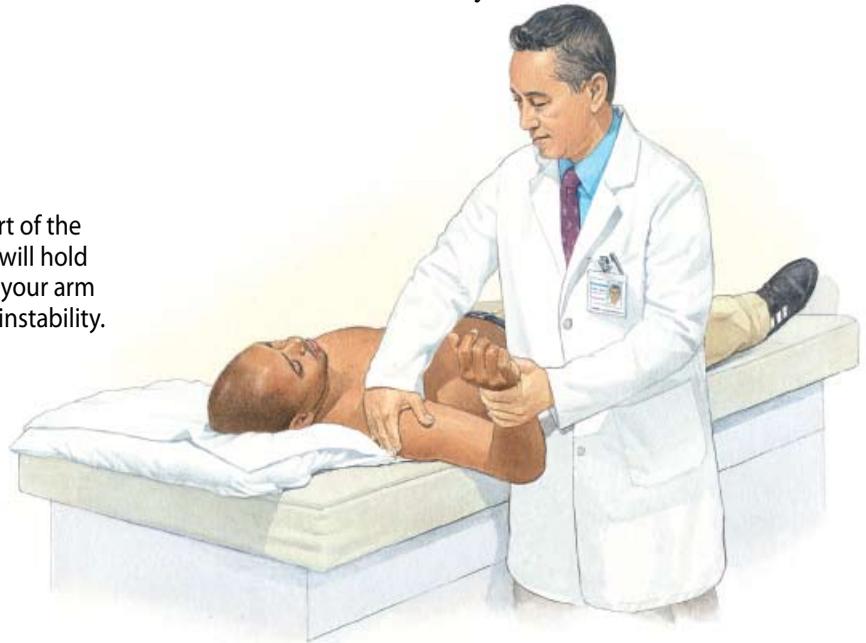
Medical History

Your doctor will ask questions about your health, symptoms, and any previous shoulder injuries. You may also be asked what type of work you do and whether you play sports. Be sure to mention what positions make your shoulder feel unstable. Also mention the location of any pain, weakness, or tingling.

An apprehension test is part of the shoulder exam. Your doctor will hold your wrist and gently rotate your arm to see what positions cause instability.

Shoulder Exam

It's important for your doctor to learn which shoulder movements cause your instability. To do this, your doctor may move your arm in different directions. This can be uncomfortable at times. But it helps your doctor pinpoint the cause of your problems. Other tests are used to assess your shoulder's strength and flexibility.



Imaging Tests

Imaging tests help show structures inside the joint. They can also help rule out other problems. You may have one or more of these tests:

- **X-rays** can show a shoulder dislocation or bone fracture.
- **MRI** (magnetic resonance imaging) helps show whether any soft tissues in the joint are stretched or torn. In some cases, the MRI is done with a special dye that is injected into the shoulder.
- **CT** (a “CAT” scan) uses a special x-ray scanner to provide a detailed view of the shoulder joint.

Your Treatment Plan

After the evaluation, your doctor will talk with you about treatment options. These can include physical therapy, surgery, or both. Be sure to tell your doctor what activities you want to get back to after treatment. By working together, you and your doctor can decide on a treatment plan that's right for you.

Physical Therapy

In many cases, your treatment will start with physical therapy. This may be done under the guidance of your doctor or a physical therapist. Some treatments help reduce pain and swelling. Others stabilize the shoulder by strengthening the rotator cuff and other muscles. Be aware that it often takes several months to regain full use of your shoulder. But the more you stick to your exercise program, the faster your shoulder is likely to improve.



Physical therapy may include exercising on special equipment designed for the shoulder.



Surgery

If physical therapy isn't enough to heal your shoulder, your doctor will recommend surgery. This helps repair the tissues that stabilize the joint. Keep in mind that surgery often makes your shoulder "tighter" than it was before. This is a good thing, because it means the shoulder is less likely to pop out of place. However, it also means you may lose a small amount of flexibility. Be sure to talk with your doctor if you have questions.

Preparing for Surgery

If surgery is needed to repair your shoulder, it will be done in a hospital or surgical center. To get ready for the procedure, be sure to follow all your doctor's instructions. The checklist on the back of this booklet can also help remind you what to do.

The Day of Surgery

You'll be given a patient gown to wear. You'll also be given an IV to provide fluids and medication. Shortly before surgery, an anesthesiologist will talk with you. He or she will explain the medications (**anesthesia**) used to prevent pain during surgery. In some cases, the shoulder is numbed. In others, you will be given anesthesia that lets you sleep during the operation. A combination of anesthesia can also be used.



You may be asked several times to confirm which shoulder is being operated on. Your shoulder may also be marked with a pen.

Two Options for Surgery

Shoulder surgery can be done in one of two ways. Your doctor will choose the method that's best for you.

- **Arthroscopy** is done with a thin instrument called an arthroscope. A small camera on the scope sends images to a video monitor. This lets your doctor see and work inside the joint. Only small incisions are needed to insert the scope and other instruments into the shoulder.
- **Open surgery** is done by making a single, larger incision in the shoulder. This lets your doctor make repairs with a direct view of the joint.

Risks and Complications of Surgery

Shoulder surgery is safe, but does have certain risks. These include:

- Infection
- Anesthesia risks
- Damage to blood vessels or nerves
- Excessive loss of shoulder flexibility
- Recurrence of instability

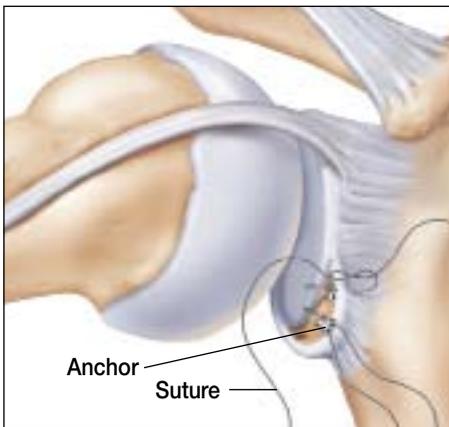
Surgical Treatment

The type of surgical repair you have depends on your shoulder problem. If you have a torn labrum, it will be reattached to the glenoid socket so it can heal. A stretched capsule is repaired by sewing the tissues so they become tighter. In most cases, the surgery takes 1 to 2 hours to complete.



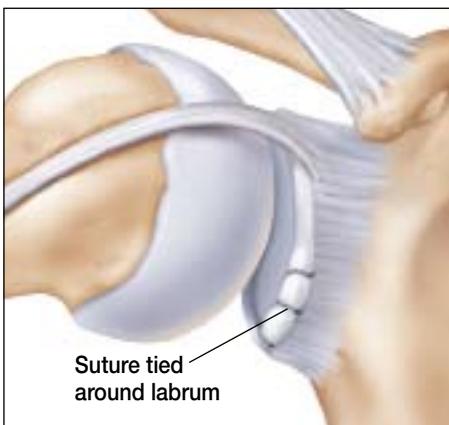
Repairing a Torn Labrum

Surgery to repair the labrum provides a more stable fit for the humeral head in the shoulder socket. The repair may be made using special **anchors** that are placed in the bone of the glenoid. These serve as attachment points so the labrum can be sewn back into place.



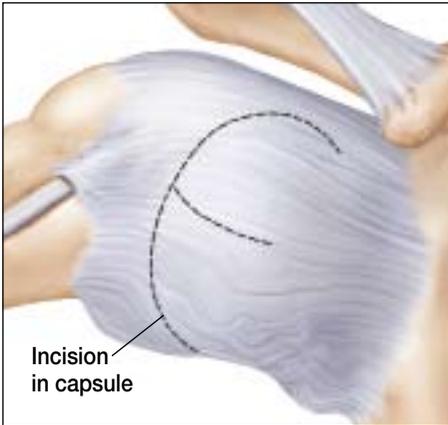
Placing Anchors

There are two methods for placing anchors. In some cases, small holes are drilled in the bone to make room for the anchors. In others, the anchors are tapped into the bone. The anchors are made of special materials that do not irritate the body. They will remain in place or be absorbed over time.



Completing the Repair

After the anchors are placed, sutures connected to the top of the anchors are tied to the labrum. This allows your surgeon to pull the labrum snugly against the glenoid so it can heal. If you have a SLAP tear, the biceps tendon may be reattached with sutures or tacks. Once the repair is complete, the skin is closed with sutures, staples, or surgical tape.



Repairing a Stretched Capsule

Repairing a stretched capsule helps “tighten” the tissues that hold the head of the humerus in its socket. To begin the repair, your doctor will make a few incisions in the capsule. This divides the capsule into flaps of tissue that can be overlapped and tightened.



Shifting the Capsule

The lower flap of the capsule is pulled up and sewn into place with sutures. This helps make the capsule tighter than it was before. It may help to think of this process like making a bed. When you pull on one end of a sheet, the entire surface stretches and gets tighter.



Completing the Repair

To complete the repair, the upper flap of the capsule is pulled down and sewn over the first flap. Sutures are then used to secure it in place. Overlapping the two flaps reduces the amount of loose, excess tissue in the capsule. Once the repair has been made, the skin is closed with sutures, staples, or surgical tape.

After Surgery

You can usually leave the hospital the same day as surgery. In some cases, you may need to stay overnight. Once you're home, care for your incision site (or sites) and manage pain as directed. As you feel better, you can return to your normal routine. Just take it easy and follow all your doctor's advice.

Recovering in the Hospital

After your surgery, you'll be taken to a recovery area to rest. You'll have a bandage on your shoulder and a sling to hold your arm in place. To help you stay comfortable, nurses will give you pain medications. This may include a device that delivers pain medication directly into the joint. In some cases, you'll also have cold packs or a cooling unit to help reduce swelling.



After surgery, you'll need to wear a sling for a few weeks.

Recovering at Home

To help speed your home recovery, use the following tips:

- Keep your bandage clean and dry. Ask your doctor when you can bathe again.
- Manage pain by taking any prescribed medications as directed.
- Reduce swelling by using ice packs or a cold therapy unit if prescribed.
- Don't remove your sling until your doctor says it's okay.
- Ask your doctor when you can return to work.

When to Call Your Doctor

Call your doctor if you have any of the following during your recovery:

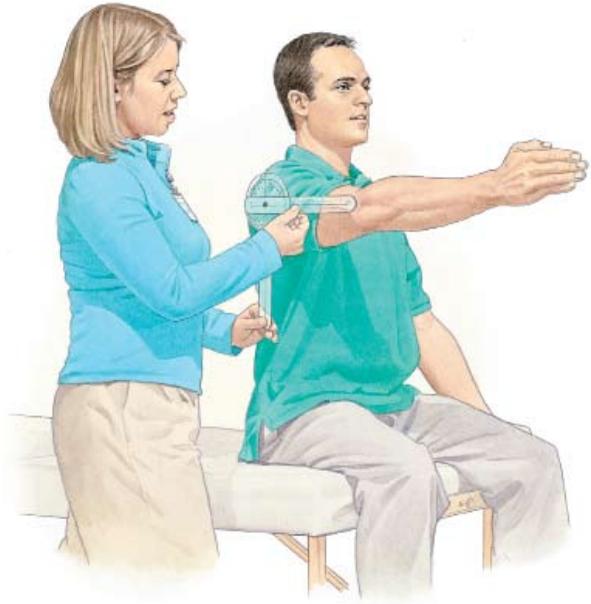
- Fever over 101°F (38.3°C)
- Sharp or increasing pain
- Numbness or tingling in your arm or hand
- Bleeding or increasing drainage from an incision
- Redness or swelling that gets worse (some swelling is normal)

Starting Your Rehabilitation

Rehabilitation (or “rehab”) is crucial to restoring your shoulder’s comfortable range of motion. With the help of a physical therapist (PT), you’ll learn how to do exercises that build strength and increase flexibility. You’ll also learn how to avoid movements that could reinjure your shoulder.

Setting Goals for Rehab

Full rehabilitation takes time and effort—often several months. For best results, talk with your PT about your goals for rehab. That way, your PT can design a program that suits your needs. You should also keep in mind that most of the work in rehab is up to you. And many of the exercises are done on your own at home. So be sure to make time each day for your workouts. If you’re an athlete, you may be given special exercises that help prepare you to return to your sport.



Your PT will measure your range of motion. This helps show improvements over time.

Reducing Pain and Stiffness

In the early stages of rehab you’ll work with your PT on reducing pain, swelling, and stiffness. A variety of treatments may be used depending on your needs. Below are some common therapies.

Manual Therapy

Manual therapy is often done using stretches and tissue massage to reduce stiffness. You may also do strength exercises by working your muscles against resistance applied by your therapist.

Ultrasound

Ultrasound therapy uses painless sound waves to create deep heat in the shoulder. This helps relax muscle spasms. It can also help loosen any scar tissue that may have formed after an injury or surgery.

Electrical Stimulation

Electrical stimulation uses a painless electrical current applied through small pads placed on the shoulder. This often helps reduce pain and swelling. It can also improve blood flow to help your shoulder heal.

Increasing Flexibility

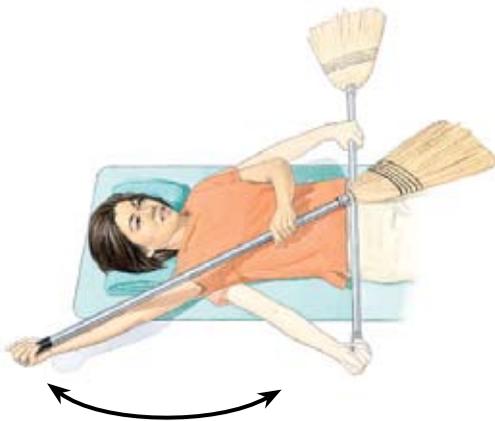
Rehab begins with stretching exercises that help increase your range of motion. Be sure to follow the instructions given by your PT or doctor. Use slow, fluid movements while you exercise. Breathe normally. Stop if you have pain.



Pendulum Exercise

1. Lean over with your good arm supported on a table or chair. Relax the arm on the injured side, letting it hang straight down.
2. Slowly swing the relaxed arm in a circle. Then reverse the direction. Next, swing it front to back. Then swing it side to side.

Note: Do this exercise 3 times a day for 5 minutes. Change direction about once a minute.



Broom Stretch

1. Lie on the floor or in bed. Place the hand on the side of your injured shoulder over the end of a broom or cane. Use your other hand to grasp the stick lower down.
2. Slowly push the broom up as high as you comfortably can. Hold for 10 seconds.
3. Return to the starting position and repeat 3 to 5 times.

Note: Don't force the stretch. Stop if you have pain.



Wall Walk

1. Stand with your injured shoulder about 2 feet away from a wall.
2. Raise your arm to shoulder level and gently “walk” your fingers up the wall as high as you comfortably can.
3. Hold for 10 seconds. Then walk the fingers back down. Repeat 3 to 5 times.

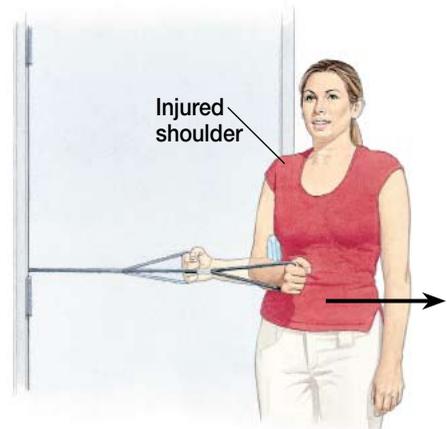
Note: Ask your healthcare provider if it's safe for you to do this stretch.

Building Strength

As your shoulder function improves, you'll be given strength exercises that help stabilize the joint. Before you begin, be sure to warm up with flexibility (stretching) exercises. Follow any special instructions. And stop if any exercise causes pain.

Internal Rotation

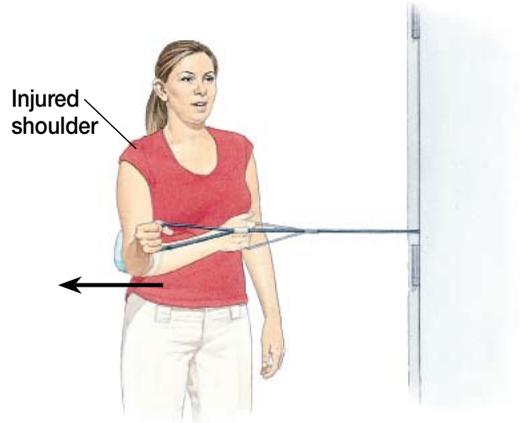
1. Attach rubber tubing to a doorjamb.
2. Stand with your injured side *toward* the door—far enough away that the tubing is just starting to stretch.
3. Keeping your elbow against your side and your arm in an “L” shape, slowly pull the tubing across your body.
4. Slowly return to the starting position. Repeat 5 to 15 times.



A towel under your elbow can help you keep your arm against your side.

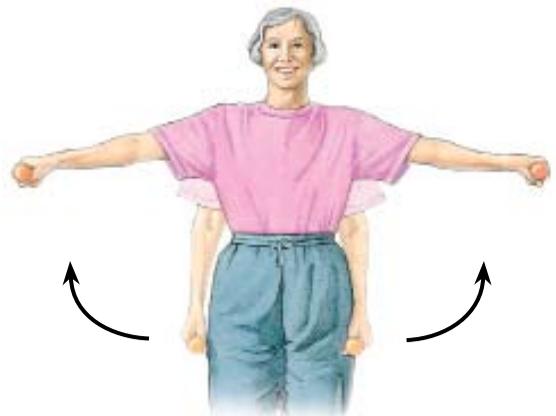
External Rotation

1. Attach rubber tubing to a doorjamb.
2. Stand with your injured side *away* from the door—far enough that the tubing is just starting to stretch.
3. Keeping your elbow against your side and your arm in an “L” shape, slowly pull the tubing across your body.
4. Slowly return to the starting position. Repeat 5 to 15 times.



Wings

1. Stand with your arms at your sides. Hold one weight in each hand.
2. With your elbows straight, slowly lift your arms upward. Don't lift your wrists higher than shoulder level.
3. Slowly lower your arms to the starting position. Repeat 5 to 15 times.



Note: Ask your healthcare provider what size weights to use.

Your Surgical List

A list such as the one below can help remind you what to do before and after your surgery. Ask your healthcare provider to go over the information with you. Your surgeon can also write down any special instructions.

Before Surgery

- Tell your doctor about all medications, supplements, or herbal remedies you take. Ask if you should stop taking any of them before surgery.
- Stop taking aspirin, ibuprofen, or other medications as directed before surgery.
- Confirm the time you should arrive at the hospital or surgery center. Be sure to arrange for an adult family member or friend to give you a ride to and from surgery.
- Don't eat or drink anything after midnight, the night before your surgery.

After Surgery

- Use ice as instructed to reduce swelling and pain.
- Take care of your incision site (or sites) as directed. You can begin bathing again as soon as your healthcare provider says it's okay.
- See your doctor for a follow-up visit.
- Take any prescribed medications.
- Wear your sling as directed.
- Do rehabilitation exercises as prescribed. Ask your doctor to list any activities you should avoid.

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