

What is Arthroscopy?

Shoulder arthroscopy is a sterile procedure that allows direct visualization of the shoulder joint to diagnose and treat a variety of shoulder conditions. Specifically, shoulder arthroscopy is utilized to correct (repair) lesions or tears of the cartilage and ligaments of the shoulder joint.

The word arthroscopy comes from the Greek word “artho” (joint) and “skopein” (to look). The term literally means “to look within the joint.” In an arthroscopic examination, an orthopedic surgeon makes a small incision in the patient’s skin and then inserts a pencil-sized instrument that contains a small lens and lighting system to magnify and illuminate the structures inside the joint.

Why is Arthroscopy Necessary?

Diagnosing joint injuries and disease begins with a thorough medical history, physical examination and usually x-rays. Additional tests such as an MRI or CT scan also may be needed. Although radiographic studies help establish a diagnosis, shoulder arthroscopy enables the most accurate diagnosis to be made and various problems to be addressed.

What are the Advantages?

Most patients have their arthroscopic surgery performed as an outpatient procedure and are home several hours after surgery. For many people, shoulder arthroscopy provides an excellent alternative to open shoulder surgery. In comparison to open shoulder surgery, shoulder arthroscopy may provide:

- Smaller incisions
- Shorter recovery time
- Less pain
- Less need for pain medications after surgery
- Less damage to soft tissue at the incision site
- Fewer complications
- Greater improvement in strength and range of motion of the shoulder after surgery

What are the Possible Complications?

The risk of complications after shoulder arthroscopy is low. However, as with any invasive procedure there is some risk that the following conditions may arise:

- Bleeding
- Infection
- Nerve and blood vessel injuries
- A build-up of fluid in the shoulder joint
- Cartilage damage
- A tear in joint tissues
- Loss of limb or function
- Anesthetic complications, including death

What Should I Do Before Shoulder Surgery?

Prior to your shoulder surgery, you will likely be asked to see your primary care physician (PCP) for pre-operative surgical clearance. This visit to your PCP is necessary to confirm that you are a healthy and appropriate candidate for shoulder arthroscopy. During your pre-operative work-up you may be asked to get an EKG, chest x-ray and other laboratory tests a few days prior to your surgery date.

If the surgery involves your dominant arm, it may present several challenges for you. Following shoulder arthroscopy your arm will be in a sling. Performing activities of daily living with your non-dominant hand requires some adjustments and patience. Strange as it seems, bathroom hygiene is quite difficult with your non-dominant hand and should be practiced. It will be several weeks before you will be able to use your dominant hand normally.

Women have several additional considerations. Most women will want to use a front-closing bra for several weeks after surgery since their operative arm will be in a sling. Additionally, most women will want to have a close shave of the axilla (arm pit) as it will be difficult to do this for several weeks after surgery.

Before having shoulder arthroscopy, you should make sure your doctor is aware of:

- All medical conditions, including any not previously disclosed
- All allergies
- Any medications that you are taking
- Any bleeding problems
- Pregnancy status

In addition, your doctor will ask you not to eat or drink anything after midnight the night before surgery. Unless directed otherwise you should refrain from taking any medications the day of surgery. You should not take Aspirin or anti-inflammatory medicines (i.e. Advil, Motrin, Ibuprofen, Aleve) for 10 days before your surgery as they inhibit platelet function (blood clotting).

You must arrange for someone to pick you up after surgery and stay with you for the first 24 hours after your procedure. It is important to plan ahead in this regard. We will do our best to make your return home after surgery as easy as possibly.

On the Day of Surgery

- Wear clothing roomy enough to accommodate the bulky bandage and sling that will be wrapped around your shoulder after surgery
- Remove all jewelry
- Go to the bathroom just before surgery

Before your surgery you will spend a short period in the pre-operative holding area. Nurses will prepare the surgical site and administer any medications that have been ordered. An intravenous (IV) line will be started. You will receive pre-operative antibiotics to help prevent infection. The IV will remain in until you have recovered or until you no longer need intravenous support.

Before any surgery requiring anesthesia, a short pre-operative exam will be done by an anesthesiologist. During this exam your anesthesiologist will be assessing whether you have any conditions that may affect the course of your anesthesia. You will be asked questions pertaining to any allergies you may have and medications you may be taking. The anesthesiologist will also ask about any prior anesthetics that you have had and your reaction to them. Your anesthesiologist will also ask about any previous or current health conditions as well as physical symptoms you currently have.

A brief physical exam will include assessment of your heart and lungs. The anesthesiologist will also perform an exam of your airway to assure you will not have any breathing difficulty during your surgery.

A general anesthetic is usually the anesthesia choice for a shoulder arthroscopy but it is possible to use other methods. With your input, your anesthesiologist will determine the anesthetic that assures the best outcome for your procedure. Regardless of the type of anesthesia, your anesthesiologist will monitor your condition throughout the surgical process.

How is Arthroscopy Performed?

The length of time shoulder arthroscopy takes varies depending on what is required during the surgery. Generally, the procedure takes between two and three hours, depending on the patient and his or her individual shoulder condition.

A small incision is made in the back of your shoulder to introduce the arthroscope (scope). A camera and light source are attached. They are also connected to a television monitor to view and record the findings. The scope is connected to a pump to precisely monitor the amount and pressure of sterile saline used to irrigate and fill the joint space for better viewing. A second small incision is made in the front of the shoulder to allow passage of arthroscopic instruments. Pictures may be taken and saved for later reference. More incisions may be made to introduce instruments for repair and to correct injuries involving the cartilage, ligaments and tendons of the shoulder.

First, the surgeon will inspect the entire joint. He or she will have an assistant help move, rotate and reposition the arm for visualization of the entire joint. Surgeons use a motorized "shaving" instrument to shave away torn cartilage, excessive growth and tissue, which may cause friction and pain. Biopsies can be taken. A cautery tool may be used to burn off excess tissue growth. This instrument can also smooth rough surfaces, help with repairs, shrink the capsule of the joint for better stability and decrease bleeding.

The amount of surgery required and recovery time will depend on the complexity of your problem. Rarely, during arthroscopy, your surgeon may discover the injury or disease cannot be treated adequately with arthroscopy alone. If this is the case, your surgeon may decide to convert to an "open" procedure in order to best treat your condition. The "open" surgery may be performed while you are still anesthetized, or at a later date after you have discussed the findings with your surgeon.

Upon completion of the procedure, the entire joint is irrigated until it is clear of blood and loose particles. The surgeon will inject a long acting local anesthetic into the joint to help with post-operative pain. Your incisions will be closed with absorbable sutures and covered with steri-strips. The area is then covered with a sterile dressing. Your operative shoulder-

arm will be placed in a sling after surgery. Please keep your surgical dressing and shoulder sling in place until your first post-operative visit.

What Happens Immediately after Surgery?

After your arthroscopy, you will go to the post anesthesia care unit (PACU). You will remain there until the effects of your anesthetic have begun to wear off and until you can eat, drink and urinate without difficulty. Specially-trained nurses work in the PACU and will monitor your progress and give you verbal and written discharge instructions. Your surgeon or anesthesiologist will discharge you from the PACU to home or your hospital room. However, you will not be able to drive home after surgery and should have someone stay with you overnight.

What is the Recovery in the Immediate Postoperative Period?

Ice is applied immediately after surgery and thereafter intermittently for 20-30 minutes at a time over the first seven days. This reduces swelling and relieves pain. The small incisions take several days to heal, sometimes up to two weeks.

The shoulder dressing is usually kept on for 48 hours. At your first postoperative visit, we will review your arthroscopic pictures and outline your rehabilitation and recovery. Some patients may begin rehabilitation within a few days of surgery as determined by your individual surgeon.

Pumping your hand and moving your wrist are encouraged as this keeps fluid from building up in your hand and arm. You may squeeze the ball included with your sling multiple times a day.

Although the incisions are small, postoperative pain ranges from little or none to very significant. Your physician will prescribe postoperative pain medication, anti-inflammatory medication and possibly an antibiotic. Instructions and side effects should be reviewed carefully, as some may cause constipation and drowsiness.

During recovery from shoulder arthroscopy, it is normal to feel some mild soreness and slight grinding sensation for a day or two. Call your CORE physician right away if you develop any of the following:

- Pain that is severe or persistent
- Inability to move the shoulder
- A fever or foul smelling drainage from surgery sites

As mentioned, at your first postoperative visit we will discuss all postoperative instructions. We will help show you how to properly position and wear your shoulder sling. In addition, we will discuss what movements and positions you must refrain from in order to protect your shoulder during the healing phase. All surgeries are different and all jobs are different. In this regard, depending on the physical nature of your job we will recommend when it may be possible for you to return to work. You will likely remain in your shoulder sling for three to six weeks after surgery.

When can I Return to Normal Activities?

Shoulder arthroscopy is used to treat a wide variety of shoulder conditions that have different recovery periods. Each patient who undergoes arthroscopy has their own unique condition and treatment. Recovery time will reflect that individuality. It takes several weeks to months for the joint to recover completely. A specific activity and rehabilitation program will be suggested to speed your recovery and protect future shoulder joint function.

Please feel free to ask any additional questions you may have at any time.