Your Arthroscopic Shoulder Procedure

Education from smith&nephew
It's a beautiful Saturday afternoon, and your friends ask you to join them at the park for a game of volleyball. Though the invitation is enticing, you begin to worry about the pain you're certain to feel in your shoulder when you return home that evening. Lately, it seems that almost everything you do – even reaching for a glass in the cupboard – causes you to feel pain in your shoulder.

Being physically active brings energy, enthusiasm, and balance to your life. Arthroscopic, or minimally invasive, shoulder surgery can help get you back in the game. Using advanced medical technology, your surgeon can assess what's causing your pain and, through arthroscopic surgery, may be able to repair your injury. Compared to traditional shoulder surgery, arthroscopic surgery results in smaller scars, less postoperative pain, and a faster return to the physical activities you love.

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It’s a beautiful Saturday afternoon, and your friends ask you to join them at the park for a game of volleyball. Though the invitation is enticing, you also begin to worry about the pain you’re certain to feel in your shoulder when you return home that evening. Lately, it seems that almost everything you do – even reaching for a glass in the cupboard – causes you to feel pain in your shoulder.

Being physically active brings energy, enthusiasm, and balance to your life. Arthroscopic, or minimally invasive, shoulder surgery can help get you back in the game. Using advanced medical technology, your surgeon can assess what’s causing your pain and, through arthroscopic surgery, may be able to repair your injury. Compared to traditional shoulder surgery, arthroscopic surgery results in smaller scars, less postoperative pain, and a faster return to the physical activities you love.
What Is Arthroscopic Shoulder Surgery?

In the late 1970s and early 1980s, arthroscopic surgery became popular, especially in the sports world, as fiber-optic technology enabled surgeons to see inside the body using a small telescope, called an “arthroscope,” which projects an image to a television monitor. Thanks to ongoing improvements made by technology leaders like Smith & Nephew, arthroscopic surgery is now accessible to more people than just professional athletes. In fact, active patients all over the world have experienced the benefits of minimally invasive surgical procedures.

Through an incision the width of a straw tip, your surgeon is able to insert an arthroscope that allows him or her to inspect your joint and locate the source of your pain. The arthroscope can also help visualize tears or other damage that may have been missed by an X-ray or MRI. Your surgeon will then make one or more small incisions to accommodate the instruments used to repair the shoulder. These instruments can shave, trim, cut, stitch, or smooth the damaged areas.

Arthroscopic shoulder surgery is often performed in an outpatient surgery center, which means no overnight hospital stay is required. You report to the surgical center in the morning, undergo the procedure, and – following a recovery period under the care of medical professionals – return home later in the day.
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Who Is A Candidate For Arthroscopic Shoulder Surgery?

Patients with shoulder pain or limited shoulder function may be candidates for arthroscopic shoulder surgery. Most people who suffer from a shoulder injury and who have not found the relief they need through nonoperative treatments may benefit from a minimally invasive surgical procedure. The information in this brochure will help you better understand the anatomy and function of the shoulder, as well as the effects on the shoulder of a rotator cuff tear or the condition known as “shoulder instability.” In addition, it will guide you through the steps of arthroscopic shoulder surgery for the treatment of these conditions.
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Anatomy And Function Of The Shoulder

The shoulder is a ball-and-socket joint and has the greatest range of motion of any joint in the body. Because of this mobility, it is at risk for injury or degenerative problems. The bones of the shoulder are the humerus (upper arm bone), clavicle (collar bone), and scapula (shoulder blade). The head of the humerus bone (the ball) is lined with cartilage that glides over the shoulder socket (also known as the “glenoid cavity”). The clavicle attaches the shoulder to the rib cage and holds the shoulder out from the body. The scapula is a large triangular bone located on the back side of the upper body, and it is connected to the clavicle through the acromioclavicular (AC) joint.

In the shoulder socket, the humerus sits like a golf ball on a tee, supported by a complicated arrangement of muscles, tendons, and ligaments. The rotator cuff is a group of tendons that attaches four shoulder muscles to the upper arm. These tendons help keep the humerus bone in place within its shallow socket and ensure that the arm moves freely within the joint.
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Age plays an important role in the development of rotator cuff tears. As we age, so does the rotator cuff, and weakening of the tendons increases the chances of a tear occurring. For this reason, tears are most common in adults over the age of 40. However, repeated use of the arms in the overhead position often accelerates weakening of the cuff. Individuals who perform common overhead activities, such as painters and sheetrock workers, frequently develop tendonitis, and this tendonitis may eventually progress to a complete tear in one of the tendons.

Tears are also common in certain athletes who use repetitive overhead motions, such as baseball pitchers, swimmers, and tennis players. In some cases, a tear can be sustained from a direct blow – a fall from a bicycle, for example.

With a rotator cuff tear, you may experience pain primarily on top and in the front of your shoulder. Sometimes, pain may occur at the side of your shoulder, and it is usually worse with any activity that forces you to reach above the level of your shoulder. You may also experience weakness and stiffness in the shoulder, and it may be difficult to perform simple overhead activities like placing dishes in the cupboard. Some people with tears can't lift their arm to comb their hair. Stiffness may result from the inability to move your shoulder, and this stiffness may become progressive.

Often with a rotator cuff tear, bursitis (inflammation of the bursa, the small sac of fluid that surrounds the joint) will occur, which may cause a mild popping or crackling sensation in the shoulder. The tear itself may rub and cause this sensation. You may also have difficulty sleeping on the shoulder at night.

When a rotator cuff tear begins to interfere with normal activities, arthroscopic (minimally invasive) shoulder surgery may be necessary to restore your shoulder's full functional abilities. Then you can get back to the activities you love, or simply enjoy a good night's rest.
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Shoulder Instability

Shoulder instability occurs when the structures that surround the shoulder joint loosen and cannot maintain the ball within its shallow socket. If the joint is too loose, it may slide partially out of place, a condition known as “shoulder subluxation.”

When the joint comes completely out of place, also called “shoulder dislocation,” the ligaments that support the shoulder are torn. Normally, this injury does not heal tightly, making the shoulder prone to repeat dislocation and additional episodes of instability.

With shoulder instability, some activities can create sudden pain, a sense of arm deadness, or the feeling of your shoulder slipping out and back into the joint. If you experience complete dislocation, you may have severe pain along with the inability to “reset” the joint.

Some shoulder instability can be treated with rest followed by rehabilitation. However, in certain instances, the physician may recommend surgery—these include more complicated injuries, cases of recurrent instability, and first-time dislocations in younger patients who have a high risk of recurrence, further damage, or limited activity.

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Shoulder - Humerus Removed
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Nonsurgical Options

There are some nonoperative, conservative options to consider for the treatment of a rotator cuff tear or shoulder instability:

**Ice Packs.** Reduce swelling while resting the arm.

**Anti-inflammatory Medications.** Decrease swelling in the joint and provide temporary pain relief. Please note, however, that all medications have risks and should be taken only in consultation with your pharmacist and physician.

**Physical Therapy.** Helps shoulder to regain normal motion and strengthens muscles.

Reasons For Arthroscopic Shoulder Surgery

Minimally invasive shoulder surgery is a positive measure to regain the active lifestyle that a painful shoulder is preventing.

**Arthroscopic shoulder surgery can:**
- Relieve pain.
- Improve joint stability.
- Repair tears and damage.
- Maximize quality of life.
- Optimize activities of daily living.
Each year, millions of people worldwide seek medical care for shoulder problems. With recent advancements in surgical techniques and equipment design, patients have experienced dramatic improvement in shoulder pain, function, and quality of life.
Preparation For Arthroscopic Shoulder Surgery

Preparation for your surgery begins weeks and sometimes months before the surgery date. Here are just a few events and considerations that you may experience:

Initial Surgical Consultation. Preoperative X-rays, a complete medical history, a complete surgical history, and a complete list of all medications (i.e., prescription, over-the-counter, vitamin supplements) and allergies will be reviewed.

Complete Physical Examination. Your surgeon will perform a physical examination and determine if your internist or family physician should assist with optimization of medical conditions prior to the surgery. This will ensure that you are in the best physical condition possible on surgery day.

Physical Therapy. Instruction in an exercise program to begin prior to surgery, as well as an overview of the rehabilitation process after surgery, will better prepare you for postoperative care.

Preparation for Surgery. You may want to wear loose-fitting clothes. You should bring your insurance information and a list of all your medications and dosages as well as drug allergies. You will need to arrange for someone to drive you home.

Evening Before Surgery. Do not eat or drink after midnight. Your surgeon or anesthesia provider may recommend that you take some of your routine prescription medications with a sip of water.
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Day Of Surgery

This is a brief overview of the activities that typically occur on your surgery day:

1. You will be admitted to the hospital or surgery center.

2. Your vital signs, such as blood pressure and temperature, will be measured.

3. A clean hospital gown will be provided.

4. All jewelry, dentures, contact lenses, and nail polish must be removed.

5. An IV will be started to give you fluids and medication during and after the procedure.

6. Your shoulder will be scrubbed and shaved in preparation for surgery.

7. An anesthesia provider will discuss the type of anesthesia that will be used.

8. Your surgeon will confirm and initial the correct surgical site.
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Rotator Cuff Repair

In rotator cuff repair, your surgeon will begin by inspecting the shoulder joint. Then he or she will inspect the subacromial bursa, a small cushioning sac of fluid that surrounds the joint, followed by the rotator cuff itself.

Arthroscopic shaver blades are used to clear away scar tissue, to shape the under side of the acromion (the bone at the top of the shoulder), and to smooth the edges of the cuff tear. Once the joint has been prepared, small anchors are attached to the bone. Sutures are passed through the edge of the tissue, and the anchors are used to hold the suture in place.

TWINFIX® suture anchors from Smith & Nephew are used to attach soft tissue to bone.

ARTHRO-PIERCE® Shoulder Instruments from Smith & Nephew are used to manipulate tissue and handle suture in arthroscopic shoulder procedures.
Rotator Cuff Repair

Instability Repair

For years, shoulder instability has been treated with open surgery to repair the torn lip of the glenoid socket, called the “labrum.” Many surgeons now believe that instability is associated with more than just labral tears. Using minimally invasive arthroscopic techniques, your surgeon will have access to the entire joint. As a result, he or she can examine all potential tears and will base the method of repair (arthroscopic and sometimes open) on this thorough inspection. The arthroscopic repair is done using small incisions, which typically means your recovery is quicker and less painful.

To repair shoulder instability, your surgeon will attach anchors to the bone, then will pass sutures through the tissue. The anchors hold the suture in place. In many cases, these anchors are bioabsorbable and are gradually absorbed in the body over time (within three to five years following the procedure), rather than permanently residing in the bone. The surgeon may tighten the joint capsule using suture or a radiofrequency (RF) or thermal probe that heats the tissue, causing a molecular change in the collagen that allows the tissue itself to shrink.
Postoperative Care

After surgery, you will be transported to the recovery room for close observation of your vital signs and circulation. You may remain in the recovery room for a few hours.

When you leave the hospital, your arm will be in a sling. The sling should be worn for the amount of time recommended by your physician.

Rehabilitation

Steps for rehabilitation following rotator cuff surgery and instability repair vary from physician to physician. To learn what activities will be involved in your own rehabilitation, consult your doctor.
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General Surgical Awareness.

Like all forms of medical treatment, surgery poses some risk of complications. These can include infection, reactions to anesthesia, excess bleeding and damage to blood vessels, kidneys, other organs, or nerves. Many complications are minor, but serious ones are possible. Your surgeon can provide you with the best treatment options for your condition and a more complete list of possible surgical risks related to your specific procedure and course of treatment. You may need to see your family doctor to be referred to a surgeon. Once you see your surgeon he or she will be able to provide you with further information about your diagnosis, treatment alternatives, and the course of care, especially expectations for surgical outcomes. Ask questions, discuss the risks of the course of treatment (including complications), and seek further clarification when you are unsure. It is important that you share all relevant information with your surgeon.