Understanding Shoulder Arthroscopy

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Introduction: Shoulder injuries are an occasional side effect of sports, work or everyday activities. Fortunately, our ability to diagnose and treat these injuries has been increased by arthroscopy.

An arthroscope is an instrument that allows me to look directly into the shoulder joint that is bothering you. A video camera is connected to the arthroscope and the procedure is monitored on a television screen. Direct visualization of the inside of the joint allows improved diagnostic accuracy. Joint conditions such as torn rotator cuff tendons, labrum and biceps injuries and bone spurs can be corrected by arthroscopic surgery. However, we must remember that not all joint problems can be helped by arthroscopy. This is especially true if the joint has wear and tear or other degenerative changes.

Arthroscopy offers several advantages: Quick and accurate information can be obtained. Only small incisions are required. The procedure is performed on an outpatient basis and complications are very infrequent with an incidence of less than 1%. Risks include infection or blood clots in the veins of the legs. Other problems such as instrument breakage or artery and nerve injury are even more infrequent but can occur. Precautions are taken to prevent all complications but we must remember that they can occur in spite of all safeguards. We must weigh the risks against the potential benefits and alternatives in making a decision about having arthroscopy.

Prior to the Day of Surgery: After I have taken your history, performed a physical examination and reviewed your x-rays and MRI, arthroscopy will be recommended if the procedure is indicated. My assistant will obtain more information from you and schedule the arthroscopy. Pretesting and postoperative appointments will also be scheduled.

After you have read this material and had all of your questions answered, you will need to sign a consent form. This form states the potential benefits, risks, complications and alternative treatments. If you are less than 18 years of age, one of your parents will have to sign the form.

A medical history and physical is required prior to your surgery. This is usually performed by your primary physician. Blood tests, electrocardiograms and chest x-rays are often required depending on your age or medical condition. My office must receive the results of these tests prior to your procedure.

Your skin has to be perfect. You must not have any scratches, sunburn or other blemishes. You should start washing the area several times a day with soap and water prior to the procedure. You do not have to shave the area. If needed, we will shave the operative site at the hospital.
**The Day of Surgery:** It is most important for you to remember not to eat or drink anything after midnight before your arthroscopy. Arrive at the hospital where a receptionist will check you in. You will change clothes and go to a preoperative area. The anesthesiologist will take your medical history and explain to you the benefits as well as the risks and potential complications of the different types of anesthesia. Shoulder arthroscopy is most often performed under general anesthesia with a supplemental nerve block. They will then put an intravenous line into your arm and make other preparations. We will double check the planned procedure and confirm whether it is on the right or left side. The operative site will be initialed. You will be taken into the operating room where you will be transferred to the operating table. The anesthesiologist will hook up monitors that will check your blood pressure, pulse, oxygen, and other functions, while you are asleep. The operative site will be cleansed with an antiseptic solution.

**The Procedure:** The arthroscope is placed into the back of the shoulder joint through a small incision or “portal”. The arthroscope is connected to the television and a view of the inside of the joint is projected on a television monitor. The arthroscope is maneuvered throughout the joint allowing an accurate diagnosis of the problem. Another small portal is established to introduce small instruments into the joint. Sometimes several openings in different locations are required for various types of specially designed surgical instruments. Larger incisions are rarely needed to address problems that are better dealt with through an open approach. At the end of the procedure, the joint is washed out and the fluid is withdrawn. If a nerve block is not performed a long-acting local anesthetic is injected into the joint to keep it numb for several hours.

**After Surgery:** When you wake up in the recovery room you will be drowsy but should not have much pain. A nurse will monitor your blood pressure and be with you as you are waking up. When you are fully awake, you will go to a secondary recovery area for about one hour. The nurse will bring you something to drink and prepare you to leave the hospital. Be sure to wear loose clothing to fit over the bandages and arrange for someone to take you home.

The Novocain will eventually wear off and you will feel pain. You will be given a prescription to help ease the pain; use only as directed. It is normal to have discomfort for several days, even weeks after arthroscopy. The operative site should be iced 20 minutes on and 40 minutes off for several days. A cold therapy unit can apply continuous cold but the cooler must be changed according to schedule. Icing helps to reduce the pain and swelling.

You will leave the hospital with a shoulder sling or immobilizer depending on the exact procedure that was performed. In general, a sling is used when the shoulder is cleaned up or a simple spur is removed. The sling is worn mainly for comfort purposes and can be removed as tolerated. If a repair of any sort is performed an immobilizer is applied to the shoulder and strictly worn at all times.

Pump your hands into a fist and your ankles up and down to decrease swelling and prevent the formation of blood clots. Do this several times an hour for several days after surgery. Other exercises will be determined by the exact procedure that is performed.
**Aftercare:** The large bandages can be removed in 48 hours. The incisions are closed with a stitch. You may shower in 48 hours. The operative site should not be submerged in water or scrubbed. Pat it dry and reapply any protective wraps.

Postoperative exercises will be modified depending on the exact procedure performed. Early exercises may be limited by the amount of pain you experience. Gentle exercise can reduce pain and swelling, increase motion and help prevent stiffness. Formal physical therapy is often recommended. Your rehabilitation is critical to the success of your surgery.

Plan to take time off from work or school. Depending on the kind of work you do, you might be able to resume work as the pain and swelling subsides. Some types of work and various sports prohibit returning to full activities until after several weeks or months of therapy.

**Follow-Up:** You should be scheduled for a follow-up office visit approximately one week after surgery. We will check your incisions, remove the stitches and apply Steri-Strips. Arthroscopic photos and findings will be reviewed. Additional exercises may be added at that time. Pain and swelling may persist for several weeks, depending on the problem you have and the amount of surgery that was performed. This is usually nothing to worry about but please call the office if you have excessive symptoms such as fever, redness, drainage from the incisions, calf tenderness or increased swelling.

I hope this information has been useful. I will be happy to answer any questions. You may also ask my office staff for further information. Your understanding of this information will help make arthroscopy a safe and beneficial procedure.