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PATIENT GUIDE TO SHOULDER INSTABILITY

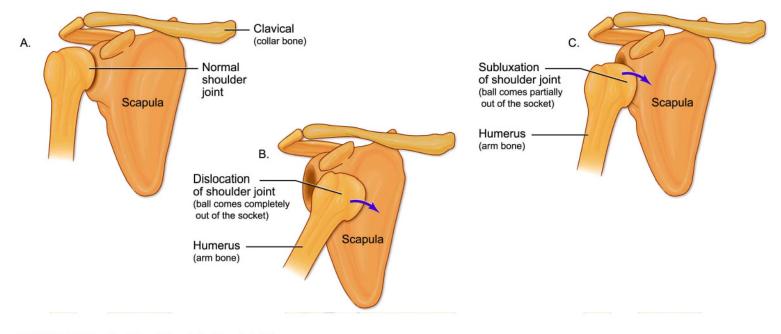


FIGURE 1A-C: Shoulder joint instability.

What is shoulder instability?

Shoulder instability is a cause of shoulder pain. The shoulder can dislocate (the ball comes completely out of the socket) (**Figure 1B**) or subluxate (the ball comes partially out of the socket) (**Figure 1C**). After this happens, pain and inability to use the shoulder occurs. Shoulder instability is the result of damage to the shoulder ligaments that keep the ball connected to the socket.

How does shoulder instability occur?

Many times, the shoulder ligaments tear from a single violent injury such as a football tackle or motor vehicle accident. However, they can also be stretched from repeated strenuous use. Some overhead athletes, such as baseball pitchers, can also have pain in the shoulder from shoulder instability.

How do I know my shoulder is unstable?

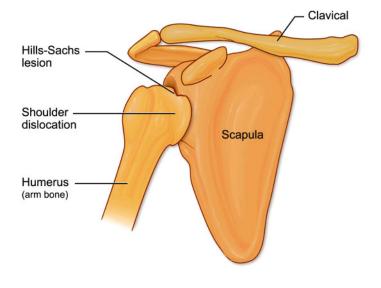
In many cases, the patient knows they have shoulder instability because they need someone to reduce the joint back into place (such as an emergency room physician). In other cases, the patient primarily complains of pain in the shoulder, with subtle feelings of slipping. The examination in the office usually confirms the diagnosis of shoulder instability.

Do I need x-rays?

A set of x-rays is usually ordered to make sure there are no fractures (broken bone) in the shoulder. Commonly, a small fracture in the area of the dislocation can occur on the humeral head, called a Hill-Sachs lesion (**Figure 2**).

Do I need a MRI?

A MRI can sometimes be helpful to confirm the tear of the ligament off of the bone (Bankart lesion) (Figure 3), and evaluate for other injuries to the shoulder. In some cases, a special MRI called a MRI arthrogram is performed. This requires an injection into the shoulder joint, and can be better to evaluate a tear of the cartilage ring, the labrum, in the shoulder. A MRI is not necessary in all cases.





Is there other damage to the shoulder in cases of instability?

The labrum (where the shoulder ligaments attach) is usually torn in cases of shoulder instability (Figure 4). In addition, there are sometimes fractures of the ball or socket of the shoulder. Rarely, there is also a rotator cuff tear in cases of instability. A rotator cuff tear is more common in patients over the age of 40 with a shoulder dislocation.

What are the treatment options for shoulder instability?

The treatment primarily depends on the patient's age, activity level, and number of dislocations of the shoulder. For patients who first dislocate their shoulder, they can commonly be treated in a sling with early rehabilitation. However, for patients with repeat episodes of instability, the usual treatment is surgery to fix the ligaments.

How is shoulder instability treated with surgery?

Shoulder instability is usually repaired with arthroscopic techniques (**Figure 4**). The arthroscope is a small fiber optic instrument that is placed into the joint through a small incision. A camera is attached to the arthroscope and the image is viewed on a TV monitor. The arthroscope allows a complete evaluation the entire shoulder joint, including the ligaments, the rotator cuff, and the cartilage surface. Small instruments ranging from 3-5 millimeters in size are inserted through additional small incisions so that any injury can be diagnosed, and damaged tissue can be repaired reconstructed or removed.

In shoulder instability surgery, the damaged labrum and ligaments are identified and then repaired back to the socket

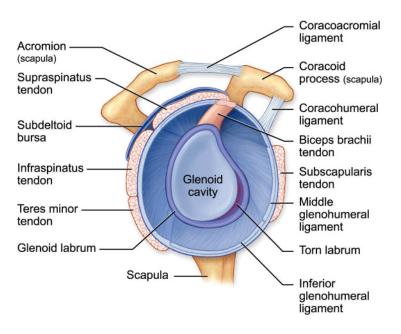


FIGURE 3: Open view of shoulder joint showing a torn labrum.

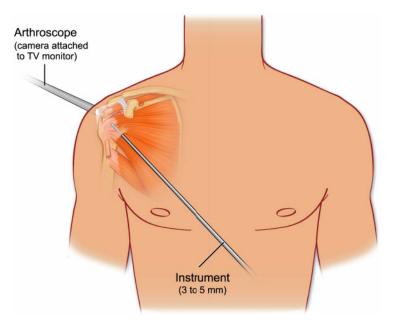


FIGURE 4: Arthroscopic technique.

(Figure 5). This is usually performed by using suture anchors (a rivet with sutures attached) to sew the ligaments back in place. In most cases, a bioabsorbable anchor (an anchor that dissolves over time) is used. Occasionally, a metal anchor is used, which does not need to be removed.

Occasionally, if the damage is severe or longstanding, the surgery needs to be performed with an open incision. This is a larger incision on the front of the shoulder used to get to the shoulder joint and repair the ligaments.

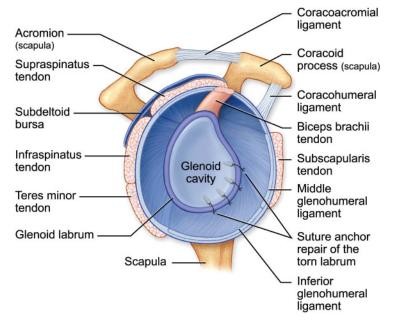


FIGURE 5: Open view of shoulder joint showing suture anchor repair of the torn labrum.

What are some of the possible complications?

Possible complications of shoulder arthroscopy include stiffness of the shoulder after surgery or recurrent instability. The use of arthroscopic techniques attempts to limit these complications. Other complications include an infection, bleeding, nerve damage, or problems with the anesthesia.

What kind of anesthesia is used?

A combination of general anesthesia and regional anesthesia is used for most surgeries. Before the surgery, the anesthesiologist will inject numbing medicine around the nerves of the shoulder. This numbs the arm and helps to control your pain after surgery. In addition, you go to sleep (general anesthesia) to help keep you comfortable during surgery.

What do I need to do to prepare for surgery?

Our staff will help to set up the surgery through your insurance company and will instruct you on any paperwork that may be necessary.

Prior to your surgery, you may be asked to get several medical tests, done on an outpatient basis. Most patients need some minor blood tests and a urinalysis. If you are over age 50, you may require an EKG and chest x-ray. Some patients need to see an internist or their family doctor to obtain clearance for surgery.

The night before the surgery, a member of our staff will contact you about what time to arrive for surgery. You may not eat or drink anything after midnight the night before your surgery.

How long will I be in the hospital?

Almost all patients are able to have surgery and go home

the same day. Occasionally, patients will be admitted for an overnight stay.

What happens the day of surgery?

The day before surgery you will be told what time to report to the hospital. You will be admitted and taken to a preoperative holding are where you are prepared for surgery.

You will be asked several times which shoulder is being operated on, and the surgical site will be initialed. Please note that you are asked this question many times on purpose.

After the operation, you will be taken to the recovery room to be monitored. Once the effects of anesthesia have worn off and your pain is under good control, you will be taken to another area where you can see your family and finish recovering. You will be given all of your post-operative instructions and pain medication before leaving.

Please be aware that the process of getting checked in, prepared for surgery, undergoing the operation, and recovering from anesthesia takes the majority of the day. I would recommend that you and your family members bring along some reading material to make the process easier for all.

How should I care for my shoulder after surgery?

Prior to your discharge, you will be given specific instructions on how to care for your shoulder. In general, you can expect the following:

Diet:

Resume your regular diet as soon as tolerated. It is best to start with clear liquids before advancing to solid food.

Medication:

You will be given a prescription for pain medication.

Bandage:

You will have a thick dressing on the shoulder. You will be instructed on when it can be removed, usually in 3 days.

Showering:

You may shower after your dressing is removed, after 2 - 3 days. You cannot take a bath until the wounds are completely sealed, usually 2 - 3 weeks after surgery.

Sling:

You will have a sling, which you will use for 4 weeks. You can remove it for grooming and physical therapy.

Ice:

You may receive an ice machine that continually surrounds your shoulder with cold water. If not, you may apply ice over the dressings for 30 minutes every hour for several days. Do not use heat.

Suture removal:

Your stitches will be removed at your office visit 7-10 days after surgery. Occasionally, sutures are used which absorb and do not need to be removed.

Follow-up office visit:

You will be instructed on when to follow-up in the office. This is usually 7-10 days after surgery.

Exercise:

You will be instructed on exercises you can do immediately after surgery. You will start physical therapy within 1 to 2 weeks after surgery.

Return to work or school:

You can return to school or work within 3-5 days without using the affected arm. If you need the use of the arm to return, you may be out of work or school for a longer period of time.

What will rehabilitation involve?

The rehabilitation is based on several goals: 1) allowing the tissue to heal; 2) regaining motion; 3) regaining strength; and 4) return to sports. The rehabilitation protocol for the physical therapist is attached for you to review.

When can I return to sports?

In general, you will be allowed to return to sports in 6 months after surgery. You must have good motion, strength, and control of your shoulder and arm. How quickly you return to sports depends on several factors, including: 1) your own rate of healing; 2) the damage found at surgery; 3) if you have any complications; 4) how well you follow the post-operative instructions; 5) how hard you work in rehabilitation.

What is the success rate?

Overall, the success rate for shoulder instability surgery ranges from 85 to 95% for attaining a stable shoulder.

Questions?

If you have any questions about your injury or possible need for surgery, please do not hesitate to contact our staff.

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