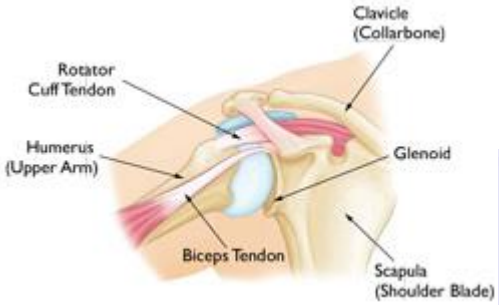
Patient Information – SHOULDER INSTABILITY

The shoulder is the most moveable (mobile) joint in your body. It helps you to lift your arm, to rotate it, and to reach up over your head. It is able to turn in many directions. This greater range of motion, however, can predispose the shoulder to instability.

Anatomy



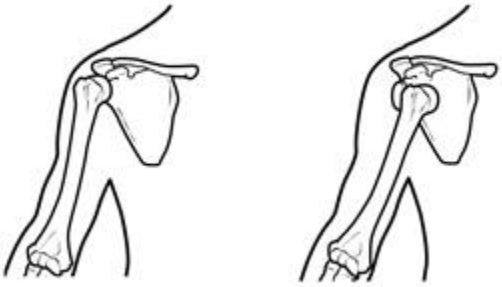
Normal shoulder anatomy

Your shoulder is made up of three bones: your upper arm bone (humerus), your shoulder blade (scapula), and your collarbone (clavicle).

The head, or ball, of your upper arm bone fits into a shallow socket in your shoulder blade. This socket is called the glenoid. Strong connective tissue, called the shoulder capsule, is the ligament system of the shoulder and keeps the head of the upper arm bone centered in the glenoid socket. This tissue covers the shoulder joint and attaches the upper end of the arm bone to the shoulder blade. Your shoulder also relies on strong tendons and muscles to keep your shoulder stable.

What is shoulder instability?

Shoulder instability is said to happen when the structures around the shoulder are unable to centre the ball of the shoulder in the socket. Shoulder dislocations can be partial, with the ball of the upper arm coming just partially out of the socket. This is called a subluxation. A complete dislocation means the ball comes all the way out of the socket. Once a shoulder has dislocated, it is vulnerable to repeat episodes. Once the ligaments, tendons, and muscles around the shoulder become loose or torn, dislocations can occur repeatedly. When the shoulder is loose and slips out of place repeatedly, it is called chronic shoulder instability.



Left: Normal shoulder stability. Right: Head of the humerus dislocated to the front of the shoulder.

What causes shoulder instability?

There are three common ways that a shoulder can become unstable:

Shoulder Dislocation

Severe injury, or trauma, is often the cause of an initial shoulder dislocation. When the head of the humerus dislocates, the socket bone (glenoid) and the ligaments in the front of the shoulder are often injured. The labrum — the cartilage rim around the edge of the glenoid — may also tear. This is commonly called a Bankart lesion. A severe first dislocation can lead to continued dislocations, giving out, or a feeling of instability.

Repetitive Strain

Some people with shoulder instability have never had a dislocation. Most of these patients have looser ligaments in their shoulders. This increased looseness is sometimes just their normal anatomy. Sometimes, it is the result of repetitive overhead motion.Repetitive or stressful activities can challenge a weakened shoulder. This can result in a painful, unstable shoulder.

Multidirectional Instability

In a small minority of patients, the shoulder can become unstable without a history of injury or repetitive strain. In such patients, the shoulder may feel loose or dislocate in multiple directions. This is called multidirectional instability. These patients have naturally loose ligaments throughout the body and may be "double-jointed."

What are the symptoms of shoulder instability?

Common symptoms of chronic shoulder instability include:

- Pain caused by shoulder injury
- Repeated shoulder dislocations
- Repeated instances of the shoulder giving out
- A persistent sensation of the shoulder feeling loose, slipping in and out of the joint, or just "hanging there"
- A loss of confidence in the shoulder

What does the assessment by the doctor involve?

Physical Examination and Patient History

After discussing your symptoms and medical history, your doctor will examine your shoulder. Specific tests help your doctor assess instability in your shoulder. Additional investigations may be needed to confirm diagnosis and plan treatment. These include X-rays, MRI and CT scans.

What are the treatment options for shoulder instability?

Chronic shoulder instability is often first treated with nonsurgical options. These may include specific shoulder physiotherapy. If these options do not relieve the pain and instability, surgery may be needed.

Nonsurgical Treatment

Your doctor will develop a treatment plan to relieve your symptoms. Nonsurgical treatment typically includes:

Activity modification, Non-steroidal anti-inflammatory medication, Physical therapy.

Surgical Treatment

Surgery is often necessary to repair torn or stretched ligaments so that they are better able to hold the shoulder joint in place. Sutures and special tacks called anchors are used to reattach the torn socket bumper and ligaments to the bone.

Arthroscopy (key-hole surgery). Soft tissues in the shoulder can be repaired using tiny instruments and small incisions. This is a same-day or an overnight stay procedure. Arthroscopy is a minimally invasive surgery. Your surgeon will look inside the shoulder with a tiny camera and perform the surgery with special pencil-thin instruments.

Open Surgery. Some patients may need an open surgical procedure. This involves making a larger incision over the shoulder and performing the repair under direct visualization and may involve moving a piece of bone to the front of the socket to deepen it and provide further resistance to dislocation.

What is the recovery and rehabilitation like after surgery?

Rehabilitation. After surgery, your shoulder may be immobilized temporarily with a sling.

When the sling is removed, exercises to rehabilitate the ligaments will be started. These will improve the range of motion in your shoulder and prevent scarring as the ligaments heal. Exercises to strengthen your shoulder will gradually be added to your rehabilitation plan. The whole process may take a few weeks, depending on your recovery.

Although it can be a slow process, your commitment to physical therapy is the most important factor in returning to all the activities you enjoy. Most patients return to the level of activity that they previously enjoyed.