

SHOULDER DISLOCATION: GENERAL INFO AND TREATMENT OPTIONS

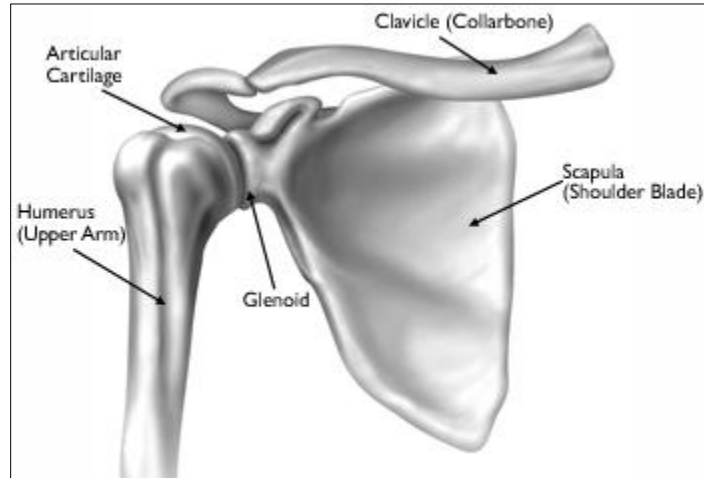


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SHOULDER ANATOMY 101

- The shoulder is a ball-and-socket joint
 - The ball is made up of the top portion of the humerus bone, called the 'humeral head'
 - The socket is called the 'glenoid', which comes from the scapula (or shoulder blade)
- The socket (or 'glenoid') is shallow and much smaller than the ball (or 'humeral head').
 - Think of it like a golf ball on a golf tee

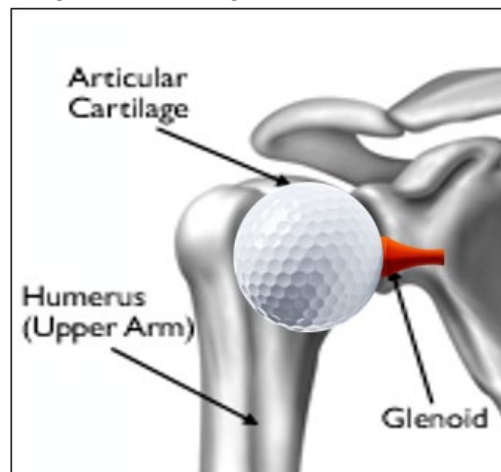


Photo Credit: [Acro PT](#)

- To deepen the socket, and better stabilize the shoulder joint, our bodies have an added bumper, or “O-ring” around the edge of the socket. This structure is called the ‘labrum.’
 - The labrum is a soft cartilage structure that wraps around the socket forming a bumper that deepens the socket and helps keep the ball within the socket. It not only deepens the socket, but also adds a “suction-seal” to suck the ball into the socket

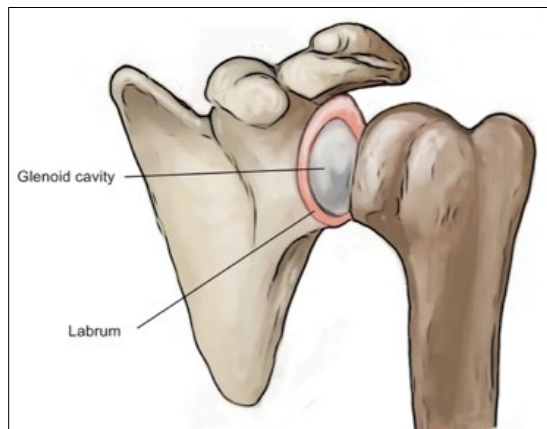


Photo Credit: [Inline Physio](#)

- Additional structures to stabilize the shoulder include the rotator cuff and the capsular ligaments
 - To learn more about shoulder anatomy, follow me on Instagram at [@dr._ridley](#) or [CLICK HERE](#) to view my videos discussing shoulder anatomy

SHOULDER DISLOCATION

- A shoulder dislocation occurs when the ball (i.e. humerus) comes completely out of the socket (i.e. glenoid)
 - A shoulder “subluxation” means the ball has come partially out of the socket
- The ball can dislocate forward, backward or downward
 - The most common direction is forward, or anterior
 - This is called an anterior shoulder dislocation

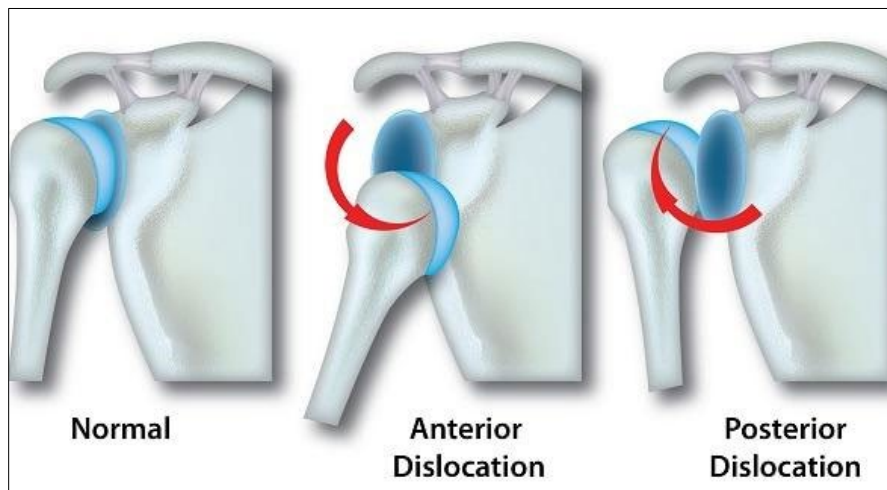


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- The ball can often return to the socket on its own, but sometimes requires special maneuvers to relocate the shoulder
 - Relocation of the shoulder is called a “reduction.”

- A shoulder dislocation almost always results in significant injury to the structures of the shoulder.
 - As the shoulder jumps out of the socket, the labrum often tears away from the socket
 - When the ball gets stuck outside of the socket, the two bones can hit each other, creating injury to the bones (glenoid and humeral head). In rare cases, this can result in complete fracture of these bones.
- X-rays, MRI and even CT scan imaging may be required to assess the soft tissue and bony injury following a shoulder dislocation.
- The risk for repeat shoulder dislocation is extremely high and you should see an orthopedic specialist urgently following this injury.

TREATMENT OPTIONS

- Non-surgical treatment involves a period of immobilization in a sling followed by restoration of normal shoulder motion and strength under the guidance of a physical therapist.
 - Athletes can return to sport when they have restored full mobility and strength in their shoulder. This may take 5-12 weeks.
- Surgical treatment is most often performed arthroscopically to repair the torn labrum followed by physical therapy to restore motion and strength
 - Athletes typically return to sport after 4-6 months depending on the sport and progression with their physical therapy.
- Debate continues over the treatment of a first-time shoulder dislocation
 - Recurrent dislocations warrant consideration of surgical intervention
 - Fractures of the glenoid or humerus may also warrant more urgent surgical intervention
- Without surgery, the risk of a second dislocation ranges from 20-90% depending on age and activity level
 - This risk is highest at ages 15-20 years
 - Participation in contact and overhead throwing sports, and higher sporting levels also increases this risk
- Repeat shoulder dislocations result in further damage to the shoulder including the labrum, rotator cuff, glenoid, and humeral head.
- Recurrent dislocations significantly risk injury to the ball and socket in addition to further damage of the labrum. If this occurs, arthroscopic surgery may no longer be an option, and open surgery may be required.
 - Therefore, it is reasonable to consider surgery after the first dislocation, as this will decrease the chance of needing a bigger, more invasive surgery.

TREATMENT CONSIDERATIONS

- Surgical intervention for a first-time dislocation remains controversial. This is because there are many things to consider. There are risks associated with non-surgical treatment as well as with surgery.

	Non Surgical Treatment	Surgery
What does it mean?	Sling use for 1-3 weeks followed by PT. Return to sport when full motion and strength achieved	Typically arthroscopic to repair damaged tissues.
Risk of repeat dislocation	20-90% depending on age and activity level	5-20%, varying throughout the literature
Risk of treatment	<p>Increased dislocation risk = increased risk to further damage = need for open surgery</p> <p>Delayed return to play if repeat dislocation</p>	<p>Surgical risks are extremely low including but not limited to stiffness, nerve injury, and anesthetic complications.</p> <p>The most notable risk is that of repeat dislocation, which is ultimately lower than that of non-surgical treatment</p>

- A recent study randomly assigned young athletes after their first dislocation to either non-surgical or surgical treatment with arthroscopy. They found improved results in the surgery group in regards to:
 - Decreased recurrence of dislocation or instability of the shoulder
 - Improved function
 - Faster return to sport with increased ability to return to the same sport
 - Those treated without surgery had difficulty returning to their sport because of their shoulder
- Other studies have demonstrated similar results in regards to the risk of repeat dislocation or instability, function and return to sport

SUMMARY

- Shoulder dislocations result in damage to the labrum and bone structures of the shoulder
- The risk of repeat dislocation after the first dislocation is very high, especially in young athletes
 - Repeat dislocations risk additional injury to the shoulder
 - Preventing recurrent dislocations is of utmost importance
- First time dislocations can be treated with or without surgery, but recurrent dislocations should warrant surgical discussion
- Surgical treatment for first time dislocation is typically performed arthroscopically and decreases the risk of repeat dislocation
- Surgery after the first dislocation can improve the chance of returning to sports with very low surgical risks
- Patients with either a first-time dislocation or a repeat dislocation should visit with an orthopedic surgeon to discuss which treatment option is most appropriate

LITERATURE CITED

- Fox et al. Increased Failure Rates After Arthroscopic Bankart Repair After Second Dislocation Compared to Primary Dislocation With Comparable Clinical Outcomes. *Arthroscopy*. 2023;39(3):682-688.
- Pougé's et al. Arthroscopic Bankart Repair Versus Immobilization for First Episode of Anterior Shoulder Dislocation Before the Age of 25. A randomized control trial. The

American Journal of Sports Medicine. 2021;49(5):1166–1174 DOI:
10.1177/0363546521996381.

- Arciero RA, Wheeler JH, Ryan JB, McBride JT. Arthroscopic Bankart repair versus nonoperative treatment for acute, initial anterior shoulder dislocations. *Am J Sports Med.* 1994;22(5):589-594
- Bottoni CR, Wilckens JH, DeBerardino TM, et al. A prospective, randomized evaluation of arthroscopic stabilization versus nonoperative treatment in patients with acute, traumatic, first-time shoulder dislocations. *Am J Sports Med.* 2002;30(4):576-580.
- Kirkley A, Werstine R, Ratjek A, Griffin S. Prospective randomized clinical trial comparing the effectiveness of immediate arthroscopic stabilization versus immobilization and rehabilitation in first traumatic anterior dislocations of the shoulder: long-term evaluation. *Arthroscopy.* 2005;21(1):55-63.
- Jakobsen BW, Johannsen HV, Suder P, Sjøbjerg JO. Primary repair versus conservative treatment of first-time traumatic anterior dislocation of the shoulder: a randomized study with 10-year follow-up. *Arthroscopy.* 2007;23(2):118-123.