

Shoulder Injuries

DISLOCATIONS VERSUS SEPARATIONS

ALTHOUGH A SHOULDER DISLOCATION AND A SEPARATION ARE OFTEN CONFUSED, THEY REQUIRE DIFFERENT TREATMENTS AND DIFFERENT LONG-TERM SOLUTIONS.

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In the young athlete, shoulder injuries can be quite serious. Injuries can run the gamut from simple strains (injuries to a muscle or tendon) and sprains (injuries to a ligament), to separations, dislocations or fractures. Shoulder separations and dislocations are often mixed up, but they are really very different injuries.

A separation occurs when an athlete falls directly on the tip of the shoulder, with the arm against the side of the body. The joint that is injured is actually the second joint of the shoulder area, the acromioclavicular joint. This is a relatively non-mobile joint between the end of the collarbone (clavicle) and the scapula (acromion process). Joint capsular ligaments as well as accessory ligaments, the coracoclavicular ligaments, maintain the stability of this joint.

With a separation, some combination of these ligaments is injured, resulting in increased mobility of the clavicle in relation to the acromion. These injuries are typically graded I through III. In grade I injuries, the superior capsular ligaments are injured or torn, but the more stout remaining ligaments maintain good joint stability. The sign of the injury is usually localized swelling at the end of the collarbone and tenderness.

In grade II injuries, more capsular ligaments are injured above and below the joint, and a partial injury to the coracoclavicular ligaments can occur, resulting in some instability at the joint and a slightly more prominent end of the collarbone.

In grade III injuries, all of the ligaments are torn, resulting in a frankly unstable joint and an obviously high riding collarbone.

A dislocation typically occurs when an athlete's arm is forcibly stretched beyond its anatomical limits to the side of the body and rotated behind the head. The result is that the ball pops out of the socket. In some cases the ball may pop right back in the socket, but often the ball gets stuck out of

the socket, resulting in severe pain and an inability to move the arm. In the young athlete, 80 percent of the time, a dislocation includes a torn ligament in the front of the shoulder. The anterior-inferior glenohumeral ligament tears a portion of the cartilage ring, the labrum, from the socket (glenoid). The injury to the ligament and labrum usually does not heal perfectly on its own, resulting in long-term instability of the shoulder, with the potential for recurrent dislocations.

The treatment for separations is quite different than for dislocations. In separations, the injury rarely requires a trip to the emergency room. Grades I and II separations are treated symptomatically, with a sling for comfort for a few days and restricted activities for a while. Grade III injuries are more difficult because of the obvious deformity created, but the current orthopedic literature and research continues to recommend a non-operative approach to this injury. Some surgeons have preferred surgical fixation of the injury, with mixed results.

In dislocations, the athlete usually has to go to the emergency room unless the ball pops back into socket on its own. Popping the shoulder back into the socket usually requires pain medicine and/or an anesthesia, with a couple of strong helpers. After relocation, the pain in the shoulder subsides promptly, and the shoulder can move and feel relatively normal within days. Unfortunately, with the probable torn ligaments, the arm can re-dislocate easily if it is put in the wrong position. Signs of recurrent instability, such as re-dislocation, numbness and tingling down the arm and pain, often indicate surgery is necessary to stabilize the joint or repair the ligament.

This cursory review should help athletes understand these complex injuries and distinguish between the two. In either case, an athlete should have such an injury evaluated by a sports specialist for appropriate treatment. •



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