

Glenohumeral Internal Rotation Deficit (GIRD)

GIRD is simply a loss of internal rotation of the shoulder. You might notice this if you have difficulty reaching for your bra strap, or tucking a shirt into some trousers. If you are unable to reach behind your lower back, then you have a restriction in the internal rotation of the shoulder. Please note that some texts or articles will refer to internal rotation as medial rotation.

The Thrower's Shoulder

The thrower's shoulder needs to be lax enough to allow for an excessive amount of external rotation, but it has to be stable enough to prevent symptomatic subluxations of the humeral head, so a delicate balance between stability and mobility is necessary. When the balance is compromised, injury can occur.

Six phases compromise the overhead throwing motion. Even though a number of other movements have been looked into, there aren't enough parallels between the movements, which is why the overhand throw tends to be the most commonly used. The goal of the motion is to develop a package of energy that can be converted into kinetic energy, which can then be imparted to the ball in a fluid and efficient manner. Shoulder loads tend to be quite minimal as the arm internally rotates.

Even though the reasoning behind the altered range of movement isn't clear, it is believed to occur in anyone who throws naturally. Theories relating to external rotation include a microtrauma to the dynamic and static restraints of the joint from repeatedly throwing an object, osseous adaptation of the humerus and contracture of the joint capsule. Movement becomes problematic in the throwing shoulder whenever the internal rotation loss is greater than external rotation.

Losing internal rotation often results from a thickening and contracture of the joint capsule, which occurs from repeated microtrauma that is imparted in the deceleration phase when throwing. Reviewing the disabled shoulder reported findings in those who exhibit GIRD symptoms.

How to Treat Glenohumeral Internal Rotation Deficit (GIRD):

1. Stretching

Based on studies, 90 percent of all those who have tightness in the shoulder and GIRD will respond to a proper stretching program. The program is designed to carefully stretch various parts of the posterior capsule. Stretches have to be incorporated into your daily routine. Athletes that are responders tend to gain about 10 degrees of internal rotation within the first week. Your therapist can also stretch your shoulder, allowing you to achieve greater gains while your arm and shoulder can remain passive.



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2. Surgery

Only 10 percent of individuals who don't respond to stretching exercises will go on to need surgical intervention. If you need surgery, a SLAP repair along with a posterior capsular release to provide relief and an increased range of movement.

3. Rest

Rest from throwing is strongly recommended. The rest period could be anywhere up to 6 months, and during this time rehabilitation with an appropriate professional should be undertaken.

Tips:

- Whenever the posterior capsule tightens, the shoulder will lose internal rotation and cause additional pain to the site.
- GIRD is often the direct cause of shoulder pain in athletes who throw regularly. It is often found in baseball players, although it is also found in high-level tennis players and other athletes using overhead motions.
- Most of the time, the condition will end up developing over the course of time, instead of following an acute injury.
- Most athletes complain of minimal shoulder pain with any overhead activities. The pain isn't as obvious as one might think, which is why the condition will continue developing slowly.
- Throwers might find that they have a decreased velocity or control over their throws, which can often accompany a decreased range of motion.
- Throwers with GIRD are 25% more likely to have a SLAP lesion (this is a tear to the edge of the socket, of the ball and socket joint of the shoulder). SLAP lesions are common in throwers.