

Rotator cuff injury of the shoulder

What is a rotator cuff injury of the shoulder?

The shoulder joint is a ball and socket-type joint formed by the scapula bone (shoulder blade), which acts as the socket, and the head of the humerus (upper arm bone), which acts as the ball. The rotator cuff includes four muscles (supraspinatus, infraspinatus, teres minor and subscapularis) located on the upper back portion of the shoulder. The rotator cuff muscles provide stability to the shoulder joint and perform specific movements at the joint. Injuries can occur as a result of traumatic injury, overuse, incorrect movement patterns involving the arm. A rotator cuff injury can be a muscle strain, a partial tear or a complete rupture of the muscle.

Who is at risk?

- Children/adolescents who participate in sports requiring repetitive and often a high volume of overhead activities (baseball, volleyball, tennis, swimming, gymnastics, etc.).
- Children/adolescents who participate in sports requiring the repeated forceful use of one or both arms (football, weightlifting, wrestling, etc.).
- Children/adolescents who have poor throwing or swimming techniques.
- Children/adolescents who have suffered a previous shoulder injury.
- Children/adolescents who have excessive motion in other joints (hypermobility).

What are the symptoms?

- Pain over the front or side of the shoulder, which is usually worse with throwing or other overhead activities.
- Pain down the affected arm, but usually not below the elbow.
- Pain up toward the neck on the affected side.
- Dull/achy or sharp/stabbing pain in the affected shoulder.
- Muscle weakness in the affected arm.
- Limited movement in the affected shoulder.
- Swelling is likely if there is a tear.

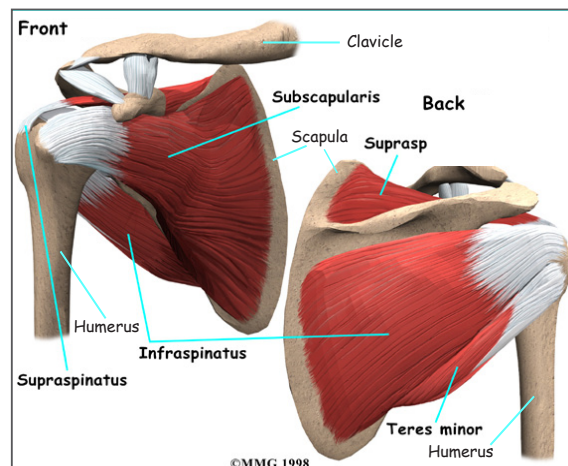
What are the treatment options?

Conservative/non-surgical treatment:

- Rest from activities that cause pain or "relative rest."
- Ice the area for swelling/pain for 10-20 minutes, once an hour as needed.
- Posture correction and muscle strengthening to promote proper movement in the affected arm.
- Muscle stretching to improve flexibility before and after activity.
- If the condition does not improve, a referral to physical therapy to address pain, swelling, instability, range of motion, flexibility, rotator cuff strengthening, bracing/taping and sport training will usually improve symptoms.

Surgical treatment:

- Surgical treatment is rarely needed with adolescents, unless there is a tear of the muscle.



What is the time frame for return to activity/sport?

- A mild injury could take six weeks before the athlete is ready to return back to activity/sport.
- The more severe injuries could take three to six months before returning to activity/sport.

What are the long-term side effects of having a rotator cuff injury?

- Progressive pain, instability, weakness and loss of function if not rehabilitated.
- Potential of not being able to return to same level of activity.