



Orthopaedic Surgery
& Sports Medicine

Shoulder impingement

Description

Impingement syndrome is characterized by pain in the shoulder due to inflammation of the tendons of the rotator cuff. The rotator cuff consists of four muscles that surround the ball of the shoulder. The rotator cuff becomes inflamed due to a specific injury or overuse causing it to be pinched between the ball of the shoulder and the acromion.

Impingement syndrome may represent a grade 1 or 2 strain of the tendon. A grade 1 strain is a mild strain where there is a slight pull without obvious tearing. There is no loss of strength. A grade 2 strain is a moderate strain where there is a partial tear of a tendon and this will cause a decrease in strength. A grade 3 strain is a complete rupture of the tendon.

Common signs and symptoms

- Pain around the shoulder, often at the outer portion of the upper arm.
- Pain that is worse with reaching overhead or lifting.
- A constant aching when not using the arm or pain that awakens you at night.
- Tenderness, swelling, warmth or redness may be present over the shoulder region.
- Limited range of motion, especially trying to reach behind your back.

Causes

- Strain from sudden increase in amount or intensity of activity.
- Direct blow or injury to the shoulder.
- Aging, degeneration of the tendon with normal use.

Risk of further injury

- Contact sports such as football, weightlifting and boxing
- Throwing sports such as baseball, tennis, or volleyball
- Heavy labor
- Previous injury to the rotator cuff
- Poor physical conditioning (strength and flexibility)
- Increasing age

Initial treatment:

Consists of medications and ice to relieve pain; stretching and strengthening exercises of the shoulder (specifically the rotator cuff muscles); rest; and modification of the activity that initially caused the problem. These can all be carried out at home for acute cases, although referral to a physical therapist or athletic trainer for further evaluation and treatment may be recommended. An injection of cortisone to the area around the tendon (within the bursa) may be recommended. Gradual return to activity is allowed after symptoms are resolved. Rarely, surgery is attempted to

remove the chronically scarred bursa and spur from the acromion, but this is usually considered after at least 3 months of conservative treatment.

Medication

Nonsteroidal anti-inflammatory medications such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur. Topical ointments may be of benefit. Pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

Heat and cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage. Cold should be applied for the first 72 hours after initial injury.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak. **Do not use** heat if inflammation (swelling) is present.