

# Informational Guide to Impingement Syndrome

## *Introduction*

Impingement is one of the most common causes of pain in the adult shoulder. It results from pressure on the rotator cuff from part of the shoulder blade (scapula) as the arm is lifted. This problem develops because of poor posture, muscle imbalance, overuse, natural degeneration and traumatic events.

The rotator cuff muscles cover the "ball" of the shoulder's ball and socket joint. The muscles work together to lift and rotate the shoulder.

The acromion is the part of the shoulder blade that sits over the top of the humeral head (the ball of the ball and socket). As the arm is lifted, the acromion may rub or "impinge" on the surface of the rotator cuff. This causes pain and limits movement.

The pain may be due to an inflammation of a fluid-filled sac (bursitis) overlying the rotator cuff, or an irritation of the rotator cuff (tendonitis). In some circumstances, a partial tear of the rotator cuff may cause impingement pain.

## *Symptoms*

Shoulder impingement commonly causes swelling and tenderness in the front of the shoulder. There may be pain and stiffness when you attempt to lift your arm. There may also be pain when you lower the arm from an elevated position.

As the problem progresses, pain at night is common. You may lose strength and motion and have difficulty with activities that place the arm behind the back, such as buttoning or zippering. In advanced cases, loss of motion may progress to a "frozen shoulder." In acute bursitis, the shoulder may be severely tender. All movements may be limited and painful.

## *Diagnosis*

The diagnosis of shoulder impingement is based on a history of pain with shoulder movements and examination where certain tests confirm inflammation. A special X-ray view called an "outlet view" sometimes will show a small bone spur on the front edge of the acromion. The doctor may request further imaging studies, such as an MRI (magnetic resonance imaging). These can show fluid or inflammation in the bursa and rotator cuff. In some cases, partial tearing of the rotator cuff will be identified.

## *Treatment*

The inflammation often associated with shoulder impingement can be decreased through medication prescribed by a physician or in physical therapy with ice and ultrasound. Rest, activity modification and therapeutic exercises are also a part of conservative care. A subacromial injection may be given to “numb” the bursal tissues which lie directly beneath the acromion.

If conservative methods of treatment are not working, other, more aggressive means may be warranted, such as surgery. This surgery is used to decompress the space between the humeral head and the acromion by cleaning out degenerative changes and carefully removing bone on the underside of the acromion.

After surgery, the arm may be placed in a sling for a short period of time. This allows for early healing. As soon as you are comfortable, you may remove the sling and begin exercise and use of the arm. This will include exercises to regain range of motion of the shoulder and strength of the arm. It may take two to four months to achieve complete relief of pain.

## *Rehabilitation*

The goals of shoulder impingement rehab include regaining tissue flexibility, muscle balance and strength in the shoulder complex.

Soft tissue mobilization techniques are used to eliminate painful restrictions in muscles and connective tissues that surround the shoulder complex.

The shoulder blade muscles are then retrained to assist in maintaining posture and position of the scapula. Finally a rotator cuff strengthening program is given for the patient to perform as part of a home exercise program.

## *More Information...*

For more information please contact any of our three clinics in Roseville, Spring Lake Park, or Blaine where a knowledgeable therapist will be happy to assist you with your recovery needs.