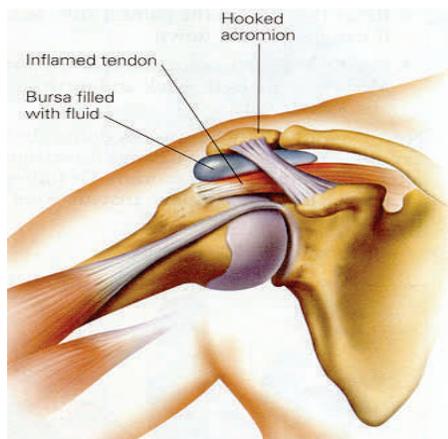


A Patient's Guide to Impingement Syndrome



What is Impingement Syndrome?

Shoulder impingement syndrome occurs when the tendons of the **rotator cuff** and the **subacromial bursa** are pinched in the narrow space beneath the acromion. This causes the tendons and bursa to become inflamed and swollen. This pinching is worse when the arm is raised away from the side of the body or above the head. Impingement may develop over time as a result of a minor injury, or as a result of repetitive motions that lead to inflammation in the bursa. Impingement caused by bone spurs on the acromion is common in older patients who participate in sports or work activities that require overhead positions.

What are the Rotator Cuff and Subacromial Bursa?

The shoulder is made up of three bones: the *scapula* (shoulder blade), the *humerus* (upper arm bone) and the *clavicle* (collarbone). The rotator cuff is formed by the tendons of four muscles: the *supraspinatus*, *infraspinatus*, *teres minor* and *subscapularis*. The tendons of the rotator cuff muscles attach to the bones of the shoulder blade and the humerus. Tendons attach muscles to bones and muscles move the bones by pulling on the tendons. This is how the rotator cuff helps raise and rotate the arm. These same muscles and tendons are also responsible for stabilizing the shoulder. As the arm is raised, the rotator cuff also keeps the humerus tightly in the socket of the scapula, the *glenoid*. The upper part of the scapula that makes up the roof of the shoulder is called the *acromion*. The subacromial bursa is located between the acromion and the rotator cuff tendons. A bursa is a lubricated sac of tissue that cuts down on the friction between two moving parts. The bursa protects the acromion and the rotator cuff from grinding against each other.

How does Impingement Syndrome develop?

Usually, there is enough room between the acromion and the rotator cuff so that the tendons slide easily underneath the acromion as the arm is raised. Each time you raise your arm, there is a bit of rubbing or pinching on the tendons and the bursa. Raising the arm tends to force the humerus against the edge of the acromion. Overuse can cause irritation and swelling of the bursa. If any other condition, such as a bone spur, decreases the amount of space between the acromion and the rotator cuff tendons, the impingement may get worse. Changes in biomechanics causes increased stress, internal pressure, and increased friction that leads to more inflammation and eventually the formation of scar tissue within the shoulder. Scar tissue restricts the translation or movement of adjacent tissues, causing friction, and leading to inflammation. Normally, the shoulder can move through a full range of motion, but as the scar tissue builds up and motion is reduced, the bursa of the shoulder becomes more irritated and inflamed, and pain is produced.

What does Impingement Syndrome feel like?

Impingement syndrome causes generalized shoulder aches in the condition's early stages. It also causes pain when raising the arm out to the side or in front of the body. Most patients complain that the pain makes it difficult to sleep, especially when rolling onto the affected shoulder. Pain is also produced whenever they try to put their coat on, scratch their back, do their hair, or reach to get something out of a cabinet.

What's the treatment for Impingement Syndrome?

In our office we use a combination of chiropractic treatments, Active Release Technique (ART) soft tissue manipulation, and rehabilitation for restoration of proper biomechanics to the shoulder, scapula and neck.

Ways We Treat Your Impingement Syndrome:

Chiropractic

- Chiropractic is a natural healing approach that promotes a healthy, pain-free lifestyle without the use of drugs or surgery. An adjustment is a hands-on therapy that delivers a controlled pressure that restores proper motion to a restricted joint.

Active Release Technique (ART)

- ART is a manual therapy that corrects muscular and soft-tissue problems caused by the formation of adhesive or scar tissues. Adhesions/scar tissue occur naturally in the body in response to overuse or cumulative trauma.

Flexibility

- Good flexibility enables muscles and joints to move through their full range of motion. Poor flexibility leads to a higher chance of injury to muscles, tendons and ligaments.

Strength

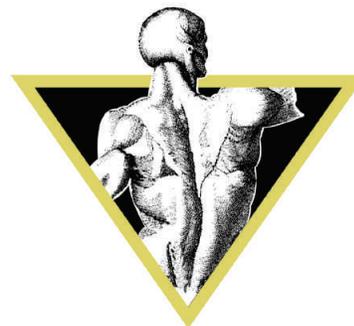
- Strength training is essential for the rehabilitation of any injury. When new tissue is laid down to repair an area, it is very thin and weak. If this tissue is not properly re-strengthened, it can lead to re-injury.

Proprioception

- Proprioception describes the body's ability to react appropriately to external forces. It also helps rebuild proper motor patterns of the body. Proprioceptive exercises form the basis for the agility, strength, and endurance for complete rehabilitation.



With our combination of different treatments, resolution can be seen in over 90 percent of shoulder cases. Effective treatment of the neck and arm, or any soft tissue injury, requires an alteration in tissue structure to break up the restrictive cross-fiber adhesions and restore normal function to the affected soft tissue areas. When executed properly, this process substantially decreases healing time, treats the root cause of the injury, and improves athletic performance. Active Chiropractic and Rehabilitation Clinic is very successful at treating this type of injury. Our therapies remove restrictive adhesions between both the superficial and deep tissue structures along the entire kinetic chain. This comprehensive approach creates a complete, time efficient healing process.



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