Shoulder Impingement

**Definition:** Shoulder impingement is defined as a “pinching” of the rotator cuff under the end of the collar bone during overhead motion.

**Common Terms:** “Impingement syndrome” is a common term, sometimes this condition is associated with rotator cuff tears and other bony or ligament injuries in the shoulder.

**Typical Mechanism of Injury:** Impingement can be caused anytime there is a decrease in the space between the end of the collar bone and where the tendons (rotator cuff) pass under it. This can happen with swelling in the area, or even with overuse of the shoulder in an overhead position. In some cases, a curved shaped bone (acromion process) can point into the space and cause impingement. When rotator cuff muscles are weak, torn, or even fatigued with activity there is a greater likelihood of one having impingement symptoms.

**Common Signs and Symptoms:** Common complaints of pain or weakness with overhead activities as simple as just raising the arm or as complex as throwing a baseball are commonly reported. The pain may be in the front or back of the shoulder, and may also radiate down the arm. Pain is also noticed sleeping when a person rolls over and lies on the affected arm, leading the area to become pinched. This oftentimes wakes a person up from a sound sleep.

**Common Treatment:** Treatment includes rest from the painful activities, local ice for pain relief, anti-inflammatory medication, and possible therapeutic modalities such as ultrasound. When able, a gradual strengthening of rotator cuff muscles should begin, and stretching as appropriate may be helpful. Based upon the cause and underlying factors that led to the condition, additional interventions may also be applied.

**Prevention:** Maintaining a healthy rotator cuff is important. This includes strengthening the muscles and keeping them adequately flexible. Trunk and lower extremity strength and flexibility can also assist in preserving the integrity of the rotator cuff, preventing impingement. Posture should be evaluated to prevent rounded shoulders. In some cases, this is unavoidable and the impingement condition may still occur.

**Expectations:** Recovery depends on how long the shoulder has been inflamed before seeking treatment, the extent of the impingement, and the ability of the person to remove or correct the irritating factors. Generally, if a person is compliant with rehabilitation and training factors are modified, symptoms could start to resolve within 7-10 days. In some cases, this may take longer and even require surgical consideration.