



291 North Fireweed
Soldotna, AK 99669
907-262-6454

www.kenaipeninsulaortho.com

Orthopaedic Surgeon:
Henry G. Krull, M.D.

Hand and Wrist Specialist:
Edwin D. Vyhmeister, M.D.

Rotator Cuff Tear

The rotator cuff is a tendon that connects 4 muscles in the shoulder to the upper arm. The muscles and tendon are the main mover of the shoulder joint. Tears occur when the tendon detaches from its insertion into the upper arm bone (the greater tuberosity of the humerus). Sometimes the tendon tears along the length of its fibers, and sometimes tears also occur within the substance of the tendon itself. Partial tears can occur, but complete tears involve the detachment of tendon from the bone. Sometimes just one of the four muscles/tendons is affected, and sometimes 2 or more tendons detach.



Symptoms:

The primary symptoms are pain, and/or weakness with certain shoulder positions (typically, raising the arm up from the side, or rotating the arm outwards). Pain can be present at rest, and is often worse with activities, particularly reaching and lifting. Pain is often present at night time, and frequently awakens patients from sleep. The location of the pain is often ill-defined. Pain often radiates or travels to the outer portion of the upper arm.



291 North Fireweed
Soldotna, AK 99669
907-262-6454

www.kenaipeninsulaortho.com

Cause:

Rotator cuff tear may occur either due to degeneration, or to injury, or sometimes both. Tears most often occur in older individuals, over 50, but can occur in the 35-50 year age range. Young overhead athletes can also suffer tears due to overuse. In older individuals, the aging process can cause weakening of the bone-tendon interface, and tears can occur spontaneously, or with a minor injury such as a fall to the shoulder. Not all rotator cuff tears, even massive ones involving 2 or more tendons, cause symptoms.

Diagnosis:

A careful history and physical examination will often raise suspicion for a cuff tear. X-rays may be obtained to evaluate for other causes of shoulder pain, and to evaluate for bony abnormalities that can be associated with the development of rotator cuff tears. Diagnostic ultrasound can often visualize cuff tears. Occasionally, an MRI may be required. An injection of local anesthetic is used at times to confirm the diagnosis.

Treatment:

Rotator cuff tears, even when documented by ultrasound or MRI, do not always cause symptoms. For individuals who have *symptoms* related to a cuff tear, initial treatment is often nonsurgical.

Nonsurgical Treatment

--Non-steroidal anti-inflammatory medicines. Drugs like aspirin and ibuprofen may reduce pain and swelling. Stronger analgesics are sometimes used in a traumatic, acute tear.

--Physical therapy can help to restore range of motion and strength to the shoulder, although it may not make a cuff tear heal.

--PRP injection. There is no data to show that PRP will make full-thickness tears heal, but there is some data that shows PRP to be useful in treating partial cuff tears. Other *biologicals*, such as AmnioFix may similarly stimulate the body's own healing response.



**291 North Fireweed
Soldotna, AK 99669
907-262-6454**

www.kenaipeninsulaortho.com

--Steroid injections. Cortisone is a powerful anti-inflammatory medicine that is injected into the space surrounding the rotator cuff. It can cause dramatic pain relief, but there is concern that repeat injections may actually prevent healing, and can make tears worse.

Surgery:

The goal of surgery is to repair the tendon back down to the bone where it belongs. This is usually done as an outpatient, with arthroscopic surgery. Stitches are placed in the end of the tendon, then the tendon is brought back down to bone where it belongs. The stitches are placed into bone anchors that are tapped into the bone, securing the tendon. Healing time is approximately 6-8 weeks for the tendon to heal to bone. Typically, 6-8 weeks of postoperative rehabilitation is needed to restore mobility and strength.