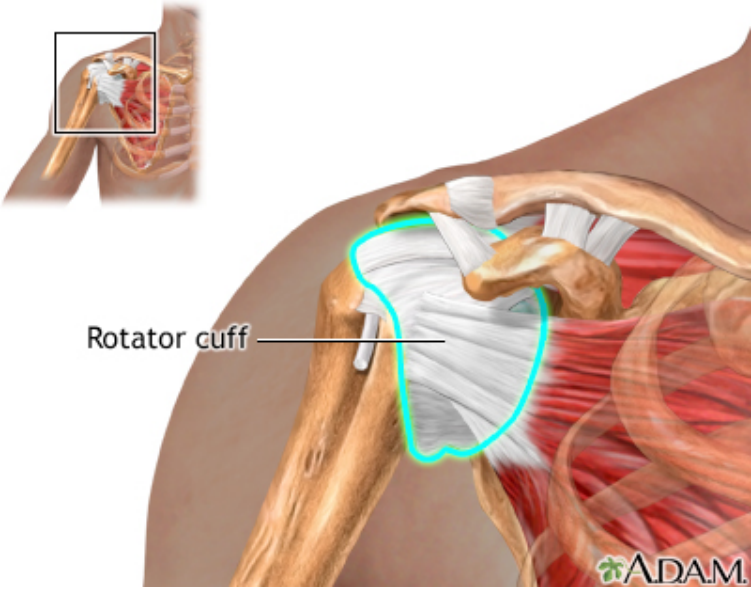
Jamin Rak, LMT
Jamin Rak Massage Therapy
10552 NE Glisan
Phone: (503) 314-8365
Email: jaminrak@gmail.com
www.jaminraklmt.com

Rotator cuff problems

Definition

The rotator cuff is a group of muscles and tendons that attach to the bones of the shoulder joint, allowing the shoulder to move and keeping it stable.

- Rotator cuff tendinitis refers to irritation of these tendons and inflammation of the bursa (a normally smooth layer) lining these tendons.
- A rotator cuff tear occurs when one of the tendons is torn from overuse or injury.



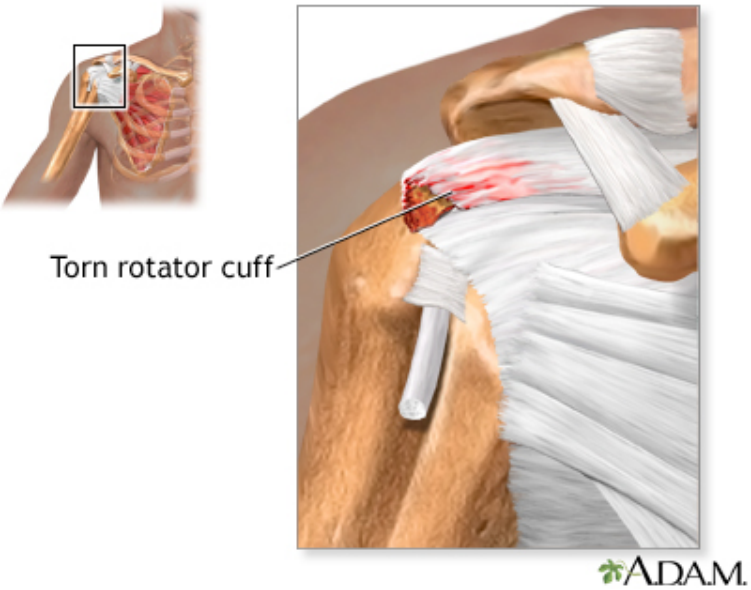
Alternative Names

Swimmer's shoulder; Pitcher's shoulder; Shoulder impingement syndrome; Tennis shoulder; Tendinitis - rotator cuff; Rotator cuff tendinitis; Shoulder overuse syndrome

Causes

The shoulder joint is a ball and socket type joint where the top part of the arm bone (humerus) forms a joint with the shoulder blade (scapula). The rotator cuff holds the head of the humerus into the scapula and controls movement of the shoulder joint.

The tendons of the rotator cuff pass underneath a bony area on their way to attaching the top part of the arm bone. When these tendons become inflamed, they can become more frayed over this area during shoulder movements. Sometimes, a bone spur may narrow the space even more.



This problem is called rotator cuff tendinitis, or impingement syndrome, and may be due to:

- Keeping the arm in the same position for long periods of time, such as doing computer work or hairstyling
- Sleeping on the same arm each night
- Playing sports requiring the arm to be moved over the head repeatedly as in tennis, baseball (particularly pitching), swimming, and lifting weights over the head.
- Working with the arm overhead for many hours or days (such as painters and carpenters)
- Poor control or coordination of your shoulder and shoulder blade muscles

Poor posture over many years and the usual fraying of the tendons that occurs with age may also lead to rotator cuff tendinitis.

Rotator cuff tears may occur in two ways:

- A sudden or acute tear may happen when you fall onto your arm while it is stretched out, or after a sudden, jerking motion when trying to lift something heavy.
- A chronic tear of the rotator cuff tendon occurs slowly over time. It is more likely in those with chronic tendinitis or impingement syndrome. At some point, the tendon wears down and tears.

There are two types of rotator cuff tears:

- A partial tear is when a tear does not completely sever the attachments to the bone.
- A complete or full thickness tear refers to a through and through tear. It may be as small as a pinpoint or all of the muscle tendon. Complete tears have detachment of the tendon from the attachment site and would not heal very well.

Symptoms

TENDINITIS OR IMPINGEMENT SYNDROME

Early on, pain occurs with overhead activities and lifting your arm to the side. Activities include brushing hair, reaching for objects on shelves, or playing an overhead sport.

- Pain is more likely in the front of the shoulder and may radiate to the side of the arm. However, this pain always stops before the elbow. If the pain travels beyond the arm to the elbow and hand, this may indicate a pinched nerve.
- There may also be pain with lowering the shoulder from a raised position.

At first, this pain may be mild and occur only with certain movements of the arm. Over time, pain may be present at rest or at night, especially when lying on the affected shoulder.

You may have weakness and loss of motion when raising the arm above your head. Your shoulder can feel stiff with lifting or movement. It may become more difficult to place the arm behind your back.

ROTATOR CUFF TEARS

The pain with a sudden tear after a fall or injury is usually intense. Weakness of the shoulder and arm is often present, along with a snapping sensation of movement.

Symptoms of a chronic rotator cuff tear include a gradual worsening of pain, weakness, and stiffness or loss of motion. The exact point when a rotator cuff tear begins in someone with chronic shoulder tendinitis may or may not be noticed.

Most people with rotator cuff tendon tears have pain at night. Pain that is worse at night may wake you up. During the day, the pain is more tolerable and hurts with certain movements.

Over time, the symptoms become much worse and are not relived by medicines, rest, or exercise.

Exams and Tests

A physical examination may reveal tenderness over the shoulder. Pain may occur when the shoulder is raised overhead. There is usually weakness of the shoulder when it is placed in certain positions.

X-rays of the shoulder may show a bone spur. They can be done in your doctor's office.

If your doctor feels you may have a rotator cuff tear, you may have one or more of the following tests:

- An ultrasound test uses sound waves to create an image of the shoulder joint. It can often show a tear in the rotator cuff.
- MRI of the shoulder may show swelling or a tear in the rotator cuff.

Sometimes, a special imaging test called arthrography is needed to diagnose a rotator cuff tear. Your doctor will inject contrast material into your shoulder joint. Then either an x-ray, CT scan, or MRI scan are used to take a picture of it. Contrast is usually used when your doctor suspects a small rotator cuff tear.

Treatment

TENDINITIS OR IMPINGEMENT SYNDROME

Treatment involves resting the shoulder and avoiding activities that cause pain. It may involve:

- Ice packs applied 20 minutes at a time, 3 - 4 times a day to the shoulder
- Taking drugs like ibuprofen and naproxen to help reduce swelling and pain
- Avoiding or reducing activities that cause or worsen your symptoms to worsen

For more information about managing your symptoms at home and returning to sports or other activities, see Rotator cuff - self-care.

You should start physical therapy to learn exercises to stretch and strengthen the muscles of your rotator cuff.

If the pain persists or if therapy is not possible because of severe pain, a steroid injection may reduce pain and swelling in the injured tendons, to allow effective therapy.

With rest and exercise, symptoms often improve or go away. However, this may take weeks or months to occur.

Arthroscopic surgery can remove inflamed tissue and part of the bone that lies over the rotator cuff. Removing the bone may relieve the pressure on the tendons.

ROTATOR CUFF TEARS

Someone with a partial rotator cuff tear who does not normally place a lot of demand on the shoulder can try rest and exercise.

If the rotator cuff has had a complete tear, or if the symptoms persist despite conservative therapy, surgery to repair the tendon may be needed. Most of the time, arthroscopic surgery can be used. Some large tears require open surgery to repair the torn tendon.

Outlook (Prognosis)

Many people recover full function after a combination of medications, physical therapy, and steroid injections after an episode of rotator cuff tendinitis. Some may need to change or reduce the amount of time they play certain sports to remain pain-free.

People with tears of their rotator cuff tend to do well, although their outcome is strongly dependent upon the size of the tear and how long the tear has been present, as well as their age and pre-injury level of function.

When to Contact a Medical Professional

Call for an appointment with your health care provider if persistent shoulder pain occurs. Also call if symptoms do not improve with treatment.

Prevention

Avoid repetitive overhead movements. Develop shoulder strength in opposing muscle groups.

See also: Rotator cuff - self-care

References

Burbank KM, Stevenson JH, Czarnecki GR, Dorfman J. Chronic shoulder pain: part II. Treatment. *Am Fam Physician*. 2008;77(4):493-497.

Burbank KM, Stevenson JH, Czarnecki GR, Dorfman J. Chronic shoulder pain: part I. Evaluation and diagnosis. *Am Fam Physician*. 2008;77(4):453-460.

Greiwe RM, Ahmad CS. Management of the throwing shoulder: cuff, labrum and internal impingement. *Orthop Clin North Am*. 2010 Jul;41(3):309-23.

Matsen III FA, Fehringer EV, Lippitt SB, Wirth MA, Rockwood Jr. CA. Rotator cuff. In: Rockwood CA Jr, Matsen FA III, Wirth MA, Lippitt SB, eds. *The Shoulder*. 4th ed. Philadelphia, Pa: Saunders Elsevier; 2009:chap 17.

Seida JC, LeBlanc C, Schouten JR, Mousavi SS, Hartling L, Vandermeer B, Tjosvold L, Sheps DM. Systematic review: nonoperative and operative treatments for rotator cuff tears. *Ann Intern Med.* 2010 Aug 17;153(4):246-55.

Definition

The rotator cuff is a group of muscles and tendons that attach to the bones of the shoulder joint, allowing the shoulder to move and keeping it stable.

- Rotator cuff tendinitis refers to irritation of these tendons and inflammation of the bursa (a normally smooth layer) lining these tendons.
- A rotator cuff tear occurs when one of the tendons is torn from overuse or injury.

Alternative Names

Swimmer's shoulder; Pitcher's shoulder; Shoulder impingement syndrome; Tennis shoulder; Tendinitis - rotator cuff; Rotator cuff tendinitis; Shoulder overuse syndrome

Causes

The shoulder joint is a ball and socket type joint where the top part of the arm bone (humerus) forms a joint with the shoulder blade (scapula). The rotator cuff holds the head of the humerus into the scapula and controls movement of the shoulder joint.

The tendons of the rotator cuff pass underneath a bony area on their way to attaching the top part of the arm bone. When these tendons become inflamed, they can become more frayed over this area during shoulder movements. Sometimes, a bone spur may narrow the space even more.

This problem is called rotator cuff tendinitis, or impingement syndrome, and may be due to:

- Keeping the arm in the same position for long periods of time, such as doing computer work or hairstyling
- Sleeping on the same arm each night
- Playing sports requiring the arm to be moved over the head repeatedly as in tennis, baseball (particularly pitching), swimming, and lifting weights over the head.
- Working with the arm overhead for many hours or days (such as painters and carpenters)
- Poor control or coordination of your shoulder and shoulder blade muscles

Poor posture over many years and the usual fraying of the tendons that occurs with age may also lead to rotator cuff tendinitis.

Rotator cuff tears may occur in two ways:

- A sudden or acute tear may happen when you fall onto your arm while it is stretched out, or after a sudden, jerking motion when trying to lift something heavy.
- A chronic tear of the rotator cuff tendon occurs slowly over time. It is more likely in those with chronic tendinitis or impingement syndrome. At some point, the tendon wears down and tears.

There are two types of rotator cuff tears:

- A partial tear is when a tear does not completely sever the attachments to the bone.
- A complete or full thickness tear refers to a through and through tear. It may be as small as a pinpoint or all of the muscle tendon. Complete tears have detachment of the tendon from the attachment site and would not heal very well.

Symptoms

TENDINITIS OR IMPINGEMENT SYNDROME

Early on, pain occurs with overhead activities and lifting your arm to the side. Activities include brushing hair, reaching for objects on shelves, or playing an overhead sport.

- Pain is more likely in the front of the shoulder and may radiate to the side of the arm. However, this pain always stops before the elbow. If the pain travels beyond the arm to the elbow and hand, this may indicate a pinched nerve.
- There may also be pain with lowering the shoulder from a raised position.

At first, this pain may be mild and occur only with certain movements of the arm. Over time, pain may be present at rest or at night, especially when lying on the affected shoulder.

You may have weakness and loss of motion when raising the arm above your head. Your shoulder can feel stiff with lifting or movement. It may become more difficult to place the arm behind your back.

ROTATOR CUFF TEARS

The pain with a sudden tear after a fall or injury is usually intense. Weakness of the shoulder and arm is often present, along with a snapping sensation of movement.

Symptoms of a chronic rotator cuff tear include a gradual worsening of pain, weakness, and stiffness or loss of motion. The exact point when a rotator cuff tear begins in someone with chronic shoulder tendinitis may or may not be noticed.

Most people with rotator cuff tendon tears have pain at night. Pain that is worse at night may wake you up. During the day, the pain is more tolerable and hurts with certain movements.

Over time, the symptoms become much worse and are not relived by medicines, rest, or exercise.

Exams and Tests

A physical examination may reveal tenderness over the shoulder. Pain may occur when the shoulder is raised overhead. There is usually weakness of the shoulder when it is placed in certain positions.

X-rays of the shoulder may show a bone spur. They can be done in your doctor's office.

If your doctor feels you may have a rotator cuff tear, you may have one or more of the following tests:

- An ultrasound test uses sound waves to create an image of the shoulder joint. It can often show a tear in the rotator cuff.
- MRI of the shoulder may show swelling or a tear in the rotator cuff.

Sometimes, a special imaging test called arthrography is needed to diagnose a rotator cuff tear. Your doctor will inject contrast material into your shoulder joint. Then either an x-ray, CT scan, or MRI scan are used to take a picture of it. Contrast is usually used when your doctor suspects a small rotator cuff tear.

Treatment

TENDINITIS OR IMPINGEMENT SYNDROME

Treatment involves resting the shoulder and avoiding activities that cause pain. It may involve:

- Ice packs applied 20 minutes at a time, 3 - 4 times a day to the shoulder
- Taking drugs like ibuprofen and naproxen to help reduce swelling and pain
- Avoiding or reducing activities that cause or worsen your symptoms to worsen

For more information about managing your symptoms at home and returning to sports or other activities, see Rotator cuff - self-care.

You should start physical therapy to learn exercises to stretch and strengthen the muscles of your rotator cuff.

If the pain persists or if therapy is not possible because of severe pain, a steroid injection may reduce pain and swelling in the injured tendons, to allow effective therapy.

With rest and exercise, symptoms often improve or go away. However, this may take weeks or months to occur.

Arthroscopic surgery can remove inflamed tissue and part of the bone that lies over the rotator cuff. Removing the bone may relieve the pressure on the tendons.

ROTATOR CUFF TEARS

Someone with a partial rotator cuff tear who does not normally place a lot of demand on the shoulder can try rest and exercise.

If the rotator cuff has had a complete tear, or if the symptoms persist despite conservative therapy, surgery to repair the tendon may be needed. Most of the time, arthroscopic surgery can be used. Some large tears require open surgery to repair the torn tendon.

Outlook (Prognosis)

Many people recover full function after a combination of medications, physical therapy, and steroid injections after an episode of rotator cuff tendinitis. Some may need to change or reduce the amount of time they play certain sports to remain pain-free.

People with tears of their rotator cuff tend to do well, although their outcome is strongly dependent upon the size of the tear and how long the tear has been present, as well as their age and pre-injury level of function.

When to Contact a Medical Professional

Call for an appointment with your health care provider if persistent shoulder pain occurs. Also call if symptoms do not improve with treatment.

Prevention

Avoid repetitive overhead movements. Develop shoulder strength in opposing muscle groups.

See also: Rotator cuff - self-care

References

Burbank KM, Stevenson JH, Czarnecki GR, Dorfman J. Chronic shoulder pain: part II. Treatment. *Am Fam Physician*. 2008;77(4):493-497.

Burbank KM, Stevenson JH, Czarnecki GR, Dorfman J. Chronic shoulder pain: part I. Evaluation and diagnosis. *Am Fam Physician*. 2008;77(4):453-460.

Greiwe RM, Ahmad CS. Management of the throwing shoulder: cuff, labrum and internal impingement. *Orthop Clin North Am*. 2010 Jul;41(3):309-23.

Matsen III FA, Fehringer EV, Lippitt SB, Wirth MA, Rockwood Jr. CA. Rotator cuff. In: Rockwood CA Jr, Matsen FA III, Wirth MA, Lippitt SB, eds. *The Shoulder*. 4th ed. Philadelphia, Pa: Saunders Elsevier; 2009:chap 17.

Seida JC, LeBlanc C, Schouten JR, Mousavi SS, Hartling L, Vandermeer B, Tjosvold L, Sheps DM. Systematic review: nonoperative and operative treatments for rotator cuff tears. *Ann Intern Med.* 2010 Aug 17;153(4):246-55.

Notes:

This has been brought to you by myRegence.com
advise.navigate.reward.
Powered by The Regence Engine

Review Date: 7/6/2011

Reviewed By: C. Benjamin Ma, MD, Assistant Professor, Chief, Sports Medicine and Shoulder Service, UCSF Department of Orthopaedic Surgery. Also reviewed by David Ziev e, MD, MHA, Medical Director, A.D.A.M., Inc.

ADAM quality

A.D.A.M., Inc. is accredited by URAC, also known as the American Accreditation HealthCare Commission (www.urac.org). URAC's accreditation program is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s editorial policy, editorial process and privacy policy. A.D.A.M. is also a founding member of Hi-Ethics and subscribes to the principles of the Health on the Net Foundation (www.hon.ch).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Call 911 for all medical emergencies. Links to other sites are provided for information only -- they do not constitute endorsements of those other sites. © 1997- 2012 A.D.A.M., Inc. Any duplication or distribution of the information contained herein is strictly prohibited.

ADAM