CONDITION

Torn rotator cuff

A torn rotator cuff is a partial or complete tear of one or more tendons that help move and steady the shoulder.

WHAT IT IS
A partial or complete tear in a shoulder tendon

BODY SYSTEM
Muscles, tendons, and joints

MAIN SYMPTOMS
Shoulder pain, night pain, weakness, limited movement

WHAT CAUSES IT
Sudden injury or age-related tendon wear

HOW IT IS DIAGNOSED
Shoulder examination plus ultrasound or MRI

MAIN TREATMENT
Rehabilitation, pain control, and sometimes surgery

CAN IT BE CURED?
Sometimes - repairable tears may heal after surgery

IS IT AN EMERGENCY?
Sometimes - major injury with deformity or a cold, numb arm

LONG-TERM OUTLOOK
Many regain function; some tears enlarge over time

Overview

The rotator cuff is a group of four muscles and their tendons around the shoulder. Tendons are strong bands that attach muscle to bone. Together, the rotator cuff helps lift and rotate your arm while keeping the upper arm bone steady in its socket.

A torn rotator cuff means that one or more of these tendons has split or pulled away from the bone. A partial-thickness tear goes through part of a tendon. A full-thickness tear passes through the whole tendon, sometimes leaving a gap.

Some tears happen suddenly during a fall or while lifting something heavy. Others develop gradually as a tendon becomes worn and less resilient with age. A long-standing tear may exist without causing symptoms and may only be found during a scan for another reason.

A tear matters when it causes pain, weakness, sleep problems, or difficulty using the arm. The size of a tear does not always match the amount of pain. A small tear can be painful, while a larger one may cause more weakness than pain.

Many people improve with rehabilitation and pain management. Surgery may be considered for certain traumatic, repairable, or persistently troublesome tears.

Symptoms

Symptoms may begin suddenly after an injury or build over weeks, months, or years.

Possible symptoms include:

A sudden full-thickness tear may cause immediate pain and a noticeable loss of strength. You may struggle to raise the arm after a fall or forceful movement.

Gradual tears can be less obvious. You might first notice discomfort at night, trouble with overhead work, or a slow loss of strength. Pain can also spread toward the upper arm, but it usually does not travel below the elbow unless another problem is involved.

These symptoms are not specific to a torn rotator cuff. Arthritis, frozen shoulder, tendon irritation, neck problems, and other conditions can cause similar symptoms.

- Pain over the outer or front part of the shoulder
- Pain when lifting the arm, reaching overhead, or reaching behind you
- Pain at night, especially when lying on the affected side
- Weakness when lifting or rotating the arm
- Difficulty dressing, washing your hair, or reaching a shelf
- Clicking or catching with movement
- Reduced movement, sometimes because pain makes you guard the shoulder

Causes and risk factors

A rotator cuff tendon can tear through sudden force, gradual wear, or a combination of both.

An acute tear may follow a fall onto an outstretched hand, a shoulder dislocation, or an attempt to lift or catch something heavy. A tendon that was already weakened may tear during an ordinary movement.

Degenerative tears develop as tendon tissue changes with age. Blood supply to parts of the

tendon may decrease, and repeated loading can add small areas of damage over time.

Factors associated with a greater chance of tearing include:

Having a risk factor does not mean that a tear will occur. Many people develop age-related tendon changes without pain or loss of function.

- Increasing age
- Repeated overhead work or sports
- Previous shoulder injury or dislocation
- Smoking
- Diabetes
- A tear in the opposite shoulder
- Family tendency toward rotator cuff problems

Diagnosis

A healthcare professional will ask how the symptoms began, which movements are difficult, and whether there was an injury. They will examine both shoulders and may check movement, strength, tenderness, and neck function.

No single movement test can confirm a tear by itself. Imaging may be used when the examination suggests a tear or when the result would affect treatment.

An ultrasound scan can show the rotator cuff moving and may identify partial or full-thickness tears. Its accuracy is influenced by the equipment and the experience of the person performing it.

Magnetic resonance imaging, or MRI, produces detailed pictures of the tendons, muscles, and other soft tissues. It can show the tear's location and size, whether muscles have shrunk, and whether fat has replaced some muscle tissue. These details can help with decisions about surgery.

An X-ray does not show the tendon tear itself. It may reveal arthritis, a fracture, changes around the shoulder bones, or signs linked to a long-standing large tear.

A scan finding needs to be considered alongside your symptoms and examination. A tear seen on imaging is not always the cause of shoulder pain.

Treatment and management

Treatment aims to reduce pain, restore useful movement and strength, and help you return to important activities. The best approach is influenced by how the tear happened, its size and repairability, your level of weakness, and how much it affects daily life.

For many gradual tears, initial treatment does not involve surgery. It may include temporarily changing painful activities while keeping the shoulder moving within a tolerable range. Complete rest for a long period can contribute to stiffness and muscle loss.

Physical therapy commonly focuses on restoring comfortable movement and strengthening the shoulder blade muscles, the remaining rotator cuff, and nearby muscles. Progress is usually gradual. Some discomfort during rehabilitation can occur, but sharp or steadily worsening pain should be reviewed.

Pain medicines may help you remain active and take part in rehabilitation. Options can include paracetamol or non-steroidal anti-inflammatory drugs like ibuprofen or naproxen , depending on your health and other medicines. These drugs are not suitable for everyone, so a pharmacist or healthcare professional can help you check what is safe.

A corticosteroid injection into the space around the tendon may provide short-term pain relief for some people. It does not reconnect a torn tendon. Repeated injections may have disadvantages, including possible effects on tendon tissue and later repair, so their role should be discussed carefully.

Surgery may be considered when:

Rotator cuff repair usually anchors the torn tendon back to the upper arm bone. It is often performed through small incisions with a camera, although some repairs need a larger incision. Other procedures may trim damaged tissue rather than repair it.

A long-standing tear may not be repairable if the tendon has pulled back or the muscle has changed substantially. Treatment can still include rehabilitation, pain management, or other types of surgery. A shoulder replacement may be considered for certain severe, irreparable tears with arthritis and major loss of function.

Recovery after repair takes months rather than days. The tendon needs time to attach to the bone. Treatment commonly moves from protection in a sling to guided movement and then strengthening. Returning too quickly to heavy lifting can disrupt the repair.

- A recent injury caused a repairable full-thickness tear and marked weakness
- Pain or loss of function continues despite an appropriate rehabilitation period
- The tear is affecting work, sport, sleep, or essential daily activities
- Imaging and examination suggest that repair is likely to be useful

Complications

A rotator cuff tear may become larger over time, although this does not happen to every tear. Increasing tear size can be accompanied by greater weakness, tendon retraction, and permanent changes within the muscle. These changes may make later repair more difficult.

Pain may lead to reduced shoulder use. This can contribute to stiffness, including frozen shoulder, in which the joint capsule becomes tight and movement is restricted.

A very large, long-standing tear can alter how the shoulder joint moves. In some people, this eventually contributes to a form of arthritis called rotator cuff tear arthropathy.

Surgery also has possible complications. These include infection, stiffness, nerve injury, blood clots, ongoing pain, or failure of the tendon to heal securely. A repaired tendon can tear again, particularly when the original tear was large or the tendon tissue was poor.

Prevention

Age-related rotator cuff tears cannot always be prevented. Tendons naturally change over time, and inherited or health-related factors cannot be removed completely.

You may be able to reduce avoidable strain by building shoulder activity gradually, using suitable technique for overhead work or sport, and allowing time to recover after an injury. Strengthening the shoulder and upper back can improve how load is shared, although no exercise can prevent every tear.

Avoid repeatedly pushing through new shoulder pain or weakness. Early assessment may identify a treatable problem before it has a larger effect on function.

Not smoking may support tendon health and healing. Managing diabetes can also be important for general tissue health and recovery from treatment.

Living with it and what to expect

A tear does not automatically mean that you will lose the use of your arm or need surgery. Many people with gradual tears regain useful movement and acceptable pain control through rehabilitation, even though the tendon remains torn on a scan.

Improvement without surgery often develops over weeks to months. Strength and confidence may take longer to return than pain relief. Continuing an agreed home exercise programme may help maintain progress.

Some tears remain stable. Others enlarge or become more symptomatic over the years. New weakness, a clear loss of movement, or increasing difficulty with daily tasks is a reason for routine reassessment rather than something to ignore.

After surgical repair, rehabilitation is longer and more restricted at first. The shoulder is protected while the tendon heals, followed by staged movement and strengthening. Some people continue to have weakness or discomfort, and not every repair heals fully.

Work and sport plans are based on the physical demands involved. Desk work may be possible before lifting, manual work, or overhead sport. A gradual return is usually needed.

Regular follow-up is most relevant when symptoms are changing, rehabilitation is not helping, or surgery has been performed. Repeat scans are not routinely needed solely because a tear is known to be present; they are generally used when the result could change management.

When to get medical help

Arrange a routine appointment if shoulder pain lasts for several weeks, repeatedly disturbs sleep, or limits work and daily activities. Assessment is also appropriate if you notice ongoing weakness, reduced movement, or symptoms that are not improving with simple measures.

Seek prompt medical assessment after an injury if you suddenly cannot lift the arm, develop marked weakness, or think the shoulder has dislocated. These symptoms may indicate a significant tendon injury, fracture, or joint injury.

Seek urgent medical care if the shoulder becomes hot, red, and very swollen, especially with fever or feeling unwell. This can be a sign of infection rather than an uncomplicated tendon tear.

Call emergency services after a major injury if the shoulder is badly deformed or the arm becomes cold, pale, blue, or numb. These signs may indicate damage to blood vessels or nerves.

Shoulder or upper-arm pain can occasionally come from the heart rather than the rotator cuff. Call emergency services for shoulder pain with chest pressure, severe breathlessness, sweating, faintness, or pain spreading from the chest to the jaw or arm.

Common questions

Can a torn rotator cuff heal without surgery?

A completely detached tendon does not usually reconnect to the bone by itself. However,

symptoms and function can improve without the tear physically healing. Rehabilitation strengthens other muscles and can help the shoulder work more comfortably. Some repairable tears can heal to the bone after surgery.

How can I tell whether the tear is partial or complete?

Symptoms alone cannot reliably show the depth of a tear. A partial tear may be very painful, while a complete tear may mainly cause weakness. Ultrasound or MRI can show whether the tear goes through part or all of the tendon.

Will using my arm make the tear worse?

Normal, comfortable movement is often encouraged because prolonged inactivity can cause stiffness. Heavy lifting or repeated painful overhead activity may place more load on the tendon. After surgery or a recent major injury, specific restrictions are important while the tendon is assessed or healing.

Does sleeping on the shoulder worsen the tear?

Lying on the affected side may increase pain by compressing sensitive tissue, but there is little reason to think that sleeping position alone causes a tear to enlarge. Sleeping on the other side or supporting the arm with a pillow may be more comfortable.

Do all full-thickness tears need surgery?

No. Some full-thickness tears cause manageable symptoms and respond well to rehabilitation. Surgery is more likely to be considered for a recent traumatic tear, substantial weakness, high physical demands, or symptoms that continue despite non-surgical treatment.

How long does recovery take?

Non-surgical rehabilitation usually requires consistent work over several weeks or months. Recovery after repair commonly takes many months because tendon-to-bone healing is slow and strengthening is introduced in stages. The timeline is influenced by the tear, the procedure, and the demands you want to return to.

Sources

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