PROCEDURE

Achilles tendon repair

Achilles tendon repair is surgery to reconnect a torn tendon at the back of the ankle.

PURPOSE
Reconnect a torn Achilles tendon and restore function

PROCEDURE TYPE
Therapeutic surgery, using open or minimally invasive repair

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General, often combined with a regional nerve block

HOW LONG IT TAKES
About 60 to 120 minutes

PREPARATION
Fasting, medication review, and arranging transport home

RECOVERY
Same day or overnight; no driving until safely cleared

MAIN RISKS
Wound problems, infection, nerve injury, blood clots

RESULTS
Repair confirmed immediately; function improves over several months

Overview

The Achilles tendon connects your calf muscles to your heel bone and helps you walk, run, stand on tiptoe, and push off the ground.

Achilles tendon repair is surgery to reconnect a torn tendon. It may use one larger incision, called open repair, or several smaller incisions, called minimally invasive or percutaneous repair. Rehabilitation is essential, and full recovery usually takes several months.

Why the procedure is performed

Surgery is most often considered for a complete Achilles tendon rupture. It may be offered when restoring push-off strength is especially important, including for people who play sports

or do physically demanding work.

Repair may also be considered if the tendon ends are widely separated, non-surgical treatment has failed, or the tendon has torn again. Older injuries may require damaged tissue to be removed and the repair strengthened with another tendon or a graft.

Surgery is not necessary for every rupture. The decision depends on the injury, your health, activity goals, and ability to complete rehabilitation.

Who should and should not have it

Repair may be offered for a complete rupture, selected partial tears, chronic ruptures, or severely damaged tendons. Its potential benefits must be weighed against wound, infection, nerve, blood clot, and anaesthesia risks. Modern non-surgical treatment with early protected movement can also produce good results.

Surgery may be avoided or delayed when:

These factors do not always rule out surgery. The team may first treat infection or swelling, improve medical control, or recommend non-surgical care.

- Skin near the incision is damaged or infected
- Swelling is too severe for safe wound closure
- Poor circulation makes healing unlikely
- Uncontrolled medical problems make surgery or anaesthesia unsafe
- Smoking, uncontrolled diabetes, or immune suppression creates major healing concerns
- You cannot safely follow weight-bearing and rehabilitation restrictions

How to prepare

Follow your treating facility's instructions because fasting, medication, and arrival requirements vary.

Tell the team about all medicines and supplements, especially blood thinners like warfarin or apixaban , diabetes medicines, and medicines affecting the immune system. Do not stop a prescribed blood thinner unless the team responsible for your procedure tells you to.

Follow instructions about when to stop eating and drinking. Arrange for an adult to take you home and, if possible, stay with you for the first night.

You may need crutches, a walker, or a knee scooter. Remove loose rugs and arrange

frequently used items so you can move around safely. Nicotine can impair wound and tendon healing, so ask about support to stop before and after surgery.

What happens during the procedure

You will usually receive general anaesthesia, often with a regional nerve block for pain relief. Some repairs use spinal or regional anaesthesia instead.

During open repair, the surgeon makes an incision over the tendon, removes damaged tissue, and uses strong stitches to reconnect the ends. Minimally invasive repair passes stitches through several smaller incisions but is not suitable for every tear.

A chronic rupture may require a tendon transfer or graft if the gap cannot be closed safely. The incisions are then closed, and the ankle is placed in a splint or boot with the toes pointing slightly downward to protect the repair.

Recovery and what to expect afterward

Pain: Pain, swelling, and bruising are expected at first. Elevate the leg and take pain medicine as directed. If you have a nerve block, protect the numb leg from pressure and heat until feeling returns.

Eating: You can usually drink and eat light food once fully awake unless instructed otherwise. Nausea after anaesthesia often settles gradually.

Activity: Keep the wound and splint dry. Follow instructions about weight-bearing, ankle movement, and boot use. Do not test the tendon or remove the boot unless told to. Physiotherapy gradually restores movement, strength, balance, and walking. Running and jumping usually require many months of recovery.

Driving: Do not drive on the day of surgery or while taking sedating medicine. Wait until you can safely control the vehicle and perform an emergency stop. Ask your surgeon and insurer about specific requirements.

Work: Desk work may be possible within several days to two weeks if you can travel safely and elevate the leg. Physical jobs usually require more time or modified duties.

Risks and possible complications

Possible complications include:

Open repair uses a larger incision, while minimally invasive repair may increase the risk to the nearby sural nerve. Your surgeon will explain the risks of the proposed technique.

- Slow wound healing, wound breakdown, or infection
- Sural nerve injury or irritation, causing numbness or burning
- A blood clot in the leg or lungs
- Another rupture or stretching of the repaired tendon
- Ankle stiffness, calf weakness, or persistent swelling
- A thick, tender, or sensitive scar
- Anaesthesia-related problems
- Further surgery for infection or failed repair

Results and follow up

The surgeon can confirm during the operation that the tendon has been reconnected, but function improves over several months.

Early follow-up checks the wound, swelling, and splint or boot. Stitches may be removed once the skin has healed. Later appointments assess movement, walking, calf strength, and physiotherapy progress.

Many people return to everyday activities, although weakness, reduced endurance, or tendon thickening may persist. Return to sport often takes 6 to 12 months and should be based on healing, strength, and functional testing rather than time alone.

Alternatives

Non-surgical treatment uses a cast or removable boot to hold the tendon ends together. It avoids surgical wound, infection, and anaesthesia risks but may carry a higher risk of another rupture. Modern programmes using early protected movement and weight-bearing have narrowed this difference.

Physiotherapy-led rehabilitation is an essential part of non-surgical care. It requires careful adherence to boot positions, movement limits, and strengthening over several months.

Partial tears may be treated with activity changes, heel lifts, temporary immobilisation, and physiotherapy. If surgery is chosen, open and minimally invasive techniques are alternatives, although smaller-incision repair may not suit chronic, complex, or widely separated tears.

When to call your healthcare team

Contact your surgical team promptly for:

Seek emergency medical help for sudden shortness of breath, chest pain, coughing up blood, fainting, or severe breathing difficulty. These may indicate a blood clot in the lungs or another serious problem.

Questions about boot use, exercises, work, or expected swelling can usually be discussed during office hours or at follow-up.

- Increasing redness, warmth, swelling, or wound drainage
- Fever or pain that is worsening instead of improving
- A wet, broken, very tight, or rubbing splint or cast
- New numbness, persistent tingling, or unusually pale or cold toes
- A new snap, sudden pain, or loss of control after a fall
- One-sided calf or thigh swelling and tenderness

Common questions

Will I be asleep?

Most repairs use general anaesthesia, so you are asleep. A nerve block may also numb the leg.

Can I drive home?

No. An adult must take you home. Do not drive again until you can control the pedals, perform an emergency stop, and have stopped sedating pain medicine.

How painful is Achilles tendon repair?

Moderate pain is common for the first few days. Elevation, prescribed pain relief, and sometimes a nerve block can help. Pain should gradually improve rather than steadily worsen.

When will I know if it worked?

The surgeon confirms the repair immediately, but the functional result becomes clear over several months of healing and rehabilitation.

How long will I wear a boot?

A boot or cast is commonly needed for several weeks. Follow your specific schedule, settings, and removal instructions.

Will I be able to play sport again?

Many people return to sport after 6 to 12 months. Calf strength, balance, confidence, and sport-specific movement should be restored first.

Sources

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