PROCEDURE

# Tennis elbow surgery

Tennis elbow surgery removes or releases damaged tendon tissue on the outer elbow.

**PURPOSE**
Relieve persistent pain and improve elbow and grip function

**PROCEDURE TYPE**
Therapeutic surgery: open, arthroscopic, or percutaneous

**WHERE IT IS DONE**
Operating theatre, usually as outpatient surgery

**ANAESTHESIA**
Regional nerve block or general anaesthesia, sometimes with sedation

**HOW LONG IT TAKES**
About 30 to 90 minutes

**PREPARATION**
Fasting, medicine review, and arranging transport home

**RECOVERY**
Same day; no driving for at least 24 hours

**MAIN RISKS**
Infection, nerve injury, stiffness, and persistent pain

**RESULTS**
Operative findings immediately; improvement over several months

## Overview

Tennis elbow surgery treats long-lasting pain where the forearm tendons attach to the bony point on the outside of your elbow. Tennis elbow is also called lateral epicondylitis or lateral elbow tendinopathy.

During surgery, the surgeon removes or releases damaged tendon tissue. They may repair healthy tendon back to the bone. The operation can be performed through one open incision, through several small incisions using a camera, or with a small percutaneous instrument placed through the skin.

It is usually day surgery, meaning you go home the same day. Recovery includes protecting the tendon at first, followed by exercises to restore movement and strength.

## Why the procedure is performed

Surgery may be offered when pain and loss of function continue despite a sustained course of nonsurgical treatment. This usually means symptoms have lasted at least 6 to 12 months and have not improved enough with activity changes, physiotherapy, pain relief, or other treatments.

The aim is to reduce pain and make gripping, lifting, work, and sport easier. Surgery does not guarantee complete pain relief. Improvement is usually gradual rather than immediate.

Your healthcare team may also use the assessment process to check for another cause of outer-elbow pain, such as arthritis, nerve compression, ligament injury, or pain coming from the neck.

## Who should and should not have it

You may be considered for surgery if tennis elbow is limiting daily life, work, or sport and well-planned nonsurgical treatment has not provided acceptable relief. The expected benefit should be important enough to you to justify the operation, recovery period, and surgical risks.

Surgery may be delayed or avoided when:

Smoking can slow tendon and wound healing. If you smoke or vape nicotine, your surgical team may discuss stopping before and after the operation.

- The source of the pain is uncertain
- Nonsurgical treatments have not yet been tried for long enough
- An infection, wound, or significant skin problem is present near the elbow
- Another medical condition makes anaesthesia or surgery temporarily unsafe
- You cannot protect the arm or take part in rehabilitation afterward
- The likely benefit is small compared with the risks

## How to prepare

Follow the treating facility's own instructions first, because its fasting, medicine, and arrival rules take priority.

Tell the surgical team about all prescription medicines, over-the-counter medicines, supplements, allergies, and previous problems with anaesthesia. Ask specifically about blood

thinners like warfarin or apixaban , aspirin, anti-inflammatory medicines, and diabetes medicines. Do not stop a prescribed medicine unless the treating team tells you to.

You may need to stop eating and drinking before anaesthesia. The facility will tell you when fasting begins and whether you may take essential medicines with water.

Arrange for a responsible adult to take you home. If you receive sedation or general anaesthesia, you may also need someone to stay with you for the first night.

Wear loose clothing that can fit over a bulky dressing or sling. Plan ahead for cooking, childcare, work, and tasks that normally require two hands.

## What happens during the procedure

The anaesthetist may give you a general anaesthetic, which makes you unconscious, or a regional nerve block, which numbs the arm. Sedation may be added to help you relax.

The exact operation depends on the surgeon's approach:

The surgeon identifies the damaged part of the tendon, often the extensor carpi radialis brevis tendon. This tendon helps lift the wrist. Damaged tissue is removed, and the tendon may be released, repaired, or reattached to bone.

The skin is closed and covered with a dressing. A splint or sling may be used to protect the arm.

- Open surgery: The surgeon makes an incision over the outside of the elbow
- Arthroscopic surgery: A small camera and instruments are inserted through several small incisions
- Percutaneous surgery: A small instrument is passed through the skin to remove or release damaged tissue

## Recovery and what to expect afterward

Pain and swelling around the incision are expected at first. Your team may recommend prescribed or non-prescription pain relief, ice used as directed, and keeping the arm raised. A nerve block can keep the arm numb for several hours; protect it from heat, pressure, and injury until feeling returns.

You can usually eat and drink once you are awake and not feeling sick. Start with light food if anaesthesia has upset your stomach.

Early activity focuses on protecting the repair while preventing excessive stiffness. You may

be asked to move your fingers, wrist, or elbow at specific times. Physiotherapy commonly progresses from gentle movement to stretching and strengthening. Do not lift, grip strongly, or return to sport until your team says the tendon can tolerate it.

Do not drive for at least 24 hours after sedation or general anaesthesia. Wait longer if you are taking sedating pain medicine, wearing a splint, or cannot safely control the vehicle and perform an emergency stop.

Return to desk work may be possible within days or a few weeks. Manual work usually requires longer. Heavy lifting, racquet sports, and repetitive arm use may be restricted for several months.

## Risks and possible complications

Possible risks include:

Arthroscopic surgery also carries a risk of injury to nearby nerves and blood vessels. Your surgeon should explain risks specific to the planned technique and your health before you consent.

- Bleeding, infection, or delayed wound healing
- Temporary or lasting numbness from nerve irritation or injury
- Elbow stiffness or reduced strength
- Ongoing or returning pain
- Tendon or ligament injury
- A reaction to anaesthesia or a blood clot
- Further treatment or another operation

## Results and follow up

Before discharge, the surgeon may explain what was found and what was done. A routine follow-up appointment is usually arranged to check the wound, remove stitches if needed, review movement, and plan rehabilitation.

Pain relief and strength improve gradually as the tendon heals. Recovery may take several months, particularly before heavy work or sport. Some people continue to have pain or reduced function despite surgery.

Attend routine appointments even if recovery seems straightforward. Contact the team earlier

if healing is not progressing as expected.

## Alternatives

Surgery is not the only option. Alternatives include:

Ask what improvement is realistic with each option and how long you can safely continue nonsurgical care.

- Continued activity modification: Avoids surgery but may require lasting changes to work, sport, or lifting
- Physiotherapy and a graded exercise program: Builds tendon strength without surgical risk, but improvement can take months
- Pain medicines or anti-inflammatory medicines: May reduce symptoms but do not repair the tendon and can have side effects
- A wrist splint or forearm strap: May reduce strain during activity but does not reliably provide lasting relief
- Corticosteroid injection: May give short-term relief, but symptoms can return and repeated injections may harm tendon tissue
- Platelet-rich plasma or other injections: Avoid surgery, but evidence of benefit is uncertain and treatment may not be funded
- Shockwave therapy: Uses sound waves without an incision, but results are inconsistent
- Percutaneous tendon treatment: Uses a smaller skin opening and may shorten early recovery, but availability and long-term evidence are more limited
- No further treatment: Reasonable if symptoms are manageable, but pain or activity limits may continue

## When to call your healthcare team

Contact your surgical team promptly for increasing redness, warmth, swelling, wound drainage, fever, worsening pain, or a dressing that becomes soaked with blood. Also call if numbness continues after the expected nerve-block period, or if your hand becomes unusually swollen, pale, blue, or cold.

Seek emergency help for chest pain, severe difficulty breathing, fainting, or signs of a serious allergic reaction such as swelling of the face or throat.

Routine soreness, bruising, and mild swelling can usually be discussed at your planned follow-up unless they are worsening or difficult to manage.

## Common questions

Will I be asleep?

You may be asleep under general anaesthesia. Another option is a nerve block that numbs the arm, often with sedation. Ask which plan is intended for you.

Can I drive home?

No. Arrange transport. Do not drive for at least 24 hours after sedation or general anaesthesia, and wait until you can control the vehicle safely.

How painful is tennis elbow surgery?

Pain is common for the first few days and should gradually ease. A nerve block and pain medicines can help. Increasing or uncontrolled pain needs medical advice.

When will I know whether it worked?

The surgeon can explain the operative findings immediately, but the benefit is judged over several months as healing and rehabilitation progress.

When can I go back to work?

Desk work may be possible relatively early. Manual or repetitive work takes longer and may require temporary restrictions.

Will I need physiotherapy?

Many people receive a staged exercise plan or physiotherapy. The timing depends on the operation and whether the tendon was repaired.

## Sources

- American Academy of Orthopaedic Surgeons. Tennis Elbow (Lateral Epicondylitis). OrthoInfo
- British Elbow and Shoulder Society. Tennis elbow patient information
- National Institute for Health and Care Excellence. Extracorporeal shockwave therapy for refractory tennis elbow. IPG313



- Kroslak M, Murrell GAC. Surgical treatment of lateral epicondylitis: a prospective, randomised, double-blinded, placebo-controlled clinical trial. American Journal of Sports Medicine . 2018;46(5):1106-1113.
- Coombes BK, Bisset L, Vicenzino B. Management of lateral elbow tendinopathy: one size does not fit all. Journal of Orthopaedic & Sports Physical Therapy . 2015;45(11):938-949.