

# Tennis elbow treatment - What are the options?

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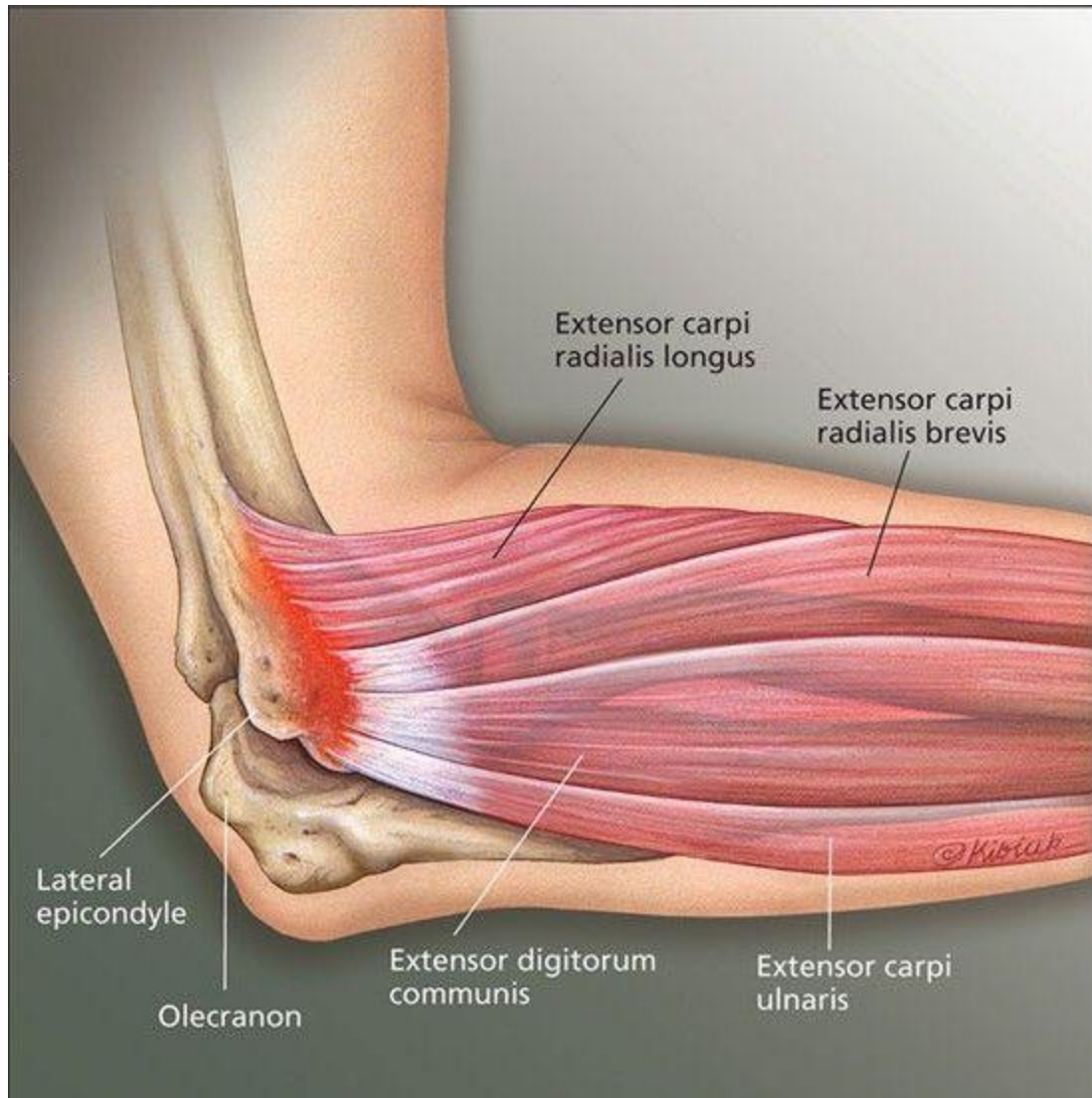
## Understanding Tennis Elbow (Lateral Epicondylitis)

Tennis elbow, or lateral epicondylitis, is a musculoskeletal condition that results from “overuse” of the tendons that join the forearm muscles on the outer part of the elbow. The forearm muscles and tendons can become damaged from overuse, leading to pain and tenderness on the outside of the elbow.

This overuse typically stems from repetitive motion, such as swinging a tennis racket or other similar activities although not limited to sports activities. The extensor carpi radialis brevis (ECRB) muscle is particularly susceptible to overuse, leading to microscopic tears in the tendon where it attaches to the lateral epicondyle. This results in inflammation a poorly functioning healing response and pain.

Symptoms often include a weak grip strength, discomfort, or a burning sensation on the outer part of the elbow. Initial treatment typically involves rest, ice, and non-prescription pain relievers. Physical therapy exercises may also be beneficial in strengthening the forearm muscles and improving flexibility.





**Goal of Treatment:** Reduce pain, rebuild strength, and prevent return.



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## Treatment Options & How Well They Work

### 1. Physiotherapy (PT) / Exercise

- **What it is:** Tailored exercises to strengthen your tendon and arm muscles.
- **How well it works:**
  -  **Best long-term results:** Studies show PT has **lower recurrence rates** than injections.
  -  **Timeline:** Improves pain in 6–12 weeks; full recovery may take 3–6 months.
  -  **Bonus:** Teaches you how to protect your elbow during daily tasks.
  -  **Availability:** Can be readily accessed through the NHS
- **Evidence:** **Strongly recommended** as first-line treatment. 80% of people improve significantly with consistent PT.

## 2. Injections

Type	How It Works	Efficacy	Key Facts
<b>Cortisone</b>	Reduces pain/swelling short-term.	<b>✗ Worse long-term:</b> Pain often returns within 6–12 months; can weaken tendon.	<b>⚠️</b> Avoid repeated use. Only for severe flare-ups.
<b>PRP</b> (Platelet-Rich Plasma)	Uses your own blood to stimulate healing.	<b>✓ Moderate improvement:</b> Better than cortisone long-term. 60–70% report reduced pain at 6+ months.	<b>💰</b> Costly; not always covered by insurance. <b>✗</b> Not readily available for NHS patient
<b>Prolotherapy</b>	Injects sugar solution to irritate/heal.	<b>⚠️ Limited evidence:</b> Some find relief; more research needed.	Considered experimental.

## 3. Extracorporeal Shockwave Therapy (ESWT)

- **What it is:** Sound waves applied to the tendon to stimulate healing.
- **How well it works:**
  - **✓ Moderate pain relief:** 50–60% of patients improve after 4–6 sessions.
  - **🔄 Best combined with PT:** Works better alongside exercise than alone.
  - **⚠️ Not for everyone:** Avoid if you have nerve issues or are pregnant.
- **Evidence:** Recommended if PT fails. **NICE (UK) approves it** for chronic tennis elbow.
- **Availability:** **✗** Not always available on NHS, variable area by area.

## 4. Radiotherapy (Low Dose)

- **What it is:** Very low radiation doses (like an X-ray) to calm tendon cells.
- **How well it works:**
  - **✓ Good for chronic pain:** Reduces pain in 60–70% of *long-standing* cases.
  - **🕒 Slow effect:** Takes 3–6 months for full benefit.
  - **⚠️ Rarely used:** Typically offered only after other treatments fail.
- **Availability :** **✗** Not usually available on the NHS
- **Evidence:** Studies show pain relief lasting 2+ years. **Not a first choice.**

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## How They Compare

Treatment	Best For...	Pain Relief	Long-Term Fix?	Recovery Time
Physical Therapy	Everyone (start here!)	Gradual, lasting	✅ Yes	3–6 months
Cortisone Shot	Severe flare-ups	Fast but temporary	❌ No	Weeks (then often returns)
PRP Injection	If PT fails	Moderate, lasting	⚠️ Maybe	3–6 months
Shockwave (ESWT)	Stubborn cases	Moderate	⚠️ Maybe	2–4 months
Radiotherapy	Chronic pain (>6 mo)	Slow but lasting	⚠️ Maybe	3–6 months

⚠️ **Avoid "quick fixes":** Cortisone gives fast relief but often makes tendons weaker over time.

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## Key Takeaways

1. **Start with exercise:** PT is the **gold standard**. It's effective, safe, and teaches lasting habits.
  2. **Avoid repeated cortisone:** It masks pain but doesn't heal. Use sparingly!
  3. **If PT fails, consider:**
    - **PRP** or **shockwave** for moderate cases.
    - **Radiotherapy** for chronic pain (rare).
  4. **Patience is key:** Tendons heal slowly. Stick with PT for at least 3 months.
  5. **Surgery?:** Rarely needed (<5% of cases). Only if all else fails after 6–12 months.  
💡 **90% of people recover without surgery!** Consistency with rehab is the real game-changer.
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**Sources:** NHS Guidelines (UK), American Academy of Orthopaedic Surgeons, Cochrane Reviews (2020–2024).

*Note: Results vary per person. Always consult a physio or doctor for a personalized plan.*

Here's a detailed, step-by-step explanation of what a **physical therapy (PT) program for tennis elbow (lateral epicondylitis)** typically involves:

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## Physical Therapy for Tennis Elbow: Your Roadmap to Recovery

*Science-Based Rehabilitation for Lasting Healing*

### Goal of PT:

Not just pain relief – **rebuild tendon strength** and **restore normal function** while teaching you how to prevent reinjury.

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## Phase 1: Reduce Pain & Inflammation (Weeks 1–3)

*(Focus: Protect, calm, and gently mobilize)*

### 1. Activity Modification:

- **Stop aggravating movements:** Avoid repetitive gripping, lifting (especially palm-down), typing with force, or twisting motions (e.g., wringing towels).
- **Ergonomic adjustments:** Use padded tools, lighter utensils, or voice-to-text software.

### 2. Ice & Compression:

- **Ice massage:** Freeze water in a paper cup, peel the rim, and rub ice directly over the sore outer elbow for 3–5 mins (2x/day).
- **Compression sleeve:** Wear a lightweight elbow band during daytime activities (not while sleeping).

### 3. \*\*Gentle Mobility Exercises:\*\*

- **Wrist circles:** 10 circles clockwise/counter-clockwise, 2x/day.
  - **Elbow bends:** Slowly bend/extend elbow 10 times, 2x/day (keep wrist relaxed).
  - **Goal:** Prevent stiffness without straining the tendon.
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## Phase 2: Strengthen & Rebuild (Weeks 3–8)

*(Focus: Eccentric loading – the GOLD STANDARD for tendon healing)*

### 1. Eccentric Wrist Exercises (Most critical!):

- **What "eccentric" means:** Slowly lengthening the muscle *under control*.
- **How to do it:**
  - a. Sit with forearm supported on a table, palm facing **down**.
  - b. Hold a light weight (e.g., 1 lb / 0.5 kg dumbbell or water bottle).
  - c. Use your **other hand** to lift your wrist upward.
  - d. **Slowly lower** the weight (take 3–5 seconds) using only your sore arm.
- **Sets:** 3 sets of 15 reps, **once daily** (allow 24 hrs rest between sessions).
- **Progress:** Increase weight only when movement feels easy (never painful).

<https://youtu.be/ap9jSCn-Res>

## 2. Grip Strengthening:

- **Soft ball squeezes:** Hold a stress ball or towel roll. Squeeze 5 secs, relax 5 secs.
- **Reps:** 10–15 squeezes, 2x/day.

## 3. **\*\*Forearm Stretches (Gentle!):\*\***

- **Palm-down stretch:** Extend sore arm straight, palm down. Use other hand to gently press fingers toward floor. Hold 15 secs.
- **Palm-up stretch:** Same position, palm up. Gently pull fingers back. Hold 15 secs.
- **Do:** 3 reps each, 2x/day. **Never stretch into sharp pain!**

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## Phase 3: Functional Training (Weeks 8–12+)

*(Focus: Prepare for daily tasks/sports)*

### 1. Simulated Activities:

- Practice pain-free versions of:
  - Turning doorknobs (use whole arm, not just wrist).
  - Pouring from a pitcher (keep elbow bent close to body).
  - Using a screwdriver (rotate from shoulder, not wrist).

### 2. Sport-Specific Drills (if applicable):

- Tennis/golf: Shadow swings with **light racket/club** (focus on smooth motion).
- Weightlifting: Re-learn lifting form (elbows in, neutral wrists).

### 3. **\*\*Advanced Strengthening:\*\***

- **Pronation/supination:** Hold hammer handle; slowly rotate palm up/down.
- **Banded resistance:** Attach elastic band to doorknob; pull toward you (palm up/down).

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## What Your PT Might Also Use


Technique	Purpose	What to Expect
<b>Manual Therapy</b>	Soft tissue release, joint mobility	PT massages forearm muscles or gently moves elbow/wrist joints. Reduces tightness.
<b>Dry</b>	Relieve muscle	Fine needles inserted into tight forearm

<b>Needling</b>	knots (trigger points)	muscles. Can reduce referral pain.
<b>Taping</b>	Support tendon, improve mechanics	Kinesiology tape applied from forearm to wrist. Reduces strain during activity.
<b>Ultrasound</b>	Deep heat (controversial efficacy)	Warm gel + sound head glides over tendon. May promote blood flow in early phases.




### Key Rules for Success

1. **"No Pain, No Gain" is WRONG:**
  -  **Safe zone:** Mild discomfort (2–3/10 pain) during exercise is okay.
  -  **Stop immediately if:** Pain is sharp, throbbing, or exceeds 4/10.
2. **Consistency > Intensity:**
  - 10 mins daily beats 60 mins once a week!
3. **Progress SLOWLY:**
  - Increase weight/reps only when current load feels **easy for 2 straight sessions**.
4. **\*\*Communicate with Your PT\*\*:**
  - Adjust exercises if they flare up pain.

### How Long Until Improvement?

- **Pain reduction:** 4–6 weeks (with strict activity modification).
  - **Functional improvement:** 8–12 weeks.
  - **Full recovery:** 3–6 months (for severe cases).
-  ***Without PT,** tennis elbow often drags on for 6–18 months. PT cuts recovery time in half for most people.*

### Don'ts for Tennis Elbow

-  Don't ignore pain and "push through."
-  Don't do aggressive stretching (overstretching harms tendons).
-  Don't return to sports too soon (wait until cleared by PT).

**Why PT Works:** It stimulates collagen remodeling – literally *rebuilding* your tendon's strength from the inside out. Stick with it!

💡 **Source:** *Based on 2023 clinical guidelines from the American Physical Therapy Association and Journal of Orthopaedic & Sports Physical Therapy.*