

Shockwave Therapy (ESWT)

Patient information from Mendip Hand Clinic

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This leaflet explains what extracorporeal shockwave therapy is, what the evidence for it shows, and what to expect if you have it. It is designed to support, not replace, your conversation with Miss Edwards or the physiotherapy team.

Written by Miss Alison Edwards, Consultant Hand Surgeon. Published: September 2026.
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What it is

Extracorporeal shockwave therapy — usually shortened to ESWT — uses acoustic waves, a kind of sound-wave pulse, delivered through the skin to a painful tendon or soft tissue. The aim is to stimulate the body's own repair processes.

“Extracorporeal” simply means the waves are generated outside the body. Nothing is injected and nothing is cut. It is delivered by the physiotherapy team in an outpatient clinic, and you go home straight afterwards.

What it is used for

ESWT is used for a range of long-standing tendon and soft tissue problems, including tennis elbow, Achilles tendinitis, shoulder tendinitis, calcific shoulder tendinitis, plantar fasciitis, patellar tendinopathy, greater trochanteric pain at the hip, myofascial pain, and some chronic stress fractures.

At Mendip Hand Clinic it is offered principally for tennis elbow and for mild to moderate carpal tunnel syndrome.

How well does it work?

This is the section that matters most, and it deserves a straight answer rather than an encouraging one.

For tennis elbow. NICE has reviewed shockwave therapy for tennis elbow that has not responded to other treatment (Interventional Procedures Guidance IPG313, 2009). NICE found no major safety concerns. However, it concluded that the evidence on how well the treatment works is inconsistent, and it makes it a condition of offering the treatment that patients are told clearly that its effectiveness is uncertain. So you are being told exactly that: it may help you and it may not, and the published trials do not agree with one another.

For carpal tunnel syndrome. Small studies suggest it may improve pain and function in mild to moderate cases in the short term, and it appears safe. But the trials are small, their results are inconsistent, and reviewers rate the quality of the evidence as low (Zhang et al., 2023; Faderani et al., 2026). It has not been shown to work better, or to last longer, than a steroid injection (Tan et al., 2020).

What that adds up to. ESWT is a reasonable thing to try when other treatments have not worked, particularly because it is non-invasive and appears safe. It is not an established treatment with a reliable success rate, and it should not be chosen in preference to a treatment with better evidence behind it. If it is going to help you, it is a genuine option; the honest position is that we cannot predict in advance whether it will.

What it is not

It is not a substitute for exercise-based rehabilitation, which has better evidence behind it for tendon problems and which ESWT works best alongside rather than instead of.

It is not available on the NHS for these conditions, so it is a private treatment.

Before your treatment

You will need to be available for the full course, which normally runs over several weeks.

Do not take non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen for two weeks before your treatment and throughout the treatment period. These may work against the healing response the treatment is trying to stimulate. If you are not sure whether one of your medicines is an NSAID, check with your doctor, nurse or pharmacist. Paracetamol is fine.

What happens during a session

1. The area to be treated is identified, and you will be asked to sit or lie comfortably.
2. Gel is applied to the skin to help the shockwaves pass through.
3. A handheld device is pressed against the skin and delivers the shockwaves. You will hear a fast clicking sound and feel a vibrating sensation. It should not be painful, though it can be uncomfortable — tell the physiotherapist if it is, as the settings can be adjusted.
4. A session usually lasts 15 to 30 minutes.
5. You can return to your normal activities immediately afterwards. Some people have mild discomfort for a day or two.

A course is usually four to six sessions, spaced over several weeks. The exact number will be agreed with the physiotherapist treating you.

Risks and side effects

ESWT is considered safe, and no major safety concerns have been identified. Possible side effects include:

- Mild pain or discomfort during or after the procedure
- Minor swelling or bruising at the treatment site
- Reddening of the skin
- Rarely, nerve irritation or damage

When it should not be used

ESWT is not suitable if you:

- are pregnant or trying to conceive

- have a cardiac pacemaker
- have a tumour at the site of treatment
- are under 18
- have had a steroid injection in the treatment area within the last three months
- have a blood clotting disorder, or take blood-thinning medication
- have acute inflammation or infection of the area to be treated
- have an open wound in the treatment area
- have a current thrombosis, or vascular disease affecting the area
- have a latex allergy
- have a nerve stimulator

Some situations need an individual decision rather than a straight yes or no: a prosthetic joint underneath the treatment area, a previous Achilles tendon rupture, increased or reduced sensation in the area, a fracture near the treatment area, or an acute tendon or plantar fascia tear.

Tell the physiotherapist about any of these before you start.

When to contact us

- Severe pain, swelling or redness at the treatment site
- Any unusual or concerning symptoms after a session
- If your symptoms have not improved after the recommended number of sessions

Referral and consent

You can be referred by your GP, physiotherapist, chiropractor or osteopath, or you can refer yourself. The physiotherapist treating you will explain the procedure and its expected effects, and will answer your questions, before you start.

Contact details

Mendip Hand Clinic, Practice Plus Group Hospital, Old Wells Road, Shepton Mallet, Somerset BA4 4LP. Bookings: 0330 818 8981.

If you think anything in this leaflet is unclear or needs updating, please tell us using the contact details above.

A final note

This leaflet is general information and does not replace individual advice. Your own options and expected results should be discussed personally with Miss Edwards or the treating physiotherapist, in line with GMC guidance on decision making and consent.

References

National Institute for Health and Care Excellence. Extracorporeal shockwave therapy for refractory tennis elbow. Interventional Procedures Guidance IPG313, 2009.

Tan MS, et al. Extracorporeal shock wave therapy versus local corticosteroid injection for the treatment of carpal tunnel syndrome: a meta-analysis. Journal of Orthopaedic Surgery and Research, 2020;15:556.

Zhang L, Yang T, Pang L, et al. Effects of extracorporeal shock wave therapy in patients with mild-to-moderate carpal tunnel syndrome: an updated systematic review with meta-analysis. *Journal of Clinical Medicine*, 2023;12(23):7363.

Faderani R, Wong ZY, Adegboye O, Kanapathy M, Nikkhah D, Mosahebi A. Systematic mapping review of applications of extracorporeal shockwave therapy in hand surgery. *JPRAS Open*, 2026.