

# Extracorporeal shockwave therapy

This leaflet explains more about the use of extracorporeal shock wave therapy (ESWT) to treat Achilles tendinopathy and plantar fasciitis. It includes information on the benefits, risks and any alternative treatments, as well as what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or nurse caring for you.

## What are Achilles tendinopathy and plantar fasciitis?

Achilles tendinopathy is a condition that causes pain, swelling, stiffness and weakness to the Achilles tendon, which attaches your calf muscle to your heel bone. It is thought to be caused by repeated small injuries to the tendon that do not heal and build up over time.

Plantar fasciitis is inflammation of the plantar fascia. This is a thick fibrous band of tissue at the bottom of your foot that lies between your toes and your heel. Repeated small injuries to the plantar fascia are believed to be the cause of the inflammation.

## What is extracorporeal shockwave therapy (ESWT)?

ESWT is a procedure where shock waves are passed through the skin to the injured part of the foot, using a special device. Extracorporeal means outside of the body. The shockwaves are mechanical and not electric; they are audible, low energy sound waves, which work by increasing blood flow to the injured area. This accelerates the body's healing process. You will usually require a course of three treatments, one to two weeks apart.

## Why should I have ESWT?

ESWT is offered to patients with Achilles tendinopathy and plantar fasciitis, who have not responded adequately to conservative treatments, such as physiotherapy, rest, steroid injection, ice therapy and painkillers. It is a minimally invasive treatment that is carried out on an outpatient basis, which means that you do not need to stay overnight in hospital, and can go home the same day. ESWT can offer relief from pain and other symptoms.

## What are the risks/side effects?

You will experience some pain during the treatment, but you should be able to tolerate this. Following the treatment, you may experience redness, bruising, swelling and numbness to the area. These side effects should resolve within a week, before your next treatment. There is a small risk of tendon rupture or ligament rupture and damage to the soft tissue. The National Institute for Health and Care Excellence (NICE) have deemed this procedure to be safe, although there are some uncertainties about how well it works. For this reason, every patient will be monitored before and after the treatments to discover how successful the outcome is. Studies have shown there is a 50% to 70% chance that it will be effective.

You will be asked to complete a questionnaire before your treatment starts, after three months and again one year following your treatment.

You must not have ESWT if you:

- are pregnant
- are taking antiplatelets (for example, aspirin or clopidigrel) or anticoagulants (such as warfarin or rivaroxaban)
- have a blood clotting disorder
- are under the age of 18
- have been diagnosed with bone cancer
- have a cardiac pacemaker or other cardiac device
- have an infection in your foot or a history of tendon or ligament rupture
- have had any steroid injections in the previous 12 weeks

These will be discussed with you by your healthcare professional when the treatment is offered.

Your doctor will discuss the benefits and risks of the procedure with you in more detail – please let them know if you have any questions or would like any further information.

## **Are there any alternatives?**

ESWT is the next step if conservative treatments such as physiotherapy, rest, steroid injection, ice therapy and painkillers have already been tried. Following this, sometimes an operation may be available, depending on your condition. Your consultant will discuss this with you.

## **How can I prepare for ESWT?**

You will need to ensure that you are available for the full course of your treatment. You should refrain from taking non steroidal anti-inflammatory medication (for example ibuprofen, aspirin) for two weeks before your first procedure and throughout your treatment.

You can eat and drink normally before your treatment.

Please wear comfortable clothes as you will be lying on your front for the treatment.

## **Giving my consent (permission)**

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

## **Who will carry out the procedure?**

Your ESWT will be carried out by one of the foot and ankle consultants, a clinical fellow or a clinical nurse specialist, all of whom have undertaken specialist training to carry out the procedure. Although carrying out this procedure is new to the Trust, the treatment is well established and has been used for several years throughout the UK and United States.

## **What happens during ESWT?**

The treatment will be given in the orthopaedic outpatient department. You will be asked to lie on your front with your legs supported by a pillow. The healthcare professional carrying out the treatment will put some ultrasound gel on the injured area and then place the hand piece of the device over the surface of the skin and the gel. The ESWT is delivered using this hand piece – it delivers compressed air impulses through the ultrasound gel. Each treatment will take approximately 15 minutes.

## **Will I feel any pain?**

Most patients do experience some pain during the procedure. You will be asked how much pain you are experiencing during the treatment and we will attempt to adjust the treatment to help manage this. The pain will stop at the end of your procedure.

## **What happens after ESWT?**

After the treatment you will be able to get up and walk straight away. If you do experience discomfort following the shockwave treatment you can take over the counter painkillers (such as paracetamol) but you should avoid anti-inflammatory medication (such as aspirin and ibuprofen) and ice therapy, as these can interfere with the body's healing process

## **What do I need to do after I go home?**

You will be able to return to your usual activities straight away and can return to work immediately. However we advise you not to undertake any strenuous, pain-provoking activity or high impact exercise for 48 hours following the procedure.

If you experience a sudden onset of pain to the area or any loss of function, please contact your GP or go to your nearest A&E department.

## **Will I have a follow-up appointment?**

You will have a follow-up appointment with your consultant or a member of their team around 12 weeks after your final treatment. This will be automatically sent to you in the post. You will also receive a follow up questionnaire three months and also one year after your treatment to assess the effectiveness of ESWT.

### **Contact us**

If you have any questions or concerns about ESWT, please contact the clinical nurse specialist (Monday–Friday, 9am–5pm). To do this, call the hospital switchboard on 020 7188 7188 and ask for the bleep desk. Ask for bleep 2567 and wait for a response. This will connect you directly.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

## Further sources of information

### National Institute for Health and Care Excellence (NICE)

NICE has produced recommendations for patients on ESWT for Achilles tendinopathy and plantar fasciitis. These documents can be accessed on the NICE website.

**w:** [www.nice.org.uk](http://www.nice.org.uk)

### Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

### Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

**e:** 020 7188 8801 at St Thomas'

**t:** 020 7188 8803 at Guy's

**e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

### Knowledge & Information Centre (KIC)

For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

**t:** 020 7188 3416

### Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

**t:** 020 7188 8815      **fax:** 020 7188 5953

### NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

### NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

### Become a member of your local hospitals, and help shape our future

Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years. To join:

**t:** 0848 143 4017

**e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk)

**w:** [www.guysandstthomas.nhs.uk](http://www.guysandstthomas.nhs.uk)

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