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 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 speeds up your 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 who have not responded well enough to other treatments such as physiotherapy, orthotics (insoles or leg braces), rest, steroid injection, ice therapy and pain relief. It is a minimally invasive treatment that is carried out on an outpatient basis, which means that you 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/discomfort during the treatment, but you should be able to cope with this. Following the treatment, you may initially experience more pain, 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, but studies have shown that five to seven out of ten patients have found it to be effective.

You will be asked to complete a questionnaire before your treatment starts, after three months and again one year after your treatment.
You must not have ESWT for Achilles tendinopathy or plantar fasciitis if you are pregnant, are taking antiplatelets excluding aspirin 75mgs (for example, clopidogrel) 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 an infection in your foot, have a history of Achilles tendon or plantar fascia ligament rupture, or have had a steroid injection into the affected area 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?
If ESWT does not help your pain, then 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 be available for the full course of treatment.
- You should not take any non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, for two weeks before your first procedure, and throughout your treatment. If you are unsure if any of your medicines contain NSAIDs then please check with your doctor, nurse or pharmacist.
- Wear comfortable clothing 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.

If you would like more information about our consent process, please speak to a member of staff caring for you.

Who will carry out the procedure?
Your ESWT will be carried out by one of the foot and ankle consultants, and a clinical fellow or nurse, all of who have undertaken special training to carry out the procedure.

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 clinician will put some ultrasound gel on the injured area and then place the hand piece of the device on the gel. The ESWT is delivered using this hand piece – it delivers compressed air pulses through the ultrasound gel. Each treatment will take approximately five minutes.

Will I feel any pain?
Most patients do experience some pain or discomfort 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.
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 don’t take anti-inflammatory medication (such as 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 Emergency Department (A&E).

Will I have a follow-up appointment?
You will have a telephone follow-up appointment with the foot and ankle clinical nurse specialist 12 weeks after your final treatment. The letter 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.

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.

Contact us
If you have any questions or concerns about ESWT, please contact the clinical nurse specialist (Monday to Friday, 9am to 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

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

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch. t: 020 7188 8815 e: languagesupport@gstt.nhs.uk