Extracorporeal shockwave therapy (ESWT) for Achilles tendinopathy and plantar fasciitis

This leaflet explains more about the use of 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 (swelling) 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 shockwaves are passed through the skin to the injured part of the foot. 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, 1-2 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, 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 experience more pain, redness, bruising, swelling and numbness to the area at first. These side effects should resolve within a week, before your next treatment. Studies have shown that 5-7 out of 10 patients have found it to be effective. There is a very small risk of tendon or ligament rupture, and damage to the soft tissue.
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 or are being treated for active cancer
- have an infection in your foot
- have a history of Achilles tendon or plantar fascia ligament rupture
- 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.

Consent – asking for your consent
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 try 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) or use 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, including returning to work, straight away. However we advise you not to undertake any strenuous, pain-provoking activity or high-impact exercise for 48 hours after 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 eight 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-5pm. To do this, call the hospital switchboard, t: 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 w: 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, Monday to Friday, 9am-5pm.