

## Extra Corporeal Shockwave Therapy (ESWT) for Gluteal, Patella and Achilles tendinopathy or Plantar fasciopathy

This leaflet explains the use of ESWT to treat lower limb tendon disorders or plantar heel pain, known as plantar fasciopathy.

It lists the benefits, risks and alternative treatments, as well as what to expect when you come to clinic.

If you have any further questions, please speak to your health professional caring for you.

### What are Gluteal, Achilles and Patella Tendinopathies or plantar Fasciopathy?

Gluteal tendinopathy is pain arising from the outside of your upper leg over your greater trochanter (hip bone). Irritation of the gluteal tendon is known to be the main cause of discomfort. It is also known as greater trochanteric pain syndrome, lateral hip pain or trochanteric bursitis.

Patella Tendinopathy is a common soft tissue injury occurring at the front of the knee, common in sports involving jumping and running hence it may be termed 'jumpers knee'.

Achilles tendinopathy is pain in the tendon at the lower portion of the posterior calf, or back of your heel. Achilles tendinopathy usually develops over a period of time (days and weeks) it is not usual to have a sudden onset of pain.

Tendinopathies generally cause localised pain, swelling and stiffness, impairing function, particularly after rest.

Tendinopathy causation is not completely understood. However, they are known as overuse injuries and occur when the tendons are unable to adapt to loads placed upon them. This leads to microscopic changes within tendon fibres and as they heal, tendons become painful and thicker.

The Plantar Fascia is a long band of connective tissue from the base of the toes to underside of the heel. It is similar to a tendon but has some differences. Pain and stiffness are felt at the underneath and inside edge of the heel, where tissue becomes frayed or thickened, resulting in activity restriction. This is known as plantar Fasciopathy. Pain develops when the fascia is unable to tolerate excessive loads, for example, prolonged standing or spikes in exercise.

### What is ESWT?

ESWT is a procedure where shockwaves are passed through the skin to the injured tissue. 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, influencing inflammation and nerve fibres involved in pain. This helps with your body's healing process. You will usually require three applications applied once weekly. This may be reviewed and repeated if appropriate.

## Why should I have ESWT?

ESWT is offered to patients who have not responded effectively to other treatments, such as exercises, injections, foot orthoses (insoles), 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 or side effects?

You will experience some pain during the treatment, but most people cope well. Anaesthesia is not necessary.

Following the treatment, you may experience more pain, redness, bruising, swelling and numbness to the area at first. These side effects should resolve within 36 hours and 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 if you

- are pregnant
- take anti-platelets (such as Clopidogrel) though 75mg aspirin is acceptable.
- take 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 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 therapist 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, other options may include further physiotherapy or podiatry treatment or injection therapy. Sometimes an operation may be available depending upon your condition. Your therapist can advise you on available options.

## 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 and throughout your treatment period. 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**

It is important that you feel involved in decisions relating to your treatment. You will have spoken with a therapist about your treatment choices. If you wish to proceed with ESWT treatment, you will be asked to sign a consent form.

This confirms that you agree to have ESWT treatment and understand what it involves.

If you would like more information about our consent process, please speak to your therapist.

## **Who will perform the procedure?**

Your ESWT will be carried out by a physiotherapist or podiatrist, whom has undertaken special training to carry out the procedure.

## **What happens during ESWT?**

Treatment will be performed in the physiotherapy department, though locations may change if necessary.

You will be asked to lie on your front with your legs supported by a pillow if treating Achilles or heel pain, or on your back for knee, or side with hip pain.

The clinician will put ultrasound gel over the area and place the device hand piece on the gel. ESWT is delivered using the hand piece – delivering compressed air pulses through the ultrasound gel. Each treatment takes approximately five minutes.

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

It is typical for patients to experience some pain or discomfort during the procedure. ESWT will be applied at a low level and slowly increased to a tolerance level.

You can inform us of your pain experience and we will adjust treatment to allow you to manage more comfortably.

## **What happens after ESWT?**

After treatment you may get up and walk straight away. If you do experience discomfort, following the shockwave treatment you can take over-the-counter pain relief (paracetamol) or use ice therapy but don't take anti-inflammatory medication (such as ibuprofen) as these can interfere with the tissue healing process.

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

You may return to your usual activities, including work, straight away.

However we advise, for you not to undertake strenuous, pain-provoking activity or high-impact exercise for 48 hours after the procedure.

If you experience 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 eight weeks after your final treatment. The letter will be automatically sent to you in the post or made after your last appointment.

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

The National Institute for Health and Care Excellence (NICE) has produced recommendations for patients on ESWT for Achilles tendinopathy and plantar heel pain

<https://www.nice.org.uk/guidance/ipg571/resources/extracorporeal-shockwave-therapy-for-achilles-tendinopathy-pdf-3541876757701>

<https://www.nice.org.uk/guidance/ipg311/resources/treating-chronic-plantar-fasciitis-using-shockwave-therapy-pdf-312696253>

## Important information

This patient information is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net)

## Hand hygiene

The trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

**Tel: 0300 131 4500 Email: [esh-tr.AccessibleInformation@nhs.net](mailto:esh-tr.AccessibleInformation@nhs.net)**

**After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.**

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## Reference

The following clinicians have been consulted and agreed this patient information:

The Clinical Specialty/Unit that have agreed this patient information leaflet:  
Community Health and Integrated Care

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Responsible clinician/author: (Graeme Hadlow Advanced Physiotherapy Practitioner)

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