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Northamptonshire Healthcare  
NHS Foundation Trust

EXTRACORPOREAL  
SHOCKWAVE  
THERAPY (ESWT)  
PODIATRIC SURGERY

INFORMATION  
LEAFLET

 01327 708102

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MAKING A  
DIFFERENCE  
FOR YOU,  
WITH YOU

This leaflet provides information about the use of Extracorporeal Shockwave Therapy (ESWT) or Shockwave Therapy (SWT) as it is more commonly known, in treating Achilles tendinopathy and plantar fasciitis.

Shockwave is an accepted intervention in the UK and treatment may provide pain relief for chronic tendinopathies.

It includes information on the benefits, risks and alternative treatments, as well as what you can expect when you come to clinic. If you have any further questions, please speak to the podiatrists 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 non-surgical procedure where acoustic shockwaves are passed through the skin to the injured part of the foot, using a special device.

Extracorporeal means outside 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 natural healing process.

You will usually require a course of three (3) treatments, one (1) week apart. There is a possibility that two to three (2 to 3) further treatments may be required if your condition is chronic (long-term or recurring).

## **WHAT MUSCULOSKELETAL CONDITIONS WOULD BENEFIT FROM SHOCKWAVE THERAPY?**

Shockwave therapy treats many problems within soft tissue areas which have proved resistant to more conventional treatments, these include:

- Achilles or patellar tendonitis
- Calcification of tendons
- Chronic tendonitis
- Plantar fasciitis (Jogger's heel)

## **WHY SHOULD I HAVE ESWT?**

ESWT is offered to patients who have not responded well enough to other treatments such as rest, ice therapy, pain relief medication, physiotherapy and orthotics (insoles or leg braces). Shockwave therapy can eliminate the need for steroid injections or surgical intervention and aid a faster return to normal activities.

It is a minimally invasive treatment carried out on an outpatient basis, which means you can go home the same day. Studies have shown ESWT can offer relief from pain in approximately 70% of cases.

## WHAT HAPPENS DURING ESWT?

The treatment will be given at Danetre Day Surgery Unit, Danetre Hospital in Daventry.

You will be asked to lie on your front with your legs supported by a pillow. The painful area is located by palpation (the use of hands or fingers to examine the area).

The treatment is delivered via a compressed air impulse, through a hand held piece attached to the shockwave machine. The shockwave radiates out through the head of the probe into the affected area. Contact gel will be applied to the skin to improve the transmission of the shockwave. Each treatment will take approximately five (5) minutes.

## HOW DOES ESWT WORK?

The treatment initiates a pro-inflammatory response in the affected tissue. The body responds by increasing the blood circulation and metabolism in the affected area which accelerates the body's own healing processes. The shockwaves can break down injured tissues and calcifications. As a result of cellular tissue micro-trauma, it can provide a temporary analgesic (pain relief) effect on nerves, providing immediate pain relief, known as 'hyper-stimulation anaesthesia'.

## WHAT ARE THE RISKS / SIDE EFFECTS?

Shockwave therapy is safe and effective. You will experience some pain/discomfort during the treatment, but the pain should be bearable. The treatment is delivered according to your response; if you are unable to tolerate the pain levels, the settings will be adjusted to reduce the discomfort.

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 (5 to 7) out of ten (10) patients have found it to be effective.

You will be asked to complete a questionnaire before your treatment starts, after three (3) months and again one (1) year after your treatment.

## ARE THERE ANY ALTERNATIVES?

If ESWT does not help your pain, then sometimes a steroid injection might be offered or an operation may be available, depending on your condition. Your consultant will discuss this with you.

## WHEN SHOULDN'T I HAVE ESWT?

You must not have ESWT for Achilles tendinopathy or plantar fasciitis if you:

- are pregnant
- are under the age of 18
- are taking antiplatelets excluding aspirin 75mgs (for example, clopidogrel) or anticoagulants (such as warfarin or rivaroxaban)
- have a history of latex allergy or allergy to coupling solution
- have a blood clotting disorder
- have a cardiac pacemaker
- have been diagnosed with bone cancer
- have cancer present in or near the treatment area
- have an infection in your foot, an open wound, skin rash, or swollen and inflamed treatment site
- have ischaemic tissues (vascular disease)
- 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
- have neuropathy (caution with Diabetic patients)

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

## HOW CAN I PREPARE FOR ESWT?

You will need to be available for the full course of treatment which is at least three (3) sessions over three (3) consecutive weeks.

You should not take any non-steroidal anti-inflammatory drugs (NSAIDs), such as Ibuprofen, for two (2) 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 podiatrist, doctor, nurse or pharmacist.

Wear comfortable clothing as you will be lying on your front for the treatment.

## WHO WILL CARRY OUT THE PROCEDURE?

Your ESWT will be performed by a podiatrist who has undertaken special training to carry out the procedure.

## 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. There are no restrictions after the treatment session, you may continue with your normal activities.

If you do experience pain/discomfort following the shockwave treatment you can take over the counter painkillers (such as paracetamol) but do not 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.

You can drive immediately after the treatment.

If you experience a sudden onset of pain to the area or any loss of function, please contact the podiatry team, your GP or go to your nearest Accident and Emergency Department (A&E).

## WILL I HAVE A FOLLOW-UP APPOINTMENT?

You will have a follow-up appointment with your podiatrist 12 weeks after your final treatment. An appointment letter will be automatically sent to you in the post. You will also have a final follow-up one (1) year after your treatment to assess the effectiveness of ESWT.

## WHAT IF THE TREATMENT DOES NOT WORK?

Though the short term effects are very good, the long term benefits of this treatment may take up to three months. If, over this time, there is no improvement in your condition, then your consultant will offer you other treatment options (i.e. steroid injections or surgery).

## CONTACT US

Email: [podiatric.surgery@nhft.nhs.uk](mailto:podiatric.surgery@nhft.nhs.uk)

Telephone: **01327 708102**

Do not hesitate to contact us with any concerns.

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

# PLEASE ASK IF YOU HAVE ANY FURTHER QUESTIONS REGARDING YOUR SURGICAL CARE.



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Inspected and rated

**Outstanding** ☆



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prosimy o kontakt z PALS pod numerem telefonu 0800 917 8504.

Dacă aveți nevoie de acest prospect în alte formate sau limbi, vă rugăm să contactați PALS: 0800 917 8504

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