



Aberdeen **Physiotherapy**

## **EXTRACORPOREAL SHOCKWAVE THERAPY (ESWT)**

### **WHAT IS IT?**

ESWT or Shockwave is the name given to a treatment that involves shockwaves being passed through the skin to the injured part of the body using a special device. Extracorporeal means outside of the body. The shockwaves are mechanical, not electric; they are audible, low energy sound waves. ESWT has been reviewed by the National Institute for Health and Clinical Excellence (NICE) in the UK and has been approved by the Food and Drug Administration (FDA in the USA).

### **HOW DOES IT WORK?**

The shockwaves are generated by a projectile that is fired at speed inside a hand held applicator. When the applicator is placed on the surface of the skin with a coupling medium such as ultrasound gel, the impulses are delivered as a shockwave that spreads inside the injured part of the body as an aspherical “radial” wave.

### **WHAT DOES IT DO?**

Passing shockwave through the surface of the skin initiates an inflammation like response in the injured tissue. This prompts the body to respond naturally by increasing blood circulation and therefore metabolism in the injured tissue. This accelerates the body’s natural healing process by increasing cell regeneration and enhancing tissue repair.

### **WHAT CONDITIONS ARE COMMONLY TREATED WITH ESWT**

- Tennis Elbow
- Plantar Fasciitis
- Achilles Tendinopathy
- Tendinopathies of the Shoulder
- Patellar Tendinopathy
- Hamstring Tendinopathy
- Greater Trochanteric Pain in the Hip
- Muscle Strains
- Trigger Points
- This list is not exhaustive

## **WHAT ARE THE RISKS / SIDE EFFECTS**

You may experience some pain during treatment but it should not be at an intolerable level. Side effects are rare, however you may experience mild discomfort, reddening of the skin or bruising in the area for a short time.

There is a very small risk of tendon rupture or damage to the soft tissue. The National Institute of Clinical Effectiveness have deemed this procedure to be safe. You will be asked to complete a consent form but ESWT should not be administered in the following cases:-

- Those who have a cardiac pacemaker / device
- Pregnancy
- Those on active treatment for Rheumatoid arthritis
- Within 11 weeks of a cortisone injection into the area to be treated
- Over local infections
- To people who have haemophilia or a blood clotting disorder
- Patients currently undergoing treatment for cancer or with a history of bone cancer
- If you are taking anti – coagulants (blood thinning drugs)
- Over a joint replacement
- Over lung tissue, cardiac stents or valves

## **WHAT TO EXPECT DURING TREATMENT**

A course of up to 6 treatments is recommended at roughly weekly intervals to allow the tissue reaction to subside before the next treatment is delivered.

1500 – 2000 shocks are delivered during a treatment session – this takes between 5 – 10 minutes.

Some cold ultrasound gel will be applied to the area before ESWT is carried out. When the treatment starts it will feel like someone is tapping / pinching firmly on the site being treated. If this becomes too uncomfortable you should notify your treating therapist as the intensity of treatment can be reduced or the treatment head repositioned.

## **CONSIDERATIONS AFTER TREATMENT**

- Side effects are rare, as detailed previously.
- NSAIDs (anti-inflammatories) or ice should not be used as they may decrease the effectiveness of the treatment. However, your pharmacist can help with advice on painkillers if required.
- You may continue with your usual activities although intensive exercise should be avoided for 48 hours after ESWT, please discuss this with your therapist who will advise you on modifying your activity level.
- Healing effects can continue for 3 months from your initial session.

**If you have any questions or concerns before or after your Shockwave treatment then please contact us on Tel 01224 626266**