

## Ultrasound Therapy



### Ultrasound Explained

Ultrasound therapy is a treatment modality used by professionals to treat conditions of pain or inflammation, and is used to promote healing of soft tissue injuries. It differs from diagnostic ultrasound which uses sound waves differently to create images.

There are two main types of ultrasound therapy used in podiatry: they are mechanical and thermal; both use sound waves through a transducer head to penetrate soft tissues.

### Mechanical

Sound waves are transmitted to the tissues by pulsing. They target superficial tissues to help reduce inflammation, pain, and to help promote healing.

### Thermal

Thermal ultrasound therapy differs by using continuous sound waves to penetrate deep tissues. The tissues are heated gently to encourage healing and increase the rate of metabolism in the tissues.

The type of ultrasound that you will receive depends on the condition/injury that you present with. All conditions are treated: deep or superficial muscular pain, injuries to ligaments or tendons, osteoarthritis, bursitis, carpal tunnel syndrome and heel pain are just a few that can be treated.

### What will ultrasound do?

As well as transmitting heat into the tissues, ultrasound therapy also:

- Speeds up metabolism in the tissues
- Improves blood circulation
- Reduces inflammation
- Reduces irritation from nerves
- Stimulates healing
- Enhances the body's immune system

### How is ultrasound performed?

The podiatrist will identify the area requiring treatment, then gel is applied to your skin which enables the sound waves to penetrate the skin evenly. The transducer head is applied to the gel and moved in a circular motion continuously for 8 – 10 minutes depending on the setting of the ultrasound therapy.

### Will I feel anything?

Ultrasound therapy is not painful in any way. Some people may feel a slight warmth in the skin; however, the majority of people feel no sensation at all apart from the cold gel on the skin. Many people receiving ultrasound feel soothed as the area is massaged gently as all the fluid collected in the tissues disperses.

### Is ultrasound safe?

Ultrasound therapy is perfectly safe when used by a health professional. The only potential risk with ultrasound is that the tissues may be heated too much if the transducer head remains still. The podiatrist will move the transducer head continually to prevent this. This complaint is particularly rare as the transducer head has to remain still for a long period of time to cause any damage.

Ultrasound therapy is not advised to be used over the following areas:

- Over plastic or metal implants
- Over areas with cancer
- Around eyes, breasts or sexual organs
- Broken skin
- Bone that is fractured
- Any organs of the body
- People who have pace makers

The podiatrist will only use ultrasound on the foot or the leg.

### **Does ultrasound work?**

The literature shows mixed opinions on ultrasound. Overall evidence suggests that ultrasound works well in conjunction with other treatment therapies including rest, stretching, padding or insole/orthotic therapy.

A course of ultrasound is performed which consists of 8 treatments divided into 2 treatments per week. If the area is still slightly painful after the course, another course of ultrasound is suggested. However, one course is usually sufficient.

## **Heel Pain**

Heel pain is a common complaint in the foot. The medical name for it is Plantar Fasciitis which simply refers to inflammation of the plantar fascia in the sole of the foot. It can be very painful in the morning when first getting out of bed, getting up after a short rest and, of course, when walking. The most common cause of plantar fasciitis is poor foot function. There are many treatments for this condition, including icing, stretching, medication, steroid injection and rest. Although the most effective treatment that we find is by performing a course of ultrasound therapy along with biomechanical foot orthoses, which work by realigning the foot and making it work more efficiently when walking. This commonly relieves the pain although it can take several months for you to be fully pain free.



## **Any further questions?**

Please feel free to call us.....

**The WalkWell Clinic**  
**22a Regent Street**  
**Rugby**  
**CV21 2PY**

**Tel: 01788 537300**

**[walkwellclinic@talktalkbusiness.net](mailto:walkwellclinic@talktalkbusiness.net)**  
**[www.walkwellclinic.co.uk](http://www.walkwellclinic.co.uk)**  
**[www.facebook.com/WalkwellClinic](https://www.facebook.com/WalkwellClinic)**

Leamington Practice:

**9 Guy Place East**  
**Leamington Spa**  
**CV32 4RG**

**01788 537300**

**David J Pinchen D Pod.M.M.Ch.S**  
**Vicky M Morley BSc(Hons) Pod. M.Ch.S**

**HCPC Registered Podiatrists**