

# Shockwave Therapy.ie



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## Frequently Asked Questions about shockwave therapy (SWT)

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### How Does SWT Promote Healing?

SWT tends to affect denser tissues more proficiently such as tendons and ligaments and especially where they attach to bones, known as the enthesis. A disease of the entheses (plural) is known as an enthesopathy. Enthesopathies are common at the shoulder, elbow, hip, knee and foot. These entheses tend to be the main target for shockwave therapy. Shockwave also affects bone and may assist in bone stimulation and healing.

Research is currently offering a better understanding of the biological effects of shockwave therapy. SWT produces a sonic pulse for approximately 10 milliseconds which may:

1. Create pressure waves within the target tissue leading to greater cell permeability with a resultant increase localized circulation and metabolism which can promote healing.
2. Break down abnormal deposits of calcium in soft tissues such as tendons (calcific tendinitis).
3. Stimulation of osteoblasts (bone building cells) which are involved in promoting bone healing and growth.
4. May reduce pain by acting as a counter irritant through the pain gait mechanism as described by Melzack and Wall.
5. Affect sensory pain fibres that are involved in transmission of pain from musculoskeletal and soft tissues.

Shockwave therapy may offer a unique ability to promote healing and these mechanisms may be very beneficial to persons suffering from chronic musculoskeletal pain.

## **What does treatment entail?**

You will undergo a physiotherapy assessment and if SWT is suitable a plan of treatment will be discussed with you and you will have a chance to have your questions answered.

Treatment will usually consist of between 2 to 10 minutes of active treatment at parameters that will suit you personally and your condition. Treatment is usually between 3 to 6 treatments spread 1-2 weeks apart

Assuming you are a candidate, you will be scheduled for treatment where patients typically require 3 separate treatment sessions approximately 7-14 days apart. Treatment is titrated to suit your condition.

Procedure:

Water based gel is applied to the target area and the shockwave head is applied over the area with a dose suitable for your condition. The tender area is localised with your feedback and moved around slowly or kept in situ over the target tissue for the stated dose.

The treatment with the Shockmaster MP200 may be pain free to mildly uncomfortable. Treatment is always interactive and your feedback is monitored to ensure treatment is tolerated well at the same time.

Previous types of shockwave devices were painful and at times a general or local anesthetic may have been required. This is NOT required with the radial shockwave Shockmaster MP200.

## **What are the side effects?**

You may experience temporary soreness and/or swelling for 24 to 48 hrs, but rarely up to 2 to 4 days. There may be local tenderness. However many patients experience significant pain relief. No serious complications or side-effects have been reported in large scale trials of SWT.

After treatment you can return to daily activities almost immediately. But you may need to taper the activities in a self-limiting fashion.

Regarding sports activity, you should seek advice from your physiotherapist about this.

## **When should shockwave therapy not be used or used with caution?**

SWT should not be used in certain circumstances:

1. Vascular / circulation disorder
2. Nerve disorder
3. Infection
4. Bone tumor
5. Metabolic bone condition
6. Open Wounds
7. Pregnancy
8. Over growth plates in younger persons
9. In the vicinity of metal implants or inserted electrical devices
10. Caution needs to be taken with patients who are on blood-thinning medications
11. Any other reason

## **Is shockwave therapy effective?**

Clinical research studies suggest there is an approximately a 70% - 85% chance this technology will improve your condition. Many clinical trials have been published – please see research resources pages.

## **What is the criteria for deciding to treat with SWT?**

The presence of a condition that is indicated for SWT

The absence of contraindications to SWT

Failure of other therapies

## **Is there anything that predicts a poorer outcome?**

SWT research, looking at plantar fasciitis of the foot, has suggested that increasing age and the presence of diabetes lead to a poorer outcome.