

Shockwave Therapy and Running Injuries

Shockwave therapy, also called extracorporeal shockwave therapy (ESWT), is now used in many aspects of medicine but has been particularly successful in the treatment of chronic soft tissue injuries like those that occur regularly in runners.

Because of the repetitive nature of running and the long distances often involved, runners experience a high rate of chronic overuse injuries with as many as 4 in 5 runners experiencing an injury each year.

The most common injuries include plantar fasciitis, Achilles and hamstring tendon injuries, medial tibial stress syndrome (shin splints) and tendon pain in the hip. Luckily these are just the kind of injuries that shockwave is very effective at treating.

WHAT IS SHOCKWAVE THERAPY?

It is a non-invasive way of restarting the natural healing process. It does this by causing a short-term (acute) inflammatory response, much like the 'normal' process that happens after an injury. The treatment involves using a device to send shockwaves through your skin to influence the affected tissues beneath. The body responds by increasing the blood circulation to, and the metabolism in, the affected area.

The main benefits of shockwave therapy are fast pain relief and improved mobility. As it does not involve surgery and there is no need for painkillers, it is an ideal therapy to speed up recovery and manage acute or chronic (long-term) pain conditions including tendon and bone problems.

Studies have shown a 70–85% success rate across a range of conditions. Shockwave therapy can help most people even when other treatments have failed and due to strong research supporting the effectiveness of shockwave treatments in injury rehabilitation, most

main insurance companies now cover the cost of shockwave treatment as part of a rehabilitation programme.

HOW DOES SHOCKWAVE HELP WITH RUNNING INJURIES?

Repetitive overloading of a tendon can cause the accumulation of microtraumas and the degeneration of the tendon.

Tendinopathies at different sites of the body are a common diagnosis in people actively involved in sport as well as the general population.

In each of the cases below, shockwave helps by promoting blood flow to the area which stimulates healing and repair, reduces inflammation, pain and tenderness, speeds up recovery times, and allows people to return to their daily routine more quickly than without treatment. Both acute inflammation of the tendon and chronic overuse of a tendon can be successfully treated with shockwave therapy.

Plantar Fasciitis and Heel Spur

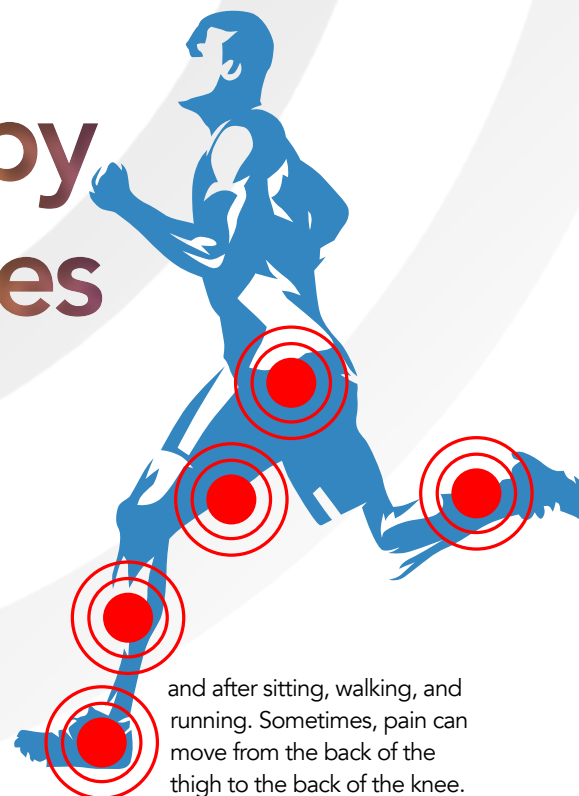
Calcium deposits on the underside of the heel bone (heel spur) are closely associated with inflammation and degeneration of the plantar fascia (plantar fasciitis). Either of these conditions alone or when combined can limit your activities because of pain.

Achilles Tendinopathy

This is pain in the muscle tendon where the Achilles tendon attaches to the heel bone and is often a chronic strain injury caused by overuse or repetitive action.

Hamstring Tendinopathy

Hamstring tendinopathy is usually experienced as pain felt in the tendon that attaches the hamstring to your buttocks. Often, people report pain during



and after sitting, walking, and running. Sometimes, pain can move from the back of the thigh to the back of the knee.

It's believed to be particularly common in runners because during the running motion, when the knee drives forwards and the hip flexes (bends), it compresses the hamstring tendon against the bones you sit on.

Medial Tibial Stress Syndrome (Shin Splints)

Medial tibial stress syndrome, also known as shin splints, typically occurs from activities that place large amounts of stress through the muscle on the front of the shin. Such activities may involve fast walking or running (especially up or downhill or on hard or uneven surfaces), or sport (particularly kicking sports).

Hip Pain

With age and wear and tear, particularly of that caused by the repetitive load-bearing experienced during running, the cartilage within a joint can wear down or become damaged. This can lead to muscles, tendons and ligaments around the hip being loaded in the wrong way. The hip bone itself can be damaged over time. Any of these conditions can lead to pain and damage in the hip area. Shockwave therapy can even help to prevent hip replacement surgery in the long term.

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