# Sciaticalm

Treating lower back pain with shockwave therapy

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#### Introduction



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#### Hello, my name is Mr Ranjan Vhadra

I'm a practicing orthopaedic surgeon who specialises in joint surgery. If you've ever broken a bone or needed a joint replaced, it was an orthopaedic surgeon who operated on you.

In this guide I'm going to explain about sciatica, one cause of lower back pain, and how you can reduce the pain in a few easy steps. I'll also explain what the condition is, what your treatment options are and how shockwave therapy can be used to treat the pain of the condition. I'll try and explain everything with the minimal amount of medical jargon but if you have any questions please email me using the contact details at the end of this guide.

#### A little about my background

I am a consultant orthopaedic surgeon operating in Guernsey, one of the Channel Islands between England and France. I trained as a doctor at St Barts medical school in London and undertook my training in surgery at many prestigious hospitals around Britain including the Royal National Orthopaedic Hospital, Wrightington Hospital and the Robert Jones & Agnes Hunt hospital in Oswestry. I also trained at the Hospital for Special Surgery in New York.



**Next:** What is sciatica?

#### What is sciatica?

Sciatica is characterised by pain in the lower back which can radiate down the leg and sometimes down to the foot. This common back problem affects around **3%** of women and **5%** of men at some stage in their lives.



Caused by a compression of the sciatic nerve where it exits the spine, often from a misaligned or herniated disc, the term sciatica is the common layman's term for the painful burning sensation which medical professionals call 'lumbar radiculopathy'.

It is worth noting that sciatica may disappear in 4 to 6 weeks without treatment or it may persist for months or even years to come. It depends on the cause of the pain and treatment.

A word of caution: Back pain, although debilitating, is usually caused by something which is not serious or life threatening. However, you should always discuss your symptoms with your GP and not 'self-diagnose' as there are a few rare cases where it is a sign of something more serious.

This common back problem affects around 3% of women and 5% of men at some stage in their lives.

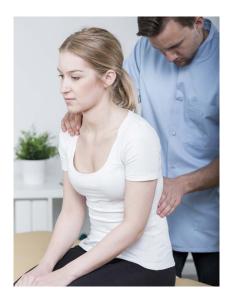


#### What treatments are available

When a doctor is treating a patient they should follow the guidance from **NICE**, the National Institute for Health and Care Excellence. This is what NICE recommends doctors do as a starting point for treatment:

- Offer paracetamol for the pain, or something stronger if needed
- Suggest heat pads on the back
- Suggest exercises for back pain
- Suggest sleeping with a cushion between the knees
- Refer for physiotherapy if the patient continues to suffer for longer than 1 to 2 weeks

Treatments not recommended include spinal manipulation, acupuncture, massage and traction as recent reviews of the clinical evidence show all these to be ineffective.



As you can see, other than medication there are **few successful treatments** and taking painkillers is not always suitable for every patient. Let's look at each of the recommended treatments in turn.



#### Anti-inflammatory drugs (Ibuprofen, Nurofen)

🕀 Short term pain relief 🛛 😑 Side effects 🛑 Not targeted at the problem

This is usually the first line of treatment for the pain of most conditions. All pain relieving (analgesic) treatments work by blocking the pain signal to the brain. Drugs such as paracetamol, ibuprofen and morphine do this chemically, blocking chemical mediators

that allow the pain signal to pass from nerve to nerve on its way to the brain. It's important to note, these drugs are not specific to the site of injury. The body is bathed by the drugs and only a very small portion of the drug that you take actually works on the damaged area.



On the whole pain relief medication is very safe but all have side effects in some patients. Anti inflammatory drugs such as ibuprofen (neurofen) and aspirin can cause gastritis and stomach ulcers. Very rarely they can cause life threatening bleeding if used for more than a few weeks. Generally, anything that can be done to reduce the amount of painkillers a person takes is beneficial.

#### Non Medicinal Treatments

#### Physiotherapy and Exercise

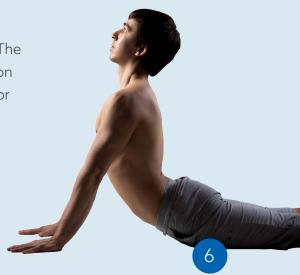
Can produce moderate benefits in many patients

Recommended by NICE

Expensive if done by a professional, time consuming

NICE recommend a number of stretching exercises for sciatica. The charity BackCare (www.backcare.org.uk) produces information on exercises which are useful and I suggest you visit their website for more information. It's a great resource.

Exercises can be done at home by yourself or a physiotherapist and are widely recommended by experts even though NICE themselves state there is a lack of good quality studies on their effectiveness. They are certainly worth a try.



#### Heat and cold

- Cheap and easy to apply
- Not always very effective

Both hot and cold compresses can be used for localized pain relief. There is some evidence to suggest that heat relieves both pain and muscle spasms. It is important to ensure that the skin is protected at all times when applying either heat or cold.





#### Extracorporeal Shockwave Therapy

• Effective for both pain relief and faster healing

Expensive and requiring specialised equipment

Shockwave therapy is a relatively simple treatment for tendon and tissue disorders with a pain relieving effect.

A powerful wave in the form of a set frequency of vibration is directed through the skin to the problem area.

The energy released promotes regeneration of the tendons and other soft tissues, while reducing the pain at the time for up to four hours after treatment.

Next: What do I suggest to my patients for drug free pain relief?

# What do I suggest to my patients for drug free pain relief?



As a surgical trainee I undertook many research projects some of which I have published and presented at orthopaedic meetings around the world. One such project was looking at **low frequency shockwave therapy** for the treatment of pain. This treatment was well recognised for chronic pain and the study involved patients who had conditions that were resistant to all other forms of treatment.

The equipment that applied the treatment was large, expensive and complex to operate. It required a therapist to apply 20 minutes of treatment which the patients received once a week, which was inconvenient but I was surprised at how much benefit the patients received from the treatment.

However, the treatment was only available in hospital and the patients were limited in their use of the machine. Now, with greater understanding of the conditions and modern technology the equipment has been made smaller, inexpensive and easy to operate. All the benefits of the hospital equipment but in a portable device that sufferers can use at home.

Next: How does Sciaticalm work?

#### How does Sciaticalm work?

Sciaticalm works to block the pain of sciatica using something called the 'Gate control theory'

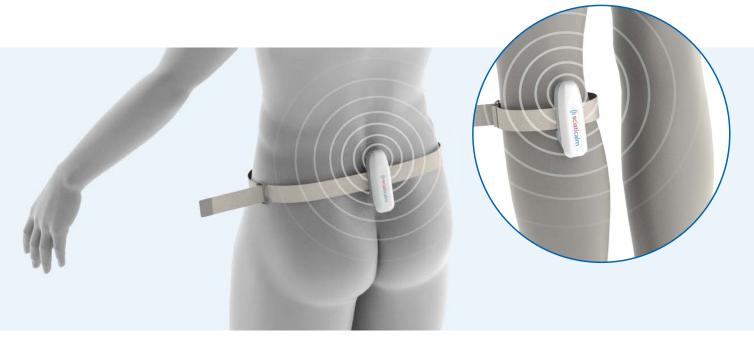
This was first discovered in 1965, by Melzack and Walls in their classic Science article "Pain Mechanisms: A New Theory". The pain signal that runs up to the brain can be blocked by an inhibitory neuron. This inhibitory neuron can be activated by accurately stimulating the vibration sensors in the body. In layman's terms the vibration shockwave scrambles the pain signal to the brain.

This signal which inhibits the pain can take many forms. If you've used a TENS machine for pain relief it works in the same way but with an electrical signal. **Sciaticalm** works with mechanical vibration like a larger shockwave device, providing a frequency of wave of 150Hz, found by researchers to be the ideal frequency for blocking the pain. Patients in trials have seen immediate pain relief which lasts after treatment.

In the original trials of the device back in 2009, many of my patients loved it so much they were reluctant to give back the trial machines I gave them in case their symptoms returned.

It is also easy to use at home. The small, battery operated device is painless and effective. Just apply to the point of the pain and gently tighten the strap. It comes with two straps for easy fitting, one for the lower back and one for the leg, and full instructions.

Press the button to start the treatment and leave it running for around 10 minutes. It's recommended to do this three times a day for maximum benefit.



Next: Conclusion 9

#### Conclusion

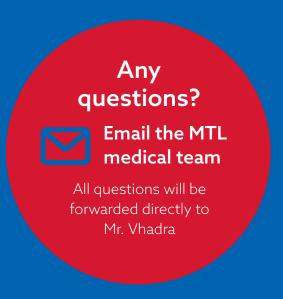
Sciaticalm is an easy to use, cheap and effective treatment for the pain of sciatica and mechanical back pain. Compared to other treatments it is safe, side effect free and uses a treatment method recognized by the National Institute of Health and Care Excellence, the professional body which decides which treatments are most effective for a condition.



## Try Sciaticalm yourself

If you'd like to try Sciaticalm you can do so with a 14 day guarantee to refund all your money if not completely satisfied so you can try it without any risk. As an added benefit, most people can order without the VAT by simply ticking in the box provided.

If you'd like to take up this offer click here to purchase your device.



Mr. Vhadra has been involved in the development of the Sciaticalm technology but has no commercial involvement with Medical Technology Ltd, the manufacturer of Sciaticalm and has not been paid for his endorsement of the product.

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