Dear Editor,

We recently presented a new analgesic method for immediate relief of clinical pain. This technique involves acute pressure stimulation on the sciatic nerves [1,2]. The technique has attracted increased attention following the reporting of two studies during the American Academy of Pain Medicine’s 24th annual meeting [3,4]. The present letter responds to important questions posed by scientists, doctors, and other readers. Hopefully, this letter will assist in better understanding of the method.

Some scientists and doctors have interpreted the new technique as merely another approach for delivering previously described analgesic methods such as acupressure and massage. Although the new technique was initially developed while practicing the traditional Chinese medicine (TCM) therapy of acupressure, the differences between the two techniques are substantial. Acupressure is derived from acupuncture and targets specific points on the body. According to the TCM theory, stimulating acupuncture points affects the meridian system to achieve rebalancing of yin and yang, or Chi (Qi). There is no physically verifiable anatomical or histological basis for the existence of acupuncture points or meridians [5].

Unlike acupressure, the new method specifically targets a recognized anatomical structure, the sciatic nerve. Effective pressure on any accessible area along the sciatic nerve will give immediate pain relief, and the effectiveness is reduced if the pressure is applied distant from the sciatic nerve.

Massage therapy also utilizes pressure. However, massage targets many types of soft tissue in different areas of the body, including muscles, tendons, ligaments, skin, joints, and other connective tissue [6,7]. In addition, massage pressure is usually applied for a longer time. Unlike massage, the new method targets the sciatic nerves, and the pressure is generally applied for only 2 minutes, or a little longer.

The most frequently asked questions about the new technique relate to the application of 11–20 kg of pressure per hand to the legs. This amount of force is an approximate guide. The method can be effective when using somewhat higher or lower pressures. Pressures of 11–13 kg per hand are generally used on more fragile and thinner patients. However, too little pressure fails to relieve pain. In our clinic, doctors learned to approximate their own hand pressure through training involving repeated pressing on a scale that measured kilograms.

The new technique requires pressure to be applied using the dorsal, proximal phalangeal surface of the fists, or the palms. The knuckles or finger tips are not used due to difficulties in applying sufficient pressure for 2 minutes and inaccurate targeting of the sciatic nerve. The pressure time is not a rigid parameter. In 55 patients with dental pain who were provided sciatic pressure, 43 patients obtained pain relief. Of these 43, 35 patients felt relief after 2 minutes of sciatic pressure, and 8 patients required another 1–2 minutes. In 18 patients with pain from renal disease who were provided sciatic pressure, 11 patients obtained pain relief. Of these 11, 8 patients felt relief after 2 minutes of sciatic pressure, and 3 needed a little more time. However, pressure for a time much longer is not associated with better relief of pain.

Other frequent questions relate to the effect of continual use of the method. While the method can be used repeatedly, there are diminishing returns when it is used too frequently. However, effectiveness returns after a period of discontinued use, with that effectiveness being proportional to the length of the non-administration interval.

Questions were raised as to whether the new method could be self-administered. Tests in several hospitals showed that self-administration was most likely to be effective if patients were trained in the technique. Those studies are the subject of a future publication.

The method works well to alleviate various types of clinical pain but not experimental cold pressor pain [8]. We have tested that method with clinical pain from various dental, renal, oncological, and other diseases. Further studies would be required to determine the effectiveness of this method on other types of clinical pain, such as sciatica, menstrual cramps, and osteoarthritis.

Finally, our studies on the new technique involved control stimulation on the front of the leg opposite to the dorsal site of the sciatic pressure. While patients reported significant relief from this control pressure, it was far less than the relief reported for the sciatic nerve press. The control effect may have been due to pressure on the intermediate and femoral nerves at the front of the
thighs. The study design could not determine whether the control effect was due to such nerve pressure, or a placebo effect, or a combination of the two. Thus, such front thigh pressure may not be an ideal placebo/control method.

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References


