



Diagnosis & Therapy

Relieving pain with extracorporeal pulse therapy



Pain in the back, in the neck or in the legs – muscular dysbalances are frequently responsible for these kinds of tension. Nevertheless, diagnosis is difficult in view of the fact that hardened or shortened muscles, for example, do not appear as such on X-ray imagery. ORTHOpress spoke with Kathrin Raegner from the Center for Holistic Pain Therapy (Zentrum für Ganzheitliche Schmerztherapie) in Germering/Munich about muscle triggers and the extracorporeal pulse therapy she uses.

Ms. Raegner, what kinds of complaints do the patients have that come to you?

Kathrin Raegner: It is mainly patients with chronic pain syndromes that I see in my practice. Their complaints are quite various: headache, chronic backache/lumbago, hand-shoulder syndrome, impairment of mobility or pain in connection with knee and hip joint arthrosis. The main causes are frequently muscle triggers. Triggers are permanently shortened muscle fibers that to this day can still not be displayed with any practicable imaging procedure. As a result, diagnosis is difficult and requires special technology and/or proficiency. The most successful method of relieving triggers in the musculature and thus treating the cause of chronic pain syndrome is extracorporeal pulse activation therapy (EPAT).

Pulse activation is best known as a treatment method for kidney stones. Does the treatment of muscle triggers involve the same procedure?

Kathrin Raegner: Yes, although in an altered form. Two different technologies are applied in trigger extracorporeal pulse therapy: radial and focused extracorporeal pulses. Each of them has its own specific advantages and effects. The first 3500 treatments I performed were carried out exclusively with radial extracorporeal pulses. In tissue, radial extracorporeal pulses spread out along a flat plane; their maximum energy is released on the skin surface and then diminishes rapidly below. I was able to achieve considerable success with this procedure, particularly when one considers that many of the patients had been suffering from chronic pain for years. Nevertheless, I found myself up against therapeutic limits with this technology in a few cases.

It is particularly with complex chronic pain syndromes that the triggers that cause it are to be found in layers of deep muscle. These cannot be treated directly with radial extracorporeal pulse technology. In addition to this, unambiguous localization of the triggers with conventional diagnostics methods such as palpation (i.e. probing the body surface or the muscles with ones fingers) or the measuring of the extent of movement is limited. Phenomena such as prickling sensations and muscle cramps, e.g. in the calf, thigh or shoulder/arm musculature, can also be caused by trigger points. Locating the corresponding triggers is often more difficult in such cases, because they may well be found in muscle groups that are a considerable distance away.

How should one picture the treatment?

Kathrin Raegner: When the extracorporeal pulses are focused in the tissue, a transducer that is superimposed on the respective trigger point is used to bundle the sound energy in order to unleash its full power to a particular point at a defined depth. This makes it possible first of all to trigger precisely the pain that the patient already knows when treating with focused extracorporeal pulses. The trigger causing the pain is thus quickly located and is relieved in a targeted manner. I often work with a combination therapy involving both radial and focused extracorporeal pulses. For this purpose, I have been working for the last two years with a combined extracorporeal pulse device manufactured by Storz Medical AG, the Duolith. This is the first device to combine radial and focused extracorporeal pulses in the same instrument. The device was developed especially for utilization in pain therapy. I have performed 1500 combined treatments to date and have observed the following: Radial extracorporeal pulses are indispensable for the treatment of surface trigger points, larger areas and musculature affected by reflex tensioning. The tension in the musculature is effectively relieved by means of the D-Actor technique (vibration) and the high frequency of 21 Hz and the metabolism in the corresponding regions is normalized. The superiority of the combined therapy is particularly evident with complex chronic pain symptoms; as a rule, it permits good and long-lasting treatment results to be achieved.

Ms. Raegner, we thank you for speaking with us today.

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