

PAIN CAN AFFECT **Your Entire Life!**

For anyone who has ever been near a car alarm that went off randomly and inappropriately, we can all agree that that car alarm is too sensitive. Well, the nervous system in our bodies is analogous to a living, breathing car alarm. And our “car alarm” can get very sensitive too, to the point where usual activities, such as standing, sitting, walking, working, lying down, and lifting all become interpreted as threatening and the “car alarm” (our nervous system) goes off to warn and defend ourselves against these things in the form of pain. The hope in all this is that we can treat that ultra-sensitivity and turn the sensitivity dial down—we do this through PNE (pain neuroscience education) and graded activity.

Specific exercises are performed to desensitize the overworked nervous system so the patient is able to do more and more in a gradual manner. The top priority is helping the patient to the point where they can manage their pain independently with a customized exercise routine which is built specifically for each patient and progressed incrementally over time.

The duration of the pain program will vary for each person and their specific need. The goal is to educate and equip each patient with the knowledge and the know-how of what to do to treat their pain through conservative efforts. We have seen patients respond extremely quickly and have had great success with transitioning them to independent management.



*At Kitsap Physical Therapy we have
5 Certified Therapeutic Pain Specialists
who treat and educate about pain;
how it works and what affects it.*

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*To learn more or to schedule an
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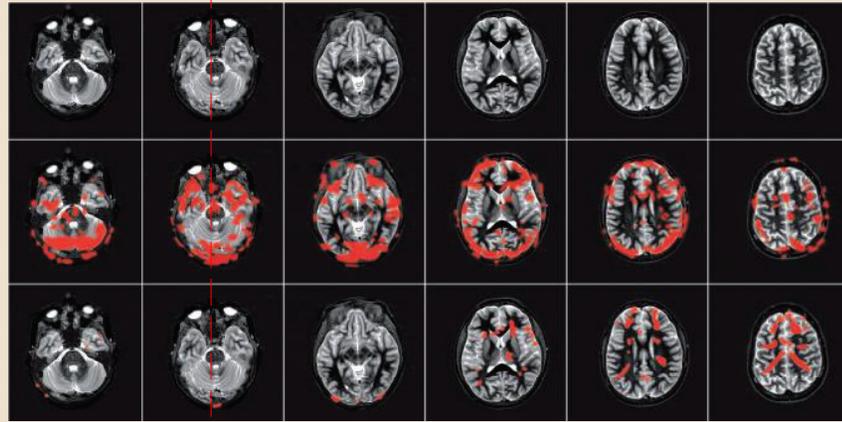
Pain Neuroscience Education

*Don't let anyone ever tell you that
your pain isn't real or is something you
just 'have to deal with.' Your pain is
100% real, but a major key to treating
persistent pain is for you to understand
in great detail why you hurt.*

PAIN NEUROSCIENCE EDUCATION (PNE)

Unfortunately, epidemiological studies (studies of populations of people) are showing that America is in pain. Current data indicates 100 million people in the U.S. suffer from some form of persistent pain, that's close to 1 in every 3 persons – despite injections, surgery, and opioid medications increasing at alarming rates. The global trend of those dealing with persistent pain is 1 in 5. The good news is that evidence for therapeutic approaches to treat people with pain is ever-increasing, resulting in treatments such as Pain Neuroscience Education (PNE), graded motor imagery, pacing/graded exposure, and more. In line with these developments, the International Spine and Pain Institute (ISPI) launched a pain certification titled Therapeutic Pain Specialist (TPS).

A certified Therapeutic Pain Specialist becomes a partner on the journey with those who have persistent pain and helps the individual to build on functionality rather than limitation – what people can do, despite being in pain. Pain Neuroscience Education (PNE) is the groundwork of the program as research shows us that patients in pain first want to know why they hurt before they start active approaches to improve function. PNE consists of discussing all the neurobiology and neurophysiology scientific understanding regarding pain, but doing so using analogies, metaphors, and descriptive stories to help those in pain to understand why they hurt. A landmark study by Moseley in 2005 showed us that PNE alone over a single session was able to reduce central processing sensitivity (how active the brain is in defending against a task that was once thought to be harmful) during the same task that previously resulted in significant pain and central processing activation.



At Kitsap Physical Therapy, we have certified pain specialists and our program is designed based on the latest evidence and clinical application of Pain Neuroscience Education. Current best evidence has shown that Pain Neuroscience Educational strategies utilizing neurobiology and neurophysiology are able to reduce pain, increase function, reduce fear and catastrophization, improve movement, and change cognitions and brain activation during pain experiences. Patients learn realistic solutions and approaches to resolve their pain and regain control of their life without using narcotics.

After understanding why they hurt, patients are taken through a graded (paced) return to function based on their goals and needs. This may consist of graded motor imagery exercises (a series of brain exercises that reduce the sensitivity of the central nervous system to movement) and eventually, regular

exercise programs. The literature shows and highly recommends that patients engage in aerobic exercise as this stimulates endorphin and enkephalin release - these are hormones that have a profound pain-relieving benefit compared to narcotic pain medication. A TPS can also help educate people on how to sleep better using "sleep hygiene" tips (*Schaefer, Chandran et al. 2011; Mork and Nilsen 2012; Wolfe 2012*); this component may be added to the program depending on each individual patient and their needs.

A major goal of the pain program is to resume daily living activities achieved through a pacing approach, which is a process of adding new activities periodically, and gradually increasing the intensity or length of time depending on each patient's unique care program. We know now (based on scientific research) that all pain involves the nervous system, which can mistakenly defend against movements or activities that are not actual threats. The nervous system is the body's defense system, and sometimes it can become hypersensitive and attempt to protect via pain against things such as movements and postures it feels are threatening.

