



Learn About Chronic Pain

Chronic pain is a complex problem with many variables. The traditional medical approach offers simplistic solutions. To solve any problem, you must first understand it in intricate detail. DOC (**D**irect your **O**wn **C**are) is a framework that breaks down chronic pain into basic parts. Once a person understands what aspects of pain apply to them, they can find their own solution.

The DOC program is organized around addressing the following variables:

- Education
- Sleep
- Stress management
- Medications
- Goal setting/vocational issues
- Physical conditioning/ rehabilitation
- Family dynamics

Structural??

Modern medicine is focused on finding a structural problem to explain why someone hurts. It is both illogical and a dangerous way to think. If you step on hot pavement, there is not a structural issue. Your brain just interpreted the sensory input from your feet and signaled danger. You automatically step back and protect the skin on the bottom of your feet. Almost every sensation of discomfort is not caused by a structural abnormality, but by your brain's interpretation of sensory input. Sensations count from every sensor and all are competing with each other.

The pain system is elegant, balanced and compels you to act in manner that ensures safety. Members of any species that ignored these signals did not survive. There is a rare condition of being born without a pain system - "congenital indifference to pain." People without this basic warning system do not survive more than 10-15 years because they can't protect themselves, their skin breaks down, and they die of infection.

Pain impulses begin with stimulation of pain receptors that are sent to the brain through peripheral nerves, then the spinal cord and finally to your brain. Your brain combines data from many different areas, unscrambles the signals, determines the location, and assesses the level of threat. Then you are automatically directed to take appropriate protective action.

Memorization of pain

Pain circuits are etched into your nervous system with repetition. The process is similar to an athlete, artist, or musician learning a skill. However, the frequency of chronic pain impulses is more like a machine gun. These circuits have been documented by dynamic brain imaging to become deeply embedded within six to twelve months. (1) Similar to knowing how to ride a bicycle, they are permanent.



In response to these danger signals, your body secretes adrenaline, cortisol, histamines, and inflammatory proteins called cytokines, which are intended to protect you. Your heart rate increases, there is more blood flow to your muscles, and your blood pressure rises. However, the speed of nerve conduction also increases, which amplifies the sensation of pain.

Acute pain is unpleasant and it is supposed to be. Otherwise, you would be able to ignore it at your peril. It is a powerful gift and how we evolved and survive. But there is nothing beneficial about chronic pain – nothing. You are continually being exposed to sensations that are supposed to create avoidance behavior, but you cannot escape. The warning system has been disconnected from the environment.

Trapped

When you are trapped by pain (or any life circumstance) you will become frustrated and angry in an effort to escape. Any time you cannot fulfill a basic need such as air, food, or water you will become anxious then angry. Not being in pain is a basic need and not having it met is what makes dealing with chronic pain particularly difficult. Not only are stress hormones elevated, the body's inflammatory response creates havoc throughout your entire body creating many different mental and physical symptoms.

Pain is intended to cause anxiety and anger. These are linked circuits in the brain. When other circumstances cause anxiety and anger, they will kick up the pain circuits. The neuroscientists have a short saying, "Neurons that fire together, wire together." Being trapped in this cycle is intolerable. Dr. Sarno, a famous rehab physician, described it as rage. (1) Research has shown that living in chronic pain is has an equivalent impact on one's quality of life as suffering from terminal cancer. (2)



The Solution

There are three parts to solving your pain:

- Understand chronic pain. It is a neurochemical scenario that is much different than acute pain.
- All the variables that affect your pain must be simultaneously addressed.
- Take control of your own care, which is the most important step.

Every recommendation is based on deeply documented medical research. The approach is based on implementing what is already known. The first step is learning about the nature of chronic pain and the principles behind the solutions. Once you gain this understanding, you'll be able to find your way out.

1. Hashmi, JA, et al. Shape shifting pain: chronification of back pain shifts brain representation from nociceptive to emotional circuits. *Brain* (2013); 136: 2751–2768.
2. Sarno, John. *Mind Over Back Pain*. Berkley, 1999.
3. Bruns D, Disorbio JM. The psychological evaluation of patients with chronic pain: a review of BHI 2 clinical and forensic interpretive considerations. *Psychol Inj Law* (2014);7: 335–361.