

Chronic Pain and Neuroplasticity (NP):

-This is the third in a multi-part series that will explain the science of neuroplasticity, how it relates to various aspects of claims, and how it puts big, scientific holes in the denial of many claims, and will win cases for you. In the first 2 articles, I gave a basic overview of the science of NP and chronic pain.

-A quick review: Chronic pain is the result of neuroplasticity gone bad! NP is the new science that explains why the patient's multiple complaints are real and claim-related. NP refers to actual changes in both the brain's physical structure (anatomy) and functional organization (physiology) which are due to changes in behavior, environment, and bodily injury. This scientific understanding of sensitization of pain from a peripheral injury explains how nervous system changes amplify and distort pain so that it no longer solely reflects the original pain from the peripheral nerves, and then causes new areas of pain.

TREATMENT:

Patients with bad NP are generally the most difficult patients to treat. First, the pain sensitivity levels have to be brought down to a more normal level. Once peripheral pain is centralized, aggressive therapy is required.

Treatment relies on a multidisciplinary approach, including better stress management skills and techniques that stimulate the body's own natural pain suppression mechanism. Minimal reliance on medications is recommended, but not always possible, as medications can lower pain levels to make the patient more active. Recommended meds include anti-inflammatories, topical lidocaine and capsaicin, tramadol, muscle relaxers, alpha blockers, neuropathic anti-seizure meds, anti-depressants, plus narcotics as a last resort. Treatments that stimulate pain suppression include exercise which begins with gentle stretching and gradually progresses to walking, jogging, cycling, pool floatation exercises, swimming, dancing, yoga, tai chi, showers-first hot then cold, massage, and more. Physical therapy, chiropractic care, acupuncture, electrical stimulation as a TENS unit, transcranial electrical or magnetic stimulators, and nonspinal injections can help. Numerous psychological approaches facilitate adaptation self-management of symptoms, including cognitive and behavioral therapy, relaxation, meditation, hypnosis, biofeedback, and proper sleep hygiene. A number of interventional approaches, including

nerve blocks, spinal cord stimulation, and surgery may be required in patients do not respond adequately to medical, psychological, and pharmacologic management. All these treatments will be transitioned to an effective home regimen.

CO DOWC Medical Treatment Guidelines: current online edition. Chronic pain chapter. **DELAYED RECOVERY.** By definition, patients with chronic pain fit into the category of delayed recovery. The CO DOWC recognizes that 3 to 10% of all industrially injured patients will not recover despite optimal care, and all of the patients with delayed recovery should have a psychological or psychiatric evaluation, if not previously provided, as well as interdisciplinary rehabilitation or vocational goal setting. It is essential to address all barriers to recovery which might include issues related to psychosocial, personality, employment, litigation, and compensation.

Even though these treatment guidelines/recommendations exists both in CO and all National treatment guides, recommending psychologic evaluation as well as interdisciplinary rehab and vocational goal setting, they are commonly ignored. Also, when psychologic evaluation is done, many of the psych providers are very biased in favor of the insurance companies. It is unfortunate that many healthcare providers use a limited scope of treatments and/or underutilize the scope and length of their treatments and/or use too low a dose of medications they prescribe, and/or ignore or don't try treatments that are recommended in guidelines, because of their treatment biases and specialties. Then, when the patient fails to respond to their treatment protocols, without following the established national or state chronic pain guidelines, the provider states the patient is at MMI and/or has associated psychological factors, but does not treat them. This is very unfortunate, as noted in the following article:

Psychological Intervention Can Change Brain Function and Pain Processing. Psychological interventions such as cognitive behavioral therapy and hypnosis can alter how the brain processes pain, thereby reducing patients' perception of pain. "This shows how mind and body can work in unison, and one can influence the other," said Dr. Magdalena Naylor, a psychiatrist and lead researcher. "Our work shows that CBT

(cognitive behavioral therapy) decreases emotional vulnerability to negative emotions and pain, which go together,” said Dr. Naylor in an interview. “With CBT, these patients are not as emotionally dysregulated.”

Per the American Medical Association guides to the evaluation of permanent impairment, fifth edition, In the section on pain, page 581, behavioral confounders, it notes that individual's rating of pain diminishes when well talk is reinforced.

There is a large amount of medical literature that supports multi-disciplinary pain/rehab programs, which always includes psychological support.

NEXT in this series:

- Part two of treatment, including multi-disciplinary programs
- Following that: recognizing and explaining how bad neuroplastic changes can scientifically refute and destroy the reports and testimonies of biased defense IME doctors.