



PMSIG Clinical Pearl - June 2017 Explaining Neuroplasticity

When patients with longstanding pain react to pain with avoidance of activity, catastrophic thinking, fear and worry for many months or years, the associated brain neural pathways become well-established and can promote the persistence of pain. Explaining neuroplasticity helps patients appreciate the capacity of the brain to change and understand their own ability to influence this change. When patients choose new thoughts and behaviors such as deep breathing, relaxation, engaging in calming self-talk and movement, they can develop and strengthen new brain pathways and weaken old ones, promoting the potential for fear and pain reduction. Sentis has created a two-minute YouTube video on the topic of neuroplasticity that explains, in lay terms, how the brain's pathways activate whenever we have a thought, an emotion, exercise or engage in a behavior. It underscores how some pathways can become well-established and easily activate and suggests that by adopting a new attitude or new behavior, new pathways develop and strengthen while the old, well-established pathways weaken. This short video is a great resource to help you educate your patients on the topic of neuroplasticity:

<https://www.youtube.com/watch?v=ELpfYCZa87g>

This Clinical Pearl was provided by Carolyn McManus, MSPT, MA. In addition to her role as President of the PMSIG, she is a clinician in the Outpatient Rehab Department at Swedish Medical Center, Seattle, Research Associate at the VA Puget Sound Health Services, Seattle and course instructor for Herman and Wallace.

The board of the PMSIG invites you to participate in the Clinical Pearl Initiative. Clinical Pearls reflect succinct, clinically relevant information drawn from your experience that can benefit patient care, but may not be found in the medical literature. Please consider sharing your expertise with your colleagues! Submit your Clinical Pearl to Carolyn at carolyn@carolynmcmanus.com.