# Cognitive Behavioral Therapy for CRPS

*By Stephen Bruehl, PhD*

Patients with CRPS often are told by their physician that they might benefit from seeing a pain psychologist. Yet patients may wonder how seeing a psychologist could help them with their pain given that CRPS is clearly a physical problem.

There are several targets for psychological intervention with CRPS, the most obvious of which is helping patients deal more effectively with the physical and emotional impact of CRPS in their lives. However, another key target of treatment is learning to control the pain without drugs. Many patients initially have trouble believing this is even possible; nevertheless, research has clearly documented that for the majority of chronic pain patients, emotional distress frequently intensifies the severity of pain. This does not imply that the pain is psychological, but rather reflects the interconnections between the parts of the brain that underlie emotions and the stress response, and the parts of the brain that regulate pain.

These pain-exacerbating effects of distress are particularly important in CRPS, because the physiological mechanisms believed to contribute to the pain, color changes, and temperature changes all can, in theory, be directly affected by certain hormones (adrenalin) released during stress and emotional distress. While patients cannot control whether they have CRPS, they can learn techniques to control their stress responses, which in turn can reduce pain intensity.

The most common approach to psychological treatment for chronic pain is Cognitive Behavioral Therapy (CBT). Psychologists and other mental health practitioners who employ CBT typically use a variety of specific techniques. The goal of reducing pain intensity often can be achieved by learning relaxation techniques that reduce emotional distress and control the stress response. These may include breathing relaxation (slow patterned breathing), progressive muscle relaxation, and imagery (ie, creating a detailed mental image of a relaxing place). The effectiveness of these techniques often can be increased by combining them with biofeedback, in which moment-by-moment changes in the body's stress response (reflected in muscle tension or finger temperature), can be observed on a computer screen to help "fine tune" the relaxation response.

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The "cognitive" part of CBT refers to the fact that our emotional reactions to a given life situation are determined by what we think ("cognitions" is another term for thoughts). For example, consider two individuals asked to speak in front of a large audience. The first, with a fear of public speaking, immediately starts thinking, "If I mess this up, I'll look like a fool!" and begins feeling very nervous. The second person is an actress, who thinks, "Great! An opportunity to perform" and feels excited. While the situation is identical, they respond with very different emotional reactions as a result of their styles of thinking. The essence of CBT is that styles of thinking become habits (eg, the eternal optimist versus the chronic pessimist) and more importantly, these habits can be changed. CRPS often leads to more pessimistic thinking. Negative thoughts may intrude repeatedly, such as "Why can't they cure this?;" "This is awful;" and "My life is over." Such thoughts lead to chronic emotional distress, which reduces quality of life, can increase pain intensity, and may contribute to the development of clinical depression or anxiety disorders.

### Changing Negative Thought Patterns

The CBT therapist helps patients learn to identify their habitual negative thoughts and consciously modify them in a way that is more constructive and produces

less distress. A patient may habitually respond to increased pain by thinking, "This pain is horrible and is never going to end," and consequently may feel miserable. The CBT therapist would help the patient learn a way to reframe the problem of pain exacerbations. For example, responding to increased pain by actively saying to oneself, "This is an opportunity to use my relaxation techniques, I can handle this," would lead to less distress and may in fact result in somewhat reduced pain.

Reframing helps patients learn to take the "glass half full" attitude towards their pain rather than the (more natural) "glass half empty" attitude. Learning to recognize and avoid other problematic styles of thinking is also key, including the tendency to dwell on and magnify negative things, ignore good things, and generally "catastrophize" one's situation. Other cognitive strategies used in CBT focus on recognizing what parts of the pain problem the patient can't control (eg, having CRPS, having certain physical limitations, how employers respond), and focusing attention instead on the aspects of the pain problem that can be controlled, such as how the patient responds to pain and limitations. With repetition, this active countering of habitual negative thoughts with more constructive thoughts can create new habits of thinking that contribute to long-term improvements in quality of life.

### Behavioral Issues

CBT often addresses behavioral issues as well. Due to pain and physical limitations, patients may over time engage less and less in their previous life activities. While this may reduce pain short-term, by avoiding activities that could potentially lead to pain exacerbations, it ultimately can lead to a situation in which patients have nothing to focus on BUT their pain. Finding distracting and enjoyable activities that can be done within the CRPS patient's physical limitation is crucial for maintaining some sense of a "normal" and meaningful quality of life.

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CBT therapists often serve as a coach to help patients identify suitable activities and overcome any barriers to those activities resulting from CRPS. Often this is done in conjunction with physicians and physical or occupational therapists. The CBT therapist may use cognitive techniques like those above to address issues such as fear of pain and fear of movement that may interfere with one's ability to re-engage in life. Beyond quality-of-life issues, it is also important to note that leading CRPS medical experts believe that avoiding disuse of the affected limbs and maintaining as normal an activity level as possible are keys to successfully managing CRPS symptoms.

While CBT is clearly not a cure for CRPS, numerous research studies in patients with a variety of chronic pain conditions indicate that it is effective for improving pain, mood, and function. CBT is a "self-management approach" to chronic pain; its techniques require patient effort for them to work and the focus is on managing, rather than curing, the condition. Patients focused exclusively on externally applied "cures" (eg, sympathetic blocks) are unlikely to benefit from CBT until they are willing to alter this treatment focus. Some patients may feel that CBT's implied focus on acceptance of their chronic pain, and working within this, means that they are "giving up the fight" and that this will reduce the possibility of a cure. However, CBT is actually emphasizing the focus on battles that are winnable in order to win the larger war, to have a better quality of life. Appropriate medical and functional therapy treatments typically continue while patients are engaged in CBT, with the hope that these treatments will all work together to produce the desired outcome.

Once CBT pain management skills are learned, they can be applied any time and in any situation. Thus, the patient always has effective pain management tools. In many people, CBT can effectively reduce the reliance on medications and other medical interventions and live a fulfilling life despite CRPS. If you are interested in pursuing CBT pain management treatment, you should discuss this possibility with your medical provider.

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