

Complex Regional Pain Syndrome (CRPS)

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Complex Regional Pain Syndrome (CRPS) is characterized by continuous and intense pain. This chronic pain condition tends to get worse over time and usually affects the extremities, beginning with specific areas spreading to the entire arm or leg. Symptoms include a change in skin appearance as well as sensory reactions. Both the color and temperature of the skin can exhibit abnormal characteristics, while the affected part of the body may experience persistent pain, skin sensitivity, swelling, and sweating. The limb could also have a limited range of movement or movement disorders.

These symptoms may result only after about 5% of nerve injuries. Between 200,000 and 1.2 million Americans have CRPS, affecting females two to three times more frequent than males. The average age at prognosis is 42, however girls as young as 3 can get it.

CRPS is categorized into two types: reflex sympathetic dystrophy (RSD) and causalgia. RSD describes cases of patients with symptoms of CRPS but with no nerve injury that is immediately identifiable. Patients with causalgia exhibit a major and distinct nerve injury. The nerve injury undergoes abnormal healing which may lead to the abnormal function of the sympathetic nervous system.

According to the Reflex Sympathetic Dystrophy Syndrome Association, there are criteria for diagnosing the two types of CRPS:

Complex Regional Pain Syndrome Type I (RSD)

- *The presence of an initiating noxious event, or a cause of immobilization*
- *Continuing pain, allodynia, or hyperalgesia with which the pain is disproportionate to any inciting event*
- *Evidence at some time of edema, changes in skin blood flow (skin color changes, skin temperature changes more than 1.1°C difference from the homologous body part), or abnormal sudomotor activity in the region of the pain*
- *This diagnosis is excluded by the existence of conditions that would otherwise account for the degree of pain and dysfunction*

Complex Regional Pain Syndrome Type II (Causalgia)

- *The presence of continuing pain, allodynia, or hyperalgesia after a nerve injury, not necessarily limited to the distribution of the injured nerve*
- *Evidence at some time of edema, changes in skin blood flow (skin color changes, skin temperature changes more than 1.1°C difference from the homologous body part), or abnormal sudomotor activity in the region of pain*
- *This diagnosis is excluded by the existence of conditions that would otherwise account for the degree of pain and dysfunction.*

There are no known causes of CRPS, however, there are a few theories. There can be a malfunction in the response of the sympathetic nervous system to pain, where that pain is intensified. Also, it could be caused by an immune response, explaining the inflammatory symptoms of redness, warmth, and swelling of the area.

Because there is no known cause for CRPS, there is no concrete treatment routine. Instead treatment for CRPS includes management of the symptoms, especially pain.

These include:

Medication (topical analgesics, antidepressants, corticosteroids, and opioids)

Physical therapy

Psychological support

Sympathetic nerve blocks

Spinal cord stimulation

Expert on Complex Regional Pain Syndrome?

DSES is always looking for volunteers to help teach or give presentations!!

Additional Resources:

Reflex Sympathetic Dystrophy Syndrome Association; www.rsds.org

National Institute of Neurological Disorders and Stroke; www.ninds.nih.gov

