

# Complex Regional Pain Syndrome after stroke

The information provided in this handout is to help you understand the general and specific aspects regarding your shoulder pain after stroke. Content of this handout is extracted from national and international stroke organizations, peer reviewed scientific research articles. If you or your family members have questions after reading this handout, please contact your doctor and or therapist in-charge.

## **What is Complex Regional Pain Syndrome (CRPS)?**

CRPS is a chronic (lasting greater than six months) pain condition that most often affects one limb (arm, leg, hand, or foot) usually one of the consequences of stroke. It is usually characterised by excessive, or spontaneous and or prolonged pain that is much greater than normal pain sensation, followed by as mild as a touch.



## Common symptoms of CRPS

### Unprovoked or spontaneous pain that can be constant or fluctuate with activity

Some say it feels like a “burning” or “pins and needles” sensation, or as if the affected limb is being squeezed.



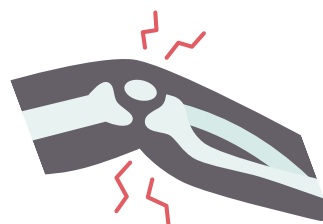
### Excess or prolonged pain after use or contact.

A light touch, normal physical contact, is felt by the person to be very painful.



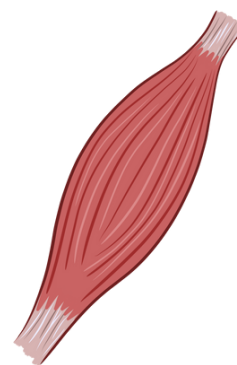
### Stiffness in affected joints

This common problem is that reduced movement leads to reduced flexibility of tendons and ligaments.



### Impaired muscle strength and movement

Most people with CRPS do not have direct injury to the nerve fibres that control the muscles coordinating muscle movement. However, most report reduced ability to move the affected body part. This is usually due to pain and abnormalities in the sensory input that helps coordinate movements. This leads to reduced flexibility of tendons and ligaments.



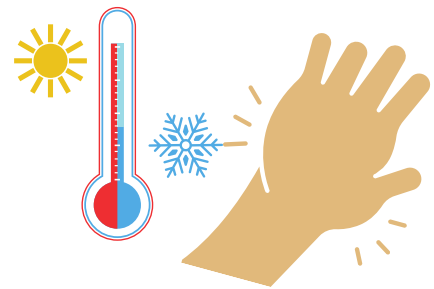
### **Changes in skin texture**

Over time, in some cases, it becomes shiny and thin, in others thick and scaly. Avoiding contact or washing painful skin contributes to this build-up.



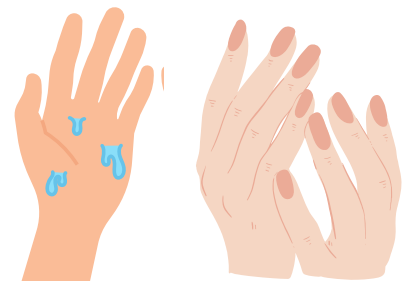
### **Changes in skin temperature, skin color, or swelling of the affected limb**

The affected arm or leg may feel warmer or cooler than the opposite limb. Skin on the affected limb may change color, becoming blotchy, blue, purple, or red. These skin symptoms typically fluctuate as they indicate abnormal blood flow in the area.



### **Abnormal sweating and nail and hair growth**

On the affected limb, hair and nails may grow abnormally rapidly, or not at all, and people may notice patches of profuse sweating or no sweating.



## How is CRPS treated?

### Rehabilitation

Gentle mobilisation exercises will keep the painful limb or body part moving that can improve blood flow and lessen the circulatory symptoms. Exercise can help improve the affected limb's flexibility, strength, and function.

Rehabilitating the affected limb also can help to prevent or reverse the secondary brain changes that are associated with chronic pain.

### Psychotherapy

People with CRPS may develop depression, anxiety, or stress disorder, all of which increases the perception of pain and make rehabilitation efforts more difficult. Treating these secondary conditions is important for helping people cope and recover from CRPS.

### Graded motor imagery

Individuals are taught mental exercises including visualizing moving those painful body parts without actually moving them. This is thought to provide non-painful sensory signals to the brain that helps reverse brain changes that are prolonging CRPS.

### Medications

Several classes of medication have been reported as effective for CRPS, particularly when given early in the disease after careful consideration of your medical condition by your doctor. Please consult your doctor for further information and advice.

Contributed by Physiotherapy, Rehabilitation, Allied Health Services

This brochure is produced for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek the advice of a qualified healthcare provider before starting any treatment or if you have any questions related to your health or medical condition.

Information shared is accurate as of April 2024 and subject to revision without prior notice.



Scan QR  
code to  
download  
e-brochure