

# RSD/Complex Regional Pain Syndrome

## Reflex Sympathetic Dystrophy

RSD is a terrible pain syndrome that can typically occur involving the arm or the leg. This syndrome was recently CRPS (Complex Regional Pain Syndrome).

This pain syndrome is a severe debilitating pain syndrome that appears to involve the entire limb, ignoring the d or leg. This means that the pain is experienced in a very broad area and can begin in the foot or hand and typical body.

Some of the classic symptoms of CRPS include a sense that the arm or leg is warmer or colder than the other and change in color stating that the arm or leg looks purple or dusky and red, but sometimes it can become white as burning pain and hypersensitivity to gentle touching or even the wind blowing across the surface of the skin. Patients unable to bear the weight of a sheet or clothing over the involved area.

They will sometimes complain of increased sweating of the arm or leg and changes of the skin can be observed including blistering and the growth of coarse hair. Nails on the toes and hands often become very brittle. Patients with this condition, because it is so painful, often do not move their extremities in a normal way. This causes joints to fuse, muscles to atrophy and this disuse can cause permanent deformity. Loss of ability to move the hand or leg because of pain and the loss of normal sensation is often seen. Patients with this condition are frequently worse with the application of cold and better when heat is applied, although the extremes of temperatures at both ends are typically uncomfortable.

The reasons why patients develop this pain syndrome remain somewhat unclear. It is typical for there to be an inciting injury that could be quite minor such as a splinter or an IV placement. Sometimes a small sprain is experienced. While most patients after these kinds of injuries go on to get much better within a week or two, patients with CRPS actually get worse and develop new signs and symptoms within two weeks to two months after the injury making their pain syndrome much worse than what one would expect from their initial injury.

At one time, because x-rays were seen to be negative and there did not appear to be any objectively obvious injury to the person, these patients were thought to be crazy or malingering. Now we know and understand that this condition exists and that it is, in fact, a syndrome that is not psychiatric.

The original name for this syndrome was Reflex Sympathetic Dystrophy. This name comes from the fact that patients with this severe condition can develop “Dystrophy” which is a deformity of an arm or leg but the word “Sympathetic” describes the involvement of one portion of our nervous system called the sympathetic nervous system. The sympathetic nervous system is the part of our nervous system that prepares us to fight or to run away. This is seen in all animals and is an “emergency nervous system.” For example, if an animal becomes frightened by something, its sympathetic nervous system kicks in, making it hyperalert and ready to either fight or turn and run away. If you think about the effect on an extremity that prepares you to fight or run away, it makes sense that blood will be diverted from the skin so if a skin wound is sustained it will not cause you to bleed out and it makes sense that blood is diverted into the muscles to allow for fighting or retreating.

When blood is diverted away from the skin, the limb often appears cooler than a limb that is relaxed with a normal amount of blood going to the skin. While these blood changes can be very helpful in the immediate period, if the sympathetic nervous system continues to operate in the absence of any injury, it can cause harm to the limb including harm to the nerves in the limb.

The reason that the name of the syndrome was changed from Reflex Sympathetic Dystrophy to

Increased sweating

