

## Double Crush Syndrome

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Physical therapists are frequently referred patients who need rehabilitation for injuries that have caused nerve pressure. Double crush syndrome refers to a situation in which there is compression or local irritation of a peripheral nerve at several separate sites along its course. The nervous system is the body's control center, responsible for maintaining necessary body functions and responding to the environment. When pressure on a nerve restricts its function, the body may not be able to respond to such sensations. Therefore, it is often important to relieve nerve pressure quickly.

The nerve pressure is often the result of a spinal injury such as a whiplash injury to the neck or a disc herniation in the low back. Due to such injuries, a nerve can be compressed where it exits the spinal column. This can cause pain that radiates from the neck down an arm or from the low back down a leg. Trauma or other stresses may cause nerve compression in other areas of the body.

A difficult problem in rehabilitating these injuries is determining whether the

pain is coming purely from the spine. An injury to the nerve further along its course to the hand or foot may also be a source of pain. The existence of two separate areas of nerve pressure along its length has been termed "double crush syndrome." Medical doctors are trained in physical examinations and special tests to diagnose these injuries. If conservative treatment might be beneficial, physical therapy modalities, manual techniques and exercises may be used to relieve the nerve pressure at both areas.

However, double crush injuries are not always the result of a single injury. Research has shown that an injury to a nerve may actually make the nerve vulnerable to disease or a second injury at a later time. A common example of this nerve pressure results from a herniated disc in the neck. If not healed, the flow of nutrition and other important chemicals down the nerve may be impaired. This may make one vulnerable to nerve pressure or injury further away from the neck such as carpal tunnel syndrome at the wrist.

For this reason, it is important to see your doctor whenever an injury causes pain to shoot down an arm or leg so that it may be resolved before further damage occurs.