

# Spinal Cord Injury Rehabilitation: An Overview

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## Editorial

SCI is an injury to the spinal cord that occurs from the foramen magnum to the cauda equina as a consequence of coercion, incision, or contusion. The highly specialised abilities of an experienced healthcare team are required for spinal cord injury. Rehabilitation following a spinal cord injury (SCI) can be a difficult process, and the degree of your injury may influence how long it takes you to recover. Fortunately, you will be aided in your recuperation by a comprehensive medical team. Doctors, nurses, occupational therapists, physical therapists, psychologists, speech therapists, orthotists, and recreational therapists are just a few of the health care specialists who can assist you in reducing pain and regaining function [1-3].

SCI rehabilitation is a lengthy procedure. Of course, a physical conditioning regimen is included (e.g., strengthening muscles and relearning how to do basic tasks). However, there is a mental and emotional component that aids you in accepting the amount of your spinal damage, loss of independence, and financial burden [4].

## The importance of physical therapy in spinal cord injury rehabilitation

Following a spinal cord injury, a physical therapy (PT) regimen will most likely involve the following:

- Mobility training
- Stretching
- Strength training
- Cardiovascular activity
- Respiratory conditioning

A physical therapist is an important part of your SCI rehabilitation team. He or she will assist you in regaining function, increasing mobility, and avoiding issues that may develop years after the initial severe injury [5]. The complexity of spinal cord injury necessitates a healthcare team with highly specialised abilities. TIRR Memorial Hermann is worldwide recognised for its expertise in the management of tetraplegia spinal cord injury patients who require a ventilator for breathing, including individuals who are able to wean from the ventilator [6].

Traffic accidents, gunshot wounds, knife wounds, falls, and sports injuries are the most common causes of SCI in the world. Functional status has a strong link to whether the injury is complete or incomplete, as well as the severity of the injury [7]. SCI causes not only loss of independence and physical function, but also a slew of consequences as a result of the injury. Complications after SCI include neurogenic bladder and bowel, urinary tract infections, pressure ulcers, orthostatic hypotension, fractures, deep vein thrombosis, spasticity, autonomic dysreflexia, pulmonary and cardiovascular issues, and mental

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disorders [8].

SCI causes the patient to become severely disabled, resulting in the loss of employment, which causes mental and economic concerns. In SCI, the treatment and rehabilitation process is lengthy, costly, and tiring. SCI rehabilitation, whether complete or incomplete, is a protracted procedure that demands the patient's patience and desire. Early rehabilitation is critical for preventing joint contractures and muscular weakness, preserving bone density, and ensuring proper respiratory and digestive system function. In SCI rehabilitation, like in other types of rehabilitation, an interdisciplinary approach is critical [9]. A physiatrist leads the team, which also includes the patient's family, a physiotherapist, an occupational therapist, a nutritionist, a psychologist, a speech therapist, a social worker, and other consultant specialists as needed. You'll require spinal cord injury rehabilitation to maximise your recovery and maybe adapt to a new way of life after a spinal cord injury. Mayo Clinic's comprehensive spinal cord injury rehabilitation team works with you and your family to [10]:

- Meet your ongoing needs
- Provide emotional support
- Improve your physical, mental, and emotional functioning
- Provide spinal cord injury-specific education and resources
- Assist you in reintegrating into your community.

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