

SPINAL CORD INJURY

WHAT YOU NEED TO KNOW

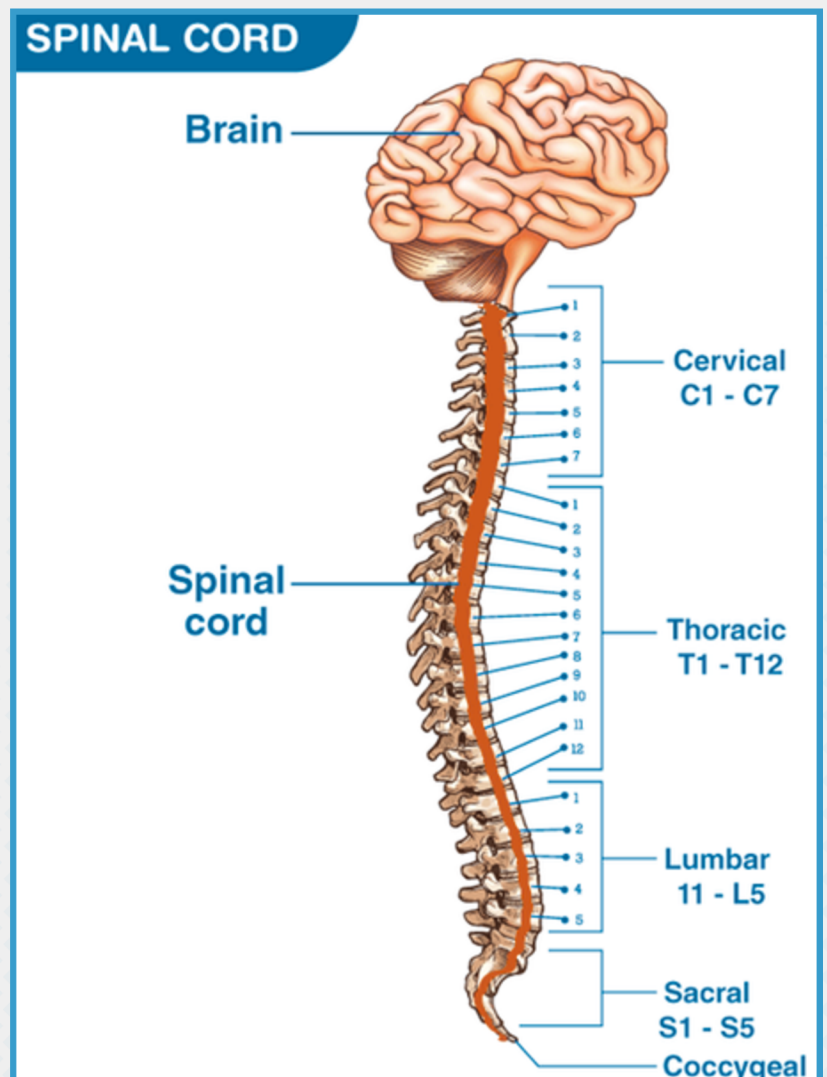
Spinal Cord Injury (SCI) refers to damage to the spinal cord or nerve roots; resulting in temporary or permanent loss of movement and/or feeling.

CAUSES

It can result from trauma (e.g. from falls and road traffic injuries) or non-traumatic causes like tumors, degenerative and vascular conditions, infections, toxins or birth defects.

WHAT IS THE SPINAL CORD?

The Spinal cord is the bundle of nerves and nerve fibers that sends and receives signals from the brain. The spinal cord extends from the lower part of the brain down through the lower back. It is encased within the spine/backbone, a connected column of multiple bones (vertebrae), that protects it.



WHAT ARE THE TYPES OF SPINAL CORD INJURY (SCI)?

An injury to the upper part of the spinal cord can cause paralysis in most of the body and affect all limbs (tetraplegia or quadriplegia). An injury that happens lower down the spinal cord may only affect a person's lower body and legs (paraplegia).

HOW COMMON IS SPINAL CORD INJURY AND WHO IS AFFECTED?

More than 20 million people are affected worldwide, and over 90% of SCI cases are caused by trauma. SCI mostly affects young men.

IMMEDIATE ACTIONS AFTER INJURY

- Call emergency services.
- Protect the spine before moving the injured person.
- Medical assessment and stabilization.
- Refer to a facility that can support acute treatment for SCI, Imaging and diagnosis, surgery and medications



WHY DOES ONE NEED REHABILITATION AFTER SCI?

After a SCI, the brain and spinal cord are no longer able to control the muscles and one may be unable to function in the same way they did before the injury.

Rehabilitation is a medical specialty that helps one find different ways to carry out daily living activities. Rehab offers skilled professionals who work as a team to help one achieve the best possible health, functional abilities, and quality of life after SCI.

Rehabilitation for SCI includes:

- Physical therapy, to strengthen muscles
- Occupational therapy to redevelop fine motor skills so as to carry out activities for daily living—such as getting in and out of a bed, personal hygiene, eating, and using the toilet.
- Vocational rehabilitation, which is identifying basic work skills and physical and cognitive capabilities that can support paid work.
- Educational training, which can help one develop skills for a new line of work that may be less dependent on physical abilities.
- Recreation therapy, which encourages participation in sports, arts, or other leisure activities.



HOW CAN WE PREVENT SCI?

- Safe driving practices.
- Fall prevention.
- Sports safety measures.
- Appropriate treatment of medical causes of SCI

CAN PARALYSIS CAUSED BY SPINAL CORD INJURY BE REVERSED?

There is currently no cure or proven way to completely reverse paralysis caused by complete SCI. However, there is still a lot of ongoing research and PWSCI can still live full and healthy lives even after SCI.

WHY FOCUS ON SPINAL CORD INJURY?

- Spinal Cord Injury can result in lifelong disability and costly medical care.
- Spinal Cord Injury represents a growing but neglected problem.
- Some Spinal Cord Injuries can be preventable and survivable with better knowledge and access to care.

REFERENCES

- WHO fact sheet on Spinal Cord Injury
- WHO International Perspectives on Spinal Cord Injury, 2013
- Global burden of Disease, 2019
- National Institute of Neurological Disorders and Stroke