## **Spinal Cord Injury**

## **TERMINOLOGY (SYNONYMS)**

- Spinal cord injury (SCI)
- Traumatic myelopathy
- Traumatic SCI

## INTRODUCTION

A spinal cord injury (SCI) usually begins with a sudden, traumatic blow to the spine that fractures or dislocates vertebrae. The damage begins at the moment of injury when displaced bone fragments, disc material, or ligaments bruise or tear into spinal cord tissue. Most injuries to the spinal cord don't completely sever it. Instead, an injury is more likely to cause fractures and compression of the vertebrae, which then crush and destroy the axons, extensions of nerve cells that carry signals up and down the spinal cord between the brain and the rest of the body. An injury to the spinal cord can damage a few, many, or almost all of these axons. Some injuries will allow almost complete recovery. Others will result in complete paralysis.

## **DEMOGRAPHICS (STATISTICS)**

The following represents facts and figures about spinal cord injury (SCI) from the National Institutes of Health (NIH) 2008

- There are an estimated 10,000 to 12,000 spinal cord injuries every year in the United States.
- A quarter of a million Americans are currently living with spinal cord injuries.
- The cost of managing the care of spinal cord injury patients approaches \$4 billion each year.
- 38.5 percent of all spinal cord injuries happen during car accidents. Almost a quarter, 24.5 percent, are the result of injuries relating to violent encounters, often involving guns and knifes. The rest are due to sporting accidents, falls, and work-related accidents.
- 55 percent of spinal cord injury victims are between 16 and 30 years old.
- More than 80 percent of spinal cord injury patients are men