Costs of SCI

The Big Picture

- First year medical costs average $198,000
- The average lifetime cost for care of a quadriplegic (injured at age 25) is estimated to be $1.35 million.
- Nearly 4 million adults and children with severe disabilities are uninsured.
- Many SCI patients cannot re-enter the workforce, as earnings would affect government provided healthcare.
- The cost of supporting the care of SCI patients nears $4 billion each year.

Typical Costs

- Home modification -- $50,000
- Home health care -- up to $70,000 per year
- Durable medical equipment, including but not limited to: lift, catheters, disposable bed sheets, urinals, etc. -- $1,000-$3,000/year
- Hospital bed -- $1,500
- Accessible van -- $45,000
- Furniture modifications -- $5,000 or less

Current treatments

- Aggressive treatment immediately post-injury can help limit damage to the nervous system.
- Surgical decompression can alleviate pressure.
- Medication can limit swelling and lessen secondary damage.
- Electrical stimulation of nerves can prevent muscle atrophy, improve nerve function, limit spasms and improve bladder control.
- Only a small percentage of people with SCI recover full function.
- At the time, damaged or bruised spinal cords cannot be repaired, but researchers are working on ways to stimulate spinal cord regeneration.

Future possibilities

Researchers are currently investigating the following potential therapies:

- Regrowth of axons after injury. Researchers are seeking to understand why nerve cells fail to regenerate after trauma.
- Introduction of growth inhibitor blockers to overcome the body's resistance to regeneration of nerve cells
- Axon therapy to grow new connectors to the spinal cord
- Use of stem cells to replace the function of impaired nerve cells
- Aggressive physical therapy to restore function and use of muscles and increase mobility and independence

11/2008

NTAF Catastrophic Injury Program

Realities
Possibilities
Community Responses

www.catastrophicfund.org
800-642-8399

Spinal Cord Injury

Spinal Cord Injury (SCI) impacts injured persons, their families and communities.

We hope to provide some information about the issues involved, as well as ways in which you can help.

Who Gets Injured?

- There are approximately 11,000 new SCI cases each year.
- 82% of SCI patients are males; 53% are single.
- The average age of injury is 31 years of age.
- In the United States, an estimated 250,000 persons are living with SCI.

Life-Changing Realities

Post-injury medical care

- The average length of stay in rehabilitation is 44 days.
- 92% of people with SCI return to private, non-institutional care (usually their homes).
- Only 4% of the patients are discharged to nursing homes.
- Each year, approximately 30-50% of all people with SCI are re-admitted to the hospital due to secondary complications.

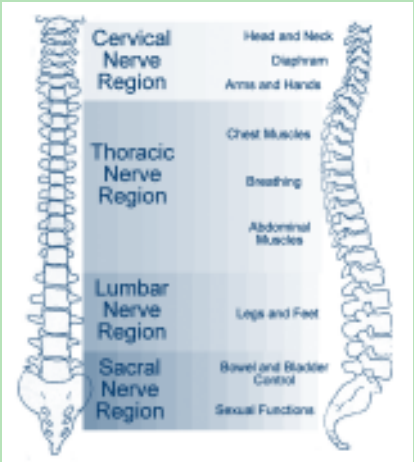
Post injury employment

- Ten years after SCI, 34.4% of the people with paraplegia are employed and 24.3% of people with quadriplegia (a.k.a. tetraplegia) are employed.

Anatomy of Spinal Cord Injury

The spinal cord -- made up of nerve cells -- is the "information pathway" between the brain and all other nervous systems of the body and is surrounded by nerve fibers, which carry signals to and from the brain.

Narrow spaces between the vertebrae where nerves exit to the rest of the body are vulnerable to injury.



Injury Process

1) Trauma to the spine causes a fracture or dislocation of the vertebrae resulting in bruising or compression of the enclosed spinal cord nerve tissue.

2) Swelling results which furthers compression, impairing oxygen flow to the cord nerve tissue. The lack of oxygen leads to nerve death.

3) Axons (nerve components) can no longer transmit signals from the brain to the rest of the body resulting in paralysis.

4) The location and severity of the injury determines which abilities and functions are affected. Injury to the cervical vertebrae (C1-12) causes loss of use of the arms and legs leading to quadriplegia. Thoracic vertebrae (T1-12) injuries affect the chest and legs resulting in paraplegia.

Community Responses

Help Individuals

Lend your support to individuals who are coping with catastrophic injury in whatever way you can: financial, practical, spiritual.

Contribute to patient fundraising efforts!

To learn more, visit the NTAF Catastrophic Injury Program Web site: www.catastrophicfund.org

Support Research

Become an advocate for patient issues, such as funding for stem cell research, disability rights and accessibility.

Go to the Web site of the Christopher Reeve Paralysis Foundation (www.christopherreeve.org) and the National Spinal Cord Injury Association (www.spinalcord.org) to learn what you can do to help.

Prevent Injury

What are the sources of SCI?

- Vehicular accidents 37%
- Violence 28%
- Falls 21%
- Sports-related 6%
- Other 8%

Educate yourself about what you can do to prevent spinal cord injury in your family and community. Visit the Foundation for Spinal Cord Injury Prevention, Care and Cure Web site (www.fscip.org).