

## Paraplegia (spinal cord injury)

Both paraplegia and quadriplegia are conditions which result from injury or trauma to the spinal cord. The spinal cord runs through the centre of the bony spine. It is like a system of telephone wires which conduct messages from the brain, through the nerves, to all parts of the body.

### **Damage can be due to various causes**

People can receive damage to the spinal cord due to an accident, for example a:

- Motor accident
- Diving mishap
- Fall
- Sporting accident
- Household accident.

Damage can also result from a tumour or blood clot on the spinal cord. The majority of people who have a spinal cord injury are young males (who have a greater tendency to indulge in risky behaviour). However, there are people from both sexes and of all ages with spinal cord damage.

### **Loss of function usually relates to site of injury**

The amount of function lost tends to correspond to the level in the spinal cord where the damage takes place. A break near the top of the neck can mean that even breathing is difficult and that people must use a respirator. People with an injury in the lower neck, however, usually have arm movement but perhaps not finger movement. However they can often drive, work, write etc with the help of specialised equipment.

People with damage to the upper part of the spinal cord are called quadriplegics or tetraplegics. People with damage below this level are called paraplegic.

People with injuries in the lower back can have sensation and movement right to the hips. They can usually live totally independently with a minimum of help, as long as they can use a wheelchair and have the necessary alterations to their home, their bathroom and car.

There are many degrees of injury and function loss, which don't always correspond to the level of the injury on the spine. Sometimes a quadriplegic only sustains partial damage to the spinal cord and can actually walk, though they may have lost other functions. At all levels, there is usually some loss of function in the bowel and bladder.

### **People with spinal cord injuries can lead productive lives**

Given the right sort of equipment and adaptations to buildings, people with spinal cord injury can do most things that the rest of the community can. They can:

- Work
- Study
- Enjoy recreation
- Socialise
- Have relationships
- Have a family of their own.

Sometimes though, they do these things in a slightly different way to the majority of the community.

### **Handicaps result from ignorance not the injuries**

Many handicaps encountered by people with spinal cord injuries actually result from lack of consideration. Services in the community often do not cater for their needs.

Without adequate access arrangements, these services may be inaccessible:

- Public buildings
- Shops
- Theatres
- Restaurants
- Public transport.

There has been some improvement in this area since the introduction of the *Disability Discrimination Act*.

### **Some common health problems**

Other problems which can arise for people with spinal cord injuries are:

- Frequent urinary tract infections
- Kidney stones
- Muscle spasm
- Pressure sores from sitting in one position for too long without a correct pressure cushion
- Wide and rapid fluctuations in body temperature.

At a higher level of injury, a condition called autonomic hyperreflexia, also known as autonomic dysreflexia, may develop. This condition can be triggered by a variety of factors, including distended bladder, distended bowel and skin or pressure sores. The symptoms of this condition include raised temperatures, profuse sweating, high blood pressure, slow pulse rate and blackouts.

### **Treatments used**

Antibiotics are generally used to cure urinary tract infections. Some people use cranberry juice and other herbal remedies as a preventative. Some people take medication for muscle spasm. Others with slight spasm prefer not to.

### **Symptoms and level of pain vary**

As you can see, there is a huge variation within this condition. Some people experience pain and various complications, and others are relatively healthy with little need for medication. The loss of sensation can mean that pain is at a low level. Some people, on the other hand, experience intense pain.

### **Where to get help**

- Independence Australia (formerly ParaQuad Vic.) Tel. 1300 704 456
- Spinal Cord Injuries Australia Tel. (02) 9661 8855 or (Consumers only Toll Free - 1800 819 775)
- AQA Victoria Ltd Tel. (03) 9489 0777
- Your doctor
- Commonwealth Rehabilitation Service Tel. (03) 9206 0802.

### **Things to remember**

- Most spinal cord injuries are caused by accidents.
- Loss of function tends to correspond to the level in the spinal cord where damage occurred.
- People with spinal cord injuries can lead productive lives.

**This page has been produced in consultation with, and approved by:**

Independence Australia

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