



AUSTRALIAN RESUSCITATION COUNCIL

GUIDELINE 8.18

MANAGEMENT OF SUSPECTED SPINAL INJURY

INTRODUCTION

The possibility of spinal injury must be considered in the overall management of all accident victims. Following fracture or dislocation, the spinal cord (nerve tissue) may be already or subsequently damaged causing paraplegia or quadriplegia. Extreme caution is needed in moving victims to minimise the risk of any further damage.

The principles of management of airway, breathing and circulation always take priority in the care and management of a suspected spinal injury.

Suspected spinal injuries of the neck, particularly if the victim is unconscious, pose a major dilemma for the rescuer because correct principles of airway management often cause some movement of the cervical vertebrae.

Victims with suspected spinal injury can be separated into two groups:

- the conscious
- the unconscious

Spinal injuries can occur in the following regions of the spine:

- the neck (cervical spine)
- the back of the chest (thoracic spine)
- the lower back (lumbar spine)

RECOGNITION

Spinal injury must be considered in all situations where the victim has been involved in:

- a motor vehicle incident
- any accident when the victim is unconscious
- a dive into shallow water or being "dumped" in the surf
- a fall from a ladder, roof etc.
- a sporting accident, (eg. rugby, falling from a horse).

A conscious victim with significant injury to the spine is usually aware of pain in the injured region and may have injured the spinal cord. If the spinal cord is already damaged, the victim may complain of pins and needles, numbness, weakness or inability to move the limbs.

MANAGEMENT

The Conscious Victim

If the conscious victim complains of pain or altered sensation in the neck or any other region tell him to remain still. Ideally the victim should only be moved by rescuers trained in the management of spinal injuries. If movement is necessary, extreme care must be taken to minimise movement of the spine in any direction, and the painful area must be fully supported.

The Unconscious Victim

Airway management takes precedence over any suspected spinal injury.

The Basic Life Support Flow Chart Guideline 7 must be followed if the victim is unconscious, with the following modifications.

The unconscious victim must be:

- handled gently with no twisting, and minimal movement of the head and neck
- turned on his side to ensure an adequate airway
- turned with spinal alignment maintained.

Note: Those airway manoeuvres which are least likely to result in movement of the cervical spine should be tried first, for example, jaw thrust in preference to head tilt.

If necessary, it is acceptable to gently move the head into a neutral position to obtain a clear airway.

SPECIAL DEVICES

There is a range of cervical collars which vary from simple cardboard, to foam and rigid plastic. These are devices which should only be used by personnel trained in their use.

Definitions:

Paraplegia - paralysis of the legs and lower part of the body.
Quadriplegia - paralysis involving all four limbs.

FURTHER READING

ARC Guideline 2.1 Priorities in an emergency
ARC Guideline 3.3 Positioning of an unconscious victim
ARC Guideline 4 Airway
ARC Guideline 7 Cardiopulmonary Resuscitation