



Spine and Spinal Cord Trauma - Management

Management of SCI's

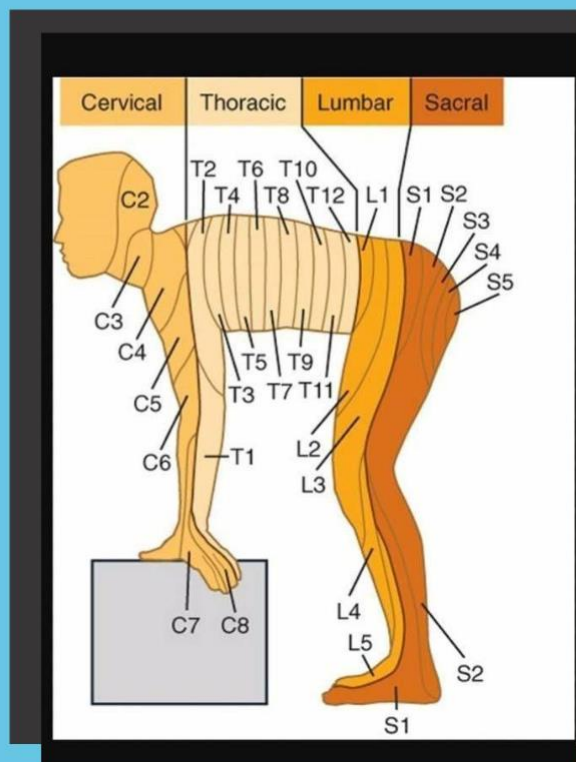


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Rehabilitation should start early. Typically a SCI patient will be in hospital for 8 – 12 weeks.

Early rehabilitation focuses on:

- Respiratory function
- Prevention of complications
- Exercising available muscle mass – actively and passively, maintaining muscle tone and preventing atrophy

Multidisciplinary approach – physiotherapy, occupational therapy, and other health care professionals.



Pre-hospital management includes basic life support

following ABCDE guidelines and stabilisation of the spine by restricting cervical spine movement – hard cervical collar, blocks on either side of head and strapping or taping patient's head securely between the blocks. A rigid spinal backboard is used for stability during transport.



Treatment in ICU involves close monitoring of the patient, restriction of cervical spine movement precautions remain in place until C-spine is cleared.

Adequate oxygenation ensures that spinal cord is not deprived of oxygen.

- Patients with high C-spine injury require mechanical ventilation.
- Patients with cervical or high thoracic injury may experience extreme bradycardia – treated with glycopyrrolate or atropine.

Hypotension and spinal hypoperfusion can result in further spinal damage – maintaining an adequate blood pressure using IV fluids and vasopressors (e.g. noradrenaline) is essential.



Useful resources:

C- Spine clearance flowsheet and guidance 2017 (Intranet – Directory – Critical Care - Neurological)