

CLASSIFICATION AND MANAGEMENT OF SPINAL AND SPINAL CORD INJURIES

CLASSIFICATION AND MANAGEMENT OF SPINAL AND SPINAL CORD INJURIES Basic management principles

Spinal realignment In cases of cervical spine subluxation or dislocation, skeletal traction is necessary to achieve anatomical realignment. This is done using skull tongs (Figure 30.19). tion and stabilisation using internal fixation is also required (Figure 30.20).

(a) (b) (d) (c) Figure 30.19 Skeletal traction using skull tongs. Figure 30.20 (a) Thoracolumbar fracture dislocation, (b) treated with open reduction and posterior /f_i xation. (c) Bifacetal cervical spine dislocation. (d) Posterior stabilisation following closed reduction.

and immobilisation of cervical fractures (Figure 30.21 Stabilisation The indication for operative intervention is influenced by the injury pattern, level of pain, degree of instability and the presence of a neurological deficit. The only absolute indication for surgery in spinal trauma is deteriorating neurological function. Decompression of the neural elements Realignment of the spine and correction of the spinal deformity may achieve an indirect decompression. A direct decompression of the neural elements may also be indicated if there are bone fragments causing residual compression or a significant haematoma (Figure 30.22). The timing of surgery in spinal cord trauma remains controversial. Corticosteroids Corticosteroids are no longer indicated in acute spinal cord injury because of a lack of evidence to support e ffi cacy . Steroids do have a role in non-traumatic spinal cord compression, e.g. malignant spinal cord compression. Summary box 30.5 Management of spinal trauma /uni25CF /uni25CF /uni25CF). -

Figure 30.21 External immobilisation using a halo jacket. Neurological de /f_i cit determines management Deteriorating neurological status requires surgical intervention Corticosteroids are ineffective (b) Figure 30.22 (a) Sagittal T2-weighted magnetic resonance imaging scan showing an L1 burst fracture and neural compression; (b) treated with combined anterior and posterior surgery.

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Revision #1

Created 2025-12-31 15:12:58 UTC by Omar Ayman

Updated 2025-12-31 15:12:58 UTC by Omar Ayman