

A Bad Bodycheck

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A 15-year-old male was checked into the board during a hockey game two hours ago. He instantly became quadriplegic.

On examination, he is:

- hypothermic (35.5 C),
- hypotensive (80/40 mmHg),
- tachycardic (120 bpm) and
- tachypneic (32 respirations per minute).

He has no movement in his arms and legs, with a C5 sensory level. Plain C-spine X-rays and computed tomography scan (Figure 1) are performed.

What is the diagnosis and management?

This patient sustained a devastating acute cervical spinal cord injury as a result of fracture dislocation of the cervical spine and traumatic C5-6 disc herniation.


Initial management consisted of cervical immobilization, airway protection, aspiration, intubation, and fluid resuscitation.

main considerations should include C-spine immobilization, airway protection, aspiration, intubation, and fluid resuscitation.



Figure 1. Computed tomography of spine.

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sympathetic vasomotor control. Tachypnea might result from intercostal muscle paralysis. The acute flaccid quadriplegia (neurogenic spinal shock) will be followed by the characteristic spastic paralysis in the coming weeks and months.

The use of intravenous methylprednisolone is controversial and has not been recommended by some neurosurgeons, since the reported meaningful functional recovery is minimal.

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Once he is stabilized, the patient should be transferred urgently to a tertiary neurosurgical centre.

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