

IMAGES IN EMERGENCY MEDICINE

Trauma

Man with trauma after a fall

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1 | PATIENT PRESENTATION

A 53-year-old man was sent to our emergency department because of a drunken and unintentional high fall from the fifth floor to the canopy on the second floor, ~15 meters high. At triage, he exhibited clear consciousness, and physical examination revealed thoracic deformity, absent anal tone, and a 0 score of muscle power of bilateral lower extremities. Neurologic examination also disclosed absence of knee and ankle jerk reflexes, sensory loss below T10 level, and urinary incontinence. The scout view (Figure 1) and emergency CT scan (Figure 2) both showed abnormal penile erection.

2 | DIAGNOSIS

2.1 | Priapism in spinal cord injury

The patient's CT scan revealed fracture-dislocation at T11 level with complete spinal cord transection (Figure 3) along with rib fractures, pneumothorax, and lung contusion. There were no injuries to the brain, abdominal organs, or extremities.

The cause of spinal cord injury-related priapism is thought to be because of increased parasympathetic input following blockage of sympathetic pathway.¹ The sympathetic outflow originates from approximately T2 and innervates penis and clitoris from the lowest levels of the spinal cord, the conus, which could explain why lesion at any level in the spinal cord from the brainstem to the conus may induce priapism.² Priapism in spinal cord injury usually occurs shortly after trauma and may resolve spontaneously from a few hours to up to 30 hours after the

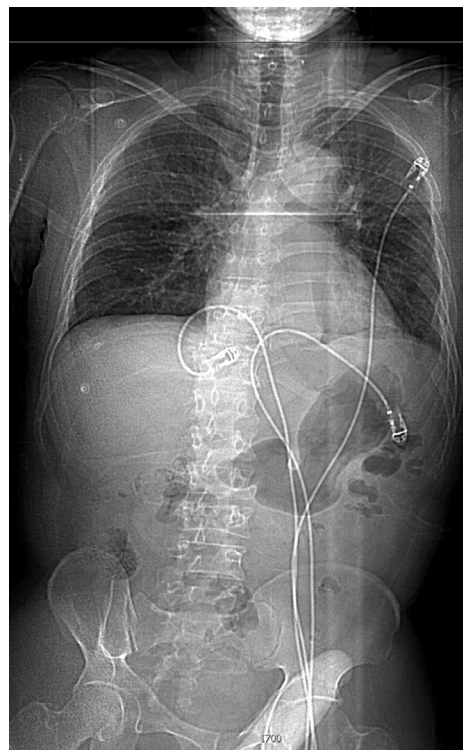


FIGURE 1 CT scout film. The scout view of CT scan shows abnormal penile erection

event. It appears to be invariably associated with complete spinal cord transection and may indicate poor prognosis. However, the proportion of male patients with priapism after suffering acute complete spinal

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FIGURE 2 CT coronal view. The coronal view of the CT scan shows abnormal penile erection, more exaggerated than unintended condition

cord transection is unclear because of few reported cases in literature.

Under the impression of T11 traumatic spondyloptosis, our patient underwent transpedicular screw fixation and posterolateral fusion by artificial bone grafts. However, he remained hemiparaplegic even after the surgery and rehabilitation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

INFORMED PATIENT'S CONSENT

Yes.



FIGURE 3 CT sagittal view. The sagittal view of the CT scan reveals fracture-dislocation at T11 level with complete spinal cord transection

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