

"DECEIVING X-RAY" - A CASE OF CERVICAL FRACTURE DISLOCATION IN NORMAL CERVICAL X-RAY

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Introduction: Trauma series of cervical x-ray included 3 views (lateral, anteroposterior and open mouth) had a corresponding 93% sensitivity, 71% specificity, and 84% accuracy.(1) It is sufficient for screening most of cervical injury in trauma centers. However Woodring JH retrospectively studied 216 patient for limitation of cervical radiography in evaluating acute cervical injury. Trauma series x-rays increases the sensitivity but still unable to detect 61% of the fractures and 36% of the subluxations and dislocations, and falsely identified 23% of the patients, half of whom had unstable cervical injuries, as having normal cervical spines.(2) Careful clinical evaluation and diagnosis is very crucial as neurologic sequelae increases by a factor of 10 if a cervical injury is missed.(3)

Discussion: 22 years old female foreigner was found less responsive by public, believed to attempt suicide by jumping from 3rd floor. She was intubated at ED for airway protection and low GCS, then was and referred to surgical team for tension pneumothorax. Initial trauma x-ray series screening was done. Pelvic x-ray showing right acetabular fracture with protrusion, however cervical and other x-rays is normal. We proceed with CT cervical for patient's dangerous mechanism of trauma, as recommended by Canadian C spine rules. We was shocked to review the finding; traumatic fracture dislocation with 50% anteroposition of C5 over C6 and widened space between C5 and C6 suspicious transected cord at this level, comminuted fracture C6 vertebral body, fracture of C6 left lamina and facet, fracture of C7 bilateral lamina.

Conclusion: This case stresses the importance of careful clinical assessment and imaging procedures on polytrauma and high energy mechanism. CT scan must be considered in all patient with suspicious cervical injury, even in normal x-ray finding.