## Do Attending Physicians Know Evidence-Based Guidelines for Cervical Spine Clearance in Blunt Trauma Patients?

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**Purpose:** This study was designed to investigate attending physician knowledge of cervical spine (C-spine) clearance in adult blunt trauma patients at an academic Level I trauma center as well as an academic tertiary care center.

**Methods:** Attending physicians in the departments of orthopaedic surgery, neurosurgery, general surgery, and emergency medicine at a Level I trauma center and spine surgeons at a tertiary care center affiliated with a single academic institution were emailed a survey investigating their knowledge of current evidence-based C-spine clearance protocols.

**Results:** The response rate was 46%. 47% of attendings are aware of the existence of an official C-spine clearance protocol at their institution. 95% of attending physicians use an acceptable clinical clearance guideline (NEXUS or NEXUS plus range of motion) when deciding which blunt trauma patients need imaging. 50% selected CT alone as the first-line imaging study. 92% correctly managed an alert patient following a negative CT scan by either continuing a collar, ordering MRI, or obtaining flexion/extension views. For an obtunded patient, 89% correctly managed the patient by continuing the hard collar until a reliable examination could be obtained, clearing the C-spine based on the CT only, or ordering MRI. 5% identified dynamic flexion/extension radiographs as an option for clearing the C-spine in an obtunded patient. When queried specifically about the 2009 Eastern Association for the Surgery of Trauma evidence-based guidelines for cervical spine clearance, only 58% were aware of the contents of the guidelines.

**Conclusion:** The majority of attending physicians appropriately managed case-based scenarios to clear the C-spine in adult blunt trauma patients. However, only half of attending physicians correctly identified CT scan alone as the appropriate first-line imaging following blunt trauma, which is in line with the current recommendations. Despite the evidence in the literature, there seems to be resistance to transitioning to CT scan alone for the initial imaging of blunt trauma patients.

**Table 1.** Percentage of Attendings by Department Who Selected an Appropriate Answer for Clinical Scenarios

Department	Clinical Clearance	Imaging	Patient with Neck Pain	Obtunded Patient
Orthopaedics	83	42	75	92
Neurosurgery	100	0	100	67
<b>Emergency Dept</b>	100	55	90	85
General Surg	100	100	100	100
Average	95	50	87	87

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