

Clinical Research

Surgical

Cervical Spine Assessment using the Canadian C-Spine Rule - A Department Audit

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INTRODUCTION

Trauma patients must be assessed for possible cervical spine injuries, a daunting task for the inexperienced Emergency Department (ED) doctor, as the consequences of a missed cervical spine injury can be very serious.¹ The use of the Canadian C-spine rule will allow doctors to be more selective in their use of x-rays without the risk of missing a fracture/dislocation of the C-spine.² It will reduce neck immobilisation times for patients, greatly expedite treatment of trauma patients in our crowded EDs, and reduce healthcare costs without jeopardising patient care.^{3,4} The ED of Letterkenny General hospital manages a significant amount of trauma patients from road traffic accidents annually and the Consultants regularly instruct NCHDs on the clinical evaluation of trauma patients.

OBJECTIVE

To determine whether ED/specialist team doctors are evaluating trauma patients properly using the Canadian C-spine rule as per department standards in Letterkenny General Hospital.

METHODOLOGY

In this retrospective study, 50 patients were randomly selected over a 6 month period. All patients selected were suspected to have C-spine injuries. ED standard: Canadian C-spine rule used in trauma patient evaluation. Data were obtained from patients' notes.

RESULTS

Thirty patients (60%) were treated by ED SHOs, 19 (38%) by ED Registrars and 1 (2%) patient was treated by an ED Consultant. Twenty-nine patients (58%) were sent for imaging studies with 28 (96.5%) of them having proper indications according to the guidelines. Three patients had further CT scans due to inadequate views on x-ray. One patient (3.4%) had a confirmed C-spine injury in this study while 21 (42%) patients were clinically cleared of a neck injury. Of the 21 patients clinically cleared of a neck injury, 19 (90.5%) of them were done according to the guidelines.

CONCLUSION

This audit showed acceptable knowledge levels of, and adherence to the Canadian C-spine rule guidelines in assessing trauma patients by ED NCHDs in Letterkenny General Hospital. This can be attributed to the continuing education programme run

by the ED Consultants. It is recommended that a daily teaching programmer of ED NCHDs should be encouraged and continued.

REFERENCES

Available on request.

PRESENTED

At the CAPA Meeting (RSCI) in University College Hospital Galway in June 2007 by Dr. Kelechi Iwuji.