

## Michelle Lepitre<sup>1</sup>, Aoife O'Halloran<sup>1</sup>, Darbar Ali Shah<sup>2</sup>, Athar Noshad Sheikh<sup>2</sup>

<sup>1</sup>Graduate Entry Medical School, University of Limerick, Castletroy, Co. Limerick, Ireland; <sup>2</sup>Department of Surgery, South Tipperary General Hospital, Clonmel, Co. Tipperary, Ireland

**Background:** This audit analysed the admission and management of patients aged 18–50 who presented with head injury to South Tipperary General Hospital (STGH), Clonmel, Co. Tipperary, Ireland, against accepted guidelines of the National Institute of Health and Care Excellence (NICE).

**Methods:** The aims of this audit include assessing inpatient/outpatient neurological observation protocol at STGH and whether or not it is in accordance with NICE guidelines, to determine whether STGH is over/under treating patients with a head injury, and to determine if STGH is unnecessarily using resources (CT) computed tomography scan, inpatient admissions). Existing patient records were examined via *Hospital In-Patient Enquiry* (*HIPE*), and national integrated medical imaging system (NIMIS) to follow CT scan orders and reports over a 32-month period.

**Results:** According to NICE 2017, of 106 patients admitted with head injury, CT-head was appropriately ordered for 79% of patients (n=84), indicated but not received for 11% (n=12) and inappropriately ordered for 10% (n=10). Neurosurgical evaluation and neurological observation were managed appropriately for 94% (n=100) and 69% (n=73), respectively. However, 29% (n=31) of patients were admitted unnecessarily under inpatient neurological observation. Overall, 57% of patients were managed in accordance with NICE guidelines (NICE, 2017).

**Conclusions:** STGH is over-treating patients with head injury by way of unnecessary CT scans and inappropriate inpatient hospital admissions when they could be managed via outpatient observation.

Keywords: Head-injury; CT-scan; neurological observation

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