Management of patients admitted with head injury at Guy’s and St Thomas’ NHS Foundation Trust

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BACKGROUND

• 1.4 million people attend Accident & Emergency (A&E) with head injuries annually.¹ ²

• St Thomas’ Hospital A&E is one of the busiest in the country with approximately 201,000 patient attendances in the last year.³

• Our aim:
  To assess adherence to NICE guidance for all patients admitted to St Thomas’ Hospital with head injury between 01/12/2015 - 31/12/2015.
SUMMARY OF NICE GUIDANCE USED

• A standard head injury proforma must be used in all clinical departments.
• CT scan timing requirements:

  In 1 hour:
  GCS <13 on arrival, GCS <15 2 hours after injury, post traumatic seizure, >1 episodes of vomiting, focal neurology, sign of basal skull fracture, open/depressed skull fracture

  In 8 hours:
  Age 65 years or older, any history of bleeding or clotting disorders, dangerous mechanism of injury, more than 30 minutes’ retrograde amnesia of events immediately before the head injury.

• Observations must be performed every 30 minutes for 2 hours, every hour for 4 hours, then 2 hourly.
• Written and verbal advice on discharge.
METHODS

• Symphony used to identify all adult head injury cases during December 2015.

• 251 head injury cases analysed based on data from Symphony, e-noting, and EPR (hospital patient databases).

• Findings were then analysed using excel.
RESULTS 1: Proforma

The GSTT A&E head injury proforma was completed in only 9 cases out of 251 (4%), with 19 patients not waiting in the department to be fully assessed.

Head injury proforma used

- Yes (n=9)
- No (n=223)
- Did not wait (n=19)
RESULTS 2: CT scanning

- Overall, 47 patients had CT scans (19%).
  - Abnormality found in 5 scans (11%).
- 27 patients had an indication for CT head within 1 hour:
  - 14 patients (52%) had the CT scan within 1 hour. Median time 00:52 minutes (IQR=00:28, 01:35). 3 patients did not have a scan.

**Indication for CT in 1 hour**

- Seizure (n=1)
- Sign of basal skull fracture (n=1)
- GCS <13 on arrival (n=2)
- GCS <15 after 2h (n=4)
- Focal neurology (n=6)
- >1 vomit (n=13)
RESULTS 3: Patient outcome

- 166 patients had documented written advice on discharge from A&E (81%).
- 27 patients admitted.
  - 19 under medical teams
  - 3 under surgical teams (1 of these patients was then transferred to KCH)
  - 5 under specific teams for injuries (plastics, orthopaedics, frailty)
- Only 13 out of 27 (48%) patients had neurological observations recorded in e-noting.

- Proposed ward proforma to prompt accurate neurological observation recording.
DISCUSSION

• Focus on promoting the use of the head injury proforma as currently an under-utilised resource.
  – incorporate into the doctor A&E induction pack.

• Use of e-noting to make recording neurological observations simple and easily accessible to clinical staff.

• Use of a proforma for the ward environment for neurological observations and management of admitted patients.

• Reaudit December 2016.
REFERENCES


Thank you for listening.