**RACH Head Injury Pathway**

Patient seen by ED and proforma completed (see appendix)

If -ve CT and admission required/no indication for CT but admission required refer to: paediatric surgical middle grade (bleep 2159, OOH 2680). Surgical middle grade to inform Paediatric Surgical Consultant on call. **Exception** – head injuries ≥ 24 hours requiring admission should be referred to the Neurosurgical registrar (via switchboard).

If +ve CT findings refer directly to Neurosurgical registrar (via switchboard). They are to liaise with medical registrar (bleep 2678). Neurosurgical and Medical Paediatric Consultants to be informed of admission by their respective registrars.

Admit to HDU under joint neurosurgical and medical care. Simple skull fractures can be admitted to the surgical ward unless there are other concerns necessitating HDU admission.

If head injury < 24hrs ago, admit to appropriate ward under surgical paediatrics and let surgical FY1 (bleep 2161) know of admission.

Neurosurgical team to document surgical plan clearly in the notes as well as informing medical and nursing staff.

Surgical FY1 to complete the head injury admission document (see Appendix).

If concerns regarding the patients’ clinical condition FY1 to contact the surgical middle grade (bleep 2159) in hours and OOH medical middle grade (bleep 2678). NICE guidelines to be followed and Paediatric Surgical Consultant to be called if necessary.

If concerns regarding the patients clinical condition contact the neurosurgical registrar (via switchboard) as well as the medical middle grade (bleep 2678). Nursing staff are also empowered to make these calls.

Patients will be reviewed on the ward round by the neurosurgical team and medical team.

Patients will be reviewed on the ward round by the paediatric surgical team and discussed with Neurosurgical Consultant as necessary.

**N.B If the neurosurgical registrar is not contactable or unwilling to review the patient, the Neurosurgical Consultant will be called directly.**

**Appendix**

**Royal Aberdeen Children’s Hospital - Emergency Department**

**Paediatric Head Injury Proforma** (Rev. 3)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | **Date & Time of Injury:**  **Date & Time:** | | | | | | | **AGE** | | |
| **Duty Consultant:**  **Assessing clinician:** | | | | | | | | | |
| **History and Mechanism of Injury** | | | | | | | | | | | | | | | | | | | | | |
| Simple Fall |  | Fall from Height | | |  | Sports Related | | | | | | |  | Fight / Assault | | |  | RTC | | |  | |
|  | | | | | | | | | | | | | | | | | | | | | |
| **RED Risk Factors** | | | | | | | |  | | | **AMBER Risk Factors** | | | | | | | | | | |
| Post Traumatic Seizure | | |  | Suspected Open / Depressed Skull # | | |  | |  | | LOC > 5mins | | | |  | ≥ 3 Discrete Episodes  of Vomiting | | | |  | |
| GCS < 14 On Arrival  ( GCS < 15 if < 1yr ) | | |  | Tense Fontanelle | | |  | |  | | Abnormal Drowsiness | | | |  | Dangerous MOI :  (High Speed RTC or Collision, Fall > 3m,  High Velocity Object) | | | |  | |
| GCS < 15 at  2 Hours Post HI | | |  | Focal Neurological Deficit | | |  | |  | | Amnesia >5mins | | | |  |
| Signs of Basal Skull # | | |  | < 1yr with >5cm Bruise / Laceration / Swelling | | |  | |  | | **OTHER Risk Factors** | | | | | | | | | | |
| **Anticoagulation Therapy**  *Consider CT within 8 hrs as per NICE Guidance*  **Patients with an inherited or acquired bleeding disorder should be discussed with the on call haem/onc Consultant** | | | | | | | | |  | |
| **Suspected NAI\*** | | |  | **\****Follow Child Protection Triage Tool* | | | | |  | | **Intoxication**  *Be vigilant that will impair assessment* | | | | | | | | |  | |
| **Details:** | | | | | | | | | | | | | | | | | | | | | |
| **Allergies:** | | | | | | | | | | **Medications:** | | | | | | | | | | | |
|  | | | | | | | | | |  | | | | | | | | | | | |
| **Past medical history** | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | |
| **Examination findings:** | | | | | | | | | | | | | | | | | | | | | |
| Head images.JPG  **ENT:**  **Signs of basal skull fracture (circle):e;**   |  |  | | --- | --- | | Haemotympani | CSF Leak (Ear / Nose) | | ‘Panda’ Eyes | Battle’s Sign | | | | | | | | | | | **GCS: E: V: M:**  Pupils:  Cranial nerves:  **Limb Examination:**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | R UL | L UL | R LL | L LL | | Tone |  |  |  |  | | Power |  |  |  |  | | Sensation |  |  |  |  |   Gait  **C-spine: Cleared Immobilised** | | | | | | | | | | | |
| **Other Examination (inc Injuries):** | | | | | | | | | | | | | | | | | | | | | |

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| **Diagnosis & Summary of Injuries** | | | | | | | |
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| **ED Management** | | | ***Circle all that applies*** | | ***Please Provide Details:*** | | |
| Analgesia | | Paracetamol | | Ibuprofen | Others: | | |
| Antiemetics | | Yes | | No | Drug: | | |
| IV Access | IV Fluids | Yes | | No | Indications: | | |
| Tetanus Booster? | | Yes | | No | Vaccine given: | | |
| Wound care | | Dressing only | | Tissue Glue | Steristrips | Staples | Sutures |
| \*Referral Details: | | Medical | | Surgical | Other Destinations: | | |
| Other Treatments or Comments: | | | | | | | |

|  |  |
| --- | --- |
| **Assessment Outcome** | |
|  | **IF ANY RED FEATURES or >1 AMBER FEATURES ARRANGE CT HEAD WITHIN 1 HR AND MANAGE AS REQUIRED** |
|  | **IF 1 AMBER FEATURE OR CONCUSSIVE SYMPTOMS, OBSERVE IN ED UP TO 4 HOURS POST HEAD INJURY ( *COMPLETE ED Clinical Review Section Below)***   * **IF IMPROVING, CONSIDER DISCHARGE WITH CONCUSSION HIA** * **IF NOT IMPROVING, RECONSIDER CT HEAD** |
|  | **PATIENT WELL WITH NO CONCERNING FEATURES - CONSIDER DISCHARGE** |

|  |  |  |
| --- | --- | --- |
| **Imaging** |  | **Imaging findings:** |
| **CT Head** |  |  |
| **C-Spine X-Rays** |  |
| **C-Spine CT** |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ED Clinical Review** | | |  | | | | | | |
| **ED Observation Required** |  | **CNS Observations:** | | | Half hourly | | | Hourly | |
|  | | **Diet:** | | | Oral Fluids | | | Full Diet / Feeds | |
| **Details of Review:** | | **Review Time Frame:** | | | 1 hour | | 2 hours | | 3 hours |
| **Time:** | |  | | **Is Patient Fit for Discharge** | | | | | |
| |  |  | | --- | --- | | No Indication for CT Head or CT Head Normal |  | | GCS 15 |  | | Symptoms Improving |  | | No Persisting Neurological Deficit |  | | Not Intoxicated (Alcohol or Drugs) |  | | No concerns of NAI |  | | Adequate Supervision on Discharge |  | | | | | | | | | | |
| **Name & Signature:** | | | | | | **Grade:** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Discharge Plan** | | | |
| **DISCHARGED** |  | Minor Head Injury Advice Leaflet | |
|  | Concussion Head Injury Advice Leaflet (inc AcORN Guidance) | |
| **ADMISSION** |  | + VE CT Finding – Referral to Neurosurgery for Ongoing Management | |
|  | - VE CT Findings – Admission for Symptomatic Management under Paeds Surgery | |
|  | CT Not Indicated at Present but Requires Ongoing Observation for: | |
|  | If Admission & No CT – ED Senior Involved in Decision Making:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| **Name & Signature:** | | | **Grade:** |







