Abstracts

scalds and Unwitnessed scalds were statistically significantly more likely in CP cases. Contact burns; burns involving Irons, burns Independent of the Child, Unwitnessed burns and burns to the head or trunk were more likely in CP cases than in non-CP cases.

There are a number of statistically significant differences between non-CP and CP cases that may alert ED clinicians to consider referral to social services.

005 RECTAL BLEEDING PRESENTING TO THE PAEDIATRIC EMERGENCY DEPARTMENT

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Background Bleeding per rectum in infants and children is often an alarming symptom for caregivers. The differential diagnosis is wide, from the benign to life-threatening. The current literature is limited on the description of this undifferentiated population in the UK. We aimed to describe the frequency of this presentation, the most common diagnoses and current management in the Paediatric Emergency Department (PED).

Method and results Retrospective case note review of all patients presenting to a tertiary PED within a two year period from April 2017 to March 2019, with blood in stool/per rectum. Cases were identified by reviewing all presenting complaints including the words ‘blood’ or ‘bleed’. Data was collected using a standardised data collection form for the following variables; age, sex, diagnosis in PED, urgent intervention required, diagnosis on follow-up, diagnostic concordance between PED and follow-up diagnosis, investigation (stool, blood, imaging), admission, outpatient referral and reattendance during the study period.

Conclusions A total of 90 cases were identified, 10 were excluded as they did not meet inclusion criteria (n=80). This made up 0.14% of all presentations to the PED within the two year period. Mean age was 5 years (3 months - 15 years) with 51% female and 49% male. Collectively constipation and gastroenteritis accounted for 76% of diagnoses. 24% of patients were admitted the same day and 38% referred for outpatient follow up. There was agreement between PED diagnosis and outpatient diagnosis in 87% of cases. 5% of cases required urgent intervention.

Bleeding per rectum is an infrequent presentation to the PED. The most common diagnoses are benign and many cases may be managed without need of admission or outpatient follow up. A high index of suspicion remains necessary to identify infrequent but serious pathology. There is currently limited evidence to guide practice and therefore further work is required.

006 THE INTER-OBSERVER RELIABILITY OF HEAD INJURY ASSESSMENT BETWEEN CLINICIANS AND PARENTS OF HEAD INJURED CHILDREN

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Background Paediatric head injury is common, yet 80% are mild and require no investigation or treatment. Decision-making around neuroimaging is guided by clinical decision rules. Whether parents and clinicians interpret questions within these algorithms in the same way is not known. Understanding this is fundamental for public facing algorithms and parental guidance.

We aimed to determine the inter-observer reliability of Pediatric Emergency Care Applied Research Network
VARIABILITY IN POINT OF CARE ULTRASOUND (POCUS) PRACTICES IN PAEDIATRIC EMERGENCY DEPARTMENTS IN THE UK & IRELAND: A PERUKI STUDY

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Background Point Of Care Ultrasound (POCUS) is a potentially useful addition to the technical armamentarium of PEM clinicians. Evidence is accumulating on diagnostic and procedural applications; however despite widespread use in other countries, usage patterns are not clear in our setting. Given the lack of a standardised PEM POCUS curriculum, best practice standards, and formal training courses, we aimed to determine variability in PEM POCUS practices across our PEM research network.

Method and results This online survey was distributed in March 2019, with content derived iteratively by the study team from existing literature and input from PERUKI members. One response was sought from each site, to describe department practices, hardware, and major enablers and obstacles. Results are presented using descriptive statistics.

Conclusions 59/63 (94%) sites responded, including a mix of site and department types (eg 40% tertiary hospital, 60% mixed adult/paediatric EDs, 30% major trauma centres). Almost all (94%) had access to POCUS, and 70% reported limited use by a small proportion of staff, with no named lead. Most (95%) did not have a teaching program or identified trainer. Approximately half (55%) routinely documented findings, most often in clinical notes, and most (65%) did not store images; most (68%) had no quality assurance measures. The greatest enablers of PEM POCUS were its need, funding for equipment, and clinician engagement; the greatest obstacles were availability of training courses and trainers, and time to learn and maintain skills due to service delivery needs.

Whilst hardware is available in most EDs, PEM POCUS is not yet widespread, with training being the greatest obstacle. Future work exploring clinician opinions will inform whether the specialty wishes to embrace POCUS, and training course content. However, if adopted, it must be coupled with implementation of best practice standards in domains including quality assurance and governance.

Free Papers

A QUALITATIVE EXPLORATION OF THE FACTORS INFLUENCING PATIENT FLOW IN AN EMERGENCY DEPARTMENT

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Background Emergency departments have been characterised as complex adaptive systems and patient flow is one area that affects the efficiency and quality of care in emergency departments. Complex systems may comprise complex processes but the system may still be effective if the processes have the least number of steps required to produce an outcome. Improving patient flow requires an understanding of how ED processes work. However, there is little existing qualitative literature exploring ED patient flow. This study aimed to understand the ED patient flow process and identify the factors that influence it.

Multiple qualitative methods were used to explore ED patient flow in a single case study site in Trinidad and Tobago. Data was collected from May 2017 to March 2018. Non-participant observations (48 hours), observational process mapping (155 hours) and informational conversational interviews (90) were used to explore patient flow. Observational process mapping involved directly observing patient journeys across all levels of urgency. Thematic analysis was used to analyse the data.

Six broad themes were identified as factors influencing ED patient flow: 1) ED organizational work processes, 2) ED design and layout, 3) Material resources within and outside the ED, 4) ED nursing staff levels, roles, skill mix and use, 5) ED non-clinical staff, 6) External clinical and non-clinical departments. Within the themes there were primary factors that influenced patient flow as well as secondary factors. The secondary factor represented the staff response to either enhance the primary factor or to compensate for limitations in the process. A conceptual model of the factors influencing ED patient flow was developed.

The conceptual model of ED patient flow developed in this study can be used to systematically examine the factors influencing ED patient flow and may be used by policy and decision makers to improve patient flow.