Abstracts

Paediatric Special Interest Group: British Society of Haematology

827 OBSERVATIONS, VARIATIONS AND CHALLENGES IN MANAGING CONTINUED OPIATE ANALGESIA FOR CHILDREN ADMITTED WITH SEVERE AND PERSISTENT SICKLE CELL CRISIS PAIN
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Background Vaso-occlusive crisis (VOC) is the commonest reason for hospitalisation in children with sickle cell disease. After initial management with emergency analgesia, a proportion of children with severe VOC will experience persisting pain requiring continued opiate analgesia.

Objectives We evaluated our practice in prescribing opiate analgesia and relevant supportive medications for paediatric sickle cell cases admitted to our department with persisting pain from severe VOC. We also investigated the frequency of opiate-related side effects in different age groups.

Methods Our paediatric sickle cell admissions database was used to identify all cases of severe VOC during the time period January 2018-December 2019. Data on opiate analgesia and supportive medication prescriptions, side effects, pain scores and length of stay (LOS) were extracted from electronic medical records.

Results We identified 32 cases (58% female, mean age 10.8 years; range 2–18 years) of severe VOC out of 89 paediatric sickle cell admissions in the study period. All patients were prescribed opiate analgesia; 81% had modified release oral morphine (MROM) and 25% required intravenous Patient Controlled Analgesia (PCA). Oxycodone (immediate and modified release) was successfully used as an alternative to morphine in 6% of cases. Supportive medications were often not proactively prescribed together with opiates; Laxatives were prescribed in 80%, whereas antiemetics, naloxone and antihistamines were only prescribed in 52%, 55% and 48% of cases respectively. The majority of patients on MROM or PCA experienced side effects, with constipation being the commonest (41%), followed by nausea and vomiting (32%) and pruritus (19%). The rate of side effects was higher in the >12 years group, particularly for nausea and vomiting (table 1). Mean time from admission to starting the PCA was 25 hours, and the mean duration of PCA was 25 hours (range 8–70 hours). In 38% of cases that PCA was commenced, it was discontinued prematurely due to inadequate utilisation and/or poor tolerance (75% of patients on PCA experienced side effects). Pain scores (1 to 10 scale) pre and post-PCA decreased by a mean of 2.1±1.5 points. Finally, the mean LOS (7.1 days) was significantly higher for the PCA group (mean difference 2.6 days, p=0.04).

Conclusions We observed considerable variations in prescribing trends of opiate analgesia and supportive medications for paediatric sickle cell inpatients with severe VOC. Although intravenous PCA may have an important role in these cases, our study shows that it is linked with high failure rates and high incidence of side effects, particularly in teenagers. Further research and quality improvement efforts should focus on creating safe, effective and age-specific pathways of continued opiate analgesia and supportive care for children and young people admitted with severe and persistent sickle crisis pain.

Association of Paediatric Emergency Medicine

828 YOU DON’T ASK, YOU DON’T GET? SAFEGUARDING 16- AND 17-YEAR-OLDS DURING THE PANDEMIC IN AN ADULT EMERGENCY DEPARTMENT
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Background Multiagency work in safeguarding has been hampered by pandemic related reduction in General Practitioner appointments and schools moving to remote learning, reducing the opportunities for safeguarding issues to be raised and actioned. The prevalence and severity of mental health conditions amongst adolescents has since the onset of the COVID19 pandemic. A reduction in socialisation, and increased use of social media use are among many influencing factors.

Safeguarding concerns and mental health are often intertwined. The way to best identify any psychosocial concerns is to ask; taking a thorough psychosocial history.

Many 16- and 17-year olds are seen in adult Emergency Departments (ED) but are still under the umbrella of paediatrics for safeguarding.

Objectives Identify and quantify safeguarding and CAMHS referrals within 16- and 17-year olds.

Identify areas of improvements to better recognise and report safeguarding concerns.

Methods This is a single centre, cross-sectional study of a major trauma centre ED in London. Patients were all those aged 16 and 17, attending the adult ED, in November 2020. Demographic information, presenting complaint, diagnosis and discharge location were collected, as well as information regarding safeguarding and CAMHS referrals, and presence of a thorough psychosocial history. Data was analysed using Microsoft Excel.

Results 68 patients (38 aged 16 (24F, 14M), and 30 aged 17 (16M, 14F)) were included in analysis.

Safeguarding 50% of patients (34) attending had safeguarding referrals made. 59% of these were new referrals, and 41% were information sharing. 65% were made by the A&E team, the remaining 35% of referrals were made by the safeguarding team (who retrospectively look through all patient notes aged under 18 years). 59% of referrals were made on the same day, with a mean of 1.7 days. 30% of patients were discharged same day. 

Abstract 827 Table 1 Frequency of opiate-related side effects in different age groups

<table>
<thead>
<tr>
<th></th>
<th>&lt; 12 years (n=17)</th>
<th>&gt;12 years (n=15)</th>
<th>All ages (n=32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>7 (41%)</td>
<td>6 (40%)</td>
<td>13 (41%)</td>
</tr>
<tr>
<td>Nausea &amp; Vomiting</td>
<td>3 (18%)</td>
<td>7 (47%)</td>
<td>10 (31%)</td>
</tr>
<tr>
<td>Pruritus</td>
<td>3 (18%)</td>
<td>3 (20%)</td>
<td>6 (19%)</td>
</tr>
<tr>
<td>Urinary retention</td>
<td>0</td>
<td>1 (7%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Drowsiness</td>
<td>0</td>
<td>1 (7%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>No side effects</td>
<td>7 (41%)</td>
<td>3 (20%)</td>
<td>10 (31%)</td>
</tr>
</tbody>
</table>
day, and where a referral was delayed, it took an average of 5.4 days to complete.

The most common reason to refer to safeguarding was for intoxication, drug use and intentional overdose (35%), followed by physical abuse/assault (26%). 2 referrals were felt to have been missed, both were 16 years old, female, and secondary to an eating disorder and self-harm, respectively.

CAMHS 18% of patients (n=12) were referred to CAMHS, of which 66% were female, and 75% were 16 years old. Intentional overdose was the largest group of CAMHS referrals (33%). 2 referrals to CAMHS were missed – one had anxiety; one had an eating disorder.

Psychosocial history Only 4% of patients (n=3) had what was felt to be a full psychosocial history documented in their ED clerking. Those that did were all 16 years old and female. Two of these presented with an intentional overdose and one with assault. Two of these were performed by A&E doctors, and one was by a paediatrician working in adult ED. All patients had some form of psychosocial history documented, but often incomplete, usually only mentioning smoking or alcohol.

Conclusions A huge number of safeguarding referrals were required during this month of lockdown in the 2020 pandemic, adding to the ongoing evidence that the pandemic negatively impacted adolescents.

Thorough psychosocial histories should be routine to best identify safeguarding or mental health concerns.

British Association of Perinatal Medicine and Neonatal Society

831 USE OF A NEONATAL SEPSIS RISK CALCULATOR REDUCES ANTIBIOTIC USE AND HOSPITAL ADMISSION LENGTH: IMPLEMENTATION OF A DGH PILOT PROGRAMME DURING THE COVID-19 ERA

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Background Early onset sepsis (EOS), defined as the presence of bacteraemia or bacterial meningitis in a neonate within 72 hours of birth, is still a significant cause of neonatal mortality and morbidity. The National Institute for Health and Care Excellence (NICE) guidance is the gold standard for evaluating the risk of EOS. However, there are concerns regarding the high volume of preemptive antibiotic use.

The Kaiser Permanente (KP) Sepsis Risk Calculator (SRC) is a tool that generates a risk score based on multiple variables including both maternal risk factors and clinical presentation of the baby at birth.

A pilot program introducing the use of SRC over NICE guidance to guide the use of antibiotics in infants of ≥34 weeks’ gestation on the postnatal ward (PNW). It was implemented in our level 2 neonatal unit from 6th April to 5th June 2020, coinciding with the initial peak of the Covid-19 pandemic in the UK.

Objectives To evaluate the:
1. Impact of new protocol on clinical outcomes
2. Rate of ‘missed cases’ of sepsis in our cohort

Methods Retrospective cohort study comparing infants ≥34 weeks of gestation admitted to the PNW pre- and post-SRC implementation. Primary outcome was number of infants who received antibiotics for suspected EOS. Secondary outcomes were duration of initial hospital admission and safety. Safety was assessed by the number of ‘missed cases’ – defined as infants who required antibiotics ≥24 hours and ≤7 days of age for EOS (defined as positive culture OR negative culture treated with 5 days of intravenous antibiotics) and either death, admission to the neonatal unit during the initial hospital episode, continuing treatment on the PNW or re-admission following initial discharge. Incidence of ‘missed’ cases was monitored for an additional period (September-December 2020).