Paediatric Special Interest Group: British Society of Haematology

**Abstracts**

**827** OBSERVATIONS, VARIATIONS AND CHALLENGES IN MANAGING CONTINUED OPIATE ANALGESIA FOR CHILDREN ADMITTED WITH SEVERE AND PERSISTENT SICKLE CELL CRISIS PAIN

Eva Tsouana, Ayesha Fathani, Nikki Tuffin, Sam Fadheel, Kilali Ominu-Evbota. Basildon Hospital, Mid and South Essex Hospitals NHS Trust

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%, 53% 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).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Constipation</th>
<th>Nausea &amp; Vomiting</th>
<th>Pruritus</th>
<th>Urinary retention</th>
<th>Drowsiness</th>
<th>No side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 12 years (n=17)</td>
<td>7 (41%)</td>
<td>3 (18%)</td>
<td>3 (18%)</td>
<td>0</td>
<td>0</td>
<td>7 (41%)</td>
</tr>
<tr>
<td>&gt;12 years (n=15)</td>
<td>6 (40%)</td>
<td>7 (47%)</td>
<td>3 (20%)</td>
<td>1 (7%)</td>
<td>1 (7%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>All ages (n=32)</td>
<td>13 (41%)</td>
<td>10 (31%)</td>
<td>6 (19%)</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
<td>10 (31%)</td>
</tr>
</tbody>
</table>

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

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

Josh Harriott, Vithullan Sapa-tharan. Imperial College London

Background Multiagency work in safeguarding has been hampered by pandemic related relocation 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, 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 Society of Paediatric Gastroenterology, Hepatology and Nutrition

A SINGLE CENTRE STUDY INTO THE ADHERENCE IN DIAGNOsing COELIAC DISEASE IN CHILDREN

Wing Yu Siobhan Lau, 2Paul Heaton, 2Siba Paul. 1Medical School, University of Exeter; 2Yeovil District Hospital

Background Celiac disease (CD) is an immune-mediated systemic disorder elicited by the ingestion of gluten. The European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) guidelines published in 2012 suggested a no-biopsy pathway (NBP) for symptomatic children with IgA Tissue Transglutaminase (TGA-IgA) >10x Upper Limit of Normal (ULN). Biopsy confirmation remained mandatory for other cases.

Objectives This retrospective case note study was aimed at evaluating the adherence to the ESPGHAN 2012 guidelines for diagnosing CD in our unit.

Methods Forty-three cases with positive TGA-IgA were identified by a laboratory database search from January 2013 to December 2019. Six of 43 patients were not referred for a confirmation of CD diagnosis. Data was collected on the diagnostic pathways followed, and appropriateness of adherence was compared with the existing ESPGHAN guidelines.

Results 37 cases were included with 35 children diagnosed with CD. 29/35 (83%) were diagnosed via the NBP; 15/29 (52%) children did not meet all the criteria required for NBP, but were diagnosed and managed as having CD. 20/35 (57%) children were diagnosed with CD in adherence to the 2012 guidelines.

Conclusions The recommended diagnostic guidelines were frequently not implemented; adherence to the guidelines may improve following regular educational sessions. The revised 2020 ESPGHAN guidelines which exclude HLA-DQ2/DQ8 testing would address the issue of diagnosis for the 10/15 NBP cases (with TGA-IgA >10xULN) in our study who did not have HLA testing and were therefore non-adherent to the 2012 diagnostic guidelines. NBP, with the required need for endoscopy may be beneficial in resource limited settings.

British Association of Perinatal Medicine and Neonatal Society

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

Joana Rita Laddslau De Freitas, 2Lucy Webster, 2Sabina Checkets, 2Rashmi D’Souza, 2Maria Mendoza, 3Ian Vermeulen, 3Siddhartha Paliwal. 1Lewisham and Greenwich NHS Trust; 2Queen Elizabeth Hospital, Woolwich

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 use of the 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).