Methods We identified FN patients admitted to in 2016. We implemented the proforma at the start of 2017. We subsequently collected data on FN patients admitted in 2017. We reviewed clinical records to compare their management in 2016 versus 2017 including length of stay (LOS) and time to antibiotics (TTA).

Results There were 33 oncology patients with 20 FN admissions in 2016. Antibiotics were given within 1 hour for 45% and the average TTA was 72 minutes. In 2017 there were 48 oncology patients with 42 FN admissions. 17% of the admissions did not use the proforma. Antibiotics were given within 1 hour for 86% and the average TTA was 54 minutes. Risk stratification was completed for 45% in 2017: 17% were low risk and 28% were standard risk. 80% of the low risk patients were not discharged at 48 hours despite national recommendations. Average LOS was 4.2 days in 2016 and 5 days in 2017.

Conclusion The implementation of the FN proforma lead to improved standard of care in TTA of 54 minutes in comparison with national standard of 60 minutes mandated by the National Chemotherapy Advisory Group (NCAG). There has not been an identifiable improvement in the LOS, this suggests need for improving the understanding of the risk stratification and boosting the confidence in discharging low risk patients early. There is therefore scope for improvement in education and uptake of the risk stratification system to reduce LOS for FN patients.

G183(P) CLINICAL MANAGEMENT OF ACUTE PAIN IN PAEDIATRIC SICKLE CELL DISEASE (SCD) FOLLOWING THE NICE GUIDANCE (CG143)

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10.1136/archdischild-2020-rcpch.154

Aims

- To assess if children with SCD presenting to our District General Hospital with an acute painful episode are managed in line with NICE guidance.
- To compare our results with previous audits (2014 and 2016).
- To use feedback from the multi-disciplinary team (MDT) to develop sustainable interventions to ensure guidance is met.

Methods We performed a retrospective case note review (n=28) of medical notes. Primary data were collected from June-December 2018 and included all paediatric patients with SCD who presented in pain to the emergency department.

Results Our findings were presented to the MDT. Our local guideline was amended, with particular focus on the need to prescribe laxatives, anti-emetics and anti-pruritics to patients taking regular opioids, as well as timely pain relief. Feedback from the MDT, and reviewing interventions used by previous audits led us to amend induction for new doctors, emphasising the guideline and key audit findings.

Conclusions Clear improvements have been made from previous audits, however, despite this, there was a stark drop in our rates for offering analgesia within 30 minutes. This may reflect the challenges we face in providing rapid interventions in an ever-growing busy emergency department. Studies show

Abstract G183(P) Table 1

	2018	2016	2014
Pain assessed on presentation using age appropriate score	89%	94%	57%
Analgesia offered within 30 minutes of presentation	32%	65%	60%
Nursing observations measured at presentation	89%	56%	25%
Bolus of strong opioid offered in moderate-severe pain	90%	87%	32%
Effectiveness of pain relief assessed every 30 minutes until a satisfactory pain score was achieved	46%	6%	24%
Pain score reassessed every 4 hours	91%	13%	38%
Laxatives offered to patients on opioids	73%	13%	84%
Anti-pruritics and anti-emetics offered to patients on opioids	46%	-	-

that specialist care is superior over generalist care and improves outcomes (Bundy et al. 2016; Evensen et al. 2016). The Sick Cell Society suggests a Specialist Haemoglobinopathy Team with links to local hospitals could support acute pain services, as well as an individualised care plan for each patient.

This audit reinforces the importance of good acute care pathways and consideration should be given to alternative models of emergency care delivery.

G184(P) DIAGNOSTIC DILEMMA IN A CHILD WITH BLEEDING

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10.1136/archdischild-2020-rcpch.155

Introduction Acquired Thrombotic Thrombocytopenic Purpura (TTP) is a rare and severe disease in paediatric population. The known classic pentad of symptoms (microangiopathic hemolytic anemia, thrombocytopenia, acute kidney injury, fever and neurological symptoms) appear to be more varied rather than classical, in children. Herein, we describe a rare presentation of acquired TTP in a thirteen-year-old girl.

Case Report A thirteen-year-old girl previously fit and well, presented with a history of heavy vaginal bleeding, vomiting with increasing petechial rash over lower extremities and bruising to the chest wall. On presentation, she was febrile with generalised bruising. No history of trauma or significant past history nor family history to note.

Initial investigations showed anaemia and thrombocytopenia (Haemoglobin of 63 G/L, Platelet of $70 \times 10^9/L$), raised Urea of 9 mmol/L and Lactate dehydrogenase 1292 IU/L. Liver function and coagulation screen was normal. Blood film showed evidence of microangiopathic hemolytic anaemia (anisocytosis, schistocytes, spherocytes and basophilic stippling).

Differential diagnosis of Hemolytic Uraemic Syndrome (HUS) and TTP was considered at first instance.

She was initially stabilized in Paediatric Emergency Department where she received tranexamic acid infusion along with one unit of platelet and one unit of packed red cells.

In view of blood results and blood film, Haematology team considered TTP to be the likely diagnosis, henceforth she was transferred to tertiary renal unit for total plasma exchange (TPE). In addition, she received systemic steroids and immunosuppressant (Rituximab).

Further investigations revealed her ADAMTS13 (a metallo-proteinase that cleaves von Willebrand factor) activity to be <5, confirming the diagnosis of TTP. ADAMTS13 activity of 68–163% is considered normal and activity of less than 10% is diagnostic of TTP. She is currently monitored as an outpatient and continues to have Rituximab for subclinical relapses.

Conclusion Bleeding of any form is an extremely rare and severe presentation of TTP. There are only a few case reports of TTP in children till date but there are no reported paediatric cases of symptomatic bleeding as initial presentation. Acquired TTP is mainly reported in adolescence. TTP is specifically related to severe ADAMTS13 deficiency which is also used to monitor disease activity.

G185(P) INVESTIGATING CURRENT PRACTICES IN RENAL FUNCTION MEASUREMENT AND CARBOPLATIN DOSING IN CHILDREN WITH CANCER – A UK PERSPECTIVE

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10.1136/archdischild-2020-rcpch.156

Introduction Renal function-based carboplatin dosing is a well accepted practice in paediatric oncology. However, the accuracy of this approach is only as precise as the method of kidney function measurement, most commonly involving determination of glomerular filtration rate (GFR). Recent work by the Children's Oncology Group has raised concerns over nuclear medicine-based methodologies used to calculate GFR across US clinical centres.

Aims The aims of this study were to evaluate current UK practices of GFR measurement, methods used to calculate carboplatin dosage and the utility of therapeutic drug monitoring in paediatric oncology services. This aims to provide an update on current practices across UK centres involved in the treatment of childhood cancer patients, and to measure change in practice since previous evaluation in 2008.

Methods Twenty one primary paediatric oncology treatment centres in the UK provided information on carboplatin dosing practices in paediatric oncology patients through a questionnaire. Information obtained was compared to results previously published in 2008 following a similar study.

Results In relation to GFR measurement, the main changes observed were a shift towards a greater number of samples being taken following tracer administration and an increase in number of centres using the Brochner-Mortensen correction factor. In relation to the use of renal function assessment data to inform dosing, EDTA elimination half-life in conjunction with body weight was used to calculate carboplatin dose in 18/21 (86%) centres, with uncorrected GFR and body weight utilised in 9/21 (43%) centres. A total of 14/21 (67%) centres utilise therapeutic drug monitoring approaches to carboplatin treatment in defined patient groups including neonates and infants.

Conclusion Results suggest that while GFR measurement across UK centres is relatively consistent, some uncertainties remain. In addition, for patient sub-populations where there are concerns over the potential for marked inter-patient variability in carboplatin exposures, adaptive dosing approaches are now well established.

Paediatric educators' special interest group (PEdSIG)

G186(P) ABSTRACT WITHDRAWN

G187(P) TRAINING TOGETHER TO IMPROVE PAEDIATRIC PALLIATIVE CARE THROUGH INTERPROFESSIONAL SIMULATION

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10.1136/archdischild-2020-rcpch.157

Aim Although there are rising numbers of children with life-limiting diseases in the UK, there is a paucity of postgraduate paediatric palliative care training for both doctors and nurses. Current resources tend to focus on symptom management rather than the challenges of undertaking difficult conversations with patients and families. Interprofessional simulation-based education has been shown to improve both technical and human factor skills. We aimed to design an innovative interprofessional simulation-based course to improve confidence with paediatric palliative care.

Method The course was designed and delivered by an interprofessional faculty. Four scenarios were designed using a high-fidelity manikin and professional actress, focusing on key palliative care themes: advanced care planning, recognition of the dying patient, autonomy and care after death. The diamond debrief model was used to explore technical and human factor skills with a focus on real-life application. We also included a symptom management workshop.

Pre-and post-course questionnaires using Likert scales 0 to 100, (where 0 = not at all and 100 = totally agree) and free-text comments were completed by all participants to evaluate Kirkpatrick Levels one and two.

Results There were nine participants including paediatric consultants, paediatric registrars, senior paediatric nurses and oncology nurse specialists.

Feedback showed increases in average confidence levels. There was a 40-point (41 to 81) increase in confidence with having discussions surrounding dying, a 27-point (51 to 78) increase in confidence with DNAR discussions, and a 33-point (46–79) and 30-point (51–81) increase in confidence with assessing and managing patients at the end of life respectively.

Highly positive feedback was received regarding the fidelity of the scenarios (91), the opportunity to practice clinical skills (83) and the usefulness of the feedback from the debrief sessions (93).

All of this was supported by qualitative data from free-text comments.

Conclusion This course is unique to our paediatric training region. Our feedback has shown that paediatric palliative care is an area in which many healthcare professionals lack confidence. We recommend interprofessional simulation training as an effective way of improving knowledge, confidence and non-technical skills essential for delivering paediatric palliative care to patients and their families.