appropriateness of Parenteral Nutrition (PN) prescribing in a large, tertiary site PICU (23 beds).

Objectives

- Identify whether PN is initiated for an appropriate indication
- Identify whether PN is administered for an appropriate duration
- Identify whether the macronutrient content of PN is prescribed in accordance with The European Society for Paediatric Gastroenterology Hepatology and Nutrition (ESPGHAN) guidelines[2]

Method Prospective data was collected from January-March 2023, data was retrieved from the daily PN order forms. All patients admitted who received PN were included in the study. The patient's reason for admission, indication for PN, date of admission, date PN was initiated, and macronutrient content were recorded. Patients were divided into three groups; group 1: cardiac-surgical, group 2: cardiac non-surgical and group 3: non-cardiac patients. For analysis, patients who were mechanically ventilated were categorised as acute phase of critical illness and those not ventilated were categorised as stable phase. Data was analysed using Microsoft Excel (Version 1808). Data was compared with the ESPGHAN guidelines on paediatric PN.[2]

Results 102 prescriptions were identified for 14 patients, of which 5 were cardiac-surgical patients, 4 cardiac non-surgical and 5 non-cardiac. 92.8% of (13/14) patients had an approved indication for PN. 21.4% (3/14) of patients received PN for 5 days or less. Only 1 patient received PN within 24 hours of admission, however they were on PN prior to admission.

For group 1; 9.4% (8/85) of prescriptions had daily calories within target range for their phase of critical illness, 28.2% (24/85) had carbohydrates within range, 100% (85/85) had protein within range, 91.8% (78/85) met minimum lipid requirements and 36.5% (31/85) received the recommended ratio of non-protein calories per gram of nitrogen.

For group 2; 13.8% (4/29) of prescriptions had daily calories within target range, 0% (0/29) had carbohydrates within range, 93% (27/29) had protein within range, 86% (25/29) met minimum lipid requirements and 48% (14/29) received the recommended ratio of non-protein calories per gram of nitrogen.

For group 3; 12.5% (5/40) of prescriptions had daily calories within target range, 2.5% (1/40) had carbohydrates within range, 100% (40/40) had protein within range, 87.5% (35/40) met minimum lipid requirements and 15% (6/40) received the recommended ratio of non-protein calories per gram of nitrogen.

Conclusion This study confirms that PN prescribing on PICU deviates from current national guidance. Patients were prescribed PN for appropriate indications, however some patients were prescribed PN for a duration less than recommended. The majority of patients received more calories than recommended for their phase of critical illness, and this appears to be the result of prescribing and administering more carbohydrates than recommended by ESPGHAN.[1] Most protein and lipid quantities were prescribed within range, however the majority of patients received higher than recommended non-protein calories per gram of nitrogen.

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P41 NABILONE FOR GUT DYSTONIA IN PAEDIATRIC PALLIATIVE: A RETROSPECTIVE CASE REVIEW

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Aims Children with severe neurodisability presenting with pain behaviour, retching, bloating, abdominal distension, and constipation/pseudo-obstruction can be referred to as having Gastro-Intestinal Dystonia. Management can be extremely challenging, with evidence base for therapy extremely limited, and a spectrum of symptomology that can be severely debilitating.[1]

Nabilone is a synthetic cannabinoid designed to mimic the activity of delta-9-Tetrahydrocannabinol (THC). Nabilone is a partial agonist of both CB1 and CB2 receptors, and is licensed, and indicated by NICE guidance, for use in adults as adjunctive therapy alongside standard anti-emetic for chemotherapy induced nausea and vomiting. It has also been used widely in paediatrics for the same indication, despite not being licensed for use in children.[2]

There has been significant interest in the use of medical cannabis to treat the spectrum of symptomology that manifest in gut dystonia yet limited published work in reporting the effectiveness of nabilone in treating gut dystonia. However, there is emerging anecdotal and case reports from clinical practice suggesting a role for nabilone.[1]

Method From October 2022 to June 2023, patients referred and accepted to the Great Ormond Street Hospital palliative care service, for end-of-life care, were considered for use of nabilone to manage gut dystonia that had proven resistant to normal dystonia management strategies (e.g., optimisation of gabapentin, clonidine, baclofen etc.). Nabilone was initiated following approval for use by trust DTC and in discussion with the neuro-disability team. Families of patients commenced on nabilone were requested to complete a dystonia diary and reviewed weekly assessing for effectiveness and toxicity. Notes and charts were reviewed in triplicate by consultant in paediatric palliative, specialty registrar and specialist pharmacist, to ensure consensus agreement on the effectiveness of nabilone as well as any potential incidence of toxicity.

Results One patient was initiated on nabilone for gut dystonia during the study period. Weight at initiation of nabilone was 16.45 kg. Weight after 9 months (June 2023) was 19.45 kg. Observed dystonia and feed tolerance improved significantly, enabling the child to return to school, and there was a significant reduction in number of dystonic breakthrough medications required, from daily use of chloral hydrate to infrequent use at night. Following optimisation of nabilone, gabapentin has been weaned with no observed increase in dystonic episodes. Additionally, despite increased weight there has been no requirement to increase doses of clonidine. There were no parenteral or professional observations of any adverse effects associated with nabilone initiation or titration.

Conclusion Nabilone can be safely initiated for children with gut dystonia that has proven resistant to other conventional medications used for dystonia management. Use of nabilone has demonstrated a subjective and objective improvement in

tone and an increase in ability to tolerate feeds with weight gain, that has persisted despite weaning of other concomitant medications.

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P42 PAEDIATRIC PALLIATIVE CARE AND ANTICIPATORY PRESCRIBING: JUST WASTEFUL ARE WE?

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Aims A fundamental right for patients and their families presented with life-limiting condition, is maintaining choice, in terms of place of care and of death, with evidence to suggest that most patients and their families would prefer home.[1] Numerous studies have sought to evaluate patient and family preference for choice of place of care and death as well as factors that may influence this choice.[2 3] These studies, however mostly focus on offered place and the narrative dialogue that influences choice. No studies have looked how access to medications may impact the choice, or even if factored into discussions.

Despite this lack of data, anticipatory prescribing is deemed a hallmark of effective end of life care for children as well as adults. Anticipatory prescribing is recommended practice by NICE guidance (NG31) as well as CQC standards. International consensus also recommends anticipatory prescribing as best practice, all despite the practice being seemingly underpinned by clinical perception rather than evidence, with anticipatory prescribing providing reassurance, that medicines for symptom management are available at time of need, often be out-of-hours. Medication often prescribed in an anticipatory manner include high risk medications.

Research from adult palliative care suggest that of those medicines anticipatory prescribed. 40 to 54% go unused.[4] To date there has been no similar assessment in paediatrics or potential medications wastage. We conducted a retrospective chart review to determine whether anticipatory prescribing of medicine was cost effective.

Method A retrospective chart review of patients referred to paediatric palliative care team at Great Ormond Street Hospital was conducted over an 8 month period. Charts were reviewed to identify those who died with a pre-emptive symptom management plan at death. Charts were then assessed to determine what medication was administered at time of death, in the last week of life of life and compared to the medication pre-emptively requested on management plans. A cost analysis was conducted, of medication requested compared to medication used, pricing of medicines was based on NHS indicative price or drug tariff price.

Results 69 patients died in the study period, only 43 died with a management plan. 3 patients were not included in the analysis. Most frequent enteral medicines used were opioids (57.5%), midazolam (37.5%), movicol (17.5%), ketamine/glycopyronium (15%). The most frequent injectable medicines used were opioids (81%), midazolam (59%), levomepromazine (11%).

On average at end of life we identified that the total drugs cost for all drugs requested and dispensed was £33,692.28. The total cost of all drugs used was £7,966.76. The total cost of medication wastage was £25,708.79.

Conclusions Nationally and internationally, that anticipatory prescribing for end of life care in both adults and children, is recognised as best practice. However, this is not based on any level of evidence. Our retrospective chart review suggests that anticipatory prescribing in paediatric palliative is not a cost effective use of medication potentially costing the NHS in excess of £25,000 per year, and an urgent systems review required. This waste represents an environmental cost of 3,875 grams of CO_2e over the 8 month period.

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P43 AN AUDIT ASSESSING FUNGAL INFECTION RATE IN PAEDIATRIC PATIENTS UNDERGOING ALL INDUCTION

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Introduction Leukaemia is the most common cancer in children accounting for around a third of all cases and acute lymphoblastic leukaemia (ALL) is the most common of all leukaemias.[1] The intense induction treatment for ALL results in patients becoming immunocompromised and susceptible to infections.

It was noticed that many patients undergoing ALL induction required antifungal treatment courses when attending outpatient clinic. It is not standard practice to give patients upfront antifungal prophylaxis in ALL treatment.

Aim The aim of this audit was to identify the number of patients undergoing induction phase of ALL treatment who end up developing a fungal infection and require treatment. To identify whether it would be necessary for patients undergoing ALL treatment to receive antifungal prophylaxis.

Method A list of all patients treated for induction ALL was collected between 1/9/21–1/9/22. Data was collected retrospectively by looking through each patient's medical notes to identify whether they developed a fungal infection during or 1 week after completing their induction.

Results and Discussion 59 out of the 99 patients audited (n=58%) developed a fungal infection. 42 patients were prescribed antifungals when attending the outpatient clinic and their treatment was managed at home. The remaining 14 patients required antifungal treatment at their tertiary hospital (n=12) or at their local hospital (n=2). Oral thrush was the most common infection developed during induction accounting for 40% of infections and nappy rash was the second most common infection developed during induction accounting for 46% of infection cases. 72% of patients only required 1