patient; messages may not have been received. As the initial response to more regular follow up was positive, consideration should be made to whether a pre-arranged phone clinic would be more suitable. Future research could focus on reasons why CYP/their families are reluctant to engage, and ways to empower CYP to change.

To pave the way forward a patient questionnaire evaluating the current service and seeking opinions regarding regular, remote follow up would be valuable.

P18 EFFECTIVENESS OF HOME BOWEL PREPARATION FOR CHILDREN LIVING LONG DISTANCES FROM ENDOSCOPY CENTRE

Jamie Motion, Malcolm Sutherland, Brenda Smart, Carol Cameron, Shyla Kishore, Iain Chalmers, Su Bunn. *NHS Grampian*

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Introduction The North of Scotland Paediatric Gastroenterology, Hepatology and Nutrition Network (NoSPGHANN) manages children over an area of 53,000 km². Travel distances to Royal Aberdeen Children's Hospital (RACH) were previously felt to preclude the adoption of home bowel preparation (HBP) for elective colonoscopies but a trial period of HBP commenced in March 2020. The same drugs (senna and Picolax) were used for inpatient bowel preparation (IPBP) or HBP but the timings were changed for HBP to complete all doses on the day prior to procedure to allow travel to RACH. This audit evaluates the impact of this change of practice.

Methods All children undergoing elective colonoscopy at RACH between December 2019 and November 2020 were identified. Electronic records were reviewed to determine IPBP vs HBP, distance to RACH from patient's home, bowel preparation score, morning or afternoon list, requirement for intravenous (IV) fluids during the procedure, day case procedure and length of stay. Bowel preparation score was derived from the Aronchick Scale and converted as follows: 0 (unacceptable), 1 (poor), 2 (fair), 3 (good) and 4 (excellent).

Results

Summary The high standard of bowel preparation achieved with IPBP was maintained when delivered at home, despite some children travelling >100 miles and having travelling times of >3 hours. Delivering all doses of drugs on the day before procedure did not affect the quality of bowel preparation for afternoon lists. There is a trend to a higher proportion of children with HBP receiving IV fluids during anaesthetic which may suggest that some are dehydrated. The proportion of day case procedures has increased from 0% to 72%, which since March 2020, has saved NHS Grampian £18,000.

Conclusion Home bowel preparation delivered on day prior to procedure is well tolerated and as effective as inpatient delivered, even for children with long travelling times to hospital. Covid-19 distancing measures have reduced the number of available inpatient beds so HBP has aided bed management in addition to providing a cost saving. The risk of dehydration may be higher for HBP and guidance will be changed to increase the emphasis on oral fluid intake, including during travelling time, on day of procedure.

P19 EFFICACY OF THIOPURINES IN PREVENTING INFlixIMAB ANTIBODY FORMATION WHEN USED IN DUAL THERAPY: EXPERIENCE FROM A SINGLE TERTIARY PAEDIATRIC GASTROENTEROLOGY DEPARTMENT

Muhamad Azim Muhamad Amin, Varsha Datta, Danica Hapuarachchi, Loveday Jago, Andrew Fagbemi, Ahmed Kadir. *Royal Manchester Children Hospital, Manchester*

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Background and Aim There is evidence that shows addition of an immunomodulator (azathioprine or mercaptopurine) to Infliximab (IFX) therapy reduces antidrug antibodies, however, published evidence remains quite limited in paediatric population. We conducted a review to observe whether there is any correlation between the drug level of azathioprine metabolites, that is 6-thioguanine nucleotides (6-TGN) and development of anti-IFX antibodies (Abs) in inflammatory bowel disease (IBD) patients.

Method This is a retrospective study of patients with IBD based on a single tertiary paediatric gastroenterology department that had their levels monitored from March 2016 until March 2020. We defined maximum drug efficacy based on consensus on ESPGHAN management of IBD in paediatric and our lab references (235–450 pmol/8 × 108). In order to maintain consistencies, we included patients on 8 weekly 5 mg/kg of Infliximab infusion regimen who had their azathioprine metabolites measured within 3 months from starting. Fishers test and Pearson correlation were used to test the correlation between the drug level of azathioprine metabolites and development of IFX Abs.

Results 36 (58%) out of 62 patients were included in this study based on the above criteria (median age 14.25). Mean level of 6-TGN was lower in anti-IFX Abs-positive patients compared to anti-IFX Abs-negative patients (316.2 vs 322.8) with 6.607±57.51 (CI -123.5–110.3, p=0.91). There is a positive correlation between positive Anti-IFX abs with lower level of Azathioprine metabolites with coefficient at 0.47 (p=0.05).

Conclusion Our data demonstrates there is positive correlation between lower levels of azathioprine metabolites and positive anti-IFX abs level, hence suggestive of the importance of adherence to treatment to ensure longevity usage infliximab in IBD patients.

P20 EMERGENCI: A UK PROSPECTIVE SURVEY OF SEVERE GI BLEEDING (REQUIRING UPPER GI ENDOSCOPY) AND EMERGENCY ENDOSCOPY IN UNDER 16S

¹Natasha Thorn, ¹Martina Vallorani, ¹Ramiya Kirupanathan, ²Polychronis Kemos, ²Nicholas Croft. ¹Paediatric Gastroenterology, Royal London Children's Hospital, Barts Health NHS Trust, London; ²Blizard Institute, Barts and the London School of Medicine, Queen Mary University of London

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Objectives EMERGENCI is a prospective, national, cohort study of emergency endoscopy and severe upper GI bleeds in children. Objectives were to produce national data of the clinical presentations, patient co-morbidities, indications, waiting times and endoscopic treatments for emergency endoscopy.

Methods Units were identified through the UK Paediatric Gastroenterology and Paediatric Surgical Societies (BSPGHAN & BAPS). Once registered, fortnightly emails were sent over a 6 month period asking for reports in <16 years of severe upper

GI bleeds requiring endoscopy (UGIB) and/or other emergency upper endoscopies (OEE). Cases were reported in REDCap.

Results 28 centres provided denominator data with regard to the services they provide (covering 90% of the UK population). 22 provided prospective data for UGIB and 18 for OEE covering 70 and 60% of the UK population respectively.

98 cases were reported over a 6 month period: 34 UGIB, 55 OEE, (38 foreign body and 17 others); 9 less severe UGI bleeds not fitting the definitions were excluded from further analysis.

Of 25 centres reporting, 14(56%) had 0 UGIB and 20/25 (80%) had ≤ 2 over the 6 months. Endoscopic interventions for GI bleed were undertaken in only 6/25 centres.

The mean age of the UGIB group was 6.7 years, 29% were ≤ 1 year. 19(56%) had significant co-morbidities. Presenting symptoms were one or both of melaena and haematemesis. Of the 20 providing sufficient data for a Sheffield score, 25%(4/20) were high (≥ 8) at presentation (median score 2.5, range 1–24, interquartile range 3.25). Main findings at endoscopy; 8(24%) had no abnormalities, 14(41%) had UGI ulcers (6 duodenal, 6 gastric and 2 oesophageal), 9(26%) oesophagitis and gastritis, 8(24%) varices.

13(38%) required endoscopic treatment, 6 for varices, 4 for GU, 2 DU, 1 for blood in upper GI tract. 3 required surgery. Two patients died, one within 48 hours of the bleed in PICU in the context of sepsis and multi-organ failure. 14 patients required inter-hospital transfer, median time from hospital presentation to endoscopy was 97 hours for patients needing transfer and 24 hours for those not.

For the OEE (N=55), mean age was 6.3 years, 26% ≤ 1 year. 21(38%) had significant co-morbidities. Main indications were foreign bodies (25, 45%) - coins (15), battery (2), button battery (5), magnets and a toy. 13(24%) food bolus obstruction, 11(20%) caustic substance ingestion, 5 oesophageal stricture. 9/55(16%) endoscopies revealed no significant findings, 37(65%) required treatment at endoscopy. 50% (27 patients) had required inter-hospital transfer. Median time from first hospital presentation to endoscopy was 21 hours in those requiring transfer and 14 hours in those not.

Conclusions This is the first national prospective study of its kind examining the most urgent and severe endoscopy cases in under 16s. These data indicate that very small numbers of centres are performing endoscopic treatments for severe UGI bleeds. Inter-hospital transfers appears to be much quicker for surgical indications than UGIB although we did not find evidence of poor outcomes in the UGIB due to delayed transfer. The planning, location and skill mix of national emergency endoscopy services require careful consideration.

P21 EXPERIENCES IN DIETARY MANAGEMENT OF EOSINOPHILIC OESOPHAGITIS

Sarah Khweir, Lucy Jackman, Edward Gaynor, Leanne Goh. *Great Ormond Street Hospital*

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Introduction Patients with eosinophilic oesophagitis (EOE) are currently treated with medication (proton pump inhibitors (PPI)/topical steroids), diet restriction and dilation. Diet therapy consists of dietary exclusion of specific foods. A 'step-up' approach is usually recommended, considering empirical 1–2 food (milk $\pm$ wheat) exclusions then 4-food (additional

elimination of soya and egg), then 6-food (with additional elimination of nuts and seafood). Once in remission, individual reintroductions with endoscopic reassessment, helps guide the minimum number of food exclusions required to maintain this. At Great Ormond Street Hospital (GOSH), the GIANTS (gastro-intestinal, allergy, nutrition and therapy service) was a new service initiated in March 2018, managing all existing and newly diagnosed EOE patients at GOSH. This service evaluation project aimed to explore the most common strategies in dietary exclusions and how this impacted on growth and remission of EOE within our cohort.

Methods Retrospective electronic patient records review from March 2018–March 2020. Newly diagnosed patients on diet therapy under GIANTS were included. Patients who had been diagnosed prior to the inception of GIANTS and those with significant comorbidities e.g. trachea-oesophageal fistula were excluded.

Results There were 13 newly diagnosed patients (excluding those with comorbidities) with EOE in the GIANTS service. Of these patients, four patients (30%) completed diet therapy. One patient was unable to complete a milk exclusion and chose medicinal therapy. Children were 3 female, 1 male with a mean age of 7.4 years at diagnosis. Two patients commenced a milk free diet, one had a milk and soya free diet and the fourth had a milk, wheat and soya free diet. Three of four of these patients achieved remission. Three of four patients had trialled drug therapy (PPI) first with no histological remission. BMI z-score did not change between when the children were first diagnosed to achieving disease remission (mean BMI z-score -0.28 to -0.29). All patients had regular access to a dietitian.

Conclusion In this small service evaluation, medicine was the preferred treatment choice for families. This is likely due to the burden of changing the diet has on a family and a patient's quality of life. However, 75% of this cohort achieved histological remission on diet therapy. PPI appeared ineffective in this small patient group. Empirical food elimination via a step-up approach appears helpful in these patients, reducing burden of excessive exclusions and also reduced number of endoscopies when considering reintroduction of these foods. Growth appeared unaffected with no concerns with BMI. All patients on diet therapy had regular input with the dietitian, supporting the need for specialised dietetic input within gastrointestinal allergy. Whilst these findings are supported in the guidelines, more research is needed to look at which diet strategy is the most effective and how this is achieved, including how many previous treatments and endoscopies a patient has required. Achieving remission rates as timely as possible is crucial not only for the patient's quality of life but also to reducing the need for repeated endoscopies within short timeframes.

P22 FIBRATES: AN ADJUVANT THERAPY FOR CHOLESTASIS IN PAEDIATRIC AGE GROUP

¹Tawhida Y Abdelghaffar, ²Behairy A Bahairy, ²Hatem A Konsowa, ²Alif A Allam, ²Mary A Naguib, ³Huda Atta. ¹Dr.Yassin Abdel Ghaffar Charity Centre for Liver Diseases and Researches, Cairo, Egypt; ²National Liver Institute, Menoufia University, Egypt; ³Birmingham Children's Hospital

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Introduction Bile formation is a delicate process. This is illustrated by inherited liver diseases caused by mutations