2. To review if a more cautious surveillance protocol may be beneficial for children with PJS considered being at increased risk.

Subjects and Methods All patients were confirmed to have PJS by genetic analysis (STK 11 mutation).

Patient A underwent endoscopic surveillance every 2–3 years. At 9 years video capsule endoscopy (VCE) revealed one stalked small polyp and some areas of fresh blood in the small bowel, so double-balloon-enteroscopy (DBE) performed and two polyps removed. 4 years later the patient presented with sharp abdominal pain for two weeks associated with a mass in LIF, reduced appetite and required semi-urgent laparoscopic resection.

Patient B was diagnosed de novo at the age of 11 years due to lip and mucosal freckling. In addition to upper and lower GI endoscopy, small bowel imaging was booked but patient did not adhere to recommendations. Following pathological VCE, urgent booking for DBE was made but postponed by the family. The child presented then acutely with small bowel intussusception, underwent an urgent laparotomy and resection.

Patient C was diagnosed at the age of 8 years, presenting with anaemia, acute abdominal pain and non-bilious vomiting. An urgent ultrasound abdomen revealed small bowel intussusceptions, leading to laparotomy and resection. Intraoperative enteroscopy was performed with removal of two further polyps 10–15 cm from the resected bowel.

Results Review of 7 PJS patients without intussusceptions during the same 10 year period did not demonstrate significant differences in age of presentation, presence of polyps in

stomach, or duodenum. Regarding small intestinal polyp formation, 2 of control patients had small intestinal polyps, one of them referred for DBE and the other one did not require DBE resection.

Summary and Conclusion

1. In our cohort of children with PJS, presence of small intestinal polyps was the only risk factor for intussusceptions. Intussusceptions occurred in 5/10 of all children with small intestinal polyps.
2. Dynamics of small intestinal polyps appear variable, but occurred earlier or in shorter intervals than recommended by ESPGHAN guidelines.
3. Although small bowel investigations can be difficult for some children with PJS, we recommend that they should be performed not later than 8 years of age. Due to absence of early warning signs for intussusceptions, if small intestinal polyps are found, small bowel imaging under optimal imaging conditions should be repeated annually and also immediately when children are symptomatic.
4. Centres are encouraged to enroll patients in the upcoming ESPGHAN polyposis group PJS registry.

P12

CLINICAL CHARACTERISTICS, DIAGNOSIS AND MANAGEMENT OF EOSINOPHILIC OESOPHAGITIS: A RETROSPECTIVE CASE SERIES

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Abstract P11 Table 1 Characteristics of PJS patients with intussusceptions

Patients characteristics	Patient A	Patient B	Patient C
Age at diagnosis (y) ; gender	5.3, female	11, female	8.4, female
Family history of PJS	Yes	No	Yes
Age at Intussusception (y)	15.7	12.9	8.4
Time since diagnosis (y)	10.3	1.8	0
Last endoscopic assessment (interval since presentation with Intussusception)	Endoscopy(6 mts): <u>Stomach:</u> x 50 sessile polyps (<8 mm), x1 sessile polyp 10 mm <u>Duodenum:</u> x10 sessile polyps (<5 mm) <u>Colon:</u> x5 sessile polyps in DC, sigmoid, rectum, x1 stalked polyp 12 mm in TC – snare polypectomy	Endoscopy (18 mts): <u>Stomach:</u> x1 sessile polyp (2 × 3 cm) – not removed as no inpatient bed available <u>Colon:</u> no polyps	-
Previous Imaging (interval since presentation with Intussusception)	Barium meal and FT (2.2y): some filling defects in small bowel, no large polyp DBE (2y): no significant abnormalities in small bowel VCE (2.8y): small sessile polyps in jejunum and ileum VCE (8 m): normal – faecal loading	MRE: planned but not performed as patient refusing oral/NGT contrast VCE (4 m): small polyps in duodenum, slow transit from duodenum to jejunum, polyps in proximal and distal jejunum DBE: urgent referral, not adhered to by family	-
Imaging prior to surgery	USS abdomen: Persistent small bowel intussusception in the upper abdomen, the involved loops show peristalsis, not significantly thickened	USS abdomen: abnormal loop in central abdomen, very suspicious of intussusception CT abdomen: Jejunum-jejunal intussusception (thickened wall, proximal dilatation), large hamartomatous polyp in ileum (filling defect)	USS abdomen: ileo-ileal Intussusception
Surgery	1. No intussusception identified 2. 2x polyps (1 × 2 cm) in mid ileum 10 cm apart from each other	1. Jejunal small bowel Intussusception with polyp as a lead point 2. Necrotic bowel over 100 cm once reduced 3. x5 polyps (max 2 × 1.7 × 3.6 cm)	1. x2 ileo-ileal Intussusceptions each with a pathologic lead point of a polyp 2. x2 polyps 10–15 cm from the resected bowel removed
Small bowel resection (cm)	15	100	45

Background Eosinophilic oesophagitis (EOE) is a chronic immune-mediated inflammatory disease of the oesophagus, characterised by symptoms of oesophageal dysfunction and eosinophilic infiltration at oesophageal biopsy. Despite a growing body of research surrounding EOE, our understanding of its natural history and optimal management remains limited. To shed more light on this, the clinical characteristics, diagnosis and management of patients diagnosed with EOE presenting to our tertiary Paediatric Gastroenterology unit were studied.

Methods Case notes and electronic records of children diagnosed with EOE were reviewed retrospectively from a two-year period (July 2018 to July 2020). Children were eligible for inclusion if they had 1) histological confirmation of the presence of >15 eosinophils per high power field in at least one oesophageal mucosal biopsy taken at endoscopy; and 2) been discussed in the Paediatric Gastroenterology MDT for clinical-pathological correlation. Children with concomitant inflammatory diseases were excluded. Data on presenting features, investigations, management and response to treatment were collated and analysed using Microsoft Excel (Version 16.43).

Results A total of 28 children with a diagnosis of EOE fulfilled inclusion criteria for this study, 20 (71.4%) males with a mean (SD) age of 8.91 (4.22) years. A quarter of children were referred by general practitioners and the remainder by hospital paediatricians and surgeons. Symptoms of dyspepsia and dysphagia predominated among 64.3% and 46.4% of subjects respectively. For 55.6% of children an allergic condition was also present, most commonly food allergy (42.9%) (figure 1). Blood eosinophils were elevated in 78.6% of children (mean (SD) 0.64 (0.43)). Twenty-four (88.9%) children had been started on a proton-pump inhibitor (PPI) prior to initial endoscopy and 63.6% were PPI-responsive. Macroscopic

features of EOE were evident in 65.4% of subjects. Upon diagnosis, 24 children (85.7%) were reviewed by a dietician and started on an elimination diet (75% empiric versus 25% testing-directed). At subsequent review, 83.3% had clinically improved although only 52.9% showed histological evidence of improvement at reassessment. Mean (SD) time between initial endoscopy and reassessment was 10.5 (8.39) months. A further 12 children (28.6%) went on to have at least one more endoscopy. Topical steroid treatment with fluticasone was reserved as a second line treatment and given to three children (10.7%). Limitations to this study include the retrospective design, limiting comparison of treatment approaches and evaluation of longer-term outcomes among children with EOE.

Conclusion In a cohort of children with EOE diagnosed at Leicester Royal Infirmary, male sex predominated whilst symptoms of dyspepsia or dysphagia, a history of atopy and elevated blood eosinophils were highly prevalent. Over 80% of children showed a clinical improvement with PPI therapy and dietary measures alone, highlighting the benefit of robust dietetic support. However, clinical improvement did not always correlate with endoscopic improvement. Moreover, escalation to second-line steroid treatment was uncommon, in part due to local challenges procuring orodispersible budesonide, which is not licensed in children.

P13 CLINICAL FEATURES SIGNIFICANTLY ASSOCIATED WITH HIGHER RISK OF CATHETER-RELATED BLOOD STREAM INFECTION (CRBSI) IN CHILDREN ON LONG-TERM PARENTERAL NUTRITION (PN)

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Objectives and study Catheter-related bloodstream infection (CRBSI) is a common and serious complication of parenteral nutrition (PN). We aimed to determine incidence and risk factors for CRBSI in children receiving long-term home PN at home for Intestinal Failure (IF).

Methods Diagnosis of CRBSI was based on clinical manifestations of infection such as fever, rigors, and/or hypotension together with positive blood culture obtained via the central venous catheter (CVC) and absence of other potential sources of infection. The incidence of CRBSI was measured as number of catheter-related episodes per 1000 catheter days. Data regarding potential risk factors for CRBSI such as young age <5 years, oral/enteral feeding, enteral tube feeding, enterocutaneous stoma, number of CVC lumens, absence of ileocecal valve (ICV), number of PN and lipid infusions/week were recorded.

Results The study group included 58 children (26 male, aged 7.2±4.6 years). Aetiology of IF included gastro-intestinal motility disorder (26/58), short bowel syndrome (SBS) (21/58) and enteropathy (Ent) (11/58). There were a total of 58414 catheter observation-days. Thirty-one of 58 (53.4%) children (15 M, aged 5.8±4.3 years) were diagnosed with 108 CRBSIs, a rate of 1.85/1000 catheter days. The median (range) number of CRBSI episodes per patient was 1 (0–14). The median days receiving PN was 1391 (range 75–1565), the median weekly PN infusion frequency was 7 days (range 1–7) and the median weekly lipid infusion was 3 days (range

Abstract P12 Figure 1 Prevalence of different types of allergies among children with EOE diagnosed at Leicester Royal Infirmary. *Other allergies* = subjects with allergic rhinitis or eczema. *Any allergy* = subjects with at least one of either food allergy, asthma or other allergy.