maximum quantities, the percentage of this quantity was calculated.

Results A total of 12 patients aged between one and 14 years were included. All children met adjusted parenteral recommendations for water soluble vitamins except for vitamin C, where intake was suboptimal in one case. In all patients, vitamin A recommendations were exceeded, whereas vitamins D and K were suboptimal. Recommendations for zinc were clearly surpassed in all children, but this was below the maximum quantity advised. Iodine was adequately supplied in 50%, copper in 67% and selenium in 75% of patients. No patient exceeded the maximum recommended intake of vitamin E and chromium. The maximum dose of manganese was exceeded in one patient.

Conclusion Licensed parenteral multivitamin/multitrace products in the UK provide fixed combinations of multiple micronutrients and are dosed based on weight, although recommended intakes are mostly expressed as fixed daily quantities. Consequently, meeting the ESPHAN recommendations with these products is challenging and monitoring of serum concentrations of these nutrients is essential in this vulnerable patient population.

P38 PEDIATRIC INFLAMMATORY BOWEL DISEASE AND HIDRADENITIS SUPPURATIVE: A CHALLENGING ASSOCIATION?

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Introduction Within Inflammatory Bowel Disease (IBD), perineal lesions are a common extra-intestinal manifestation, yet may mask other entities. Including several etiologies across a number of subspecialties, most of which are better appreciated in adulthood. This report focuses on an unusual dermatological association with IBD, presenting at an atypical time in the disease course.

Case Report 11-year-old obese Hispanic female presented with the chief complaint of epistaxis and was noted to have painful lower extremity nodules consistent with erythema nodosum and gluteal cleft lesions. Review of systems revealed fatigue, anorexia and diarrhea for two months prior accompanied by a 6.8 kg weight loss over that period. On admission, she was febrile (38.3°C), tachycardic and hypotensive with baseline laboratory values notable for leukocytosis (13.1/nL), hypochromic microcytic anemia (hemoglobin 10.3 g/dL and mean corpuscular volume 70.3 fL), thrombocytopenia (55/nL) and evidence of systemic inflammation with elevated CRP/ESR.

Stool studies were significant for fecal leukocytes and a CT revealed mural thickening with fat stranding; segmental colitis was confirmed on colonoscopy. At that time, a punch biopsy of the gluteal lesion revealed granulomatous dermatitis, presumed to be cutaneous Crohn's Disease (CD). Treatment was initiated with Metronidazole and Methylprednisolone. Soon after the clinical course became complicated by the development of a rectovaginal fistula. Induction and maintenance treatment were achieved with Infliximab and the patient was discharged with the diagnosis of CD with perineal involvement.

Multidisciplinary team monitoring over the following three years ensued before the patient reported progression of intertriginous lesions, this time to the axillae and infra-mammary areas. Punch biopsy at the new lesion established the diagnosis of Hidradenitis Suppurativa (HS), with a pathological confirmation.

Discussion HS is a chronic inflammatory dermatological disease of the apocrine glands, characterized by recurrent and painful, deep-seated nodules, abscesses, sinus tracts and/or fistulas. It affects inverse areas of the skin following the distribution of apocrine glands. Prevalence is higher post-puberty, with smoking and obesity acting as risk factors. The association with IBD, particularly CD is stronger in the severe phenotype and in pancolitis. The formal diagnosis is made on average one decade after the onset of IBD. Up to 25% of IBD patients experience extra-intestinal manifestations, perineal pathology accounts for 50% of the cases. Yet, in the absence of extra-perineal intertriginous involvement, the possibility of HS may be less recognizable. Improved awareness to this association among Paediatricians and Paediatric Gastroenterologists is important as co-pathology may require treatment escalation to immunosuppressive agents or alterations to monoclonal antibody regimen. More intensive treatment is often required as disease remission is harder to achieve for HS than CD.

Conclusion HS, when associated with CD, typically occurs one decade after the initial IBD diagnosis. This case presents a much shorter interval between such diagnoses, and potentially a dual presentation. This has not been appreciated in the literature to date and possibly suggests rare but earlier association when present. Analysis of a larger pediatric IBD cohort with HS will help clarify the pattern of association.

P39 PHENOTYPE FLIP – RISK OF DEVELOPING CROHN'S DISEASE FOLLOWING RESTORATIVE PROCTO-COLECTOMY FOR ULCERATIVE COLITIS

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Introduction 30% of Ulcerative Colitis (UC) patients require surgery. Restorative procto-colectomy (RPC) with ileal pouch-anal anastomosis (IPAA) is the preferred procedure. Published experience suggests up to 25% of patients subsequently manifest Crohn's Disease (CD), and 50% of these require pouch excision. Despite long-term follow up, we had not previously identified Crohn's conversion in our UC pouch patients.

Aim We analysed our UC cohort, for cases where the pouch was either excised or de-functioned. The aim of this study was to quantify the incidence of CD in this group.

Methods All children undergoing pouch surgery have had data regarding their surgery, pre-op management and disease status recorded contemporaneously. This database was interrogated and further results from the histology database retrieved. In addition, pre-pouch surgery work up, specifically diagnosis and number of pre-op colonoscopies, was evaluated.

Results From 1999 to 2020, 84 children (mean age 13.5 yrs) have undergone surgery for UC with the intention of performing RPC and IPAA. 3 were unable to be anastomosed at initial surgery; 1 subsequently underwent successful IPAA, 2 have end ileostomies.

10 patients have had their pouch excised. The excised pouch did not demonstrate CD. 4 were excised for poor function, 3 for pelvic sepsis, 2 for faecal incontinence and 1 for bleeding. 3 of the 10 subsequently underwent successful revision pouch surgery. 4 other patients are currently diverted with an ileostomy (2 because of complications in pregnancy).

We have not identified CD developing in previous UC in our cohort. No children with a diagnosis of indeterminate colitis underwent RPC and IPAA. Children with the diagnosis of indeterminate colitis on initial histology had a subsequent diagnosis of UC on imaging or histology before surgery. The median number of pre-colectomy endoscopies performed was 3.

Summary and conclusion At median follow up of 10 years, we have not seen a conversion of diagnosis from UC to CD. This contrasts with published experience.

P40 PHENOTYPIC, LABORATORY AND HISTOPATHOLOGICAL ATOPY PROFILES IN A MULTIRACIAL COHORT OF PEDIATRIC EOSINOPHILIC ESOPHAGITIS PATIENTS

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Background Eosinophils are a known hallmark of the atopic march that encompasses allergic rhinitis, atopic dermatitis, allergies and asthma, with eosinophilic esophagitis (EoE) recently suggested as the ultimate component of atopic disease. Recent reports point to ethnic and racial disparities between Asian/Caucasian cohorts in eosinophilic disease, however, race-specific atopic patterns are yet to be determined.

Aim To determine racial differences in atopy profiles of pediatric patients diagnosed with EoE.

Methods Started as a quality improvement to be better serve a minority population, a retrospective chart review was performed on pediatric patients with a diagnosis of EoE seen over a decade at a Pediatric Gastroenterology clinic. The clinic serves a diverse minority population, located within a municipal hospital in The Bronx, NY. Inclusion criteria included patients with a diagnosis of EoE defined as symptoms consistent with EoE and confirmation on endoscopic biopsy (>15 eosinophils per high power field). Demographic data (age, race, sex) and atopic variables such as atopy history, serum IgE, absolute eosinophil count (AEC) and esophageal eosinophilia were noted. All variables were stratified according to race and statistical significance was evaluated using medians and proportions.

Results Thirty-four patients were included, and stratified by race. 'Other' included Mixed and Caucasian [table 1]. The subjects at time of EoE diagnosis aged 0.58 to 20 years and male to female ratio of 3:1. The median [IQR] age for initial clinical atopy diagnosis (Allergic Rhinitis, Atopic Dermatitis, Asthma or Allergy) was 2 [1,5] years and for EoE diagnosis was 5 [3,8] for all races combined. No significant difference existed between the racial cohorts for age at first atopy and EoE diagnosis [table 1]. Although, the interval between age at first atopic presentation to the age at EoE diagnosis was clinically shortest for Black/African-Americans, racial difference was not statistically significant, as majority were diagnosed within 12 months of symptom onset. Allergen sensitization was tested via either Skin Prick Testing or Serum IgE quantification. There was no racial difference in sensitization (positive test rates) to the 8 common food allergens (p=0.139), which are known triggers of EoE. Environmental allergy testing demonstrated Black/African Americans more likely to be sensitized to weeds, dog and mold than any other racial group [table 2]. No interracial difference was appreciated in terms of Absolute Eosinophil Count and Serum IgE [table 1]. Mid esophageal eosinophilia was more prominent in Black/African-American [table 1], while lower esophageal eosinophilia was most prominent for Hispanic/Latino's subjects, demonstrating a median [IQR] of 40 [20,40], compared to any other race (p=0.004).

Abstract P40 Table 1 Variable of Interest in EoE stratified by race

Variable	Black/African-American	Hispanic/Latino	Asian	Other	P-value
Subjects n (%)	6(18)	11(32)	10(29)	7(20)	NA
Age first atopy [Median (IQR)]	8 (2,14)	2 (0.33,6)	2.5 (1.5,4)	2 (0,5)	0.481
Age EoE dx [Median (IQR)]	13 (5,18)	4 (1.5,9)	5 (3,7)	3 (1.5,8)	0.07
Absolute Eosinophil Count [n (%≥0.35/nL)]	3 (60)	4 (50)	7 (78)	5 (71)	0.785
Serum IgE [n (%≥300)]	4 (80)	3 (27)	1 (10)	2 (29)	0.075
Midesophageal Eosinophilia [Mean (IQR)]	48 (20,80)	13 (3,20)	27 (1.5,41)	25 (3,41)	0.01

Abstract P40 Table 2 Environmental Allergy Sensitization in multi-racial EoE cohort

Environmental Allergen n (%)	Black/African-American	Hispanic/Latino	Asian	Other	P-value
Tree	3(100)	2 (28.5)	4 (44.4)	3(60)	0.255
Grass	1(50)	2(28.5)	0(0)	3(60)	0.069
Weeds	3(100)	3(43)	1(11)	3(60)	0.037
Dustmite	3(100)	4(57)	2(25)	1(20)	0.093
Cat	2(66)	5(71)	3(37.5)	1(20)	0.344
Dog	3(100)	6(86)	1(14)	1(20)	0.009
Cockroach	3(100)	4(57)	4(44)	2(40)	0.465
Mouse	1(33)	6(86)	2(25)	3(60)	0.132
Mold	2(100)	2(28.5)	0(0)	0(0)	0.006

Conclusion Our findings suggest no racial differences in phenotypic presentation of EoE, except for higher allergy sensitization rates to certain environmental allergens in Black/African-Americans. No racial differences existed regarding laboratory evidence of serum eosinophilia or IgE levels. Histopathological evidence demonstrated racial differences with Black/African-American exhibiting higher mid-esophageal eosinophilia on histopathology. Further study, on a larger scale is required to confirm the complex interplay between race and EoE.