The changes in all parameters and discontinuation rates in the two groups were compared after one and four months of the therapy.

**Results** In total 71 patients were included in the study, 18 patients of them lots follow up during the study, while 53 continued. There were no significant differences in the baseline demographic and biochemical baseline data between the two groups (P > 0.05).

After one month, there was statistically significant difference between the two groups in the PGS as it decreased by <1.5x base line in the T-group compared to the C-group (P < 0.02).

After four months, there were statistically significant between the 2 groups regarding decreased ALT levels below <0.02). The changes in all parameters and discontinuation rates in the two groups were compared after one and four months of the therapy. There were no significant differences in the baseline demographic and biochemical baseline data between the two groups (P > 0.05).

**Summary and Conclusion** The use of FF in combination with UDCA provided satisfactory clinical outcomes, which could be a promising alternative, but patients should be monitored closely as side effects may occur despite achieving improvements in pruritus.

**REFERENCES**

**FIRST REPORTED CASE OF AN INTERLEUKIN-2 RECEPTOR ß DEFICIENCY IN AN INFANT BORN TO NON-CONSANGUINEOUS PARENTS, PRESENTING WITH FAILURE TO THRIVE AND ENTEROPATHY**

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10.1136/flgastro-2021-bspghan.33

**Introduction** Failure to thrive is not an uncommon paediatric presentation with multiple, often easily treatable, aetiologies. Immune dysfunction is a rare cause which often manifests with a combination of inflammatory and infectious pathology. Aim We present a rare cause of immune deficiency, the first reported case attributable to this genetic abnormality in the absence of consangunuity, presenting with immune mediated enteropathy.

**Method** A five-month-old female presenting with bronchiolitis symptoms, was found to be failing to thrive. Her weight was on the 0.4th centile, gaining just 200 g in the preceding eight weeks.

The first born to non-consangunineous parents of Pakistani descent, she was born at 39 weeks' gestation weighing 2.52 kg. There was no significant family history and she had breathed successfully for the first three months, growing along the 9th centile, and meeting developmental milestones.

By seven months she was 1 kg below the 0.4th centile, weighing the same as at three months. Bottle refusal and a failure to wean to solids accompanied chronic diarrhoea, oral and perianal inflammation, and eczematous dermatitis. Amino acid nasoagastric feeds resulted in a small weight gain, but no relief of systemic symptoms.

Developmental delay and soft dysmorphic features were apparent, and she developed recurrent fevers, polyarticular swelling affecting knees and joints of the hands and feet, widespread lymphadenopathy, and chronic bilateral uveitis.

**Results** Double negative T cell levels were elevated, inflammatory markers and liver enzymes were persistently high and cytomegalovirus (CMV) IgG was positive. Hypergammaglobulinemia and numerous autoantibodies were demonstrated. Fae-cal calprotectin was markedly raised, and endoscopy revealed nonspecific acute on chronic inflammation of the duodenum and stomach.

By 12 months of age, total parenteral nutrition and pulsed methylprednisolone, followed by oral prednisolone had been started. Symptoms improved, she began to gain weight and make developmental progress.

Full genome sequencing and parental genetic analysis, identified an autosomal recessive interleukin-2 receptor ß (IL2RB) mutation, giving a diagnosis of IL2RB deficiency.

The patient is now recovering following haematopoietic stem cell transplantation, with the aim of definitive cure.

**Conclusion** Interleukin-2 is involved in building protection against autoimmune disease by stimulating T-cell differentiation. Genetic mutations in its receptor are exceptionally rare, with only four homozygous defects identified in seven infants, one neonate, and two fetuses, all conceived to consanguineous marriage partners. Common clinical manifestations amongst the seven surviving the neonatal period reflect the underlying immune dysregulation with enteropathy, arthritis, uveitis, dermatitis and hypergammaglobulinemia, together with a susceptibility to respiratory and herpesvirus infections. Inflammatory features were prominent in this case but she went on to develop symptoms of CMV illustrating the conundrum of managing inflammation with underlying immunosuppression.

Failure to thrive, diarrhoea, eczema and recurrent viral infections are not uncommon in paediatrics. However, when rare aetiology is responsible, the journey from presentation to diagnosis can be long.

The time from presentation to referral for definitive treatment was remarkably quick in this case. This is testament to the exceptional collaborative multidisciplinary working across sub specialities, leading to a prompt diagnosis and definitive management.

**FOOD REINTRODUCTION PATTERN IN CHILDREN WITH COMPLEX GASTROINTESTINAL FOOD ALLERGY**

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10.1136/flgastro-2021-bspghan.34

**Introduction and Objective** Gastrointestinal food allergy (GIFA) is a common condition in paediatric age and both IgE-mediated and non-IgE-mediated reaction are well recognised underlying mechanisms involved in its pathogenesis. Due to the non-specificity of GI symptoms, GI allergic reactions may significantly overlap with a number of other GI disorders, making the diagnosis lengthy and confusing (Heine, 2015). Moreover, in this patient cohort, prolonged food exclusions are common and possibly unnecessary. In our retrospective study, we explore the impact of multidisciplinary team (MDT) approach on the food reintroduction rate in a group of children seen in a tertiary GI allergy service.

**Method** 108 patients (83 new, 25 follow up) were seen between April 2019 and April 2020 in an MDT setting...
including gastroenterologist, allergist, dietitian, psychologist and clinical nurse specialist. Of those, 32 children with eosinophilic oesophagitis (EOE) alone were excluded. Hence, 76 patients [61%, (n=46) non IgE mediated allergy, 4% (n=3) IgE mediated allergy, 27% (n=20) combined IgE, non-IgE and EOE, 10% (n=7) had other food triggered conditions] were retrospectively reviewed.

Results 97% (n=74) of children were following exclusion diets for ≥12 months, with a mean of 5 excluded foods (median 4, IQR 2, 6). At the follow-up, the mean number of foods excluded had reduced to 3 (median 2.5, IQR 1, 5); p <0.0001. Milk (n = 59; 78%) was the most common excluded food, whilst fish/shellfish (n=18; 24%) was the least. Over 12 months 55% (n=42) of patients introduced at least 1 food into their diet and 16% (n=12) of patients reintroduced between 75–100% of excluded foods. The dietitians provided on average 3 contacts to patient, in the form of face-to-face appointments or telephone appointments (range 1–16).

Conclusion In children with GIFA, long-term unnecessary food exclusions should be avoided, due to the relationship with poor growth, feeding difficulties and nutritional deficiencies (Meyer, 2018) Despite the fact that the majority of them had been following long-term exclusion diets, over half of patients were able to reintroduce at least one food into their diet.

In this cohort, the MDT approach, which brings together professionals from different backgrounds to pave the most effective management plan for the patient, has shown to be highly beneficial in supporting patients and their families to reintroduce foods into their diets. However this requires ongoing support for many families’ in-between medical appointments to achieve this goal.

This small centre outcome demonstrates some positive impacts of MDT approach, which should become the standard model of care in children with complex GIFA.

REFERENCES