Interventions done involved ward-based education in the first instance to nursing staffs and the use of paper reminder for each NG-fed patient. Other interventions include production of an awareness poster and patient's leaflets which were then distributed among cognitively intact post-stroke patients. We also raised awareness among the healthcare staffs in a larger scale through presentation of our QIP during the UHDB Junior Doctors' Grand Round event.

Conclusions Despite focus being given on providing prompt swallow assessment and subsequently NG tube insertion to aid feeding for our stroke patients, the incidence of aspiration remains prevalent. Inappropriate bed inclination during NG feeding administration is believed to be one of the reasons and this aspect seems to have been underrated in our clinical practice. Having said this, we do understand that the incidence of aspiration among our patient cohort could be multifactorial.

Re-audit data collection is currently ongoing, with the latest set of data demonstrating a good outcome following our interventions.

P277 NUTRITIONAL STATUS AND DISEASE ACTIVITY IN CROHN'S DISEASE: PRELIMINARY DATA

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Introduction Malnutrition is a highly prevalent and crucial complication of Crohn's Disease (CD), even in patients in remission; nevertheless assessment and treatment of malnutrition is rarely integrated into management plans. Body Mass Index (BMI) and Malnutrition Universal Screening Tool (MUST) are widely used, but not exempt of limitations.

Objectives To investigate (1) the prevalence of malnutrition in an outpatient sample of CD patients, using the most frequent and recommended nutritional tools in clinical practice (2) the existence of any relationships between nutritional and clinical status in patients with CD, and (3) the reliability and validity of different methods of nutritional assessment in patients with CD in an ambulatory setting.

Methods Cross-sectional, observational study that took place in the IBD outpatient clinic at University College Hospital between March and June 2019. Demographic (gender, ethnicity, age and smoking status), and disease activity data (Harvey Bradshaw Index, Montreal Classification, past surgical history, current and past medication) were collected. Nutritional assessment was performed, using weight, height, BMI, MUST, Mid-upper arm circumference (MUAC) and Hand Grip Strength (HGS). Additionally, blood biochemistry was recorded.

Results 86 consecutive CD patients were included (38 female; mean age 38.5±15.3 years; 19 Asian, 67 of white ethnicity; 62 non-smokers, 13 smokers and 11 ex-smokers). Statistically significant positive associations were found between clinical activity (HBI) and MUST ($r=0.426$, $r^2=0.18$, $p<0.05$), CRP ($r=0.282$, $r^2=0.079$, $p<0.05$) and Platelet values ($r=0.24$, $r^2=0.079$, $p<0.05$). A significant positive association was found between MUST and CRP ($r=0.29$, $r^2=0.08$, $p=0.0049$) and negative between MUST and BMI ($r=0.43$, $r^2=0.19$, $p=0.000002$).No significant association was found between the other parameters collected. In the sub analysis comparing active (HBI≥5; n=40) vs remission group (HB<5; n=46), there was a trend for a lower mean HGS in the active group (29.58±11.89 vs 33.94±12.66; p=0.1). MUST score 0 was more prevalent in patients in remission compared with active (n=31 vs n=22; p<0.005) and MUST score 1 was more common in the active group (n=13 vs n=7; p<0.005). The prevalence of malnutrition was 12.5% in the active group, and 17.3% in the remission group, when calculated with MUST; and 22.5% in the active group and 8.69% in the remission group by BMI criteria.

Conclusions Malnutrition rates are high in patients with CD, even in remission. HGS was lower in the active group while MUST was negatively associated with BMI. Malnutrition screening and assessment should be included routinely in IBD clinical practice. Further data are being collected based on body composition.

P278 DEFINING LOW FODMAP THRESHOLDS IN IRRITABLE BOWEL SYNDROME

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Introduction Studies support the use of the low FODMAP diet (LFD) in irritable bowel syndrome (IBS). Whether an optimal threshold of restriction exists is yet to be determined, but <12 g total FODMAPs has been suggested.[1] There are no current recommendations for individual FODMAPs such as fructans. Pre and post dietary intervention levels were explored.

Methods A systematic review was performed of publications reporting total FODMAP and fructan intakes pre and post dietary intervention. LFD dietary trials (n=15) were identified on PubMed using MESH terms 'low FODMAP', 'irritable bowel syndrome' and 'fructans'. From the articles identified, studies having no data on total FODMAP intake or fructan intake were excluded (n=6). Percentage change in total FODMAP intake pre- and post dietary intervention were assessed in eligible articles (n=9). All eligible articles (n=9) had data on total FODMAPs (n=7 after restriction stage and n=2 in long term) and 7 articles had data on fructan intakes (n=5 after the restriction stage and n=2 at long term). Studies assessing fructan intake in healthy participants were included for comparison (n=2).

Results Total FODMAPs at baseline or in the control group was 13.0–29.6 g/d (n=7 studies) and following the LFD restriction phase 3.1–22.0 g/d (n= 7 studies), with a 24.1–85.8% reduction across studies (see graph 1). Of the 7 studies, 6 achieved the suggested threshold <12 g/d. Total FODMAPs at long-term was 9.0–20.6 g/d (n=2 studies). Baseline fructan intake was 2.3–4.0 g/d (n=5 studies) and following the LFD restriction phase 1.0–2.1 g/d (n=5 studies), with a 33.3–69.2% reduction across studies. Fructan intake at long-term was 2 g/d (n=2 studies). Fructan intakes in healthy individuals was 3.9–4 g/d (n=2 studies).

Conclusions The total FODMAP threshold of <12 g/d was achieved in the majority of studies, but intakes in the long term varied, between 9–22 g/d. Fructan intakes <2.2 g/d were

commonly reached following the LFD restriction phase with a 33.3–69.2% reduction seen, which was maintained in the long term. Whether a fructan reduction in isolation would provide symptom benefit should be explored, as less restrictive dietary approaches are needed.

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P279 MALNUTRITION IS HIGH IN PRESURGICAL CROHN'S DISEASE COMPARED WITH OTHER IBD PATIENTS AND HEALTHY CONTROLS

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Background Malnutrition occurs in 20–85% of patients with inflammatory bowel disease (IBD) depending on nutrition assessment criteria and disease activity. Patients with Crohn's disease (CD) and malnutrition awaiting surgery are at increased risk of postoperative complications compared with patients without malnutrition. This study aimed to assess whether there were any differences in nutrition status between presurgical CD, active CD, CD in remission, ulcerative colitis (UC) in remission and healthy controls.

Methods Patients with presurgical CD, active CD, CD in remission and UC in remission were recruited from a UK hospital IBD unit. Healthy controls (HC) with a healthy body mass index (BMI: 19–25), matched for age and sex were recruited from staff/students. Anthropometric measurements were BMI, waist circumference (WC), mid-upper arm circumference (MAC), tricep skinfold (TSF) and mid-arm muscle circumference (MAMC). Bioelectrical impedance analysis (BIA) determined fat mass (FM) and fat-free mass (FFM). Muscle strength was assessed using hand-grip strength (HGS). Age and sex specific population reference ranges for malnutrition were ≤5th percentile for MAC, MAMC and TSF and <85% for HGS. Comparisons between groups were made using one-way ANOVA for continuous data and chi-squared for categorical data with significance set at $p<0.05$. For significant results, post hoc analysis identified which groups differed.

Results A total of 121 patients with IBD and 40 healthy controls were assessed. Malnutrition was identified in 21 (17%) patients using MAC, 6 (5%) patients using TSF, 39 (32%) patients using MAMC and 55 (46%) patients using HGS. Differences between groups (with post hoc analysis) were found for BMI (presurgical CD vs CD in remission, $p=0.04$), WC (UC in remission vs HC $p=0.028$), MAMC and HGS (presurgical CD vs CD in remission, $p=0.036$; presurgical CD vs UC in remission, $p=0.001$, presurgical CD vs HC $p=0.002$).

Conclusions Across IBD phenotypes and disease activity groups, nutrition status is most depleted in presurgical CD patients. Nevertheless, clinically significant rates of malnutrition also occur during active disease and in remission. This data may help healthcare services prioritise dietetic provision to IBD patients, specifically for presurgical CD patients.

P280 THE CLINICAL SIGNIFICANCE OF HYPOPHOSPHATAEMIA AFTER INTRAVENOUS IRON INFUSIONS FOR IRON DEFICIENCY ANAEMIA

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Introduction Intravenous (IV) iron is commonly used to treat iron deficiency in patients with severe anaemia or intolerance to oral iron supplements. Ferric carboxymaltose (FCM) is an IV iron known to cause a fall in serum phosphate in up to 70% of patients. Although several isolated patient cases with severe hypophosphataemia-related symptoms post-FCM administration have been published, the clinical significance of this side effect has not been studied in a wider population.

The purpose of this retrospective study was to examine the clinical relevance of IV iron-induced hypophosphataemia in a UK population to inform clinical practice and implement service improvements.

Methods The medical notes of 321 randomly selected patients, who received an FCM infusion at UCLH during the audit period (April 2016-December 2018), were retrospectively examined. After excluding patients without a post-FCM phosphate measurement, the records of 209 patients, who received 224 courses of FCM, were analysed. Of those patients, 162 received FCM as inpatients and 47 as outpatients. A treatment course consisted of one or two infusions depending on the patient's iron need. If the time interval between two infusions was >4 weeks, each infusion was analysed as a separate course.

Data were separated into two groups depending on whether or not hypophosphataemia (defined as phosphate <0.65 mmol/L) occurred at any time post-FCM.

Results The overall incidence of hypophosphataemia increased from 3.4% at baseline to 27.7% post-FCM. Among the courses reporting hypophosphataemia, 8.1% showed severe hypophosphataemia (defined as phosphate <0.32 mmol/L). IV phosphate was deemed necessary in 24.2% of courses reporting hypophosphataemia, and in 7.4% of courses not reporting hypophosphataemia post-FCM.

A statistically significant drop in the mean phosphate level occurred post-FCM administration. The drop was more substantial in patients with hypophosphataemia post-FCM, where the phosphate level was reduced by ~50% ($p<0.001$).

Conclusions The incidence of hypophosphataemia following FCM administration was high. Hypophosphataemia was persistent. The incidence of hypophosphataemia at 60 days post-FCM was 40%.Treatment was necessary in 24% of courses reporting hypophosphataemia; an average of 4.4 phosphate infusions were administered per patient. This impacts on the patient and on the utilisation of healthcare resources.

P281 DEDICATED PHYSIOTHERAPY IN INTESTINAL FAILURE IMPROVES PATIENT OUTCOMES AND QUALITY OF LIFE

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