PWE-036 A PROSPECTIVE AUDIT OF THE 2017 ESPEN GUIDELINES ON MICRONUTRIENT TESTING IN QUIESCENT IBD PATIENTS

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Introduction ESPEN guidelines advise regular screening for micronutrient deficiencies in patients with inflammatory bowel disease (IBD). This is rarely undertaken in UK and in the presence of active disease and systemic inflammation, plasma micronutrient concentration is complicated by the influence of acute phase response. We prospectively audited the micronutrient profile in an IBD cohort in clinical remission attending the OPC.

Methods 54 IBD patients in remission were identified between September 2017 and January 2018 with a Harvey Bradshaw Index ≤ 4 or partial Mayo score < 2 . Micronutrient screen was performed for Vitamin B1, B2, B6 and B12, Vitamin A, Vitamin E, Vitamin C, Vitamin D, Vitamin K, Selenium, Magnesium, Copper, Ferritin, Zinc, Manganese and Folate. Serum albumin and CRP were measured and faecal calprotectin was also tested.

Results 33 patients had Crohn's disease with the majority Montreal A2 (15), L2 (15), B1 (23). 21 patients had UC or IBDU with majority Montreal A2 (12), E2 (10). Low levels of Vitamin B2 were identified in 1 (2%); Vitamin B6 in 10 (19%); Vitamin B12 in 6 (11%), Vitamin A in 1 (2%); Vitamin C in 9 (17%); Vitamin D in 39 (72%); Ferritin in 3 (6%); Zinc in 10 (20%) and Folate in 4 (8%). 3 (6%) patients had low levels of Selenium, Magnesium and Copper. Vitamin E, Vitamin B1 and Manganese were within normal range in all patients. To rule out the effect of acute phase response on blood micronutrient levels, a subgroup of 27 (50%) patients with albumin > 34 g/L, CRP < 20 mg/L and faecal calprotectin < 250 mg/kg were analysed. Low levels of Vitamin B2 were identified in 1 (4%); Vitamin B6 in 4 (15%); Vitamin B12 in 2 (8%), Vitamin A in 1 (4%); Vitamin C in 2 (7%); Vitamin D in 20 (74%); Copper in 2 (7%); Ferritin in 1 (4%); Zinc in 4 (15%) and Folate in 2 (7%). Magnesium was within normal range in all patients. A few patients had high Vitamin B1 (1), Selenium (1) and Manganese (3).

Spearman's rank correlation analysis showed positive significant correlations between faecal calprotectin with Vitamin B2, Magnesium, Copper, Ferritin and manganese; CRP with serum Selenium and Copper; and Albumin with Vitamin B2, Vitamin A, Vitamin D, serum Selenium, Copper, Ferritin and Zinc.

Conclusions While we identified a substantial number of IBD patients with micronutrient deficiencies, a proportion of these may be an epiphenomenon of the acute phase response. We propose that micronutrient screening only be performed in IBD patients with disease in 'deep' remission.

PWE-037 ACUTE SEVERE ULCERATIVE COLITIS (ASUC) OUTCOMES AREN'T ALTERED BY ADMISSION TO A TERTIARY REFERRAL CENTRE

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Introduction First-line treatment for ASUC with IV steroids is routinely given in UK hospitals. We sought to establish if initial treatment in a tertiary referral centre affected outcome. We examined all admissions with ASUC within Lothian and compared outcomes between those initially treated at the tertiary referral centre: Western General Hospital (WGH) and those treated at the other two acute hospitals in the health trust: Royal Infirmary of Edinburgh (RIE) and St. John's Hospital (SJH). We assessed response to steroids and second-line medical therapy and the likelihood of requiring surgery during the index admission.

Methods Admissions to NHS Lothian were identified using the ICD-10 code K51 between November 2013 and November 2016. If a patient was admitted more than once during this time only the first admission was used. 159 patients were included. 105 (105/159; 66.0%) were admitted to WGH. 14 (14/159; 8.8%) were admitted to RIE and 40 (40/159; 25.2%) were admitted to SJH. Female: male split was 60 (37.7%):99 (62.3%). Mean age at admission was 41.7 years (range 16.3–86.75).

Results 71.4% (75/105) were successfully treated with IV steroids at WGH compared with 63.0% (34/54) at RIE and SJH ($p=0.364$; OR=1.471). 37.0% (20/54) of patients treated for ASUC at the other hospitals in NHS Lothian required transfer to WGH for further management. There was wide variation in the proportion of ASUC patients referred from the two referring hospitals: 45% (SJH, 18/40) and 14.2% (RIE, 2/14). There was no significant difference in the proportion of patients requiring medical rescue therapy (Infliximab or Ciclosporin) when comparing those admitted to WGH 23.8% (25/105) and those admitted to RIE and SJH 33.3% (18/54) ($p=0.1412$; OR=0.625). Of those requiring second line medical therapy 48.0% (12/25) responded in the tertiary centre compared with 50.0% (9/18) in those admitted to other hospitals, and therefore did not require surgery ($p=0.6609$; OR=0.923). At WGH 16.7% (5/30) required surgery after failing IV steroids without being given second line medical therapy. Compared with 10% (2/20) of those transferred from surrounding hospitals ($p=0.8029$; OR=1.8).

Conclusions In Lothian, although there is no statistical difference in response to IV steroids whether treatment was started in a tertiary referral centre or not, there was a trend towards a greater success at WGH. There was no statistical difference in response to second line medical therapy between the two groups. Although numbers are small there is a trend to patients in the tertiary referral centre being more likely to proceed directly to surgery upon steroid failure. This could be due to the input of the surgical team at an earlier stage.