information about the aetiology of their deficiency, their symptoms, management and response to supplementation.

Methods We reviewed all Vitamin A assay requests which were reported as <1 umol/L across a 5 year period between 2012–2016. We looked at the indication for the test, whether the patient was symptomatic, and what their symptoms were. In addition, we collected data regarding past medical history.

Results We identified 80 patients with Vitamin A deficiency. Of our cohort, 16 patients were symptomatic, presenting with predominantly visual symptoms: blurred vision, night blindness, recurrent miscarriage, poor vision and xerophthalmia. Vitamin A assays were requested by a variety of departments but most commonly by Liver, Gastroenterology/Nutrition and Ophthalmology. Only one of our symptomatic patient's Vitamin A deficiency was due primarily to poor intake and in one patient the aetiology of Vitamin A deficiency was unknown. Our other symptomatic patients had coexisting chronic illnesses which resulting in malabsorption.

Conclusion We demonstrated that Vitamin A deficiency is a cause of morbidity and potentially mortality in a developed country. We have also shown that the cause of deficiency in developed countries is not the same as in developing countries. We found the cause of Vitamin A deficiency to be overwhelmingly due to malabsorption, most commonly secondary to surgery or hepatobiliary disease.

PWE-118 HYPOPHOSPHATEMIA FOLLOWING IRON INFUSION IN PATIENTS RECEIVING HOME PARENTERAL NUTRITION IN A REGIONAL NUTRITION CENTRE

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Background Hypophosphatemia is a recognised complication of iron infusion. Patients receiving Home Parenteral Nutrition (HPN) due to intestinal failure are at additional risk of hypophosphatemia due to their underlying disease state. This study aimed to identify the extent of hypophosphatemia following iron infusion in this group of patients.

Methods The medical records of all HPN patients treated with parenteral iron infusion in the Department of Gastroenterology, Freeman Hospital, between April 2012 and February 2017 were retrospectively reviewed. Patients were identified from the regional HPN electronic database.

Patient's demographics, type and dose of iron infusion were noted. Blood test parameters including haemoglobin, ferritin, transferrin saturations and phosphate levels were analysed before and after iron infusion. Management of abnormal phosphate level was documented.

Degree of hypophosphatemia was categorised as severe (<0.30 mmol/L), moderate (0.30 to 0.59 mmol/L), mild (0.59 to 0.79 mmol/L). Normal phosphate level was defined between 0.80 to 1.50 mmol/L, elevated levels above 1.50 mmol/L.

Results Thirty five patients (19 females, 16 males), mean age 54, received iron infusions. All patients received Ferrinject iron infusion (Vifor Pharma UK Limited) at a dose appropriate to manufacturer recommendations, based on bodyweight. Results demonstrated that phosphate levels fell in 7 out of 35 patients (20%) following iron infusion; 2 with severe hypophosphatemia (5.7%) and 5 with mild hypophosphatemia (14.3%). Table 1 summarises the effect on phosphate level of

iron infusion. Twenty seven out of 35 patients (71%) had phosphate levels checked within 2 months post iron infusion.

One patient who developed severe hypophosphatemia had mild hypophosphatemia prior to iron infusion. All other patients had normal phosphate levels beforehand. Both patients with severe hypophosphatemia required intravenous phosphate replacement via manipulation of their HPN prescription. Of the 5 patients who developed mild hypophosphatemia, 4 resolved spontaneously, 1 required HPN prescription change. Time to normalisation of phosphate ranged from 4 weeks to 5 months.

Conclusions Severe Hypophosphatemia is a rare but potentially significant occurrence following iron infusion and can be prolonged in patients receiving Home Parenteral Nutrition. Numbers in this study are small and more studies are needed to investigate this further, including assessing the incidence using other preparations of intravenous iron in this group of patients. Routinely checking phosphate levels after iron infusions in this group of patients is probably warranted.

PWE-119 IRON ISOMALTOSIDE TO IMPROVE OESOPHAGOGASTRIC ADENOCARCINOMA RELATED ANAEMIA AND QUALITY OF LIFE DURING CHEMOTHERAPY

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Introduction Anaemia is common in oesophagogastric (OG) adenocarcinoma, increasing mortality, blood transfusions and reducing quality of life with no clear evidence exists for safe and effective treatment, especially for mild to moderate anaemia. This study assessed the efficacy of intravenous iron isomaltoside to improve anaemia, quality of life and prevent blood transfusions in OG adenocarcinoma.

Methods Anaemic patients with histologically proven OG adenocarcinoma were recruited before initiation of palliative chemotherapy. Patients were randomised to receive standard care or intravenous iron isomaltoside. Post-chemotherapy changes in haemoglobin, ferritin, transferrin saturations, blood transfusions and quality of life were recorded for 3 cycles of chemotherapy.

Results 27 patients were randomised to standard care (n=13) or intravenous iron (n=14). A non-significant decrease in haemoglobin was seen in the standard care group over three cycles of chemotherapy (mean difference -0.6 g/dL 95% CI -0.1 to -1.1 g/dL, p=0.336) compared to an increase in the intravenous iron group (mean difference 0.5 g/dL 95% CI -0.1 g/dL to 1.1 g/dL, p=0.903). An increase in ferritin and transferrin saturations above 20% was seen in the intravenous iron group by cycle one of chemotherapy with a greater and statistically significant increase in ferritin in the intravenous iron group (standard care 116 ng/mL versus intravenous iron group 770 ng/mL, p<0.05).

Blood transfusions were received by 7 patients (standard care n=4, intravenous iron n=3). No significant difference in the number and amount of blood transfused were seen (p=0.851). No patient received a blood transfusion after cycle one of chemotherapy in the intravenous iron group.

Quality of life improved in the intravenous iron group with physical well-being, emotional well-being, anaemia-specific