PWE-178 POSITIVE OUTCOMES FROM A NUTRITION TEAM-LED RADIOLOGICALLY INSERTED GASTROSTOMY (RIG) SERVICE

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Introduction Radiologically inserted gastrostomies (RIGs) are an important alternative method of enteral feeding when endoscopic technique is unfeasible. Current published data regarding results post-RIG insertion report varying success, with 30-day mortality ranging from 1–18%.[1,2] A robust multidisciplinary assessment prior to RIG insertion is vital to ensure clinical suitability. We therefore have examined the case selection and clinical outcomes of our new RIG service.

Methods All patients who underwent RIG placement in our centre between February 2011 and November 2012 were identified. Retrospective analysis of the case notes established the complications post-RIG, the mortality data and which clinicians were involved with the pre-RIG assessment. Two clinicians also independently evaluated the clinical benefit of each RIG using criteria including weight gain, appropriate RIG dwell time and reliance on RIG delivered nutrition to complete proposed treatment (e.g. radiotherapy).

Results 26 patients were identified (mean age 64 years, 54% male). The indications for RIG were head and neck cancers (69%), oesophageal malignancy (15%) and neurological disorders (16%). The Nutrition Team assessed 100% of patients prior to RIG and supported management of all patients post procedure. The mean time between referral and RIG was 6 days (range 2–15 days) and success rate for RIG placement was 96%. The overall 30 day mortality was 4% (1 patient; unrelated to RIG). Early complications (< 24 hours) comprised 1 perforation with pneumoperitoneum. Late complications (2–30 days) included peristomal infection (15%), stomal leakage (12%) and bleeding from RIG site (4%). Complications after 30 days included peristomal infection (8%), inadvertent removal (8%) and RIG tube blockage (8%). Evaluation of clinical benefit concluded that 10% of patients did not benefit from their RIG: one patient with a perforation had a jejunostomy and one patient had leaking from the RIG site that was not utilised. For the remaining 90% of patients the RIG was judged a clinical success.

Conclusion Our data demonstrates an efficient and effective RIG service. Overall complication rates and 30-day mortality are low, reflecting RIG insertion as a safe alternative in those unsuitable for PEG. The assessment of the suitability for RIG by a multi-professional Nutrition Support Team and provision of ongoing support post insertion are key factors associated with a successful RIG service. Prospective data collection with a questionnaire could further evaluate patient experience.

Disclosure of Interest None Declared.

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PWE-179 NUTRITIONAL ASSESSMENT AND MANAGEMENT IN PATIENTS WITH DECOMPENSATED LIVER DISEASE

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Introduction Good nutrition is an effective intervention in decompensated liver disease[1]. Protein Energy Malnutrition (PEM) is found in 65–90% of patients with advanced liver disease and almost 100% of those awaiting transplant[1]. There is an association between nutritional status and mortality[1] and PEM before transplantation leads to higher rates of post-transplant complications.

Reasons for PEM include ascites causing early satiety, alcohol use and malabsorption of fat soluble vitamins in cholestatic liver disease. Patients with cirrhosis have an altered metabolic response to starvation and overnight fasting can result in muscle depletion[2]. Daytime and evening snacks are therefore important, and hospital catering struggles to meet the nutritional needs of these patients. Clinicians should consider nutritional supplementation when admitting patients with cirrhosis.

Methods We audited 30 patients with decompensated liver disease who had been reviewed by a dietitian. Demographics, aetiology, prevalence of alcohol use and ascites were reviewed along with if the clerking or senior review doctor considered nutrition in their management plan. Dietetic reviews were audited to calculate the deficit in calorie and protein intake and if this was eliminated by the next review.

Results There were 18 male (60%) and 12 female (40%) patients with a mean age of 53 years (range 16–79). The most common aetiology was alcohol (25 patients) followed by Hepatitis C (2). 65% of those with alcoholic liver disease (ALD) were current drinkers (mean consumption 76 units/week, range 12–280). All non ALD aetiology were non-drinkers. Reason for admission was ascites (37%), alcoholic hepatitis (30%), encephalopathy (23%) and variceal bleeding (10%). 22/30 had ascites. No supplements or night time snacks were given and in only 3 was nutritional assessment planned.

18 (60%) were consuming under 500kcal/day and 15 (50%) were consuming under 10g of protein/day. 10 (33%) had a deficit of over 2000kcal/day and 12 (40%) had a protein deficit of over 80g/day. By the second visit the deficit had been eliminated in 8 (26%); 4 with supplements and 4 with NG feeding. 10 (34%) had a reduced deficit, 9 (30%) had no reduction and 3 patients had been discharged or died prior to review.

Conclusion We found a huge burden of PEM that is poorly recognised and acted upon. A Nutrition Care Pathway has been developed which should improve the nutritional care of these patients and encourage the use of supplements and snacks in addition to the hospital menu.

Disclosure of Interest None Declared.

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PWE-180 THE ACIDIC POLYSACCHARIDE COMPONENT OF SOLUBLE PLANTAIN FIBRE INHIBITS THE ADHESION OF DIARRHOEA-ASSOCIATED PATHOGENS SALMONELLA, CLOSTRIDIUM DIFFICILE AND ENTEROTOXIGENIC ESCHERICHIA COLI TO INTESTINAL EPITHELIAL CELLS

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Introduction Pathogen-related diarrhoea is a major problem worldwide, causing significant morbidity and mortality each year. Our recent studies have shown that soluble dietary fibre (non-starch polysaccharides, NSP), particularly those from plantain bananas (*Musa* spp.), can inhibit the adherence of diarrhoeal pathogens such as *Salmonella*, *Clostridium difficile* and enterotoxigenic *Escherichia coli* (ETEC) to the intestinal epithelium (J. Nutri. Biochem. 24:97–103). Our aim in this study was to elucidate specific polysaccharide components present in soluble plantain fibre that confer bioactivity to block diarrhoeal pathogen interaction with the gut epithelium.

Methods Plantain NSP was separated into neutral and acidic component polysaccharides using Q-Sepharose strong anion-exchange