

220 patients from 8 studies, allowed a random effects model meta-analysis to be carried out. The mean age of patients within individual studies ranged between 45–61 years. 64% of patients were female. The underlying primary malignancy was gastrointestinal (53%), gynaecological (25%) (accounting for the female predominance), and others (22%). Four studies reported use of palliative chemoradiotherapy with 39–100% of the patients under going at least one cycle of treatment. Figure 1 shows the survival at monthly intervals for six months. The overall median survival is 83 days. 24% were still alive at 6 months but only about 2% at year.

Conclusion This is first systematic review showing the survival in patients with malignant inoperable bowel obstruction receiving HPN during the palliative phase of care. We show, using the largest published cohort to date, that the median survival is only 83 days. The described variability in survival length between studies and between patients can be substantial. This information can help inform clinician decisions about the use of HPN in such patients.

Disclosure of Interest None Declared.

OC-026 DIAGNOSTIC YIELDS OF SEHCAT SCANNING AND GLUCOSE HYDROGEN BREATH TESTING IN PELVIC RADIATION DISEASE

R Stacey*, J Turner, J Green. *Department of Gastroenterology, University Hospital Llandough, Cardiff, UK*

10.1136/gutjnl-2014-307263.26

Introduction Late Gastrointestinal side effects following radiotherapy are common but under reported by patients and poorly recognised by clinicians¹ Pelvic radiation disease (PRD) can present up to 30 years after radiotherapy treatment with a range of symptoms, including rectal bleeding, abdominal pain and diarrhoea. Many of these patients experience troublesome symptoms of diarrhoea secondary to Bile acid Malabsorption (BAM) and small intestinal bacterial overgrowth (SIBO).

In our centre we have access to 23-seleno-25-homo-taurocholic acid (SeHCAT) nuclear medicine scanning and glucose hydrogen breath testing for the investigation of BAM and SIBO associated with PRD. The majority of data on patients with pelvic radiation disease has been published by one specialist centre (The Royal Marsden Hospital). We audited the diagnostic yields for investigation of small intestinal manifestations of PRD.

Methods We identified 77 patients referred to gastroenterology clinic at University Hospital Llandough, Cardiff with suspected pelvic radiation disease via a departmental database. All patients were investigated via the Royal Marsden algorithm and BSG guidance. We then identified all patients with diarrhoeal symptoms and audited the results of any SeHCAT and glucose hydrogen breath tests and their diagnostic yields.

Results 26 patients (36%) had diarrhoeal symptoms. Within this group, 24 patients underwent SeHCAT scanning, with 45% having positive results. 19 were referred for glucose hydrogen breath tests of which 53% had positive results. 17% had both positive SeHCAT and Glucose hydrogen breath tests. Not all patients received both tests due to various reasons (clinical decision, patient choice and non attendance).

Conclusion PRD is common but under investigated. BSG guidance on its management exists^[1] and an algorithmic approach has been shown to be beneficial^[2] Diarrhoea occurs frequently in

PRD, and we have found that SeHCAT scanning and Glucose Hydrogen breath tests in these patients have a high diagnostic yield for BAM and SIBO respectively. SIBO and BAM can exist concurrently in this group, and our data supports a thorough and systematic algorithmic approach. Clinicians should have a low threshold for requesting these tests in patients with suspected PRD.

REFERENCES

- 1 Andreyev HJN, Davidson SE, Gillespie C, Allum WH, Swarbrick E. British Society of Gastroenterology, *et al.* Practice guidance on the management of acute and chronic gastrointestinal problems arising as a result of treatment for cancer. *Gut* 2012;179–92
- 2 Andreyev HJN, Benton BE, Lalji A, Norton PC, Kabir M, Gage PH, *et al.* Article-Algorithm-based management of patients with gastrointestinal symptoms in patients after pelvic radiation treatment (ORBIT): a randomised controlled trial. *Lancet*. Elsevier Ltd; 2013 Sep 20:1–9

Disclosure of Interest None Declared.

OC-027 FGF19 LEVELS IN SUBJECTS WITH PRIMARY BILE ACID DIARRHOEA AND ELEVATED TRIGLYCERIDES

¹J Nolan, ²S Pattni, ¹JR Walters, ¹IM Johnston*. ¹Imperial College London, London, UK; ²University of Leicester, Leicester, UK

10.1136/gutjnl-2014-307263.27

Introduction There is evidence that primary bile acid diarrhoea (PBAD) is caused by disordered bile acid homeostasis. Most patients with severe PBAD have low fasting serum FGF19 which fails to rise above 300 pg/ml postprandially. Different patterns of postprandial FGF19 response have been demonstrated, with some resembling those of healthy individuals. Others have shown that serum triglyceride levels reflect expression of the luminal bile acid transporter ASBT. It is hypothesised that a subset of individuals with hypertriglyceridaemia have different fasting FGF19 levels and postprandial FGF19 response.

Methods Study 1: 162 patients with chronic diarrhoea were recruited prospectively. All patients underwent routine testing to exclude other causes of diarrhoea and had SeHCAT tests. Patients were classified as having PBAD, or unexplained chronic diarrhoea (CD). Other diagnoses were excluded. Fasting blood samples were taken and processed for triglycerides and FGF19. Subjects with either diagnosis were also analysed within 2 subgroups according to triglyceride level (cut off 2.30 mmol/l). Study 2: 18 subjects took part in a study to examine FGF19 levels over the course of 6 h. After an overnight fast, blood was sampled every 90 min for 6 h. Meals were provided at 9 am and 12 noon. Serum FGF19 was quantified by ELISA using a commercially available kit. Triglycerides were quantified by standard colorimetric technique. Mann-Whitney and Spearman rank correlation tests were used in analyses.

Results Study 1: Overall subjects with elevated triglycerides (n = 18) have significantly lower SeHCAT retention (median 7.95 vs. 19.5% p = 0.01). Subjects with severe BAD with elevated triglycerides had higher fasting FGF19 levels (241 vs 101 pg/l p = 0.02). Study 2: There was no significant difference in fasting triglycerides between different phenotypes of FGF19 response (previously presented work). The percentage increase in FGF19 from fasting to 90 min after breakfast correlates with fasting serum triglyceride level (R = 0.59, p < 0.005).