

Results Eight of the 27 patients had one abnormal test, six had two and in five, all three tests were abnormal. In fifteen of the 27 patients with a normal GES (56%), eight had normal GEBT and GUS studies. Of the remaining seven patients, four had a normal GEBT and an abnormal GUS, two had normal GUS with an abnormal GEBT, and in one, both the GEBT and GUS were abnormal. GES was delayed in ten of the 27 patients (37%). In four of these, both GEBT and GUS were abnormal, three had delayed gastric emptying on GEBT with a normal GUS, two had delayed gastric emptying on GUS with normal GEBT, and in one patient, both GUS and GEBT were normal. GES was abnormally rapid in two patients (7%). In one patient, both GEBT and GUS indicated rapid gastric emptying and in the other, GUS revealed rapid gastric emptying with a normal GEBT. Assuming GES as the gold standard for diagnosing abnormal gastric emptying, GUS has a sensitivity and specificity for detecting a motor disorder of 66% and GEBT has a sensitivity of 66% and a specificity of 80%.

Conclusion In this group of FD patients, 70% had at least one abnormal test of gastric motor function. Whilst GES is regarded as the gold standard test, in seven patients with normal GES, the GEBT, GUS, or both, were abnormal. This discrepancy might reflect the day-to-day variability of gastric motor function testing or that each investigation measures a different component of gastric motor physiology. We conclude that in FD, adding GEBT and GUS to GES substantially increases the positive diagnostic yield and the heterogeneous patterns might indicate a variety of FD subtypes.

Disclosure of Interest None Declared.

PTU-147 VALIDATION OF UPDATED BARRETT'S OESOPHAGUS GUIDELINE RECOMMENDATIONS: COMPLICATIONS AND OUTCOMES OF AN 'ADEQUATE' CASE VOLUME AND THE FEASIBILITY OF SAME DAY DISCHARGE

E Taylor*, S Din, J Campbell, A Hopper. *Gastroenterology, Sheffield Teaching Hospitals, Sheffield, UK*

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Introduction Recent advances in the management of high grade dysplasia and early cancer in Barrett's oesophagus (BO) have led to updated guidelines recommending endoscopic resection (ER) as a first line option in selected cases. The complexity and complications of ER have prompted guidelines recommending at least 15 procedures annually per endoscopist to minimise complications. The reported complications of oesophageal perforation (<0.9%) and delayed bleeding (2–22%) may prompt routine overnight observation following resection. Our aim was to report complications and outcomes in a unit performing just above the recommended annual numbers of ER for BO.

Methods All patients undergoing ER for BO over 3 years were identified. All resections were performed with a mutiband ligation technique. Number of resections performed, size of resected specimens and stage of dysplasia/cancer in specimens were recorded. Complications of delayed bleeding, perforation, or dysphagia requiring dilation were also recorded.

Results In 3 years, 108 endoscopic resections were performed in 46 procedures (median resections per procedure=2; range 1–6). 3 patients underwent 2 separate procedures. Resected specimens ranged in size from 3–17 mm (mean 10mm, SD 2.77). Final histological diagnosis per procedure was: no dysplasia=6, low grade dysplasia=3, high grade dysplasia = 8, invasive cancer- T1a=9 T1b =13, T2=4. 2 ER specimens were not retrieved, 1 showed granular

cell carcinoma. Immediate complications included 1 perforation (2.3%. 95% CI:0–13%) with successful closure at endoscopy. 2 procedures were abandoned due to immediate bleeding (4.6% 95% CI 4.2 to 16.0%) which was successfully treated at the time. Delayed bleeding occurred in 2 patients, (4.6% 95% CI 4.2 to 16.0%) requiring emergency OGD at 8 h and 11 days post procedure. The second required endotherapy and readmission for 7 nights. 7 patients developed post-ER dysphagia (15.9% 95% CI 7.6 to 29.7) requiring oesophageal dilation (median procedures = 2, range 1–5). There was no significant difference in the number of resections in patients who had perforation (1 ER) or bleeding (median 1 range 1–3) $p = 0.56$. Patients who developed symptomatic strictures had a significantly higher number of resections (median 4 range 1–6) $p < 0.0001$.

Conclusion Complication rates of Barrett's ER procedures in a unit performing an adequate number are comparable to published outcomes from high volume centres. Delayed bleeding is rare, occurring up to 7 days post procedure and is not more common within the first 24 h. Therefore, if no immediate complications occur, same day discharge is appropriate.

Disclosure of Interest None Declared.

PTU-148 HEALTHCARE COSTS AND QUALITY OF LIFE ASSOCIATED WITH ACUTE UPPER GASTROINTESTINAL BLEEDING IN THE UK

¹E Stokes*, ¹H Campbell, ¹D Bargo, ²M Murphy, ³R Logan, ⁴V Jairath on behalf of TRIGGER Investigators. ¹Health Economics Research Centre, Nuffield Department of Population Health, University of Oxford, UK; ²Transfusion Medicine, NHS Blood and Transplant, Oxford, UK; ³University of Nottingham, Nottingham, UK; ⁴Translational Gastroenterology Unit, Nuffield Department of Medicine, Oxford, UK

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Introduction Acute upper gastrointestinal bleeding (AUGIB) accounts for over 70,000 hospital admissions in the UK annually. Its incidence is likely to rise due to an ageing population and increasing burden of liver disease. Data on the healthcare costs and health-related quality of life (HRQoL) associated with this condition are sparse.

Methods The TRIGGER trial is a cluster randomised feasibility trial evaluating restrictive versus liberal red cell transfusion for patients with AUGIB. The study collected data on resource use, costs and outcomes during hospitalisation and up to day 28 to explore the feasibility of gathering inputs required for a cost-effectiveness analysis. Resource use data were collected during the inpatient episode on the use of laboratory tests, medications, blood components, endoscopy and endoscopic therapy, clinical events including ischaemic/thromboembolic events and length of hospital stay (LOS) by ward type. Data were also collected on primary and secondary care resource use, as well as informal care/days off work, post-discharge to day 28. Resource use for each patient was multiplied by national unit costs to generate an estimate of the costs of AUGIB to 28 days. HRQoL was measured on a scale anchored at 0 (death) and 1 (full health), using the EuroQol EQ-5D-3L questionnaire at day 28.

Results 936 patients were enrolled into TRIGGER between August 2012 and March 2013 in 6 UK hospitals. Preliminary analyses show that the mean (standard error (SE)) cost of the inpatient episode was £1,914 (£78) per patient. LOS was a key cost driver; mean LOS was 5.4 days with an associated cost of £1431. Additional cost drivers included: (1) red cell transfusion, with a mean of 1.6 units transfused per patient at a cost of £197; (2) endoscopy, with mean of 0.8 endoscopies per patient

at a cost of £169. Mean (SE) costs from hospital discharge to 28 days were £293 (£22) per patient. The main cost driver post discharge was readmission to hospital; 12% of patients were readmitted within 28 days for a mean of 4.8 days. The mean cost associated with readmission across all patients was £127. HRQoL was on average (SE) 0.68 (0.01) at 28 days.

Conclusion The mean cost up to 28 days for patients presenting with AUGIB is £2,207. At 28 days, the mean HRQoL in patients who have experienced an AUGIB is well below the average population level of 0.86. This is the first study to provide detailed estimates of the costs and HRQoL associated with AUGIB in the UK. These data can be used by healthcare providers and researchers to inform the design of subsequent cost-effectiveness analyses of interventions for AUGIB.

Disclosure of Interest None Declared.

PTU-149 MALNUTRITION AND GASTROINTESTINAL (GI) SYMPTOMS IN PATIENTS WITH UPPER-GI CANCER

^{1,2}E Grace*, ³K Mohammed, ¹C Shaw, ²K Whelan, ³J Andreyev. ¹Department of Nutrition and Dietetics, The Royal Marsden NHS Foundation Trust, UK; ²Diabetes and Nutritional Sciences Division, King's College London, UK; ³GI Unit, The Royal Marsden NHS Foundation Trust, London, UK

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Introduction Persistent GI symptoms and malnutrition have been associated with poorer quality of life in upper-GI cancer patients. This study aims to assess GI symptoms and nutritional status in patients undergoing modern treatment.

Methods Patients with newly diagnosed upper-GI cancer were prospectively reviewed at the time of diagnosis and at 3- and 12-months following radical treatment. Nutritional assessment was performed using the patient-generated subjective global assessment (PG-SGA), which is considered the 'gold-standard' for nutritional assessment and has been validated in the oncology setting (score ≥ 4 intervention needed; score ≥ 9 critical intervention needed). The gastrointestinal symptom rating scale (GSRS) was used to evaluate the presence/absence and severity of 22 GI symptoms using a 4-point response scale. Total scores range from 0–66, where 0 = all symptoms absent and 66 = all symptoms severe.

Results 61 males and 19 females, median age 66 (range 46–89) years were recruited (61% oesophageal, 33% gastric, 6% gastro-oesophageal junction tumours). Of these, 68 were reviewed at 3-months and 25 at 12-months. Mean (SD) body weight and body mass index (BMI) were 76.7 kg (17.4) and 26.7 kg/m² (4.7) at baseline, 74.4 kg (14.8) and 25.9 kg/m² (4.4) at 3-months and 72.1 kg (16.3) and 24.7 kg/m² (4.4) at 12-months. There was a significant mean difference in weight (-2.0 kg, $p = 0.002$) and BMI (-0.56 kg/m², $p = 0.006$) at 3-months compared to baseline. These reduced further by 12-months. Mean (SD) PG-SGA score at baseline 9.0 (6.3), 3-months 7.8 (5.6), and 12-months 7.4 (5.0) indicated that intervention was required. At baseline, 3- and 12-months 61%, 52% and 68% of patients respectively were considered moderately or severely malnourished. Mean (SD) total GSRS scores were 14.2 (10.8), 12.0 (9.4) and 15.5 (11.5) at baseline, 3- and 12-months respectively. The symptoms with the greatest increase in prevalence (% more patients) from baseline to 3-months ($n = 68$) were nausea (+24%), loose stool (+16%), urgency (+6%), flatulence (+6%) and early satiety (+6%). Those with the greatest decrease in prevalence (% less patients) during this time were difficulty swallowing (-24%), painful swallowing (-24%), regurgitation (-21%), belching (-15%) and acid reflux (-12%). Of the $n = 25$ followed up at 12-

months, the most common symptoms reported were flatulence (76%), belching (72%), abdominal pain (68%), abdominal grumbling (56%) and early satiety (52%).

Conclusion After treatment commences there is progressive weight loss over time. Troublesome GI symptoms persist at 12-months and may be contributing to this weight loss. Optimising nutritional status and controlling GI symptoms is required throughout the treatment pathway.

Disclosure of Interest None Declared.

PTU-150 EO: ARE WE GETTING THE MESSAGE YET?

IA Murray*. Gastroenterology, Royal Cornwall Hospital, Truro, UK

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Introduction Eosinophilic oesophagitis (EO) is the underlying diagnosis in at least 10% of those with dysphagia. To make the diagnosis, oesophageal biopsies showing an eosinophil count >15 per hpf are required. It is most frequent in males under aged 50 years.

Methods All patients having a gastroscopy for dysphagia were identified retrospectively for 6 consecutive years from our endoscopy reporting system. Patient demographics, endoscopic findings and whether biopsies were taken were recorded together with histology results.

Results 3068 patients had a gastroscopy with an indication of dysphagia (1489 female, age 15–100 years, average 67.7 y). The number of patients varied little between years (486–550 patients/year). Common endoscopic diagnoses were normal (20.4%), benign stricture (12.6%), oesophagitis (18.1%), Barrett's (4.8%), dysmotility (3.7%) and hiatus hernia (10%). 1620 (52.8%) had oesophageal biopsies.

44 patients (1.5% of all patients) were diagnosed with EO, 32 of who were males. This equates to 2.8% of those who were biopsied and 4.7% of those biopsied without cancer, stricture or Barrett's. Although only 13.3% of those with dysphagia were aged 50 years or under, they equated to 45.4% of those diagnosed with EO. Of those with EO, 6 had food bolus, 6 "typical" EO changes e.g., feline oesophagus, ridges etc, 4 an irritable oesophagus and 3 Schatzki rings.

Conclusion EO is a relatively common cause of dysphagia but is almost certainly under-recognised due to lack of oesophageal biopsies at endoscopy. Reliance on endoscopic changes of EO at endoscopy will miss the majority of cases. Although biopsying only those under 50 years would be more cost effective than biopsying all, it would also miss the majority of cases. It may be appropriate for the BSG to use frequency of oesophageal biopsies in dysphagic patients as a quality assurance measure for upper GI endoscopy.

Disclosure of Interest None Declared.

PTU-151 PREDICTORS FOR COELIAC DISEASE IN CASES OF LYMPHOCYTIC DUODENOSIS

¹I Aziz*, ²T Key, ²JG Goodwin, ¹DS Sanders. ¹Department of Gastroenterology, Royal Hallamshire Hospital, Sheffield Teaching Hospitals, Sheffield, UK; ²Department of Histocompatibility and Immunogenetics, Royal Hallamshire Hospital, Sheffield Teaching Hospitals, Sheffield, UK

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Introduction Lymphocytic duodenitis (LD) is an early marker for coeliac disease (CD). However, the majority of cases are due to non-CD related conditions.