Demographic data, histology, procedure success, long-term outcome and complications were assessed.

**Results** A total of 161 lesions were treated by UGI ER between 2005 and 2011. 14 of 161 were submucosal lesions. Nine of the 14 patients were female and the mean age was 54.3 years (range 34-69 years). Five lesions were located in the oesophagus, seven in the stomach and two in the duodenum. Histology revealed granular cell tumour (3), neuroendocrine tumour (5), inflammatory fibroid polyp (2), lipoma (2), gastrointestinal stromal tumour (1), Leiomyoma (1). All cases were successfully treated in a single ER session of which 6 cases were treated by conventional EMR, 9 by ESD techniques. The single complication was a microperforation during ESD of an oesophageal GIST which was endoscopically clipped. The patient was managed conservatively with intravenous antibiotics and was discharged after 3 days. There were no cases of significant bleeding and no patient required surgery. After a mean follow-up of 19.5 months all patients remain well and have no signs of recurrence.

Conclusion The caseload of UGI ER for submucosal lesions in low with an average of two cases per year in a large UK specialist centre. The majority of cases required ESD skills and therefore these cases should be treated in specialist centres with expertise in this technique. Outcomes and complication rates were acceptable in this small series and major surgery was avoided in these patients reducing costs and bed occupancy.

#### Abstract PWE-178 Table 1

Occaphogue	Granular cell tumour	3
Oesophagus	didilulai celi tullioti	3
	GIST	1
	Leiomyoma	1
Gastric	Neuroendocrine tumour	4
	Lipoma	1
	Inflammatory fibroid polyp	2
Duodenum	Neuroendocrine tumour	1
	Lipoma	1

Competing interests None declared.

## PWE-179 | GASTRIC POLYPS: ARE WE FOLLOWING GUIDELINES?

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Introduction Gastric polyps are usually benign and >90% are found incidentally at endoscopy, most common type being fundic gland polyps (FGP). Current guideline advocates biopsy for all types of gastric polyps. Literature review failed to demonstrate a strong link between proton pump inhibitors (PPIs) and FGPs. BSG guidelines also suggest testing and eradicating Helicobacter pylori in patients with hyperplastic polyps. Our study is to analyse gastric polyp subtypes and management.

Methods Retrospective case note analysis of patients with gastric polyps between January 2009 and December 2010 at James Paget University Hospital. Data collected: Age, gender, endoscopic appearance, histology, association with PPI, management and follow-up.

Results Total number of patients was 79. Mean age was 67.1 (38-89 yrs). 60.8% were women (n=48). Reflux symptom was the most common indication for OGD (36.7%;n=29). 22.8% (n=18) had single polyp, 58.2% (n=46) had multiple polyps (>3). Majority had sessile appearance at OGD 62.0% (n=49). Most polyps were found in the gastric body 45.5% (n=36), followed by fundus 20.3% (n=16). 54.4% (n=43) polyps were estimated <5 mm, compared to 6.3%

(n=5) over 10 mm. Biopsy was performed in 94.9% (n=75) gastric polyps. 2.5% (n=2) polyps were not biopsied due to typical appearance of FGP. Fundic gland polyp (FGP) was the most common histopathological diagnosis (73.4%; n=58), followed by hyperplastic polyp (11.4%; n=9). Neither adenoma nor neoplasic lesions were detected. Information on PPIs use was obtained in only 60.8% patients (n=48): 33.3% (n=16) were not on PPIs; 35.4% (n=17)were on PPIs for an uncertain length of time; 8.3% (n=4) were on PPI's for <6 months; and 22.9% (n=11) were more than 6 months. The prevalences of FGPs in the above groups were 75%, 76.5%, 75% and 90.0% respectively. 3.8% polyps (n=3) were removed, all of which were greater than 10 mm. H pylori test was performed in 34.2% (n=27) of the patients. All nine patients (100%) with hyperplastic polyps underwent the test. 87.3% (n=69) patients had no follow-up. Only 2.5% (n=2) had repeat OGD.

**Conclusion** The local practice in management and follow-up seems to be concordant with the current guidelines. In this study, all gastric polyps were benign, with FGPs as the most frequent diagnosis (73.8%). It raises the question whether a routine biopsy is necessary for polyps with typical FGP appearance. There is no definitive link between PPIs and FGPs (75% FGPs in non-PPI users compared with 80.5% in PPI users). However, the percentage of FGPs presented in long-term PPI users is slightly higher (90%).

Competing interests None declared.

#### REFERENCE

Goddard AF, Badreldin R, Pritchard DM, et al. The management of gastric polyps. Gut 2010:59:1270-6

### PWE-180 | CLINICAL AND LABORATORY CHARACTERISTICS AND THE USE OF BIODEGRADABLE STENTS IN EOSINOPHILIC **OESOPHAGITIS: A SINGLE CENTRE UK EXPERIENCE**

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Introduction Eosinophilic Oesophagitis (EoE) is an under recognised condition. There are clues in the history, biochemistry, immunology and gastroscopy to make the diagnosis. Strictures associated with this condition need careful endoscopic management.

Methods Retrospective review of histology proven eosinophilic oesophagitis cases between April 2009 and June 2011.

**Results** Total no of patients 16, Male: female=7:1. Age range: 18-89 years (IQR 24.25 (24.75-49). Mean age 41.5 years. All of them complained of intermittent dysphagia and 50% of them had a history of food bolus impaction on presentation. Only 25% had symptoms less than a year. 18.75% (3/16) had symptoms for more than 10 years.10/16 (62.5%) had a history of atopy. 2/16 (12.5%) had food intolerance/oral allergy especially for fruits. 6/16 had oesophageal manometry; 5/6 of them had normal manometry findings and one showed dysmotility. 50% had barium swallow; two of them showed mild dysmotility. 7/16 had high peripheral eosinophil count (0.04-0.4). Mean 0.58. Only 56% (9/16) of patients had IgE levels checked, 8/9 had high IgE levels. All of them were treated with proton pump inhibitors, while 75% needed fluticasone inhaler. 25% needed montelukast maintenance therapy to achieve clinical benefit. 25% showed normal gastroscopy, remainder showed characteristic findings such as concencentric rings, furrows with ulceration. 25% had symptomatic oesophageal strictures; two of them had balloon dilatation previously. The other 2 (50%) were successfully treated with biodegradable stent. One patient had sustained response with single stent even after 18 months, the other had two sequential stents (8 months apart) to improve the symptom of dysphagia.

Gut July 2012 Vol 61 Suppl 2 A369 **Conclusion** To diagnose the condition history is crucial, while laboratory and gastroscopy add more strength. Fluticasone inhaler, exclusion diets and montelukast help in the majority of patients. Strictures associated with EoE can be successfully treated with biodegradable stent.

Competing interests None declared.

### PWE-181 | PANCREATIC EXOCRINE FUNCTION AFTER MAJOR **UPPER GASTROINTESTINAL SURGERY MEASURED WITH** A CARBON 13 MIXED TRIGLYCERIDE BREATH TEST

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Introduction Major upper gastrointestinal resectional surgery, including oesophagectomy, gastrectomy and pancreatico-duodenectomy, can result in post-operative nutritional difficulties, which may in part be associated with reduced pancreatic exocrine function, but there is debate in the literature about the actual proportion of these patients that have pancreatic exocrine insufficiency which may then benefit from oral supplementation. The Carbon 13 labelled mixed triglyceride breath test (C13-MTG-BT) was used to indirectly measure pancreatic exocrine function in post-operative patients and these results were compared to the test performed in control subjects.

Methods 30 normal subjects, 15 post-oesophagectomy patients, 15 post-gastrectomy patients and 10 post-pancreatico-duodenectomy patients were recruited to undertake the C13-MTG-BT at Box Hill Hospital, Melbourne, Australia, between August 2009 and January 2011. The C13-MTG-BT was performed using 200 mg of C13-MTG substrate and measured using an infra-red isotope spectrometer. The cumulative percentage of ingested C13 exhaled after 6 h and the time at peak rate of C13 excretion were measured in all subjects and compared between groups, with statistical significance calculated using the Student t test.

Results The mean cumulative percentage of ingested C13 exhaled after 6 h in the control group was 28.6% with a SD of 8.8%. The cumulative percentage exhaled after 6 h in each post-operative group compared with the control group was not significantly different. The time of peak rate of C13 excretion was earlier in the post-operative groups compared with the control group.

Conclusion This study has not found a large percentage of patients post major upper gastrointestinal resections with measurable reduction in pancreatic exocrine function using the C13-MTG-BT, which is in contrast to the literature. The finding of earlier times of peak rate of excretion imply the post-operative patients tend to have more rapid gut transit. Larger and prospective studies using this test or another pancreatic function test may be useful to detect the proportion of post-operative patients with pancreatic exocrine insufficiency that may then benefit from pancreatic exocrine supplementation.

Competing interests None declared.

# PWE-182

#### **EFFICACY OF ARGON PLASMA COAGULATION THERAPY** FOR GASTRIC ANTRAL VASCULAR ECTASIA

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Introduction Argon plasma coagulation (APC) is an established endoscopic therapy for various gastrointestinal disorders but with varied success in the management of Gastric Antral Vascular Ectasia (GAVE). The aim of this study was to assess the efficacy of APC in the management of patients with GAVE.

Methods Retrospective audit of upper GI endoscopies (UGIE) performed at our institution between 1 January 2007 and 31 December 2011. Data were extracted from the endoscopy reporting software (Unisoft) database using search term "argon plasma coagulation." The case notes were reviewed for those patients undergoing APC for a diagnosis of GAVE.

Results 306 episodes of APC were noted on 127 patients. Of these 135 APC sessions were performed on 30 patients for management of GAVE. Of the 30 patients 17 (57%) were women. The median age was 68 (range 44-89) years. Co-morbidities included chronic kidney disease in 9 (30%), chronic liver disease in 7 (23%), malignancy in 4 (13%), scleroderma in 3 (10%). Seven (23%) patients were on Aspirin, 1 (3%) on Clopidogrel, 1 (3%) on Clopidogrel and Aspirin and 2 (7%) on Warfarin. The indication for index UGIE was anaemia in 23 (77%) cases, iron deficiency without anaemia in 2 (7%) and acute upper gastrointestinal bleeding in 5 (17%). APC therapy was applied at 50-65 watts. A cluster of multiple sessions of APC was treated as "one cycle" of therapy. APC was applied with success in single cycle lasting over a median period of 2 (range 0-30) months with median of 3 (range 1-24) APC sessions. Six (20%) patients required a single session of APC. The median follow-up period was 26.5 (range 1–59) months. We noted mean haemoglobin (Hb) rise of 22% and Hb normalised in 57% cases. In 3 (10%) patients symptomatic anaemia recurred and two of them required one further cycle and one required two cycles of APC therapy. There was no significant difference in the index Hb and number of APC sessions required between men and women. However, 13 out of 17 (75%) women normalised their Hb at the end of therapy while only four out of 13 (31%) of men could achieve normal Hb at the end of

Conclusion Argon plasma coagualtion appears to be an effective therapy for patients with Gastric Antral Vascular Ectasia.

Competing interests None declared.

#### PWE-183 INVESTIGATIONS FOR COELIAC DISEASE IN IRON **DEFICIENCY ANAEMIA—ARE WE FOLLOWING BSG GUIDELINES?**

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Introduction BSG guidelines for the investigation of iron deficiency anaemia (2011)<sup>1</sup> recommend screening of these patients for coeliac disease (CD) by serology. Small bowel biopsy is recommended at OGD if coeliac serology is positive or not available. If coeliac serology is negative, small bowel biopsies need not be performed at OGD unless there is a high degree of suspicion for CD despite negative serology.

**Methods** We retrospectively evaluated the use of coeliac serology testing (tissue transglutaminase antibody, tTG) and upper gastrointestinal endoscopy (OGD) with duodenal biopsies in the evaluation of anaemia, according to BSG guidelines in our NW London teaching hospital cohort. All upper GI endoscopies performed for anaemia over a 6-month period were reviewed for rates of duodenal biopsy and results, and serological testing.

Results In 6 months, 206 OGDs were performed for anaemia. Duodenal biopsies were taken in 134/206 (65%). Of 72 (35%) procedures at which no duodenal biopsy was taken, another cause for anaemia found on OGD in 27, six had melaena or acutely falling haemoglobin as an indication for OGD, six had previous duodenal

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