hyposplenism and the high prevalence of hyposplenism in CD, it is worth considering pneumococcal vaccination for all CD patients at

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## OC-022 ENDOSCOPY PITFALLS IN CELIAC DISEASE DIAGNOSIS; A MULTICENTRE STUDY

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Introduction The traditional diagnosis of celiac disease (CD) requires a small bowel biopsy to identify at histology the characteristic mucosal changes. The current biopsy practise among endoscopists for celiac disease is in most part unknown. The aims of this study were to compare the different diagnostic criteria in various centres in Italy, Iran, Lithuania, Romania and the UK, the methodological approach to the biopsy and to investigate the pitfalls of CD diagnosis.

To measure the number of specimens submitted during duodenal biopsy among patients in Italy, Iran, Lithuania, Romania and the UK, and to determine the incremental diagnostic yield of adherence to the recommended number of specimens.

Methods A total of 931 patients who underwent duodenal biopsy for CD were recruited prospectively at nine centres in European and Middle East countries. Small-bowel biopsies were obtained from the duodenal bulb and the second part of the duodenum (and from the duodenal bulb when it had a micronodular appearance). The histopathological appearances were described according to the modified Marsh classification.

Results The most frequent degree of villous atrophy amongst Iranian subjects was 3A and that of the rest of the study population was 3C. The most common number of biopsy specimens for Romanian subjects was 1 (52%) followed by 2 for Iranian (56%), 3 for Lithuanian (66.7%) and British patients (65%) and 4 for Italian patients (48.3%). The main presenting symptom was anaemia (18.7%) followed by malabsorption (10.5%), diarrhoea (9.3%) and dyspepsia (8.2%).

**Conclusion** Taking less biopsy samples than recommended will have a negative impact in detecting massive number of undiagnosed cases. As CD is more common with atypical presentation, taking 4 duodenal biopsies is mandatory for an accurate diagnosis or its exclusion.

Disclosure of Interest None Declared

# OC-023 | SPECIALIST CARE OF IN-PATIENTS WITH NON-VARICEAL **UPPER GASTROINTESTINAL BLEEDING IS ASSOCIATED** WITH A DRAMATICALLY SHORTER LENGTH OF STAY

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Introduction Acute upper gastrointestinal bleeding (UGIB) is a common medical emergency that has a 10% mortality rate [1], requiring specialist input and management [2]. It is not known if the care, outcome and length of stay of UGIB is influenced by whether patients are primarily cared for by Gastroenterologists or General physicians. We conducted a retrospective study to assess these aspects of care for in-patients with UGIB.

Methods A retrospective review of case-notes (Electronic patient record-EPR) was conducted for all patients admitted to Kings College hospital with suspected UGIB between February and September 2012. Patients were divided as to whether they came immediately under the care of Gastroenterologists (GI) or general physicians (non-GI) after initial evaluation in the Acute Admission Unit. Patients were assigned on the basis of bed availability in a ward-based system. Statistical comparisons were made as appropriate with t-test or Fisher's exact test.

**Results** 109 patient episodes were reviewed. 14 had no evidence of UGIB and were excluded from further analysis. 59 (76.6%) of patients had an initial risk assessment (including documented score) completed on admission. After excluding patients with major nonmedical ('social') issues, 53 (69%) GI and 24 non-GI patients were compared. The two groups were broadly similar in their baseline characteristics. Mean length of stay (days) was significantly shorter in the GI group:  $5.5 \pm 5.7$  vs  $15.7 \pm 20.8$  (p = 0.02). Other comparators are shown in the table.

#### **Abstract OC-023 Table**

	GI (n = 53)	Non-GI (n = 24)	р
Age (years)	$56.4 \pm 22.87$	53.9 ± 21.9	0.64
Male:Female	43:10 (4.3:1)	17:7 (2.4:1)	0.37
Time to endoscopy (days)	$1.23\pm1.57$	$\textbf{1.79} \pm \textbf{2.93}$	0.38
Laparotomy	0	2 (8.3%)*	0.09
Mortality ascribed to UGIB	3 (5.7%)	2 (8.3%)*	0.64

\*different patients

**Conclusion** The length of stay of patients with UGIB is dramatically shorter when receiving specialist care. This was statistically significant even after adjusting for social issues. Further data regarding the specific management of each case will be forthcoming. In line with previous reports [3], we found that the incidence of UGIB was higher in males. There was a trend toward better risk assessment, shorter time to endoscopy, reduced need for surgery and mortality in the GI group. Mortality rates in both groups compared favourably to the national average.

Disclosure of Interest None Declared

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# OC-024 PROLONGED PLATELET ACTIVATION IN PATIENTS WITH **ACUTE UPPER GASTROINTESTINAL BLEEDING**

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Introduction Acute upper gastrointestinal bleeding (AUGIB) is a common reason for hospital admission and is associated with significant cardiovascular (CVS) morbidity and mortality. Patients who have aspirin withheld for 8 weeks following AUGIB have significantly higher rates of CVS events. 1 We previously demonstrated that patients with AUGIB have significantly higher levels of platelet activation during the index hospital admission.2 This study aimed to assess the level of platelet activation and reactivity 12 weeks following admission for AUGIB.

**Methods** Patients admitted to SWBH NHS Trust with AUGIB were recruited. Dyspeptic patients attending for diagnostic OGD were used as controls. To assess platelet activation citrated whole blood was incubated at room temperature with monoclonal mouse antibodies against constitutively expressed platelet marker CD42a-PerCP, and markers of platelet activation PAC1-FITC, and CD62P-APC. Incubation was terminated after 15 minutes. Samples were analysed using a FACSCalibur flow cytometer. Platelets were identified on the basis of their forward and side scatter properties and the presence of the CD42a platelet-specific marker. CD62P and PAC1 expression were measured by the percentage of platelets expressing these markers.

Data are expressed as mean±SD for normally distributed parameters and median (interquartile range) for non-normally distributed parameters. Statistical analysis was performed using SPSS 18.0 software.

**Results** A total of 24 patients with AUGIB and 18 controls were recruited. Patients were age and gender matched. The mean age of the AUGIB group is  $66.4 \pm 18.2$  years, and the control group  $62.8 \pm 6.1$ years. Significant differences were seen in all markers of platelet activation (table 1).

Abstract OC-024 Table 1 Platelet activation at 12 weeks

	AUGIB	Controls	P-value
	AUGID	Controls	i -value
CD62P %	16.77 (15.26–18.28)	$12.95 \pm 2.77$	< 0.001
PAC1%	$7.04 \pm 3.67$	$3.98\pm1.78$	0.001
$CD62P\!+\!PAC1\!+\%$	1.33 (0.70–1.97)	0.73 (0.60-0.87)	0.003

**Conclusion** Patients presenting with AUGIB have prolonged levels of platelet activation for at least 12 weeks following the index event. This phenomenon may be further prolonged and further studies are required. This may explain the excess of CVS events in AUGIB patients. In patients with high cardiovascular risk early re-introduction of aspirin should be considered.

Disclosure of Interest None Declared

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EXPANDED CARDIA MUCOSA ASSOCIATED WITH CENTRAL OBESITY IMMUNOHISTOCHEMICALLY RESEMBLES NON-IM BARRETT'S MUCOSA

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**Introduction** Recently we showed that the length of cardiac mucosa in asymptomatic volunteers correlated with age and obesity defined by waist circumference (WC) and intra-abdominal fat on MRI (ref). To further investigate the aetiology of expanded cardia, we have performed detailed histological and immunohistological studies comparing cardia with other upper GI epithelia including long segment Barrett's with or without intestinal metaplasia.

**Methods** Double oriented biopsies from SCJ of the 52 H.pylori negative healthy volunteers in the original obesity study were examined. To assess inflammation, the densities of polymorphonuclear (PMN), mononuclear (MN) cell infiltrations and reactive atypia were scored at squamous, cardia and oxyntocardiac mucosae of SCJ, separately. Slides were also stained for CDX-2, Villin, TFF-3 and LI-Cadherin. The immunoreactivity in each of the three types of mucosa were compared to additional biopsies from the antrum and gastric body in same subjects and biopsies from ten patients with long-segment Barrett's demonstrating foci with and without intestinal metaplasia (IM).

Results The median scores of PMN and MN cell infiltrations were maximum in the cardia mucosa compared to either proximal or distal adjacent tissues (all p values < 0.001). The score of reactive atypia was maximum at the most distal squamous mucosa. Immunohistochemistry showed that the cardia mucosa had similarities to the antrum and Barrett's with IM; however, it was identical in all immunohistochemical aspects to non-IM Barrett's mucosa (Table). Table The extent (%) of immunostaining with different antibodies in squamocolumnar junction, gastric body, antrum and Barrett's Conclusion Cardia mucosa which is extended proximally in H. pylori negative healthy volunteers with central obesity, is immunohistochemically identical to non-IM Barrett's mucosa. This is consistent with the expansion of cardia mucosa having similar aetiology to Barrett's mucosa and being due to metaplasia of the most distal oesophageal mucosa resulting from short segments reflux.

Disclosure of Interest None Declared

## REFERENCE

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# Oesophageal free papers

OC-026

EOSINOPHILIC OESOPHAGITIS IN PATIENTS PRESENTING WITH DYSPHAGIA- A PROSPECTIVE ANALYSIS

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**Introduction** Eosinophilic oesophagitis (EO) is a chronic relapsing, immune/antigen mediated disease of the oesophagus with rapidly increasing incidence and prevalence; however EO often remains under-diagnosed. Early detection and appropriate therapy improves quality of life and may prevent development of chronic

#### **Abstract 0C-025 Table**

		Squamocolumnar Junction						
Antibody		Squamous	Cardiac	Oxytocardiac	Body	Antrum	Barrett's(nonIM)	Barrett's(IM)
CDX.2	Median	0	1.0	0	0	1.0	5.0	90.0
	IQR	0.0	0.10	0.0	0.0	0.1	0.10	78,90
Villin	Median	0	30.0	5.0	1.0	90.0	35	90.0
	IQR	0.0	20,70	0.10	0.1	81,90	20,48	90,95
TFF.3	Median	1.0	80.0	30.0	10.0	70.0	70.0	90
	IQR	0.5	70,90	10,30	0.13	30,70	60,80	90,90
LI.Cadherin	Median	5.0	15.0	10.0	5.0	17.5	10.0	90.0
	IQR	1,5	5,25	5,15	0.9	11,24	5,30	89,91

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