Abstract OFR-5 Table 1

	N=318
Mean age (years)	66
Sex (female)	166 (52%)
Intestinal metaplasia	60 (19%)
- None	53 (17%)
- Proximal	101 (32%)
- Distal	68 (21%)
- Both locations	36 (11%)
- Present, location unknown	
Only gastric atrophy	60 (19%)
H.pylori present	48 (15%)
Family history of gastric cancer	14 (4%)
- Yes	156 (49%)
- No	148 (47%)
- Unknown	

in countries with a low incidence of gastric cancer. The rate of endoscopic recognition of pre-cancerous lesions, is low. The results of this study suggest that substantial improvement is required in adherence to guidelines for surveillance and endoscopic training in detection of pre-malignant conditions.

Pancreas and neuroendocrine

OTU-17 EXPRESSION, CLINICAL AND PROGNOSTIC VALUE OF DUAL SPECIFIC PROTEIN PHOSPHATASE-7 (DUSP-7) IN PANCREATIC CANCER

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Introduction Dual Specific Protein Phosphatases (DUSPs) are a family of proteins that dephosphorylate both tyrosine and serine/threonine residues in biological systems and play multiple and diverse role in cells. The clinical impact of the protein phosphatase family has not been well explored in solid tumours. The present study investigated the role of DUSP-7 (also known as PYST2), a protein phosphatase that dephosphorylates mitogen activated protein kinase (MAPK), c-Jun N-terminal kinase (JNK) and p38 which are important regulators of solid tumours and cancer cells, in pancreatic cancer.

Methods Pancreatic cancer tissues from patients who underwent resections were obtained immediately after surgery, stored and subsequently processed for quantitative analyses of DUSP-7 gene transcript. The expression levels were correlated with the survival and pathological parameters of the patients. Human pancreatic cancer cell line, PANC1 was used in creation of a DUSP-7 knockdown (by way of siRNA) cell model and was assessed for the impact of DUSP-7 on the biological functions by various cell based assays.

Results Pancreatic tumour tissues displayed significantly lower levels of DUSP-7 transcript than normal tissues ($p=0.0031$). Kaplan-Meier Survival analysis showed that patients with high levels of DUSP-7 had a significantly longer survival than those with low levels ($p=0.021$ (Mansel-Cox log rank test), mean survival 30.2 months for high levels *vs* 17.0 months for low

levels). This survival benefit was particularly seen in tumours with low levels of Her-2 expression. It is noted that while high grade tumour had low levels of DUSP-7, the same trend was found with TNM tumours of which high TNM tumours had lower DUSP-7. Tumours with metastatic lymph nodes had marginally higher levels of DUSP-7 than node negative tumours. The presence of microvascular embolism ($p=0.015$) and levels of DUSP-7 ($p=0.044$) were two prognostic indicators of the patients. Knocking down DUSP-7 from PANC1 cancer cells rendered the cell to be less mobile and less adhesive as assessed by way of electric cell-substrate impedance sensing (ECIS).

Conclusions Dual Specific Protein Phosphatase, DUSP7/PYST2 is aberrantly expressed in pancreatic cancer and is a positive survival indicator of the patients.

OTU-18 SILENCE OF THE LAMS: REDUCING RISK IN EUS GUIDED DRAINAGE OF PANCREATIC FLUID COLLECTIONS

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Introduction and Aims Endoscopic ultrasound guided transmural drainage (ETD) followed by endoscopic transluminal necrosectomy (ETN) is the evidence based preferred modality of treatment for symptomatic pancreatic fluid collections (PFC). EUS guided insertion of a lumen apposing metal stent (LAMS) facilitates improved drainage of fluid and improves efficacy of ETN. There is recognised risk associated with the procedure, primarily including bleeding, stent displacement and buried stent. Recent ESGE guidelines on the management of acute necrotising pancreatitis describe the use of imaging prior to drainage and at a 4 week interval, primarily to quantify the solid component in the collection. No definitive imaging protocols are established. In our institution, a protocol was developed to reduce the risk of adverse events associated with drainage. This included pre-intervention arterial phase CT and if identified, prophylactic embolisation of underlying pseudoaneurysm. In addition, all patients underwent CT at 4-5 weeks post stent insertion to determine efficacy of drainage and quantify residual component to determine benefit of long term plastic stents. We sought to assess the impact of the protocol on reducing LAMS associated adverse events.

Methods We evaluated our practice over a two year period between November 2018 and 2020. Prospectively collected data was reviewed retrospectively for the rates of technical success, clinical success and adverse event.

Results A total of 56 ETD procedures were performed on 52 patients. The majority of patients in the cohort were male (70.6%) with a mean age of 58 years. All patients underwent an arterial phase CT prior to ETD. Nine patients (17.3%) required embolisation of a previously unrecognised pseudoaneurysm prior to ETD. All procedures were technically successful (100%). Thirty five (67.3%) patients underwent a single ETN and 10 (19.2%) had multiple ETN procedures. Twenty two (62.8%) patients had a 20mm lumen diameter stent inserted and the remainder 15mm. Forty eight patients (92%) achieved complete resolution of collection with a single stent. Four patients (8%) required either an additional stent (multi-gated approach) or additional percutaneous drain. Stent dislodgement occurred in 4 (7.6%) patients during ETN. The

median duration of LAMS placement was 44 days. No procedural or delayed LAMS related complications occurred.

Conclusion Appropriate pre-procedural cross-sectional imaging facilitates identification and treatment of underlying pseudoaneurysm in this complex patient group. Post procedure interval imaging enables quantification of the residual collection to determine the benefit of long term plastic stents or additional drainage procedure. Our experience suggests adherence to a rigorous imaging protocol may reduce the risk of complication associated with LAMS deployment.

Small bowel

OTH-5 FUNCTIONAL GASTROINTESTINAL DISORDERS AND ASSOCIATED HEALTH IMPAIRMENT IN INDIVIDUALS WITH COELIAC DISEASE

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Introduction Individuals with coeliac disease (CD) can experience persisting gastrointestinal symptoms despite adhering to a gluten-free diet (GFD). This may be due to functional gastrointestinal disorders (FGIDs), although there is little data on its prevalence and associated factors.

Methods An online health questionnaire was completed by adult members of Coeliac UK in October 2018. The survey included validated questions on Rome IV FGIDs, non-gastrointestinal somatic symptoms, anxiety, depression, quality of life, healthcare use, GFD duration and its adherence using the coeliac dietary adherence test score (with a value ≤ 13 indicating optimal adherence). The prevalence of FGIDs and associated health impairment in the coeliac cohort was compared against an age- and sex- matched population-based control group.

Results Of the 863 individuals with CD (73% female, mean age 61 years) all were taking a GFD for at least 1 year, with 96% declaring that they have been on the diet for over 2 years. The adherence to a GFD was deemed optimal in 61% (n=523) with the remaining 39% (n=340) non-adherent. Those adhering to a GFD fulfilled criteria for a FGID in approximately a half of cases, although this was significantly lower than non-adherent subjects (51% vs. 75%, OR 2.0; $p<0.001$). However, the prevalence of FGIDs in GFD-adherent subjects was significantly higher than in matched population-based controls (35%, OR 2.0; $p<0.001$). This was accounted for by functional bowel (46% vs. 31%, OR 1.9; $P<0.0001$) and anorectal disorders (14.5% vs. 9.3%, OR 1.7; $p=0.02$) but not functional esophageal (7.6% vs. 6.1%, $p=0.36$) or gastroduodenal disorders (8.7% vs. 7.4%, $p=0.47$). Finally, GFD-adherent subjects with FGIDs were significantly more likely, than their counterparts without FGIDs, to have abnormal levels of anxiety (5% vs. 2%, OR 2.8; $p=0.04$), depression (7% vs. 2%, OR 3.6; $p=0.01$), somatisation (31% vs. 8%, OR 5.1;

$p<0.0001$), increased healthcare use and reduced quality of life ($P<0.0001$).

Conclusion One-in-two people with CD, despite having been on a GFD for a number of years and demonstrating optimal adherence, have ongoing symptoms compatible with a Rome IV FGID. This is two-fold the odds of FGIDs seen in age- and sex- matched controls. The presence of FGIDs is associated with significant health impairment, including psychological co-morbidity. Addressing disorders of gut-brain interaction might improve outcomes in this specific group of patients.

OTH-6 REFRACTORY COELIAC DISEASE: PITFALLS OF T-CELL RECEPTOR CLONALITY AND INTRA-EPITHELIAL LYMPHOCYTE IMMUNOPHENOTYPING

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Introduction Persistent villous atrophy (VA) occurs in up to 66% (Lebwohl et al 2013) following a diagnosis of coeliac disease (CD) despite a gluten free diet. Refractory coeliac disease (RCD) affects 0.3-4% of all patients with CD (Baggus et al 2019) and manifests persistent or recurrent classic malabsorptive symptoms of weight loss and diarrhoea. RCD is sub-classified by intra-epithelial lymphocyte (IEL) immunophenotyping and T-cell receptor (TCR) clonality into RCD1 and RCD2. RCD2 carries a high rate of progression to enteropathy-associated T-cell lymphoma (EATL) and roughly 50% 5-year mortality (Baggus et al 2019). However, the prognostic value of IEL immunophenotype and TCR clonality in patients not meeting strict clinical criteria for RCD is unclear.

Methods 17 consecutive patients referred for RCD assessment at King's College Hospital (KCH) were seen between September 2016 and November 2020. Retrospective data from 1998 to November 2020 were collected from patient records at KCH and referring hospitals, including demographics, blood tests, biopsies, IEL immunophenotyping and TCR clonality, diagnosis and clinical course.

Results Of 17 patients followed up for 104 patient years, 16 had persistent VA of which only 7 (44%) had malabsorptive

Abstract OTH-6 Table 1 Prevalence of abnormal IEL immunophenotype and TCR monoclonality at any point in follow-up period by diagnosis of all specimens in which TCR monoclonality was detected (n=38), 32% (n=12) had normal IEL counts. When tested, 92% (n=11) of specimens with normal IEL counts demonstrated TCR monoclonality

Abnormal IEL immunophenotype prevalence

Total	7 (42%)
NR	5 (56%)
RCD	1 (17%)
EATL	1 (100%)
Non-CD immune enteropathy	0
TCR monoclonality prevalence	
Total	12 (71%)
NR	7 (78%)
RCD	3 (50%)
EATL	1 (100%)
Non-CD immune enteropathy	1 (100%)