Results 1496 patients were studied: median age 62 (IQR 51-73), 58% female. Median EDS score was 4 (IQR 2.5-6); with 67% having an EDS ≥ 3.5 . 64% were triaged to 2WW endoscopy; 18% to urgent (but not 2WW) endoscopy; 2.8% to urgent CT scan; 5.5% to routine OGD; and 4.4% to barium swallow. After excluding patients who declined investigation, results were available for 96%.

91 UGI cancers were diagnosed (prevalence 7.1%); with 3 (3%) UGI cancers diagnosed in patients with EDS <3.5 (one with EDS 3, two with EDS 1.5). EDS ≥ 3.5 had sensitivity of 96.7% and negative predictive value of 99% for UGI cancer. The factors associated with UGI cancer and hence selected to develop CDS included: age odds ratio 1.05 (95% CI 1.03-1.06); male 3.95 (2.36-6.58); progressive dysphagia 2.30 (1.39-3.79); unintentional weight loss 3.28 (2.02-5.31); acid reflux symptoms 0.47 (0.25-0.88) and dysphagia localised to the neck (0.26 (0.12-0.57)). Dysphagia duration less than 6 months was not statistically significant (1.02 (0.45-2.22)). AUROC was 0.83 for CDS as compared to 0.81 for EDS.

Cancer dysphagia score and its receiver operating curve in comparison to Edinburgh dysphagia score is presented in figure 1.

Conclusion A national prospective cohort confirms that EDS has high sensitivity and negative predictive value for UGI cancer, however, a modified cancer dysphagia score offers higher diagnostic accuracy. Our results suggest that CDS should be incorporated in the UGI cancer 2WW pathway for risk stratification of patients with dysphagia and further studies in primary care are needed.

OTU-13 EUS CHOLEDOCHODUODENOSTOMY IN MALIGNANT DISTAL BILIARY OBSTRUCTION: MULTI-CENTRE COLLABORATION FROM THE UK AND IRELAND

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Introduction Endoscopic ultrasound guided choledochoduodenostomy (EUS-CDD) with electrocautery enhanced lumen apposing metal stents (EC-LAMS) has emerged as a viable option in the management of patients with malignant distal biliary obstruction (MDBO). We conducted a multi-centre collaboration from the UK and Ireland with an aim to analyse the pooled efficacy, safety and long term outcomes of EUS-CDD for treatment of MDBO.

Methods Consecutive patients with MDBO who underwent EUS-CDD with EC-LAMS at 8 tertiary hepatopancreatobiliary institutions between September 2016 and September 2020 were retrospectively analysed. Recorded variables included patient demographics, procedural characteristics and follow-up data.

Abstract OTU-13 Table 1

Severity of adverse event	Adverse event description
Mild (n=6)	<ul style="list-style-type: none"> Cholangitis with no stent occlusion treated with antibiotics (n=5) Pneumoperitoneum post stent deployment; bridged with metal stent with no post-procedural clinical consequence (n=1)
Moderate (n=11)	<ul style="list-style-type: none"> Cholangitis and stent occlusion requiring re-intervention (n=6) Stent migration requiring re-intervention (n=2) Stent occlusion without cholangitis requiring re-intervention (n=1) Bile leak due to malposition of stent requiring re-intervention (n=1) Bile leak due to maldeployment of stent; managed conservatively (n=1)
Severe (n=2)	<ul style="list-style-type: none"> Duodenal perforation requiring laparotomy (n=2)

Results 112 patients (59 male) were identified. The mean age was 72 years old (range 46 - 94 years old). Pancreatic adenocarcinoma was the commonest underlying malignancy in 63.4% (n=71). The indications for EUS-CDD were: an inaccessible papilla (n=49), tumour infiltration of papilla (n=29) and unsuccessful biliary cannulation/stricture impassable with guidewire (n=34). Technical success was achieved in 91.1% (n=102) of patients. Additional stenting with plastic pigtailed through the EC-LAMS was performed in 26 patients at the discretion of the endoscopist to augment biliary drainage. Data for clinical success (reduction of serum bilirubin to $\leq 50\%$ of original value at day 7) was available for 90 patients and was achieved in 94.4% of these (n=84). The adverse event rate was 16.9% (n=19) and further details are summarised in the table. The biliary re-intervention rate was 8.1% (n=8) in 99 patients with successful EUS-CDD (3 lost to follow-up), over a median follow-up of 70 days (range 3 - 761 days). Eight patients underwent attempted surgical resection of their primary tumour and in those who did, resection and formation of hepaticojejunostomy was successful.

Conclusion We present the first collaborative data from the UK and Ireland demonstrating EUS-CDD in MDBO to be efficacious with a reasonable safety profile.

OTU-14 COLONOSCOPY POLYP DETECTION IS LOWER AT WEEKENDS: A NATIONAL ENDOSCOPY DATABASE ANALYSIS

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Introduction Due to the mismatch between endoscopy capacity and demand, many centres use in-reach services at weekends. We used data from the National Endoscopy Database to investigate whether (1) patient characteristics on weekdays and weekends differ and (2) weekend procedures are associated with lower polyp detection, after accounting for patient characteristics.

Methods We conducted a retrospective cross-sectional study using data on independent colonoscopies conducted 01/01-04/04/2019. Procedures had to be non-emergencies, undertaken on patients aged ≥ 18 years, involve complete examinations

with withdrawal time ≤ 120 minutes and location(s) of any polyps detected recorded. Primary outcome measures were mean number of polyps (MNP) and polyp detection rate (PDR). Multi-level mixed-effect negative binomial and logistic regression analyses, fitting endoscopist as a random effect, were used to examine associations between weekend procedure and these outcomes.

Results 92879 unique colonoscopies were performed by 2496 endoscopists. 19977 (21.5%) were performed at weekends. Patients who had weekend procedures were more often female and less often seen for screening-related procedures (χ^2 tests: $P < 0.05$); age differed little. Compared to weekday procedures, MNP was significantly lower for weekend procedures, after adjusting for patient age, sex and indication (RR=0.87, 95% CI 0.84-0.90). A similar significant reduction was found for PDR at weekend (OR=0.86, 95%CI 0.82-0.90).

Abstract OTU-14 Table 1 Regression analyses: factors associated with MNP and PDR

	MNP		PDR	
	Univariable	Multivariable	Univariable	Multivariable
	RR (95%CI)	RR (95%CI)	OR (95%CI)	OR (95%CI)
Patient level				
Weekend procedure				
No	1.00	1.00	1.00	1.00
Yes	0.81 (0.78-0.84) ^a	0.87 (0.84-0.90) ^a	0.81 (0.78-0.85) ^a	0.86 (0.82-0.90) ^a
Age, years				
18-39	-	1.00	-	1.00
40-49	-	1.43 (1.35-1.51) ^a	-	1.62 (1.50-1.74) ^a
50-59	-	2.16 (2.06-2.28) ^a	-	2.67 (2.50-2.85) ^a
60-69	-	2.66 (2.54-2.80) ^a	-	3.51 (3.29-3.74) ^a
≥ 70	-	3.00 (2.86-3.15) ^a	-	4.03 (3.78-4.29) ^a
Sex				
Women	-	1.00	-	1.00
Men	-	1.48 (1.45-1.51) ^a	-	1.60 (1.56-1.65) ^a
Indication				
Other	-	1.00	-	1.00
Lower GI symptoms	-	0.79 (0.76-0.81) ^a	-	0.77 (0.74-0.80) ^a
Previous abnormal investigation	-	1.27 (1.19-1.35) ^a	-	1.31 (1.19-1.43) ^a
Previous polyp(s)	-	1.93 (1.86-2.00) ^a	-	2.86 (2.72-3.02) ^a
IBD	-	0.53 (0.49-0.57) ^a	-	0.44 (0.40-0.49) ^a
Screening	-	1.76 (1.68-1.84) ^a	-	2.53 (2.37-2.71) ^a
Endoscopist level, variance (SE)	0.51 (0.02)	0.27 (0.01)	0.55 (0.02)	0.39 (0.02)

^a $p < 0.001$

This study, part of the NED-APRIQOT project, was funded by the Health Foundation.

Conclusions Colonoscopy polyp detection is significantly lower at weekends, after adjusting for case-mix. Research is needed to better understand the reasons for this unwarranted variation.

IBD

OFIR-8 INFLIXIMAB IS ASSOCIATED WITH ATTENUATED IMMUNOGENICITY TO BNT162B2 AND CHADOX1 NCOV-19 SARS-COV-2 VACCINES

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Introduction Pressure on critical care services because of further COVID-19 surges have forced governments to prioritise primary vaccination to vulnerable groups. To extend limited vaccine supplies, many countries including the United Kingdom have also delayed second vaccine doses, trading maximal effectiveness for a lower level of protective immunity across a greater proportion of the most at-risk population. We investigated whether patients with inflammatory bowel disease (IBD) treated with infliximab have attenuated serological responses to a single-dose of a SARS-CoV-2 vaccine.

Methods Antibody responses and seroconversion rates in infliximab-treated patients (n=865) were compared to a cohort treated with vedolizumab (n=428), a gut-selective anti-integrin $\alpha 4\beta 7$ monoclonal antibody. Our primary outcome was anti-SARS-CoV-2 spike (S) antibody concentrations 3-10 weeks after vaccination in patients without evidence of prior infection. Secondary outcomes were seroconversion rates defined by a cut-off of 15 U/mL, and antibody responses following past infection or a second dose of the BNT162b2 vaccine.

Results Geometric mean [SD] anti-SARS-CoV-2 antibody concentrations were lower in patients treated with infliximab than vedolizumab, following BNT162b2 (6.0 U/mL [5.9] vs 28.8 U/mL [5.4] $P < 0.0001$) and ChAdOx1 nCoV-19 (4.7 U/mL [4.9] vs 13.8 U/mL [5.9] $P < 0.0001$) vaccines. In our multivariable models, antibody concentrations were lower in infliximab-compared to vedolizumab-treated patients who received the BNT162b2 (fold change [FC] 0.29 [95% CI 0.21, 0.40], $p < 0.0001$) and ChAdOx1 nCoV-19 (FC 0.39 [95% CI 0.30, 0.51], $p < 0.0001$) vaccines. In both models, age ≥ 60 years, immunomodulator use, Crohn's disease, and smoking were associated with lower, whilst non-white ethnicity was associated with higher, anti-SARS-CoV-2 antibody concentrations. Seroconversion rates after a single-dose of either vaccine were higher in patients with prior SARS-CoV-2 infection and after two doses of BNT162b2 vaccine (Figure 1).

Conclusions Infliximab is associated with attenuated immunogenicity to a single-dose of the BNT162b2 and ChAdOx1 nCoV-19 SARS-CoV-2 vaccines. Vaccination after SARS-CoV-2 infection, or a second dose of vaccine, led to seroconversion in most patients. Delayed second dosing should be avoided in patients treated with infliximab.