cancer in different triage categories was: 2WW 9%; urgent (non-2WW) endoscopy 3%; urgent CT 8.5%; and routine endoscopy 1%. Triage based on the BSG recovery guidance was 97% sensitive and 19% specific for upper GI cancer (at 2WW or urgent endoscopy or CT scan), with a negative predictive value of 99% and a positive predictive value of 8%. A summary of all endoscopy findings from the service evaluation is presented in figure 1.

Conclusions Triage based on the BSG recovery guidance was 97% sensitive with a negative predictive value of 99% in diagnosing UGI cancer at 2WW or urgent endoscopy or CT scan. 6.6% of 2WW referrals were safely investigated routinely and over 9% of 2WW referrals required no investigation at all following triage. These findings should guide reform of the upper GI 2WW pathway to reduce the burden on endoscopy during and after the COVID pandemic.

IBD

HMO-1 VARIATION IN IBD CARE AND EDUCATION ACROSS EUROPE RESULTS FROM A PAN-EUROPEAN SURVEY

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Background 2.5 million people in Europe are diagnosed with IBD. IBD affects quality of life, but also has important consequences for health systems. It remains unknown if there are variations in IBD care across Europe and to help address this question, we conducted this European Variation In ibd PracticE suRvey (VIPER) to study potential differences.

Methods This trainee-initiated survey, run through SurveyMonkey®, consisted of 47 questions inquiring basic demographics, IBD training and clinical care. The survey was distributed through social media and national GI societies from December 2020 - January 2021. Results were compared according to GDP per capita, for which countries were divided into 2 groups (low/high income, according to the World Bank).

Results There were 1268 participants from 39 European countries. Most of the participants are specialists (65.3%), followed by fellows in training (>/< 3 years, 19.1%, 15.6%). Majority of the responders are working in academic institutions (50.4%), others in public/district hospitals (33.3%) or private practices (16.3%).

Despite significant differences in access to IBD-specific training between high (56.4%) and low (38.5%) GDP countries ($p<0.001$) the majority of clinicians felt comfortable in treating IBD (77.2% vs 72.0%, $p=0.04$). Interestingly, a difference in availability of dedicated IBD units could be observed (58.5% vs 39.7%, $p<0.001$), as well as an inequality in multi-disciplinary meetings (72.6% vs 40.2%, $p<0.001$), which often take place on a weekly basis (53.0%). In high GDP countries, IBD nurses are more common (86.2%) than in low GDP countries (36.0%, $p<0.001$), which is mirrored by differences in nurse-led IBD clinics (40.6% vs 13.8%, $p<0.001$). IBD

Abstract HMO-1 Figure 1 Factors associated with confidence on multivariate analysis

dieticians (32.4% vs 16.6%) and psychologists (16.7% vs 7.5%) are mainly present in high GDP countries ($p<0.001$).

On multivariate analysis (Abstract HMO1 Figure 1) GDP was not a factor that dictated confidence in treating patients with IBD. Those that had experienced specific IBD training were more than 3 times more likely to report confidence in treating IBD patients. Furthermore, there was a direct correlation with confidence related to the quantity of patients seen per week with each additional 10 patients improving confidence by a factor of 10. These factors are important as they are easily modifiable targets that can help improve confidence across Europe in managing patients with IBD.

Treat-to-target approaches are implemented everywhere (85.0%), though access to biologicals and small molecules differs significantly. Almost all (94.7%) use faecal calprotectin for routine monitoring, whereas half also use intestinal ultrasound (47.9%).

Conclusion A lot of variability in IBD practice exists across Europe, with marked differences between high vs low GDP countries. Further work is required to help address some of these inequalities, aiming to improve and standardise IBD care across Europe.

HMO-2 ADHERENCE AND DISCONTINUATION OF ORAL 5-AMINOSALICYLIC ACID AMONGST ADOLESCENTS AND YOUNG ADULTS WITH ULCERATIVE COLITIS

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Background Adherence to maintenance 5-amino-salicylic-acid (5-ASA) therapy is associated with better health and quality of life of adolescents and young adults (AYA) diagnosed with Ulcerative Colitis (UC). However, little is known about rates of adherence and how often AYA discontinue oral 5-ASA treatment.¹

Aims To determine rates and predictors of oral 5-ASA adherence and risk of discontinuation amongst AYA diagnosed with UC.

Methods A retrospective data analysis was performed within the UK Clinical Practice Research Datalink amongst AYA diagnosed with UC between 1998 and 2016 and starting on oral 5-ASA treatment between the ages of 10 to 24 years. The proportion of individuals discontinuing treatment (first prescription gap of ≥ 90 days) in the first year of treatment and the median time until a first 90-day gap was estimated using Kaplan-Meier analysis. Adherence, measured as

Abstract HMO-2 Figure 1 Probability of 5-ASA discontinuation in the first year of therapy

proportion of days covered (PDC) in the first year of treatment was calculated. Multivariable Cox and linear regressions assessed predictors associated with 5-ASA discontinuation and adherence, respectively.

Results We identified 694 AYA initiated on oral 5-ASA treatment. The median time to 5-ASA discontinuation was 176 days (95% CI 153-204). A quarter of AYA stopped after a month of treatment and by a year 2 out of 3 individuals had discontinued. The proportion with continuous use of 5-ASA in the first year of treatment varied by age at initiation (10-14 years: 49%, 15-17 years: 52%, 18-24 years: 32% - Figure 1). The mean PDC was 73% (S.D. 0.31) in the first year of therapy and was lowest amongst individuals aged between 18 to 24 years, at 69% (S.D. 0.32), compared to 81% (S.D. 0.27) in 10 to 14 year olds and 79% amongst 15 to 17 year olds (S.D. 0.30). Starting treatment between 18 and 24 years of age and socioeconomic deprivation increased the risk of discontinuation and lower adherence, while early corticosteroid use, a proxy marker of disease severity, was associated with a lower risk of discontinuation and better adherence.

Conclusion AYA diagnosed with UC and initiated on oral 5-ASA medication are at risk early discontinuation and poor adherence. Clinicians should be vigilant regarding the higher risk following the first month of treatment, particularly in young adults and those living in deprived postcodes. Targeted interventions are needed to improve 5-ASA adherence among these high risk groups.

REFERENCE

- Spekhorst LM, et al. Adherence to oral maintenance treatment in adolescents with inflammatory bowel disease. *J. Pediatr. Gastroenterol. Nutr.* (2016).

HMO-3 MAPPING FIELD CANCERISATION AND CLONAL EVOLUTION IN IBD COLONS WITH DYSPLASIA AND CRC

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Introduction In Inflammatory Bowel Disease (IBD), clonal evolution and field cancerisation precedes the development of colitis-associated colorectal cancer (CA-CRC), however the extent and spread of pre-cancerous clones in the IBD colon remains incompletely determined and consequently clinical practice is poorly informed of how best to detect these clones by endoscopy and accurately predict future cancer risk. This study aims to quantify the number and size of mutant clones arising across the length of the colitic bowel, reveal the mechanism of how they arise and spread, and through this gain a detailed molecular understanding of the evolutionary dynamics of progression to CA-CRC.

Methods Three IBD patients undergoing a total panprocto-colectomy for multifocal dysplasia or CA-CRC were recruited prospectively. Fresh-frozen biopsies were taken at regularly spaced intervals (~2cm) across the entire colon (rectum to caecum, comprising 118, 108 and 25 biopsies respectively). Epithelial tissue was isolated from each biopsy using laser capture microdissection and DNA was extracted. Low pass whole genome sequencing (lpWGS) was performed to generate genome-wide copy number alteration (CNA) profiles.

Results Analysis from the first 45 samples from colon 1 show; 1) Multiple CNA events occur in macroscopically 'normal' parts of the colon. 2) Recurrent CNAs were shared between biopsies, revealing clonal expansions in multiple areas of the colon, both proximal and distal to the cancer, and comprising normal, inflamed, dysplastic and cancer-adjacent tissue. 3) Clonal expansions ranged from 2-14cm in size, and were separated by distances of 4-30cm. 4) Certain CNA events occur more commonly across the colon, both independently and from within different clonal patches, such as a gain on chromosome 7 and 20, and losses on chromosomes 5, 8 and 17. 5) Whole genome doubling events within clonal clades.

Conclusions These data show that across the IBD bowel, CNAs occur and expand in ostensibly 'normal' cells, demonstrating evidence of field cancerisation. Moreover, the fact that similar and independent patterns of CNAs are seen throughout the whole colon provide evidence to suggest both convergent and independent evolutionary events occurring respectively. Further work is needed to more precisely quantify clonal and sub-clonal distribution across the IBD colon, in addition to deriving measures of intra-colon, intra-lesion and intra-clade genomic diversity to complement the above measures of evolvability.

HMO-4 IMMUNOGENICITY TO SECOND ANTI-TNF THERAPY (IMSAT): IMPLICATIONS FOR SEQUENCING OF BIOLOGIC THERAPY

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Introduction Anti-TNF treatment failure in patients with IBD is common. International guidelines recommend switching out of class when anti-TNF drug levels are therapeutic and within class with an immunomodulator when anti-TNF drug levels are suboptimal and associated with antibody development.