HTH-14 A MULTI-CENTRE ANALYSIS OF AUGIB; UREA-CREATININE RATIOS A USEFUL PREDICTOR FOR BLEEDING, AND ENDOTHERAPY

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Introduction The assessment of patients presenting with symptoms of acute upper GI bleed (AUGIB) is critical in determining if patients would benefit from a gastroscopy and endoscopically delivered therapy. The Rockall score, and superiorly, the Glasgow-Blatchford score (GBS) have been validated as effective risk tools for this purpose. The GBS considers serum urea levels, it established that digested blood from AUGIB causes a raised serum urea. This may be confounded by patients with kidney injury (acute, or acute on chronic) which may occur as a consequence of hypovolaemia in susceptible patients with AUGIB. There has been evidence that a urea creatinine ratio (UCR) may be useful identifying patients with a significant AUGIB.¹ A preliminary analysis of 357 cases showed UCR - using a cut off of 97.7 was superior to serum urea (AUC 0.789 vs 0.733).²

Methods We collated data from 2203 presentations of AUGIB resulting in admission and an inpatient OGD within 72 hours, between January 2017 and January 2020, from 9 English centres. Data was recorded in a Microsoft Excel spreadsheet. We analysed serum urea levels, urea creatinine ratio (urea x 1000/creatinine), whether a plausible diathesis for AUGIB was seen, if endoscopic intervention was needed, and whether the patient had liver disease. Logistical regression was performed using SPSS.

Results Of the 2203 presentations (mean age 65.2 years, median 68, range 16-101 years), 1194 had a plausible bleeding diathesis (54.2%), of this 1194, 721 had endoscopic therapy (60.4%). 296 patients had liver disease (13.4%) – of which 271 had a bleed (91.6%).

Conclusions This large multicentre analyses of AUGIB cases have shown that UCR was a good indicator in AUGIB for patients who have a culprit lesion and required endoscopic therapy. It may be appropriate to use UCR as opposed to serum urea in patients with AUGIB when considering the need for endoscopic therapy.

Abstract HTH-14 Table 1

	All	With liver disease	Without liver disease	Endoscopic therapy
Area under the curve (AUC)	0.7235	0.7409	0.7031	0.664
Threshold value	101.6	86.1	101.6	101.2
Specificity	0.65	0.76	0.64	0.54
Sensitivity	0.70	0.72	0.73	0.73

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Small bowel

HTH-1 OPTIMUM STRATEGIES FOR IDENTIFYING ADULTS AND CHILDREN WITH COELIAC DISEASE (CD): AN EVIDENCE SYNTHESIS APPROACH

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Introduction Guidelines recommend that adults and children 'at high risk' of CD should be offered testing. However, it is unclear which groups are at sufficiently high risk, which symptoms should prompt testing, and which tests should be offered. This NIHR funded study had five components: Systematic reviews on accuracy of tests for CD; and on the predictive ability of diagnostic indicators for CD; Routine data analysis to develop prediction models; Collaborative work with patients to establish diagnostic thresholds; Cost-effectiveness analysis.

Methods Presented here are 2 systematic reviews using rigorous Cochrane methods on 1) the accuracy of tests for CD in adults and children and 2) the predictive ability of potential risk factors and symptoms for CD. Six databases were searched. Summary sensitivity, specificity and positive predictive values were estimated for each test and diagnostic indicator by fitting bivariate random effects meta-analyses.

Results 113 Studies evaluating serological test accuracy for CD diagnosis were included. Summary estimates for adults: IgA tTG (5 studies, 4310 participants, threshold 15U/ml) Sensitivity 90.7 (95%CI, 87.3, 93.2) Specificity 87.4 (84.4, 90.0), IgA EMA (5 studies, 927 participants threshold 1:5) Sensitivity 88.0 (75.2, 94.7) Specificity 99.6 (92.3, 100.0). Summary estimates for children: IgA tTG (6 studies 2232 participants, threshold 20U/ml) Sensitivity 97.7 (91.0, 99.4) Specificity 70.2 (39.3, 89.6). IgA EMA (5 studies, 1257 participants threshold 1:10) Sensitivity 94.5 (88.9, 97.3) Specificity 93.8 (85.2, 97.5).

185 studies reporting 25 distinct diagnostic indicators were included. Analysis found large variation in diagnostic accuracy estimates between studies and high risk of bias. People with dermatitis herpetiformis, HLA DQ2/8 risk genotype, migraine, anaemia, type 1 diabetes, and osteoporosis were at least twice as likely as the general population to have CD. Gastrointestinal symptoms, psoriasis, epilepsy, inflammatory bowel disease, chronic liver diseases, systemic lupus erythematosus, fractures, type 2 diabetes, and multiple sclerosis showed poor diagnostic ability. People with first-degree relatives with CD had a three times higher risk of CD.

Conclusions Sensitivity and specificity estimates for test accuracy were lower than previously reported. IgA EMA specificity in adults could support serological diagnosis of CD. People with dermatitis herpetiformis, first-degree relatives, HLA DQ2/8 risk genotype, migraine, anaemia, type 1 diabetes, and osteoporosis have a higher risk of having CD than the general

population and should be offered CD testing. Migraine should be added to current testing guidelines.

Colon and anorectum

HFR-7 PREVENTABLE EARLY COLORECTAL CANCER IN CYSTIC FIBROSIS: IS THERE 'SCOPE' FOR A UK SCREENING PROGRAMME?

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Introduction Adults with cystic fibrosis (CF) have a high incidence of premalignant colorectal polyps and early colorectal cancer (CRC), forming the basis for CRC screening recommendations for patients with CF ≥ 40 years of age in the USA¹. Despite this, there are no equivalent UK guidelines for CRC screening in CF. In the absence of a national screening programme, we evaluated the current utility and diagnostic yield of colonoscopy, the incidence of CRC, and the proportion of patients that would potentially benefit from CRC screening programme at a CF centre.

Methods Data were collected from a prospectively maintained database of all patients with CF attending the Manchester Adult Cystic Fibrosis Centre (MACFC) between 2010 and 2020. Patients included were all ≥ 30 years of age and had to have undergone a colonoscopy within the 10-year study period.

Results Overall, 709 patients with CF attended MACFC, 361 (51%) were aged ≥ 30 years, and 135 (19%) were ≥ 40 years old, and would have fulfilled the criteria for CF CRC screening colonoscopy in USA.¹ Only 33/361 (9%) of CF patients ≥ 30 years of age (mean age 44.8 ± 11.0 years) underwent 39 colonoscopies between 2010-2020. Of the 33 CF patients that underwent an index colonoscopy, the majority (31/33, 94%) were for symptomatic indications, and only 2/31 (6%) were for screening in the context of a family history of CRC. Colonoscopy completion rate was 94.9%. Extended bowel preparation was used in 14/39 (36%) of procedures. Diagnostic views were achieved with standard preparation in 18/25 (72%) vs. 12/14 (85.7%) with extended preparation ($p=0.44$). At colonoscopy, in 11/33 (33%) of CF patients aged ≥ 30 years, 20 polyps were detected and removed, 5/20 (25%) of these polyps were 10-20mm size, overall polyp retrieval rate was 80%, and of those polyps retrieved 93.8% were premalignant and 87.5% were proven adenomas. The majority of the patients that underwent colonoscopy were ≥ 40 years of age (24/33, 73%), and this group also accounted for most of those who were found to have polyps (8/11, 72.7%). Over 10 years of follow-up, no patients in this study developed post-colonoscopy CRC. However, of the CF patients ≥ 40 years of age that did not have a colonoscopy (111/135, 82.2%), four subsequently developed CRC, three of whom died from complications of their cancer.

Conclusion This 10-year experience from a CF centre suggests that colonoscopy screening is rarely performed in those ≥ 40 -years of age despite the known increased of premalignant polyps and early CRC, and supports the development of a UK screening programme, especially given the increasing life-expectancy in CF.

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Gastroenterology service

HTH-2 MYCHART APPLICATION IN ADDRESSING IBD PATIENTS' CONCERNS AND IMPACT ON SERVICE UTILISATIONS

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Introduction MyChart is an electronic patient portal within the electronic patient record provider EPIC. We asked patients to complete an electronic survey via MyChart. A threshold was set that any patient who recorded a severe disease activity score (MAYO >3 , HBI >8) or signaled they had a concern on their questionnaire created a 'BPA' message that was routed to our clinical nurse specialists. Our aim was to assess the impact of this on addressing patients' concerns and service utilization.

Methods We reviewed the electronic notes of all IBD patients who received infliximab in the month of September 2020. Notes were reviewed for demographics, status on MyChart, number of questionnaires filled, type of concerns raised and outcomes of concerns, number of inpatients and outpatient appointments pre- and post- the introduction of the online questionnaire.

Results 141 IBD patients on infliximab were identified. 3 were excluded (2 had insufficient details, 1 did not commence on infliximab eventually). 77 males (55.8%), mean age of 27 years. 110 (78.70%) were diagnosed with Crohn's, 24 with UC (17.0%) and 4 with unspecified type (2.8%). 104 (75.1%) were active on My Chart and 83 (78.3% of MyChart population, 58.9% of total ($n=138$)) completed the infliximab questionnaire.

44 patients (53%) raised concerns on the questionnaire with a total of 54 concerns (10 of the patients had 2 concerns). 33 (61.1%) of the concerns were addressed through MyChart communication alone, 16 (29.6%) required an outpatient IBD nurse review and 3 (5.6%) required an outpatient medical review. 2 concerns (3.7%) were not addressed. The mean time to address these concerns were 6 days. There were no significant differences in terms of mean age, gender and type of IBD between the two groups. A greater proportion of those who did not fill in the questionnaire were found to be in clinical remission (83.6% vs 67.5%).

Abstract HTH-2 Figure 1 Flow diagram