Methods Consecutive patients attending a tertiary referral centre and undergoing clinically indicated oesophogastroduodenoscopy (OGD) and colonoscopy were prospectively recruited between September 2011 and June 2012. Outcomes measures were assessed using a validated 10-point numeric rating scale (NRS) from 0 (no pain) to 10 (worst pain imaginable), with scores ≥5 considered to be elevated. Details of staff member(s) undertaking endoscopic examinations were recorded, with procedures considered to have trainee involvement if a trainee had performed all or part of the procedure. Chi squared analysis was then used to determine if trainee involvement influenced outcome measures.

Results 610 patients were recruited (280 male, median age 56 years, range 17–90 years). Whilst no significant differences were identified for pain, discomfort or distress during colonoscopy, significant differences were identified in procedural discomfort and distress ($p = 0.015$ and $p = 0.033$ respectively) when trainees undertook OGD's, with procedural pain approaching significance ($p = 0.061$, Table 1).

Conclusion This is the first study to discriminate pain, distress and discomfort as tolerability outcome measures. Whilst trainee involvement during OGD negatively influenced all 3 outcome measures, no significant effect was observed during colonoscopy. This finding may reflect OGD's frequently being the first endoscopic procedure taught to trainees and the difficulties of oesophageal intubation.

Disclosure of Interest None Declared

Abstract OC-049 Table 1 Comparisons in tolerability between trainees and non-trainee performed procedures.

	No Trainee n (%)	Trainee n(%)	P value
Colonoscopy (n = 304)			
Elevated Pain	87 (27%)	68 (22%)	0.382
Elevated Discomfort	92 (30%)	76 (25%)	0.136
Elevated Distress	56 (18%)	52 (17%)	0.078
OGD (n = 306)			
Elevated Pain	18 (6%)	46 (15%)	0.061
Elevated Discomfort	44 (14%)	98 (32%)	**0.015**
Elevated Distress	43 (14%)	93 (30%)	**0.033**

IBD symposium: towards personalised treatment

OC-050 5-AMINOSALICYLATE (5-ASA) INDUCED NEPHROTOXICITY IN INFLAMMATORY BOWEL DISEASE

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Introduction Nephrotoxicity is a rare idiosyncratic reaction to 5-ASA therapy. The precise pathogenic mechanisms are unknown. This study aims to a) describe the clinical features of this rare complication b) explore underlying mechanisms and c) identify clinically useful predictive genetic markers so these drugs can be avoided, or monitoring intensified, in high-risk patients. Here we report the clinical features.

Methods Patients were identified and recruited from 185 sites (130 UK). Inclusion criteria included normal renal function prior to commencing 5-ASA, ≥50% rise in creatinine after starting 5-ASA and medical opinion implicating 5-ASA justified drug withdrawal. An adjudication panel assessed causality from case report forms using the validated Liverpool Adverse Drug Reaction Causality Assessment Tool.

Results 154 patients were recruited. 19 patients were excluded following adjudication. The cohort included patients with Crohn's disease, ulcerative colitis and indeterminate colitis (42%, 55%, 4% respectively). 74% of cases were male. Nephrotoxicity was seen with all aminosalicylates including 1 patient treated with topical therapy only. Nephrotoxicity occurred at a median age of 36.5 yrs (range 15.4–88.4 yrs). Two patients had a confirmed family history of 5-ASA-induced nephrotoxicity. 78% were detected by routine blood monitoring. Only 45% of cases recovered completely after drug withdrawal, with 18 requiring renal replacement therapy (14 transplantation). The median time for peak creatinine after commencing 5-ASA was 3.5 yrs (range 0.16–43.4 yrs). There was no evidence that time on 5-ASA treatment was associated with a higher peak creatinine or the likelihood of full recovery ($p = 0.87$). Women were more likely to reach full recovery than men ($p = 0.00148$; OR 8.26; CI 2.46–34.94). There was no evidence that early withdrawal of 5-ASA led to a higher likelihood of complete recovery. There was no difference in recovery between the three disease groups on logistic regression analysis.

Conclusion This is the largest and most detailed study of 5-ASA induced nephrotoxicity to date. Whilst the incidence is low, the morbidity is high with 13% of patients requiring renal replacement therapy and 55% of patients failing to return to a normal creatinine after 5-ASA withdrawal. The next step is to carry forward these patients to a genome-wide association analysis, to be performed in February 2013.

Disclosure of Interest None Declared

Oesophageal symposium: early oesophageal neoplasia

OC-051 PATIENTS UNDERGOING RADIOFREQUENCY ABLATION (RFA) FOR BARRETT'S RELATED NEOPLASIA HAVE IMPROVED OUTCOMES WITH DECREASING LENGHTHS OF BASELINE BARRETT'S OESOPHAGUS (BE) & INCREASING NUMBER OF RFA SESSIONS

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Introduction BE is the pre-cursor to oesophageal adenocarcinoma (OAC). High grade dysplasia (HGD) & early mucosal neoplasia in BE have a 40–60% risk of progressing to OAC. Endoscopic mucosal resection (EMR) & RFA are alternatives to surgery for curative treatment of these patients. We present prospective data from 19 centres in the UK HALO RFA registry.

Methods Before RFA, superficial lesions were removed by EMR. Patients then underwent RFA 3 monthly until all BE was ablated or cancer developed (endpoints). Biopsies were taken at 12 months for Primary outcomes (clearance for HGD (CR-HGD), all dysplasia (CR-D) & BE (CR-BE)).

Results 630 patients have outcomes recorded. We report on 370 who have completed treatment. 81% male, mean age 68 years (40–91). Patient's underwent mean 2.5 ablations (1–6) during protocol. 70% baseline histology HGD, 27% IMC & 3% LGD. Mean length baseline BE 5.6cm (1–20). At 12 months CR-HGD was 87% patients, CR-D 82%, & CR-BE 64%. 97% with no dysplasia at 12 months remain disease free at most recent follow up (median 18 months,range 2–68). Kaplan Meier statistics predict CR-D is durable at 5 years with 88% remaining disease free. Logistic regression demonstrate each extra 1 cm of BE reduces chances of attaining CR-D by 15.7% (OR 1.156, SE 0.048, CI 1.07–1.26, p = 0.0003) & for each extra RFA treatment likelihood of CR-D increases by 31.7% (OR = 0.683, SE 0.95, CI 0.52–0.89, p = 0.0006). Progression to invasive cancer at 12 months is 2.7%. Symptomatic strictures requiring dilatation occurred in 9% after treatment.

Conclusion End of protocol CR-D is encouraging at 83% & successful eradication appears durable. Patients with shorter segment BE respond better & multiple treatments are more likely to achieve CR-D. Our data represent real life outcomes of integrating novel endotherapy into demanding endoscopy service commitments

Disclosure of Interest None Declared

OC-052 COMBINED EMR AND RADIO FREQUENCY ABLATION LEADS TO HIGH BARRETT'S ERADICATION RATES FOLLOWING STRUCTURED TRAINING PROGRAMME

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Introduction EMR and Radio Frequency Ablation (RFA) have recently been combined to treat dysplastic Barrett's oesophagus (1). These are complex techniques and require a high level of endoscopic skill and published reports show a range of success. The Academic Medical Centre (AMC) in Amsterdam is a high volume tertiary centre for these procedures and has established expertise in providing structured teaching (2). After attending a structured teaching programme at the AMC a service was established at a London teaching hospital to treat patients with dysplastic Barrett's oesophagus. We wanted to know if high quality results could be reproduced in this setting.

Methods We retrospectively analysed all cases of dysplastic Barrett's referred for treatment at our centre since the introduction of RFA (Barryx), following structured training at the AMC. Decision for endoscopic therapy was made at a multidisciplinary meeting involving surgeons, radiologists, oncologists and gastroenterologists. Published protocols for treatment with EMR/RFA were closely followed (1), although argon plasma coagulation was used to remove residual islands less than 5mm in the interests of cost, rather than RFA. All procedures were carried out by one of two senior endoscopists.

Results Over 30 months 33 patients were referred for endoscopic therapy. Following initial EMR of visible lesions 3were found to have cancer extending beyond the first 1/3 of the sub-mucosa and were offered alternative therapy. 24have finished therapy and 1 is lost to follow up. Mean age was 70 years (53–89) and mean Barrett's length 5.4cm (<1–10 cm). Therapy was applied as follows: 2 patients had only EMR, 4 only RFA, 1 EMR + APC, 6 EMR + RFA, 5 RFA +APC, 6 EMR + RFA + APC. 24/24 have had eradication of high grade dysplasia or intra-mucosal cancer (100%). 21/24(87.5%) have had complete eradication of Barrett's by endoscopic and histological criteria. Mean follow up is 9.8 months(1.5–25). There were no perforations. 3 strictures were treated endoscopically.

Conclusion Following a comprehensive structured teaching programme in the treatment of dysplastic Barrett's with combined RFA and EMR, results comparable to published studies are achievable in lower volume centres treating approximately only one new patient per month.

Disclosure of Interest None Declared

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Liver symposium: impact of clinical research in hepatology

OC-053 CURCUMIN, ANTI-OXIDANT, AND PIOGLITAZONE THERAPY WITH INCLUSION OF VITAMIN E IN NON ALCOHOLIC FATTY LIVER DISEASE-A RANDOMIZED OPEN LABEL PLACEBO CONTROLLED CLINICAL PROSPECTIVE TRIAL (CAPTIVE)

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Introduction NAFLD is a global clinical challenge which progresses to cirrhosis and liver cancer. Defective transport of free fatty acids and mitochondrial dysfunction lead to explosion of a series of free radicals, apoptosis, up regulated cytokines and fibrogenesis ultimately causing cirrhosis and cancer. Curcumin is a pan-antioxidant with anti-inflammatory, anti-apoptotic, anti-microbial, and anti-fibrogenic properties. This study evaluates the role of curcumin in NAFLD to progression of NASH

Methods Eighty patients (n = 80) with mean BMI 29%, NAFLD score 0.66, NASH fibrotic score 0.33, HOMA IR 3.8, ALT 58, LDLc 143, HDLc 29, Triglyceride 186 and Adipokines (leptin, Adiponectin, Retinal Binding Proteins) were divided into Group A-(n = 20) pioglitazone 15mg, Group B-(n = 20) vitamin E, Group C-(n = 20) curcumin (all the three above groups received placebo), and Group D (n = 20) vitamin E plus curcumin. Pre and post values (Triglycerides, LDLc, HDLc, ALT, HOMA-IR, TNF-alfa, Leptin, Adiponectin, Retinol Binding Protein, HBA1c, Serum necro-inflammatory NAFLD and NASH fibrotic score were analysed at 3, 6, and 12 months. Diet and exercise were left unchanged. Daily alcohol content was less than 30 grammes

Results Group A-Minimal changes on ALT, HbA1c, HOMA, lipids, no changes in TNF-alfa, adipokines, lipid profile and necro-inflammatory score and/or NASH fibrosis score. Group B and Group C had modest changes in ALT, lipid profile, HbA1c and HOMA; while no changes in adipokines, necro-inflammatory score and fibrotic score. Group D had significant changes in all scores particularly the adipokines and small improvements in fibrotic score. All patients tolerated the medications well

Conclusion This study postulates the effects of Curcumin plus vitamin E in NAFLD may prevent NASH with a modest anti-fibrotic effects and necroinflammatory score; with impressive changes in adipokines levels. Additive effects of Curcumin with vitamin E has significant effects on Serum lipids and insulin sensitivity. Unavailability of Pre and post liver biopsy was the limitation A large control trial needs to validate.

Disclosure of Interest None Declared

OC-054 HEPATIC EXPRESSION OF CCL25 MEDIATES RECRUITMENT OF PLASMACYTOID DENDRITIC CELLS TO LIMIT LIVER INJURY

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