Methods Consecutive patients attending a tertiary referral centre and undergoing clinically indicated oesopha gastroduodenoscopy (OGD) and colonoscopy were prospectively recruited between September 2011 and June 2012. Outcome 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 = 0.053 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

OC-049 Table 1

Comparisons in tolerability between trainees and non-trainee performed procedures.

<table>
<thead>
<tr>
<th></th>
<th>No Trainee n (%)</th>
<th>Trainee n(%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colonscopy (n = 304)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevated Pain</td>
<td>87 (27%)</td>
<td>68 (22%)</td>
<td>0.382</td>
</tr>
<tr>
<td>Elevated Discomfort</td>
<td>92 (30%)</td>
<td>76 (25%)</td>
<td>0.136</td>
</tr>
<tr>
<td>Elevated Distress</td>
<td>56 (18%)</td>
<td>52 (17%)</td>
<td>0.078</td>
</tr>
<tr>
<td>OGD (n = 306)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevated Pain</td>
<td>18 (6%)</td>
<td>46 (15%)</td>
<td>0.061</td>
</tr>
<tr>
<td>Elevated Discomfort</td>
<td>44 (14%)</td>
<td>98 (32%)</td>
<td>0.015</td>
</tr>
<tr>
<td>Elevated Distress</td>
<td>43 (14%)</td>
<td>93 (30%)</td>
<td>0.033</td>
</tr>
</tbody>
</table>

Oesophageal symposium: early oesophageal neoplasia

OC-051 PATIENTS UNDERGOING RADIOFREQUENCY ABLATION (RFA) FOR BARRETTS RELATED NEOPLASIA HAVE IMPROVED OUTCOMES WITH DECREASING LENGTHS OF BASELINE BARRETTS ESOPHAGUS (BE) & INCREASING NUMBER OF RFA SESSIONS

doi:10.1136/gutjnl-2013-304907.050

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 = 0.0005) & 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

REFERENCES

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)
doi:10.1136/gutjnl-2013-304907.052

Introduction NAFLD is a global clinical challenge which progresses to cirrhosis and liver cancer. Detrimental transport of free fatty acids and mitochondrial dysfunction lead to expansion 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 0.53, 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, TNE-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 TNE-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 necro-inflammatory 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
doi:10.1136/gutjnl-2013-304907.053

Introduction High expression of CCL25 on parenchymal cells has been reported in chronic liver diseases. CCL25 deficiency results in liver injury, characterized by tropism of the hepatic infiltrates towards liver progenitor cells, and impairment of NK cell-mediated antitumor responses. The aim of this study was to determine whether CCL25 mediates hepatic recruitment of plasmacytoid dendritic cells (pDCs) and their role in limiting liver injury.

Methods Human plasmacytoid dendritic cells (pDCs) in normal livers of healthy volunteers express high levels of CCL25. Using activated pDCs from healthy FVB mice, we determined the role of pDCs in limiting liver injury. We used two mouse models of liver injury: (1) a diet-induced steatohepatitis model and (2) carbon tetrachloride-induced liver injury model. In the steatohepatitis model, mice were fed a high-fat diet (HFD) for 12 weeks. In the carbon tetrachloride model, mice were injected with carbon tetrachloride. In both models, mice were treated with anti-CCL25 antibody or control antibody. Liver injury was assessed by histological and biochemical analyses.

Results In the steatohepatitis model, mice fed the HFD had higher levels of liver injury compared to control mice. Treatment with anti-CCL25 antibody significantly increased liver injury compared to control antibody-treated mice. Similarly, in the carbon tetrachloride model, treatment with anti-CCL25 antibody significantly increased liver injury compared to control antibody-treated mice. In both models, the number of pDCs in the liver was significantly higher in control antibody-treated mice compared to anti-CCL25 antibody-treated mice.

Conclusion In conclusion, our study demonstrates that hepatic expression of CCL25 mediates recruitment of pDCs to limit liver injury. These findings suggest that targeting CCL25 as a therapeutic strategy for liver injury warrants further investigation.

Disclosure of Interest None Declared

OC-052 COMBINED EMR AND RADIO FREQUENCY ABLATION LEADS TO HIGH BARRETT’S ERADICATION RATES FOLLOWING STRUCUTURED TRAINING PROGRAMME
doi:10.1136/gutjnl-2013-304907.051

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 35 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 (<10cm). 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%). 0/21 (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