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Abstracts

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SMOKING KNOWLEDGE, HABITS AND UPTAKE OF SMOKING CESSATION THERAPIES IN PATIENTS ATTENDING A TERTIARY REFERRAL CENTRE FOR INFLAMMATORY BOWEL DISEASE (IBD) (ORAL PRESENTATION)

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Aims/Background: Smoking is associated with increased rates of relapse, surgery and use of immunosuppressive therapy in patients with Crohns Disease (CD). We aimed to assess the smoking habits, cessation strategies and knowledge regarding negative associations of smoking on IBD and general health in a cohort of IBD patients.

Methods: Data was prospectively collected to assess smoking history, smoking cessation attempts, nicotine dependence and knowledge of smoking in IBD and common smoking related diseases (SRD). Patients with SRD and no history of SRD were used as positive and negative controls respectively.

Results: 200 subjects were recruited (100 IBD patients, 100 positive/negative controls). There was significant age difference between IBD group and non-IBD group. Total overall knowledge of smoking causing SRD was 91% in all 3 groups: current smokers, ex-smokers and never smokers. IBD diagnosis did not influence knowledge. Only 57% of CD patients knew smoking was a risk factor for CD. Most patients stopped smoking for general health reasons. 25% of IBD patients stopped to improve their IBD. The most common smoking cessation strategy in all ever smokers was “cold turkey”. There was minimal engagement with Champix, hypnotherapy, behavioural therapies and telephone support (all < 5%). In smokers there was no significant difference in nicotine addiction score between the 3 groups.

Conclusion: IBD patients have excellent knowledge of the health risks of smoking. CD patients require further education regarding the negative effects of smoking. Patients prefer “cold turkey”, with low engagement with alternative strategies. Smokers (particularly those with CD) who have failed abstinence previously should engage with a smoking cessation service to improve education and maximise chances of long-term abstinence.

THE IMPACT OF OBESITY ON MORTALITY AND MORBIDITY FOLLOWING LIVER RESECTION (ORAL PRESENTATION)

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Aims/Background: Obesity is a risk factor for complications following liver resection. This study aimed to determine the impact of Body Mass Index (BMI) on morbidity and mortality of patients undergoing liver resection.

Methods: Patients undergoing liver resection between 2005-2010 inclusive were included. Patients were stratified according to BMI and intra-operative and post-operative courses reviewed. A normal BMI was defined as 18.5-24.9 kg/m2, overweight 25.0-29.9 kg/m2 and obese >30 kg/m2. Kruskal-Wallis and Chi-squared test were used in statistical analysis, with a p value of less than 5% considered significant.

Results: 179 patients were included. 57 patients had a normal BMI, 82 were overweight, 37 were obese and 3 were underweight. American Society of Anesthesiologists risk profile grade was equal between groups (p=0.92). An increase in surgical time (p=0.04) and intra-operative blood loss (p=0.01) was seen with increasing BMI. Intra-operative intravenous fluids (p=0.08), inotropic requirements (p=0.82) and transfusion showed no significance (p=0.09). The requirement for a higher level of post-operative care was similar between groups (p=0.15).

Conclusions: Obesity has a significant impact on surgical time and intra-operative blood loss but does not alter mortality or overall morbidity in patients undergoing liver resection surgery. Obesity should not prohibit the timely intervention of liver resection when indicated as it is not related to an increased mortality.

PREDICTING COMPLICATIONS AFTER LIVER RESECTION IN NON-CIRRHOTIC PATIENTS: VALIDATION OF A PREOPERATIVE SCORING TOOL (ORAL PRESENTATION)

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Aims/Background: Mortality following liver resection surgery has significantly reduced in recent years yet severe morbidity has remained steady. This study aimed to validate the Breitenstein scoring model, designed to predict risk of major post-operative morbidity in non-cirrhotic patients undergoing liver resection.

Methods: Patients undergoing liver resection between 2005-2010 inclusive at a regional specialty centre were included. Complications were retrospectively assessed and defined using the Dindo-Clavien system. A Breitenstein score for each patient was calculated and its ability to predict complications assessed. Kruskal-Wallis and Chi-squared test were used, with a p value of less than 5% considered statistically significant.

Results: 184 patients were included with an average Breitenstein score of 2.2. The patient group without complications had an average score of 2.1 while those with major morbidity had a score of 2.8. There was no significant difference between the groups (p=0.17). Of the parameters within the scoring model aspartate aminotransferase, American Society of Anesthesiologists risk profile classification and extra-hepatic procedures failed to show a significant difference in complications (p=0.9, 0.19 and 0.16 respectively). A higher number of resected segments was related with an increase in morbidity (p=0.02) as was length of operation (p=0.0001), intra-operative blood loss (p=0.0003) and transfusion requirements (p=0.0005).

Conclusions: The scoring tool proposed by Breitenstein et al shows promise. Further larger studies are required in order to validate this model prior to its incorporation into clinical practice.

CAN WE PREDICT PATIENTS WITH BARRETT'S DYSPLASIA WHO WILL FAIL TO RESPOND TO ENDOTHERAPY WITH RADIOFREQUENCY ABLATION (RFA); RESULTS OF A SINGLE CENTRE EXPERIENCE.

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Introduction: Despite endotherapy in IMC (Intramucosal Cancer) and HGD (High Grade Dysplasia) Barrett's, some progress to oesophageal adenocarcinoma (EAC). We sought to examine the factors associated.

Methods: 105 patients were treated. The treatment protocol involved EMR of all nodular areas with subsequent RFA remaining Barretts epithelium. Patients who failed to respond to endotherapy or developed EAC were withdrawn from endotherapy.

Results: Eighty patients have completed the treatment protocol to date, 42 (52%) of these had initial EMR . Eleven patients died during follow up. Eradication of Barrett's dysplasia was achieved in 80/91 (87%) and eradication of metaplasia in 61/91 (67%). Five (4.7%) patients progressed to EAC and 3 (2.8%) patients failed treatment as their IMC or HGD was refractory to RFA and required surgery. The demographics for those that progressed to EAC compared to those that did not (Non-EAC) are as follows. EAC; males 5 (100%), mean initial Barrett's length 7cm, those having pre-halo EMR 4 (80%) and initial pathology of 2 IMC (40%) and 3 HGD (60%). Non-EAC group; males 71 (73%), females 26 (27%), mean initial Barrett's length 7cm, those having pre-halo EMR 42 (43%) and initial pathology of 28 IMC (28%) and 69 HGD (71%). Finally the time from first RFA to developing malignancy was a mean of 182 (42 – 733) days.

Conclusion: In this cohort, there is a 4.7% chance of developing EAC, 2.8% of patients could not complete planned endotherapy and an 8.5% chance of death from non-oesophageal diseases. These outcomes are independent of the demographic, pathologic and endoscopic variables studied.

SUCRALFATE PASTE ENEMA - A NOVEL MODE OF DELIVERY IN THE TREATMENT OF RADIATION PROCTITIS

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Introduction: Rectal sucralfate has been reported to deliver clinical and endoscopic improvement in chronic radiation proctitis (CRP). However patients with active proctitis find the enema suspension difficult to retain thus reducing compliance and effectiveness. We describe a novel method of rectal administration via a low-volume sucralfate paste and report its results in a series of 23 patients.

Method: Patients with CRP self-administered sucralfate paste enemas (SPEs) twice daily for 6 weeks. SPEs were prepared using sucralfate 2G tablets mixed with 4.5ml water in an enema applicator producing a low-volume paste. Pre- and post-treatment clinical (RTOG/EORTC Proctitis) scores were calculated retrospectively and verbal feedback obtained via telephone questionnaire.

Results: Twenty-three patients (18 male) were included with a median age of 67 years (32-75). Twenty-two had full clinical scoring of whom 16 (73%) demonstrated clinical improvement. Six (27%) had neither a clinical improvement nor deterioration. Seven (32%) had resolution of all symptoms

Conclusion: Most patients demonstrated clinical improvement. This initial experience of the sucralfate paste enema may provide the basis for a prospective study of its

effectiveness in the treatment of chronic radiation proctitis.

A RARE CASE OF INTESTINAL LYMPHANGIECTASIA (POSTER)

Author(s): Callaghan S, McLoughlin L

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We would like to discuss a rare case of a 13 month old girl with Hypomelanosis of Ito, hemihypertrophy and severe failure to thrive. She presented through A&E severely malnourished with hypnocalcaemic tetany, an albumin of 11 and other significant electrolyte disturbances. The underlying diagnosis was protein losing enteropathy secondary to intestinal lymphangiectasia. One other case of intestinal lymphangiectasia and hypomelanosis of Ito has been described in the literature. We describe the diagnostic and management pathway in this girl.

AN UNUSUAL PRESENTATION OF FAT MALABSORPTION IN AN INFANT (POSTER)

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In Paediatrics, fat malabsorption is usually associated with pancreatic insufficiency attributed to cystic fibrosis or cholestatic liver disease.

We would like to present a very unusual cause of fat malabsorption in a 9 month old girl. Abetolipoproteinamia, or Bassen-Kornzweig syndrome, is a rare autosomal recessive disorder with a guarded prognosis. The children have steatorrhoea, failure to thrive and symptoms of fat soluble vitamin deficiencies. We discuss the presentation and pathophysiology of the disease, the diagnostic pathway, management and prognosis for this infant.

ASSESSING THE NEEDS OF PATIENTS ATTENDING A TERTIARY REFERRAL INFLAMMATORY BOWEL DISEASE (IBD) CLINIC (POSTER)

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Introduction: Patients with inflammatory bowel diseases (IBD) have complex needs beyond the management of their symptoms. These may be difficult to define and address. Subjective comfort of knowledge therefore may drive clinic consultation rather than actual knowledge.

Aims & Methods: To assess patient-perceived levels of importance (PI) and knowledge (PK) for a range of IBD-related issues using a novel questionnaire. Identification of areas which patients feel are most important and in which subjective levels of knowledge are poorest.

Results: 50 patients were prospectively recruited (54% M, 68% Crohns disease, mean age 34 years). Females gave significantly higher overall PI scores than men and also had greater PK but this did not reach statistical significance. Females had significantly higher PI/PK scores for medications in breast-feeding and disease in pregnancy.

The 3 highest PI groups were medication adverse events, need for medication and cancer risk. The 3 lowest PK groups (non-pregnancy related) were vaccinations, sexual health and causes of IBD. PI and PK for each of these factors differed significantly (all $P<0.001$). The biggest discrepancies between PI and PK were found in risk of children developing IBD, cancer risk and causes of IBD. Ethnicity, education, employment status, disease duration and perceived disease severity did not predict for greater PI or PK.

Conclusion: A questionnaire tool may be useful to screen for IBD issues deemed to be relatively important or subjectively low in knowledge for IBD patients. It is difficult to predict specific issues using demographic and disease variables aside from female sex. We propose to provide patients with a list of topics before each consultation to allow identification of major concerns and patient centred education.

HUMAN PAPILLOMAVIRUS IN HEAD AND NECK AND OESOPHAGEAL CANCER (POSTER)

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Aims/Background: There are over 480,000 new cases of oesophageal cancer per annum and 600,000 new cases of head and neck cancer. The oesophageal incidence encompasses both histological subtypes: squamous cell carcinoma (SCC), which has known risk factors; and adenocarcinoma (AC), which has unknown aetiology. It has been recently discovered that a subset of head and neck cancers may be triggered by the presence of human papillomavirus (HPV). Due to the oesophagus having a mucosa that is continuous with the mucosa of the oropharynx it is theorised that HPV may play a role in the development of oesophageal cancer. This pilot study aims to establish whether DNA extracted from oesophageal cancer biopsies is positive for HPV DNA, using head and neck cancer biopsies as a comparison and to evaluate p53 and top2a expression.

Methods: 45 oesophageal samples and 28 head and neck samples were investigated for HPV positivity using nested PCR with MY09/11 and GP5+/6+ primers. p53 and top2a expression was analysed by immunohistochemistry.

Results: Ten samples were positive for HPV DNA, one oesophageal sample and nine head and neck samples. A significant difference in the top2a staining between the oesophageal and the head and neck samples was identified, $p<0.001$, however this significant difference was not observed in the p53 stained samples. No significant difference was

detected between the HPV positive and HPV negative samples for either antibody.

Discussion: The data collected can be used as a basis for a planned larger investigation to investigate the role of HPV in the oesophagitis-Barrett's oesophageal- adenocarcinoma pathway.

THE USE OF MR ENTEROGRAPHY IN CHANGING MANAGEMENT OF PATIENTS IN A DISTRICT GENERAL HOSPITAL (POSTER)

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Background: MR Enterography is a well established tool for small bowel imaging without radiation exposure, routinely available in Altnagelvin.

Aim: To compile data on the indications for and clinical interventions following MR Enterography in Altnagelvin from May 2009 to May 2013.

Method: MR Enterography reports performed within the study period were obtained from NIPACs and related clinical data compiled from Patient Centre.

Results: A total of 101 MR Enterographies in patients (age range 13 to 75 years; 46.5% male) were eligible for study.

69 were indicated for assessment of known Crohn's disease, 16 for investigation of possible Crohn's, 8 for small bowel imaging in patients with colitis, 4 to clarify small bowel abnormalities on previous imaging, 2 to investigate small bowel obstruction and 1 to investigate possible GI motility disorder.

On the basis of the MRE results, 42 patients had changes to their medical therapy. Of these, 41 patients with Crohn's disease had escalation of therapy. A further 8 Crohn's patients received continued funding for biologics.

18 patients were referred for further procedures -12 for surgery, 3 for consideration of balloon dilatation of strictures and 3 for further investigation with capsule endoscopy.

31 patients had no change in management, but of these, 12 had a normal MRE allowing exclusion of small bowel pathology.

Conclusions: MR enterography is a safe and useful tool in excluding, diagnosing and directing management of a variety of small bowel pathologies, and is particularly useful in identifying Crohn's patients with active disease requiring escalation of therapy.

CMV COLITIS- -A REGIONAL VIRUS LABORATORY APPROACH TO ASSESS CURRENT TESTING METHODS AND CLINICAL OUTCOME (POSTER)

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Introduction: Following primary infection, Cytomegalovirus (CMV) infection resolves to a state of life-long latency in the immune-competent host. Inflammatory bowel disease (IBD) patients are at increased risk of colonic reactivation of CMV in the inflamed colonic mucosa. However, the clinical significance of CMV complicating colitis flares is uncertain. Further, the optimal method of diagnosis of CMV colitis remains unclear. We performed a study of all CMV virology requests in IBD patients received by the Regional Virus laboratory to assess current testing practices.

Methods: As an extension to a previous study of CMV colitis in N. Ireland, laboratory results on requests submitted to the Regional Virus Laboratory from January 2010 to March 2013 were reviewed. Histopathology reports were reviewed by GI histopathologists.

Findings: A total of 320 CMV testing requests were performed in IBD patients. 192/320 (60%) patients had a CMV tissue PCR performed and 30/192 (16%) had a positive result.

Cohort:	CMV Positive PCR Mucosal Biopsy (n=30)	CMV Negative PCR Mucosal Biopsy (n=162)
Male:female %	57:43	46:54
Age range (mean; median)	15y-80y (53;52)	7y – 86yr (40 ;39)
CMV IgG positive (No. tested)	100% (n=22)	26% (n=23)
CMV Blood PCR positive (No. tested)	38% (n= 23)	Not available
CMV Histology positive (No. tested)	21% (n=28)	Not available
Colectomy rate	13%	Not available

Conclusions: There was wide variation in the testing methods used to assess for CMV. CMV IgG serology and CMV tissue PCR appear to be the optimal tests for diagnosis. A significant risk of colectomy was seen in this cohort of patients but whether CMV contributes to this risk remains unclear. Clinical data collection is ongoing and prospective studies are planned.