TIME TO ENDOSCOPY FOR ACUTE UPPER GASTROINTESTINAL BLEEDING: RESULTS FROM A PROSPECTIVE PAN-MIDLANDS TRAINEE-LEAD AUDIT

**Introduction** Prompt endoscopy for acute upper gastrointestinal bleeding (AUGIB) is associated with improved outcome. NICE recommends early endoscopy (<24 hour from admission) for all patients with AUGIB whereas the JAG Global Rating Scale stipulates early endoscopy in ≥75% as a minimum standard for service accreditation. We aimed to audit these outcomes and identify predictors of delayed endoscopy (>24 hour from admission).

**Methods** A prospective, pan-Midlands, multi-centre study was jointly undertaken by GARNet and WMRIG trainee networks. Adults admitted with AUGIB and had inpatient endoscopy between Nov-Dec 2017 were enrolled over 30d. Admission, endoscopy referral and procedure times were collected, along with clinical, laboratory, endoscopic and post-endoscopic variables. Heterogeneity between sites was assessed using Mann-Whitney and chi². Multivariate binary logistic regression analysis was used to study factors associated with delayed endoscopy.

**Results** 337 patients met inclusion criteria (median age 69.5, SD 18.8). The median time from admission to endoscopy (figure 1) was 20.9 hour (IQR 11.5–31.8). The time from admission to endoscopy referral were comparable between East and West Midlands (median 8.1 hour, IQR 3.6–18.1; p=0.242), as was the time from referral to endoscopy (median 6.6 hour, IQR 3.0–22; p=0.219). 61.1% of patients received endoscopy within 24 hour of admission (p=0.025 across sites) and 79.3% within 24 hour of referral (p=0.012). An admission GBS was associated with early endoscopy. Each 1 hour increment in referral time led to a 4% added risk of delayed endoscopy. Weekend admission, malena or suspected varices did not affect this outcome. Early endoscopy did not affect rates of endoscopic therapy (p=0.356), 30d readmission or death (p=0.985), but reduced length of stay (median difference 1d; p=0.039).

**Conclusions** Time to endoscopy for AUGIB generally fell below national standards during the period of Nov-Dec. Early endoscopy can reduce length of stay, but is dependent on prompt recognition, assessment and referral. As such, ongoing audit and strategic initiatives involving acute care services may be required to improve this outcome.

**OTU-012 A MODEL FOR IDENTIFYING PATIENTS AT RISK OF ESOPHAGEAL ADENOCARCINOMA WITHIN THE UK BIOBANK**

**Introduction** The prognosis for most patients with esophageal adenocarcinoma (EAC) is poor because they present with advanced disease. Models developed to identify patients at risk for EAC and increase early detection have been developed based on data from case-control studies. We analysed data from a prospective study to identify factors available to clinicians that identify individuals with a high absolute risk of EAC.

**Methods** We collected data from 355,034 individuals (all older than 50 years) without a prior history of cancer enrolled in the UK Biobank prospective cohort study from...
OUTCOMES OF 360 HALO EXPRESS RADIO-FREQUENCY ABLATION FOR BARRETT’S OESOPHAGUS RELATED NEOPLASIA

Conclusions We combined data on several well-established risk factors that are available to clinicians to develop a system to identify individuals with a higher absolute risk of EAC within 5 years. Studies are needed to evaluate the utility of these factors in a multi-stage, triaged, screening program.

Results Within up to 5 years of follow up, 220 individuals developed EAC. Age, sex, smoking, body mass index, and history of esophageal conditions or treatments identified individuals who developed EAC (AUROC, 0.80; 95% CI, 0.77–0.82). We used these factors to develop a scoring system and identified a point cut off that 1 047 723 individuals (29.5%), including 170 of the 220 cases with EAC, were above. The scoring system identified individuals who developed EAC with 77.4% sensitivity and 70.5% specificity. The 5 year risk of EAC was 0.16% for individuals with scores above the threshold and 0.02% for individuals with scores below the threshold.

Method Specialist centres in the UK and Ireland submitted cases where Halo 360 express had been used. Patients returned for follow up at 3 months after index RFA treatment. Surface area regression of BE regression of intestinal metaplasia (EoT (End of Treatment) CR-IM) and dysplasia (EoT CR-D) were analysed. [MDP1].

OTU-014 REPRODUCTIVE FACTORS AND RISK OF GASTRIC CANCER BY ANATOMICAL SUBSITE: THE EPIC STUDY

Introduction Gastric cancer is more common in men than in women, indicating a potential role for sex hormones in its development. The aetiology of gastric cancer differs by anatomical subsite; however, few studies have compared hormonal and reproductive risk factors by subsite in prospective analyses. We investigated the association between reproductive factors and the risk of gastric cancer by subsite in the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort.

Methods EPIC is an ongoing multicentre prospective cohort study, which comprises of 5 21 448 men and women, aged 25–70 years, recruited between 1992–2000 from ten European countries. Questionnaires administered at baseline assessed reproductive factors, including age at menarche, menopause, first pregnancy, and first child birth, as well as parity, breast feeding, menopausal hormonal therapy, and oral contraceptive use. The association between reproductive factors and gastric cancer were examined in Cox proportional hazard models to estimate hazard ratios (HRs) and 95% confidence intervals (CIs), adjusting for potential confounders.

Results During an average of 14 years of follow up, 83 gastric cardia cancers and 191 gastric non-cardia cancers were diagnosed among 3 439 851 women. Compared to women who had their first pregnancy at an earlier age (<22 years), women who had their pregnancy at a later age (>26 years) had a decreased risk of gastric non-cardia cancer (HR 0.55, 95% CI: 0.32–0.92). In addition, compared with women who had not undergone ovariectomy, women who had a bilateral ovariectomy had an increased risk of gastric non-cardia cancer.

2006 through 2010; clinical data were collected through September 2014. We identified demographic, lifestyle, and medical factors, measured at baseline, that associated with development of EAC within 5 years using logistic regression analysis. We used these data to create a model to identify individuals at risk for EAC. Model performance was assessed using area under the receiver operating characteristic curve (AUROC), sensitivity, and specificity analyses.

Results 11 centres submitted 123 patients treated with the Halo 360 Express catheter. 112 of these cases had 3 month follow up. The mean age was 67 years±10. 83% were male. 43 patients (35%) had low grade dysplasia (LGD) as initial histology; 62 had high grade dysplasia (HGD) 50%, 19 had intramuscosal carcinoma (15%), 1 had invasive adenocarcinoma. 54 (44%) had had previous endoscopic mucosal resection (EMR). The mean pre-treatment circumferential Barrett’s segment was 5.5 cm ±4.3 cm and the mean mucosal length (M) was 7.8 cm ±3.6 cm mean% reduction in C of 78±6% and mean reduction in M of 55±36% at this first 3 month follow up.

17 patients developed strictures which required dilation at this 3 month follow up. The median number of dilations was 2 (IQR2–4). 4/17 (24%) were treated with 10J/no clean, 10/17 were treated with 10J/no clean (59%), 3/17 (17%) had been treated with 10J/complete protocol. 8/17 (47%) had had previous EMR.

47 patients had 12 month EoT biopsies, 40 (85%) had CR-D and 34 (76%) had CR-IM. 4/112 patients (<4%) had progressed to invasive cancer at the time of writing. The median number of treatments (focal RFA, EMR, APC (argon plasma coagulation)) to EoT was 2 (IQR1–4).