(HR 1.83, 95% CI: 1.02–3.28). For gastric cardia cancer, there was also an elevated risk among women who had a bilateral ovariectomy but this did not quite attain statistical significance (HR 2.19, 95% CI: 0.98–4.86). The remaining reproductive factors analysed were not associated with risk of gastric cardia or non-cardia cancer.

Conclusion The results of this study suggest that reproductive factors in women may influence risk for gastric cancer, particularly non-cardia gastric cancer.

OTU-015 THE ACCURACY AND TOLERABILITY OF MAGNET ASSISTED CAPSULE ENDOSCOPY FOR THE INVESTIGATION OF OESOPHAGEAL PATHOLOGY

¹Sabina Beg*, ¹Tim Card, ¹Emilie Wilkes, ¹Jonathan White, ²Imdadur Rahman, ¹Krish Raghunath. ¹Nottingham University Hospital, Nottingham, UK; ²University Hospital Southampton, Southampton, UK

10.1136/gutjnl-2018-BSGAbstracts.277

Introduction Gastroscopy (OGD) is the established method for the investigation of oesophageal disease. Magnet Assisted Capsule Endoscopy (MACE) potentially offers a comfortable, patient friendly and community-based alternative to conventional endoscopy. This pilot study aims to explore whether this approach can be used to detect oesophageal pathology.

Methods MACE procedures were carried out using the Mirocam Navi capsule endoscope, which is steerable with the use of an external handheld magnet. A total of 50 participants were enrolled, of which 34 had known pathology, 17 Barrett's Oesophagus (BO), 17 Oesophageal Varices (OV), with 16 controls. Patients underwent the MACE procedure first by a single operator blinded to the indication. The subsequent OGD was performed by a different endoscopist blinded to the MACE findings. Sedation pre-OGD was given as per patient preference. Diagnostic yield, comfort and patient preference between the two modalities were compared.

Results 47 patients undertook both procedures (3 patients were unable to swallow the capsule), with a mean age of 61 years old (range 39–83), M:F of 2.1:1. Participants had a mean BMI of 29.5, with an average chest measurement of 105.3 cms. Three patients were unable to swallow the capsule. Sedation was requested by patients, in addition to throat spray, in 60% of OGDs (median 3 mg midazolam and 50 mcg fentanyl). With the use of the magnet, it was possible to hold the capsule in the oesophagus for a mean duration of 3 mins and 10 s and a maximum of 10 mins and 34 s. A correct real time MACE diagnosis was made in 11/15 patients with OV, 16/16 patients with BO and 15/16 controls. MACE was also able to correctly identify incidental findings, such as oesophagitis, hiatus hernia and as well as an inlet patch. Sensitivity and specificity of diagnosing OV was 73.3% (95%CI: 0.45–0.91) and 96.9% (95%CI: 0.82–1) respectively and in diagnosing BO 100% (95%CI: 0.76–1) and 100% (95%CI: 0.86–1).

MACE was considered more comfortable than conventional endoscopy ($p < 0.0001$) with a mean score of 9.2 with MACE compared to 6.7 with OGD, when assessed on a 10-point scale. 78% of patients would prefer to undergo MACE if a further examination was required compared to 0% OGD (22% had no preference). No MACE or OGD related complications occurred.

Conclusion This pilot study demonstrates that MACE is both safe and well tolerated by patients. Accuracy for the diagnosis

of BO was high and may therefore have a role in screening for this condition.

OTU-016 TIMELINE AND LOCATION OF RECURRENCE FOLLOWING SUCCESSFUL ABLATION IN BARRETT'S OESOPHAGUS: AN INTERNATIONAL MULTICENTRE STUDY

¹Krish Raghunath*, ²Sarmed Sami, ²Adharsh Ravindran, ³Allon Khan, ³Diana Snyder, ¹Jose Santiago, ¹Jacobo Ortiz-Fernando Sorto, ⁴Keith Tan, ⁵Michael Heckman, ²Ross Dierkhising, ²Michelle Johnson, ²Ramona Lansing, ²Kenneth Wang, ⁴Massimiliano DiPietro, ⁵Herbert Wolfson, ³Francisco Ramirez, ³David Fleischer, ²Cadman Leggett, ²David Katza, ²Prasad Iyer. ¹Queens Medical Centre, Nottingham, UK; ²Mayo Clinic, Rochester, US; ³Mayo Clinic, Arizona, US; ⁴Cambridge University Hospitals, Cambridge, UK; ⁵Mayo Clinic, Florida, US

10.1136/gutjnl-2018-BSGAbstracts.278

Introduction Surveillance intervals and biopsy protocols after complete remission of intestinal metaplasia (CRIM) post radio-frequency ablation (RFA) in Barrett's oesophagus (BO) are intensive and not based on substantial evidence. We aimed to assess the timeline, location, and histology of recurrence following CRIM with the goal of assessing the appropriateness of current recommendations.

Methods Data on patients undergoing RFA for BO-related neoplasia were obtained from prospectively maintained databases of five (3 USA and 2 UK) tertiary referral centres with expertise in management of BO-related neoplasia. Patients underwent RFA following endoscopic mucosal resection (EMR) of visible lesions. RFA was performed every three months till CRIM was confirmed endoscopically and histologically on two consecutive endoscopies. Subsequent surveillance was performed at 3, 6, 9, and 12 months thereafter. Recurrence incidence was estimated using Kaplan-Meier method and Cox Proportional Hazards models were used to assess predictors of recurrence.

Results 594 patients achieved CRIM as of April 1 st 2017 and were included in the analysis. Mean (standard deviation (SD)) age was 67 (10) years and 86% were males. Median (interquartile range (IQR)) BO segment length was 4 (2–6) cm. 90% of patients were treated for dysplasia or carcinoma. 151 subjects developed recurrent BO over a median (IQR) follow up of 2.8 (1.4–4.4) years. BO recurred at the gastroesophageal junction (GOJ) in 67% of subjects and in the tubular oesophagus in 33%. 84% of BO recurrences in the tubular oesophagus occurred within 5 cm of the GOJ. Histology of recurrences included cancer (9%), high grade dysplasia (HGD) (8%), low grade dysplasia (LGD) (12%), indefinite for dysplasia (2%) and non-dysplastic BO (69%). Annual incidence of any recurrence was 9.6%, dysplastic (LGD/HGD/cancer) recurrence was 2.8% and HGD/Cancer recurrence was 1.6%. The recurrence hazard rate did not vary over the follow-up ($p = 0.74$) with 19% risk within 2 years and an additional 49% risk over the next 8.6 years. Recurrence hazard rate of any dysplasia and HGD/Cancer while lower, also did not vary over the duration of follow up ($p = 0.94$ and $p = 0.88$, respectively) (Figure 1). In a multivariable model, baseline HGD/cancer predicted recurrence (hazard ratio 1.9, 95% CI 1.2–3.1, $p = 0.004$).

Conclusions In this large multicentre and international cohort study, BO recurrence risk (at least in the first 5 years following CRIM) did not appear to vary over time suggesting that continued surveillance remains important. Most recurrences