Methods Data collection spanned 16 months (1/1/2016-30/4/2017) with 442 patients being identified from the Infoflex endoscopy database. Patients were enrolled if the main indication for upper gastrointestinal endoscopy was coded as ‘Barrett’s surveillance’. Review of histology reports, Infoflex accounts and clinical notes allowed acquisition of both ‘Prague Classification’ and ‘Seattle Biopsy Protocol’ data, alongside operator status (generalist or specialist). The relationship between type of endoscopy and compliance to techniques were assessed statistically through chi-squared independence testing.

Results From 442 cases (Mean 66.2 years (Range 24–88)), compliance to both ‘Prague Classification’ and ‘Seattle Biopsy Protocol’ were 73% (322/442) and 70% (309/442), respectively. Access to specialist endoscopy was improved at 41% compared to 26% (2014-2015). Furthermore, specialist endoscopy yielded superior adherence to both, ‘Prague Classification’ (87%, (157/181) v 63%, (165/261); X²=31.04, p<0.0001)) and ‘Seattle Biopsy Protocol’ (75%, (136/181) v 66%, (173/261); X²=4.09, p=0.0432)), compared with generalist counterparts.

Conclusions Specialist endoscopy improves adherence to BSG recommendations. The introduction of dedicated specialist lists at this large teaching hospital will help to optimise surveillance further. Ultimately, future work is necessary to help identify whether this specialist service carries value for both, BO screening and outcomes related to oesophageal dysplasia and OAC.

REFERENCES

PTU-057 LINX® MAGNETIC SPHINCTER AUGMENTATION: AZITHROMYCIN AND HIGH DOSE PROTON PUMP INHIBITORS CAN IDENTIFY REVERSIBLE OESOPHAGEAL HYPOMOTILITY

1Andres Vales*, 1Jordan Haworth, 1Anthony Hobson, 2Nicholas Boyle. 1The Functional Gut Clinic, London, UK; 2The Reflux Centre, Tunbridge Wells, UK

Introduction Oesophageal hypomotility, which can accompany gastro-oesophageal reflux disease, is a contraindication to LINX® magnetic sphincter augmentation (Torax Medical). This device is employed in a minimally invasive anti-reflux procedure and involves implanting a bracelet of magnetic beads around the gastro-oesophageal junction to augment lower oesophageal sphincter function. The manufacturer has shown using oesophageal manometry, that a pressure of ≥28 mmHg is required to open the bracelet and allow normal swallowing. Consequently, for patients in whom the mean distal oesophageal amplitude (MDA) is <28 mmHg, surgery is contra-indicated and this increasingly requested treatment option denied to patients. We took a group of patients being considered for LINX but with an MDA below the opening threshold of the device, or a mean distal contractile integral (DCI) of <100 mmHg.cm.s, and tested if combined azithromycin (AZI) and proton pump inhibitor (PPI) therapy can improve contractility to the point that these patients could proceed with surgery.

Methods 18 patients (12 female, mean age 55.8) underwent a pre-LINX assessment with high resolution impedance manometry and were found to have hypomotility (MDA<28 mmHg or DCI<100 mmHg.cm.s). They were then given a four-week course of high dose twice daily PPI, combined with AZI 250 mg taken every other day. A repeat manometry study was then performed whilst on medication. Changes to the mean MDA of all subjects, the ratio of those with MDA below or above 28 mmHg, and the mean DCI, were assessed.

Results Data were assessed with Wilcoxon signed-rank and McNemar’s tests. The MDA improved from a mean of 21.3 to 33.9 (p<0.01). The DCI improved from a mean of 40.7 to 217.1 (p<0.01). The ratio of those with MDA ≥28 mmHg improved from 1/18 to 11/18 (p<0.01).

Conclusion We summarise that using a pre-operative protocol of concomitant AZI and PPIs can significantly improve contractility in a proportion of patients with GORD. This protocol distinguishes these patients as having a reversible hypomotility, and therefore allows them to proceed to LINX implantation. Further investigation is required to evaluate whether this improvement is due to a change in reflux induced dysmotility, the prokinetic effects of AZI, or a combination of both.

PTU-058 RFA FOR DYSPLASTIC BARRETT’S OESOPHAGUS: 10- YEARS OF EXPERIENCE FROM THE EAST MIDLANDS

1JR White*, 1,2J Ortiz-Fernández-Sordo, 1,2J Santiago-Garcia, 1,2D Reddill, 1,2J De Caestecker, 1,2A Cole, 1,2P Kaye, 1,2K Ragunath. 1Nottingham Digestive Diseases Centre, The University of Nottingham, UK; 2NIHR BRC at Nottingham University Hospitals and University of Nottingham, UK; 3Leicester General Hospital, UK; 4Royal Derby Hospital, UK

Introduction Radiofrequency ablation (RFA) is the recommended therapy for flat high grade dysplasia (HGD) and residual Barrett’s oesophagus (BO) after endoscopic mucosal resection (EMR) to reduce the risk of metachronous neoplasia. We aim to assess safety and effectiveness from the East Midlands Barrett’s RFA database.

Methods Data was analysed on patients referred to Nottingham University Hospital for RFA therapy to treat dysplastic BO between 2008 and 2018. The main outcome measures included complete remission of dysplasia (CRD), complete remission of intestinal metaplasia (CRIM), recurrent rates of BO, HGD and adenocarcinoma, procedural complications, treatment failure rates and median follow up prior to discharge back to the referring hospital. RFA techniques involved the use of circumferential and focal ablation every three months until the BO was obliterated. Follow up endoscopy and biopsy of original BO length was performed 3 and 12 months after the last RFA session and annually thereafter unless there was evidence of recurrent disease.

Results 221 patients were included in the analysis. Median age was 67.72 (±9.2) years, the male: female ratio was 4:1, median BO length was C2 (IQR:6) M6 (IQR:5), 59.8% had EMR prior to RFA. The proportion of patients having RFA with a previous histological diagnosis of LGD, HGD and intramucosal adenocarcinoma (IMC) was 22%, 44.8% and 32.2% respectively. The median number of RFA sessions was 66%, (173/261); X²=31.04, p=0.0432), compared with generalist counterparts.

Conclusions Specialist endoscopy improves adherence to BSG recommendations. The introduction of dedicated specialist lists at this large teaching hospital will help to optimise surveillance further. Ultimately, future work is necessary to help identify whether this specialist service carries value for both, BO screening and outcomes related to oesophageal dysplasia and OAC.

REFERENCES

PTU-057 LINX® MAGNETIC SPHINCTER AUGMENTATION: AZITHROMYCIN AND HIGH DOSE PROTON PUMP INHIBITORS CAN IDENTIFY reversible OESOPHAGEAL HYPOMOTILITY

1Andres Vales*, 1Jordan Haworth, 1Anthony Hobson, 2Nicholas Boyle. 1The Functional Gut Clinic, London, UK; 2The Reflux Centre, Tunbridge Wells, UK

10.1136/gutjnl-2019-BSGAbstracts.270

Introduction Oesophageal hypomotility, which can accompany gastro-oesophageal reflux disease, is a contraindication to LINX® magnetic sphincter augmentation (Torax Medical). This device is employed in a minimally invasive anti-reflux procedure and involves implanting a bracelet of magnetic beads around the gastro-oesophageal junction to augment lower oesophageal sphincter function. The manufacturer has shown using oesophageal manometry, that a pressure of ≥28 mmHg is required to open the bracelet and allow normal swallowing. Consequently, for patients in whom the mean distal oesophageal amplitude (MDA) is <28 mmHg, surgery is contra-indicated and this increasingly requested treatment option denied to patients. We took a group of patients being considered for LINX but with an MDA below the opening threshold of the device, or a mean distal contractile integral (DCI) of <100 mmHg.cm.s, and tested if combined azithromycin (AZI) and proton pump inhibitor (PPI) therapy can improve contractility to the point that these patients could proceed with surgery.

Methods Data collection spanned 16 months (1/1/2016-30/4/2017) with 442 patients being identified from the Infoflex endoscopy database. Patients were enrolled if the main indication for upper gastrointestinal endoscopy was coded as ‘Barrett’s surveillance’. Review of histology reports, Infoflex accounts and clinical notes allowed acquisition of both ‘Prague Classification’ and ‘Seattle Biopsy Protocol’ data, alongside operator status (generalist or specialist). The relationship between type of endoscopy and compliance to techniques were assessed statistically through chi-squared independence testing.

Results From 442 cases (Mean 66.2 years (Range 24–88)), compliance to both ‘Prague Classification’ and ‘Seattle Biopsy Protocol’ were 73% (322/442) and 70% (309/442), respectively. Access to specialist endoscopy was improved at 41% compared to 26% (2014-2015). Furthermore, specialist endoscopy yielded superior adherence to both, ‘Prague Classification’ (87%, (157/181) v 63%, (165/261); X²=31.04, p<0.0001)) and ‘Seattle Biopsy Protocol’ (75%, (136/181) v 66%, (173/261); X²=4.09, p=0.0432)), compared with generalist counterparts.

Conclusions Specialist endoscopy improves adherence to BSG recommendations. The introduction of dedicated specialist lists at this large teaching hospital will help to optimise surveillance further. Ultimately, future work is necessary to help identify whether this specialist service carries value for both, BO screening and outcomes related to oesophageal dysplasia and OAC.