

risk, but did not account for the difference between the two groups (table 1).

Conclusions ESD remains a low risk therapeutic option for early oesophageal neoplasia, however the stricture risk is higher in squamous neoplasia, irrespective of circumferential lesion involvement. We would suggest counselling patients with squamous neoplasia for a higher risk of stricture and having a lower threshold for steroid injection or prophylactic dilatation in these patients.

P228 OUTCOMES OF RFA FOR BARRETT'S MUCOSA: 10 YEARS' DATA FROM A TERTIARY CENTRE

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Introduction Radiofrequency ablation (RFA) with or without endoscopic mucosal resection (EMR) is an established, effective and safe treatment for dysplastic Barrett's oesophagus, aiming to cause complete regression to squamous mucosa. In high volume centres, complete remission of dysplasia (CR-D) is seen in 91%, and complete remission of intestinal metaplasia (CR-IM) in 83.9%¹.

Method The audit assessed the outcomes of all patients treated at the Royal Liverpool Hospital for Barrett's mucosa with low grade dysplasia (LGD), high grade dysplasia (HGD) or intramucosal cancer (IMC) through RFA (HALO 360 or HALO 90) with or without EMR over a ten year period (2009–2019). The patients were treated by consultant gastroenterologists following referrals from throughout the Mersey region. Data was collated through the United Kingdom Radio Frequency Ablation Registry, which was regularly updated in this time period.

Results 227 patients completed treatment in the 10 year period; 185 male and 42 female, with a median age of 68 years at time of first therapy (range 38–88). 45 had initial histology of LGD, 135 HGD, and 47 IMC. The median Barrett's extension was C1 (range 0–15 cm) M4 (0–16 cm). 147 patients underwent EMR prior to RFA.

The median number of ablations performed was 3 (range 2–12). Patients were followed up for a median of 1020 days (range 188–3557). As highlighted in the graphic, 209/227 (92.07%) patients achieved CR-IM at their latest endoscopy. Of those patients who have not achieved or maintained squamous mucosa upon completion of treatment, initial histology was predominantly HGD (12/18), with both LGD and IMC accounting for the remainder (3/18 each).

Conclusion The data demonstrates a high proportion of patients receiving RFA for Barrett's with dysplasia achieve CR-IM, exceeding national standards. Those whose initial histology was HGD or IMC were at higher risk of failing to achieve this.

These outcomes, from a large dataset over an extended time period, highlight the level of expertise of the relevant endoscopists, and reinforce the benefit of therapy being undertaken in high volume centres.

REFERENCE

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P229 A NOVEL APPROACH TO RADIOTHERAPY TARGETING FOR OESOPHAGEAL SQUAMOUS-CELL CANCER USING LUGOL'S-SOLUTION GUIDED ENDOCLIP MARKING

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Introduction Squamous cell carcinoma (SCC) of the oesophagus often presents at a late stage with dysphagia symptoms. Chemoradiation (definitive or neoadjuvant treatment) remains the standard strategy for the treatment of localised SCC. Accurate radiotherapy target delineation is however problematic for very early tumours that cannot be visualised on cross-sectional imaging. We describe a novel technique of endoscopic clip placement to mark the area for targeted radiotherapy, in conjunction with Lugol's iodine chromoendoscopy to delineate the dysplastic field.

Methods A prospective study of procedures performed using the technique between 2017 and 2020 was undertaken in a tertiary referral centre. Unstained lesions (USL) were described and photographed, The proximal and distal extent of USLs were marked with ResolutionTM endoclips (Boston Scientific) which were placed on normal appearing squamous tissue 0.5 cm away from the USL. Four operators carried out the procedures with expertise in Endoscopic Eradication therapy and lesion recognition. Endoscopy reports, clinic letters, and imaging modalities were all interrogated to evaluate patient outcomes.

Results Fifteen patients were enrolled, 4 male, 11 female. Thirteen (86.7%) were for a new diagnosis of SCC, and 2 (13.3%) were for SCC recurrence. All patients were staged as T2N0M0 on CT. Eight patients had prior EUS and 13 had PET-CT scans, but these imaging modalities could only detect the area of abnormality in 3 (20%), and 4 (26.7%) of cases respectively.

Lugol's Chromoendoscopy was able to clearly delineate the dysplasia in all cases (100%). The mean total length of oesophageal USL marked with clips was 7.3 cm \pm 3.8. The mean length of endoscopic procedure was 9.2 minutes \pm 2.4. All procedures were undertaken with conscious sedation with a median dose of 2.5 mg midazolam (2.5–3.0) and 50 mcg fentanyl (0–75 mcg). All 15 patients scored comfortable on a GRS scale. Mean time from clip deployment to CT radiotherapy planning scan was 7.8 days (\pm 5.1). No clips fell off prematurely requiring repeat endoscopy. Median dose of radiotherapy delivered was 50Gy. At 12-months, of those followed up 26.7% had evidence of relapse free survival.

Conclusions Here we describe a novel technique using Lugol's guided clip placement prior to radiotherapy, demonstrating it to be a quick and uncomplicated procedure which can be used in the management of patients with SCC.

P230 PREVALENCE OF CERVICAL INLET PATCH IN PATIENTS WITH AND WITHOUT GLOBUS

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Introduction The cervical inlet patch (CIP) is an island of heterotopic gastric mucosa, most commonly found in the

proximal oesophagus. Its importance as a cause of throat symptoms has been recognised, particularly chronic globus.

Studies report variable figures regarding the prevalence of heterotopic gastric mucosa in the proximal oesophagus, between 0.03% and 5.9%. It is likely that this variability is due to the quality of endoscopy, with one study demonstrating the detection rate rises 10-fold when endoscopists were aware of the condition.

Here, we aimed to evaluate the true prevalence of cervical inlet patch in patients with and without globus following implementation of a structured endoscopy reporting template to enhance detection rate of CIP.

Methods A prospective study of presence of inlet patch documented during endoscopic BRAVO capsule procedures performed between 2009 and 2020 was undertaken. Five operators carried out the procedures with expertise in optical image enhancement endoscopy and upper-GI lesion recognition. Endoscopy reports were interrogated including picture photo-documentation to confirm presence of inlet patch. Additionally, patient symptoms and BRAVO capsule pH data were analysed to detect association with globus and reflux. Assessment of normality of data was assessed using the Shapiro Wilks test and subsequently non-parametric analyses were performed using the Mann Whitney U test.

Results A total of 1042 patients undergoing Bravo were studied. The use of a structured endoscopy reporting template for BRAVO capsule was used and as such all patients were classified as having the presence or absence of an inlet patch.

All had conscious sedation; median dose of fentanyl 100 mcg (75–150 mcg) and midazolam 4 mg (3–7 mg).

CIPs were detected in 76/1042 (7.1%). Association of CIP and abnormal BRAVO reading was non-significant for number of reflux events or total acid exposure time but was significantly associated with symptoms such as chest pain ($p < 0.05$).

In those with no globus symptoms ($n=294$), CIP was detected in 13 (4.4%), but in those with globus ($n=748$), this increased to 63 (8.4%), $p=0.03$.

Conclusions In this large cohort study the prevalence of cervical inlet patch was found to be 7%, and in those with oropharyngeal symptoms, over 8%. Improved detection rate may be related to numerous factors, including endoscopists level of experience at detecting pathology, sedation use and patient comfort, as well as a reporting template focusing the endoscopist to comment on presence/absence of inlet patch. Presence of CIP may be considered as a quality metric of upper-GI endoscopy in the future.

P231

AN EVALUATION OF THE ENDOSCOPIC, PATHOLOGIC AND RADIOLOGIC FEATURES OF 225 PATIENTS WITH EOSINOPHILIC OESOPHAGITIS

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Introduction Eosinophilic Oesophagitis (EoE) is a chronic allergic disorder of the oesophagus, associated with an inflammatory infiltrate of eosinophils into the oesophagus, and associated with submucosal fibrosis and dysphagia. A high index of suspicion is needed at endoscopy and targeted biopsies from areas of mucosal abnormality in addition to standard

multiple level sampling strategies achieves highest diagnostic yield.

Methods A retrospective study of patients with a pathological diagnosis of eosinophilic oesophagitis between 2015 – 2017 was undertaken following a data extraction of results using the Electronic Patient Record (EPR) system.

Baseline characteristics were interrogated, in addition to endoscopic findings, associated radiological abnormalities, management strategies and patient outcomes.

Data was extracted and analysed using Rstudio.

Results A total of 225 patients with a new diagnosis of EoE were made during the time period studied. Median age distribution was 25–30 years, with the oldest patient diagnosed at 75-years of age. The main indication for endoscopy was dysphagia (47%), followed by odynophagia (27%). Food bolus obstruction was present in 25 individuals (11%). The most common endoscopic finding was stricture (40%). A normal oesophagus was described in 18% of individuals with trachealisation seen in 15% of cases. A schatzki ring was present in 10% of cases with endoscopic evidence of oesophagitis described in 45%.

Eosinophil counts ranged from 15–72 eos/hpf with furrows and exudates associated with higher mean eosinophil counts/hpf (55 and 52 respectively) than other endoscopic features, and mucosal oedema associated with lower counts (mean 32 eos/hpf).

Number of biopsies taken ranged from 1–20. Taking more biopsies was associated with a higher chance of spongiosis as well as fibrosis being commented on during histopathological analysis ($p < 0.001$ and $p = 0.013$ respectively).

Conclusions Eosinophilic Oesophagitis is becoming an increasingly more commonly diagnosed condition and is associated with significant patient morbidity. Heightened awareness of endoscopic features of disease as well as enhanced biopsy protocols maximise the chances of successful diagnosis.

P232

EXCESSIVE BELCHING IN GERD: SUPRAGASTRIC BELCHING OR SMALL INTESTINAL BACTERIAL OVERGROWTH?

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Introduction Excessive belching is commonly reported in patients with gastroesophageal reflux disease (GERD). The main determinant of troublesome belching in reflux patients is thought to be supragastric belching (SGB). We looked at the prevalence of SGB and small intestinal bacterial overgrowth (SIBO) in GERD patients with excessive belching.

Methods Using retrospective data, we identified 41 adult patients referred to a speciality reflux centre with excessive belching, and who carried out a 24-hour esophageal pH-impedance test and lactulose breath test (LBT). Pathological SGB was defined as >13 per 24 hours and SIBO was determined by a rise in hydrogen ≥ 20 ppm from baseline within 90 minutes, respectively. These data were analysed statistically using McNemar's test, Fisher's exact test and independent t-tests.

Results All patients reported excessive belching and at least one other typical symptom of GERD (85% reported heartburn and 63% reported regurgitation). SIBO was more prevalent