(46.3%; 95% CI, 30.7–62.6%) than SGB (17.1%; 95% CI, 7.2–32.1%; $P = 0.012$). SGB was not associated with a positive reflux-symptom association for heartburn or regurgitation ($P > 0.05$), but the presence of SIBO was associated with a positive reflux-symptom association for regurgitation ($P = 0.004$). Patients with a positive reflux-symptom association for regurgitation had significantly more hydrogen production on LBT than those without (mean AUC 275.8 ppm vs 139.1 ppm; $P = 0.028$).

Conclusions A larger proportion of reflux patients with excessive belching have SIBO compared to SGB. Therefore, SIBO may be the primary cause of belching in GERD. In addition, SIBO was associated with a positive reflux-symptom association for regurgitation and hydrogen production on LBT was significantly greater in these patients. It may be that excessive bacterial fermentation in the proximal gut contributes to reflux symptoms, but further studies are required to look at the relationship between SIBO and GERD.

P234 COMPARING THE ENDOROTOR® RESECTION DEVICE WITH CONTINUED ABLATION IN TREATMENT OF REFRACTORY BARRETT'S OESOPHAGUS

[1,2]Mohamed Hussein*, [1,2]Sarmed Sami, [1,2]Laurence Lovat, [1,2]Rehan Haidry, [3]Kenneth Wang. [1]*University College London, UK*; [2]*University College London Hospital, UK*; [3]*Mayo clinic, USA*

10.1136/gutjnl-2020-bsgcampus.308

Introduction Endoscopic ablation therapy is recommended in patients with flat dysplastic Barrett's oesophagus (BE). A proportion will be refractory to treatment. This is associated with neoplasia recurrence. The EndoRotor® device (Interscope Medical Inc, Whitinsville, MA, USA) is a non-thermal resection device. The aim was to compare the safety and efficacy of EndoRotor with ablation in the treatment of refractory BE.

Methods This is an on-going prospective, randomised trial in two centres in the UK and USA. Patients with refractory BE were randomised to EndoRotor resection or continued ablation (Cryotherapy/Radiofrequency ablation). All patients had Intramucosal adenocarcinoma/High grade or Low-grade dysplasia at initial baseline histology. Patients were followed up every 3 months with a maximum of 3 treatments. Primary outcome was BE length reduction. Secondary outcomes included pain post procedure (pain scores), stricture rates and complications. Refractory disease was defined as the presence of BE after at least 3 sequential sessions of first line ablative endotherapy or less than 50% reduction in BE after two sessions.

Results A total of 11 patients were recruited thusfar. 5 randomised to EndoRotor and 6 to ablation.

In the EndoRotor arm the mean initial BE length was C 1.4 (SD 2.1) and M 3.5 (SD 1.9). Patients had a median number of 5 (IQR, 3–6) previous ablations. Patients had a mean of 2 EndoRotor procedures. The mean BE length post initial treatments is C 1 and M 1.9 thusfar. There were 14 procedures performed. Patients had mild (score =1- 4) discomfort post 3/14 procedures. There was no perforations/strictures during follow-up. There was one adverse event where intraprocedural bleeding was treated successfully with bipolar probes.

In the ablation arm the mean baseline initial BE length was C 0.7 (SD =1.2) and M 3.6 (SD 1.9). They had a median number of 4 (IQR, 3–5) previous ablations. They had a mean of 2 follow-up ablations. The mean current BE length post treatment is C 0.2 and M 3.2. There were 13 procedures performed. There was one report of mild discomfort post procedure.

Abstract P234 Table 1 Outcomes in the EndoRotor and ablation arm

	EndoRotor arm (N = 5)	Ablation arm (N =6)
Median no. of previous ablations	5(IQR, 3–6)	4(IQR, 3–5)
Median no. of procedures	2	2
Median follow up time (months)	6(IQR, 3–6)	5(IQR, 3–6)
Median procedure treatment time (Mins)	32(IQR, 16–60)	6(IQR, 5–9)
Mean reduction in BE length (C)(mm)	4	5
Mean reduction in BE length (M) (mm)	16	4

Conclusion EndoRotor is safe to use in the treatment of refractory BE with no associated strictures and low pain scores. In this cohort of refractory patient's EndoRotor has slightly better outcomes in terms of BE length reduction. This data will be validated with more patients recruited and completed treatment sessions with histology and final BE lengths.

P235 DEVELOPMENT AND VALIDATION OF THE DIRECT OBSERVATION OF BARRETT'S IMAGING/ENDOTHERAPY SKILLS (DOBES) ASSESSMENT TOOLS

[1]John McGoran*, [1]John de Caestecker, [2]Rami Sweis, [3]Howard Smart, [4]Hugh Barr, [5]Nigel Trudgill, [6]Massimiliano diPietro, [2]Rehan Haidry, [2]Matt Banks, [2]David Graham, [2]Laurence Lovat, [7]Krish Ragunath, [2]Sarmed Sami. [1]*University Hospitals Of Leicester, Belfast, UK*; [2]*University College London Hospitals, London, UK*; [3]*Royal Liverpool Hospitals, Liverpool, UK*; [4]*Gloucestershire Hospitals, Gloucester, UK*; [5]*Sandwell and West Birmingham NHS Trust, West Bromwich, UK*; [6]*MRC Cancer Unit, Cambridge, UK*; [7]*Curtin University, Perth, Australia*

10.1136/gutjnl-2020-bsgcampus.309

Introduction Endoscopic resection (ER) and radiofrequency ablation (RFA) have become the standard of care worldwide for treatment of early Barrett's neoplasia. Procedural outcomes are highly dependent on the operator skill and training. Validated tools for assessment of competency in these 2 procedures are currently lacking. We aimed to develop and validate ER and RFA tools for use in clinical practice.

Methods A working group of 15 experts who met one or more of the predefined inclusion criteria was set up. Using published evidence-based criteria, the group devised a structured checklist of graded competency descriptors (scores ranged from 1=required maximal supervision to 4=competent). The latter were grouped into four main competency domains, namely: pre-procedural; specific skills; post-procedural; and endoscopic non-technical skills (ENTS). Consensus agreement and piloting was undertaken to ensure content validity.

Construct validity was measured by independent assessment of 60 videos per procedure of ER and RFA by 7 assessors (selected from the working group) in a random manner. Procedures were performed by 15 operators with variable expertise including experts and trainees. Statistical analysis was performed using Generalizability theory, which analysed 'variability components' between: operators; cases; assessors; assessors across (x) operators; and unexplained variation.