Conclusions These results confirm previous findings that NER1006 is a more effective bowel preparation than NaP + MgCit and 2L PEG + Asc. If used routinely in large populations, the higher level of cleansing obtained with NER1006 will likely contribute towards increased lesion detection rates.

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PTH-068 ENDOSCOPIC CLOSURE OF ANTERIOR RESECTION ANASTOMOTIC DEHISCENCE USING PADLOCK CLIPS

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Introduction Anastomotic leakage is one of the serious complications after anterior resection. The risk of colonic anastomotic leak after anterior resection has been reported to be as high as 23% in some published series. Herein, we present a case of successful endoscopic closure of anastomotic dehiscence using Padlock clipping system, which was used alongside the drainage of pelvic collection.

Method 43 days after developing anastomotic dehiscence post anterior resection, endoscopic Padlock clips were used to successfully close a 2 cm full thickness defect.

Results 73 years old male patient underwent laparoscopic anterior resection operation for moderately differentiated recto-sigmoid adenocarcinoma. He developed colonic anastomosis dehiscence on day 5 post-operatively. Emergency laparotomy was performed where drains were inserted with ileostomy formation while through-the-scope endoscopic clips deployed intraoperatively by the surgical team, were unable to successfully close the anastomotic defect. Patient was given parenteral nutrition post-procedure.

Two weeks later, faeculent fluid was noted in one of the drains, which suggested on-going leak. Repeat scan showed persistent extra-luminal leakage of the contrast with collection.

A flexible sigmoidoscopy was performed which identified a large 2 cm anastomotic site defect. This was then closed by the deployment of three Padlock clips along with three through-the-scope Resolution clips.

Conclusion Traditionally, surgical 'divert and drain' technique has been the mainstay of treatment for anastomotic leakage. Whereas endoscopic clips have been used successfully for the closure of anastomotic leaks, this case highlights that the Padlock system can be used successfully to close a chronic full thickness defect.

PTH-069 VALIDATING A CLASSIFICATION SYSTEM USING ISCAN OPTICAL ENHANCEMENT FOR DETECTION OF EARLY BARRETT'S OESOPHAGUS NEOPLASIA

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Introduction Magnification endoscopy (ME) offers an additional tool for endoscopists undertaking BE surveillance to guide biopsies or direct endoscopic eradication therapy (EET) for early neoplasia. Mucosal patterns and oesophageal mucosal microvasculature can be interrogated. We propose a simple classification based on mucosal (M) and vascular (V) patterns, to differentiate dysplastic BE (DBE) mucosa from non-dysplastic (NDBE) mucosa. We assessed if magnification endoscopy paired with a new imaging platform, iScan OE (Pentax, Hoya, Japan) improves detection of early BE associated neoplasia. We validate our MV classification with this new platform.

Methods Patients undergoing BE surveillance from Jan 2016–Nov 2017, were recruited from 3 international centres. ME was used to image the mucosa at up to 136x magnification. Endoscopists targeted normal and abnormal areas suspicious for neoplasia. Where possible, each area was imaged in HD-WLE and OE and matched histology was acquired from recorded areas. 7 experts blinded to histology classified HD images using our MV classification as NDBE or DBE. Mucosal patterns were graded as M1 (regular/gyric pits); M2 (irregular/featureless pits). Vascular patterns were graded as V1 (regular, normal calibre); V2 (dilated, irregular). M1V1 was considered NDBE; M2V1, M1V2 or M2V2 as DBE. Classifications were compared with histology. Accuracy, sensitivity, specificity were calculated. Krippendorff's alpha was used to assess interobserver agreement (IA).

Results 54 patients were recruited: 63 HD-WLE and 90 OE magnified images were obtained. The proportion of dysplastic areas imaged between WLE and OE was similar (29/63 vs 49/90 p=NS). Using the MV classification, experts classified tissue as DBE or NDBE with 66.3% (±0.05) accuracy using HD-WLE vs 80.1% (±0.02) with OE [65–76% p<0.001]. Sensitivity improved from 81.2% (±13) with HD-WLE to 87.4% (±5.6) with OE [79–92%]. Specificity improved with OE; from 54.3% (±17.6) in HD-WLE to 70% (±4.4) in OE [62–76]. Both modalities showed fair IA between experts (0.28 in HD-WLE and 0.25 in OE).

Conclusion ME allows interrogation of the oesophageal mucosa and microvessels. We show that using iScan OE with ME in combination with the MV classification, confers a significant improvement in the accuracy, sensitivity and specificity of endoscopists in identifying early neoplasia, compared to HD-WLE alone.

PTH-070 CORRELATION OF THE RECORDED IMAGE QUALITY INDEX (RIQI) SCORE WITH EXISTING COLONOSCOPY KEY PERFORMANCE INDICATORS

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Introduction The RIQI score (scale 0–10) has been validated as a measure of the quality of image recording during endoscopic examination. A high RIQI score (9–10) provides good clinical utility of the images to support clinical decision-making e.g. in MDTs. Taking high quality images requires good tip control to hold the correct focal length and time spent cleaning the mucosa. We aimed to assess the correlation between median RIQI scores and existing colonoscopy key performance indicators (KPIs) including the Caecal Intubation Rate (CIR), Polyp Detection Rate (PDR) and median colonoscopic withdrawal time (WDT).