Introduction Gastric cancer is the 4th leading cause of cancer death worldwide. Prognosis remains poor, largely due to late diagnosis. Early gastric neoplasia carries a far better prognosis with a 5 year survival of 85%. Traditionally, gastrectomy is the definitive locoregional treatment, but carries significant perioperative morbidity. For early gastric cancer without risk of nodal metastasis, endoscopic en bloc resection with endoscopic submucosal dissection (ESD) is a feasible alternative. We present a prospective cohort analysis of patients with early gastric neoplasia undergoing ESD at a single tertiary Centre in the United Kingdom

Methods Patients were all referred through local cancer networks after staging to exclude metastatic disease. Patients underwent gastroscopy with biopsy for histology and contrast computed tomography (CT) for staging. High definition endoscopy & chromoendoscopy with indigo carmine were used to help delineate lesions. Pathology was confirmed by expert GI pathologists prior to resection. Surgery was discussed with all patients as an alternative to ESD. All gastric ESD were performed under propofol sedation by a single endoscopist with specialist training.

Results Over 24 months, 19 patients underwent ESD. Mean age was 71 years (range 23–87), 68% were male. Two lesions (10%) were in the proximal stomach, 1 in mid body (5%) 16 in distal stomach (85%). Mean resection size was 28mm (15–58). Mean resection time was 71 mins from intubation. En-bloc resection was achieved in 15/19 (74%) patients. 16/19 patients (84%) had a clear deep resection margin. Resection histology was high grade dysplasia in 52%, carcinoma in situ 11%, LGD 5%, poorly differentiated adenocarcinoma 21%, neuroendocrine tumour in 5%. 13/16 with clear resection margins post ESD remain in follow up. Of these 11/13 (87%) remain free of disease at most recent biopsy (median follow up 6 months, range 0–38). Both recurrences were LGD at the resection site. One was treated with laser ablation and the other with repeat ESD. There were no perforations or bleeding seen in our cohort during ESD.

Conclusion In this small cohort of early gastric neoplasia, ESD appears to provide a safe and effective alternative to surgery with encouraging durability although our follow up time is short. Early recognition of lesions is essential to offer patients a minimally invasive curative intervention. With increasing use of high definition endoscopy more patients will become eligible for therapy. Long term durability remains to be seen.

Disclosure of Interest None Declared.

**[P-TH-044]** ANALYSIS OF METACHRONOUS COLORECTAL ADENOMA SITES SUGGESTS PROXIMAL OCCURRENCE IS MORE PROBABLE

doi:10.1136/gutjnl-2013-304907.534

**[P-TH-047]** A PROSPECTIVE STUDY ON THE IMPACT OF A ‘BOWEL CLEANSING CARE BUNDLE’ ON INPATIENT COLONOSCOPY VISUALISATION SCORES: A LONDON DISTRICT HOSPITAL EXPERIENCE

doi:10.1136/gutjnl-2013-304907.534

Introduction It is recognised that a well prepared colon increases adenoma detection and removal rates1 and the discovery of other significant pathology at endoscopy. Several factors can lead to a suboptimal outcome at inpatient colonoscopy but inadequate bowel preparation is a major contributor2. Potentially, this leads to repeat and/or alternative procedures and costly and prolonged hospital length of stays. ‘Care Bundles’ improve outcomes by decreasing the unwanted variation in clinical care and ensure the application of accepted clinical practices3. Consequently, we created a bowel cleansing bundle to address these issues and see whether it would lead to better visualisation scores.

Methods All inpatients requiring colonoscopy were recruited over two six-month periods at a London district hospital. A bowel cleansing bundle was devised formalising accepted clinical guidelines and it was implemented for all subsequent inpatient colonoscopies during the latter study phase. The bundle included sections on timings for the administration of bowel preparation agents, cessation of anti-motility agents, nutrition and hydration. Visualisation scores were noted from the endoscopists’ reports (good, moderate and poor) and patients were followed up until discharge.

Results In total there were 93 eligible procedures. 53 patients in the pre-bundle population [56% Male, average age 69 years] and 40 patients in the post-bundle population [three exclusions, 57% male, average age 64 years] of which: ‘good’ visualisation scores = 45% vs 81%, ‘moderate’ = 21% vs 1% and ‘poor’ = 34% vs 16%. Implementation of the bundle led to significantly superior ‘good’ visualisation scores (p = < 0.001).

Introduction A human sporadic colorectal adenoma may influence the formation of another adenoma even after its removal, with up to 60% of such patients developing metachronous adenomas following adenoma excision. However data regarding the occurrence of a metachronous colorectal adenoma relative to the index adenoma is scarce. Therefore, we investigated whether a metachronous human sporadic colorectal adenoma is more likely to be found in a section of the colorectum proximal to that of the index adenoma. Travel in segments may be significant. Taken together, the data suggest research effort into underlying mechanisms of metachronous adenoma is needed.

Disclosure of Interest None Declared.

**Introduction**

Over 24 months, 19 patients underwent ESD. Mean age was 71 years (range 23–87), 68% were male. Two lesions (10%) were in the proximal stomach, 1 in mid body (5%) 16 in distal stomach (85%). Mean resection size was 28mm (15–58). Mean resection time was 71 mins from intubation. En-bloc resection was achieved in 15/19 (74%) patients. 16/19 patients (84%) had a clear deep resection margin. Resection histology was high grade dysplasia in 52%, carcinoma in situ 11%, LGD 5%, poorly differentiated adenocarcinoma 21%, neuroendocrine tumour in 5%. 13/16 with clear resection margins post ESD remain in follow up. Of these 11/13 (87%) remain free of disease at most recent biopsy (median follow up 6 months, range 0–38). Both recurrences were LGD at the resection site. One was treated with laser ablation and the other with repeat ESD. There were no perforations or bleeding seen in our cohort during ESD.

**Conclusion**

In this small cohort of early gastric neoplasia, ESD appears to provide a safe and effective alternative to surgery with encouraging durability although our follow up time is short. Early recognition of lesions is essential to offer patients a minimally invasive curative intervention. With increasing use of high definition endoscopy more patients will become eligible for therapy. Long term durability remains to be seen.

**Disclosure of Interest** None Declared.

**[P-TH-046]** ANALYSIS OF METACHRONOUS COLORECTAL ADENOMA SITES SUGGESTS PROXIMAL OCCURRENCE IS MORE PROBABLE

doi:10.1136/gutjnl-2013-304907.533

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**Conclusion**

A metachronous human sporadic colorectal adenoma is more likely to be found in a segment of the colorectum proximal to that of the index adenoma. Travel in segments may be significant. Taken together, the data suggest research effort into underlying mechanisms of metachronous adenoma is needed.

**Disclosure of Interest** None Declared.

**[P-TH-047]** A PROSPECTIVE STUDY ON THE IMPACT OF A ‘BOWEL CLEANSING CARE BUNDLE’ ON INPATIENT COLONOSCOPY VISUALISATION SCORES: A LONDON DISTRICT HOSPITAL EXPERIENCE

doi:10.1136/gutjnl-2013-304907.534


**Introduction**

It is recognised that a well prepared colon increases adenoma detection and removal rates1 and the discovery of other significant pathology at endoscopy. Several factors can lead to a suboptimal outcome at inpatient colonoscopy but inadequate bowel preparation is a major contributor2. Potentially, this leads to repeat and/or alternative procedures and costly and prolonged hospital length of stays. ‘Care Bundles’ improve outcomes by decreasing the unwanted variation in clinical care and ensure the application of accepted clinical practices3. Consequently, we created a bowel cleansing bundle to address these issues and see whether it would lead to better visualisation scores.

**Methods**

All inpatients requiring colonoscopy were recruited over two six-month periods at a London district hospital. A bowel cleansing bundle was devised formalising accepted clinical guidelines and it was implemented for all subsequent inpatient colonoscopies during the latter study phase. The bundle included sections on timings for the administration of bowel preparation agents, cessation of anti-motility agents, nutrition and hydration. Visualisation scores were noted from the endoscopists’ reports (good, moderate and poor) and patients were followed up until discharge.

**Results**

In total there were 93 eligible procedures. 53 patients in the pre-bundle population [56% Male, average age 69 years] and 40 patients in the post-bundle population [three exclusions, 57% male, average age 64 years] of which: ‘good’ visualisation scores = 45% vs 81%, ‘moderate’ = 21% vs 1% and ‘poor’ = 34% vs 16%. Implementation of the bundle led to significantly superior ‘good’ visualisation scores (p = < 0.001).
Introduction UK practise in diagnostic oesophago-gastric-duodenoscopy (OGD) has changed little over the last 10–20 years. Currently the only quality measure relates to ability to reach the second part of the duodenum. Evidence-based quality indicators in colonoscopy pertain to the quality of views, the amount of time spent examining the mucosa and expected levels of lesion detection, in addition to completion rates. Their adoption, in combination with robust clinical governance has undoubtedly improved the detection of colorectal diseases, patient safety and patient experience. The equivalent evidence base for diagnostic OGD does not exist and this has limited development.

Benchmarking is a process measuring the practise of one organisation against its peers and may provide a basis for developing quality standards for upper GI practise. This study measures routine practise in diagnostic oesophago-gastric-duodenoscopy, use of mucosal enhancement techniques, care in image capture, and better awareness of upper GI pathology will have significantly contributed to increased detection.

Further investigation is needed into which factors can be used as independent measures of quality in UGI examination, including time taken to examine the upper GI tract and measures of endoscopists’ lesion recognition skills (not currently assessed as part of endoscopy training).

Disclosure of Interest None Declared.

REFERENCES

Abstract PTH-047 Table 1

<table>
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<tr>
<th></th>
<th>Pre-Bundle Population</th>
<th>Post-Bundle Population</th>
<th>Total</th>
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<tbody>
<tr>
<td>Good Visualisation</td>
<td>24</td>
<td>30</td>
<td>54</td>
</tr>
<tr>
<td>Moderate/Poor Visualisation</td>
<td>29</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>37</td>
<td>90</td>
</tr>
</tbody>
</table>

P-value = 0.0008; two-tailed Fisher’s exact test.

Conclusion Our study - the first looking at the effect of a bowel cleansing care bundle on inpatients - shows that its implementation conferred significantly better visualisation scores at colonoscopy with a dramatic reduction in poor visualisation.

Disclosure of Interest None Declared.

Abstract PTH-047 Figure 1

Conclusion Comparison of the ‘cultures of practise’ are interesting, revealing significant differences of approach in UGI examination.

Although there are differing disease prevalence’s in the background populations, it seems likely that better cleaning of the upper GI tract, use of mucosal enhancement techniques, care in image capture, and better awareness of upper GI pathology will have significantly contributed to increased detection.

Further investigation is needed into which factors can be used as independent measures of quality in UGI examination, including time taken to examine the upper GI tract and measures of endoscopists’ lesion recognition skills (not currently assessed as part of endoscopy training).

Disclosure of Interest None Declared.

Abstract PTH-048 BENCHMARKING IN UPPER ENDOSCOPY - BEST PRACTICE MARKERS

doi:10.1136/gutjnl-2013-304907.535

1*R J Mead, 1*Y Hawkes. ‘Gastroenterology, Cambridge University Hospitals NHS Trust, Cambridge; ‘Gastroenterology, Royal Glamorgan Hospital, Llantrissant, UK

Introduction Modern colonoscopic surveillance follows clear evidence based guidelines, and clinical decisions appear straightforward. However, the guidelines do not define what should be done in cases with sub-optimal preparation.

Methods We retrospectively reviewed all adenoma and post carcinoma surveillance colonoscopies over 5 years (2006–2011) with a further year follow up looking for incident cancers.

Polyp site, number, size, and colonoscopy completion rates were recorded.

Two cleaning regimes were used: standard - Fleet; second line in older patients/renal failure - KleanPrep, picolax and senna. Preparation was graded as optimal, suboptimal or unsatisfactory. The colonoscopy completion rate and polyp site, number, size and colonoscopy completion rates were recorded.

Results 2176 patients underwent 2649 surveillance colonoscopies. Average patient age was 68.8 years. Mean follow up was 3.4 years.

3758 polyps were identified in 1539 procedures; 525 polyps were 1cm or larger. There was a marked trend towards lower polyp detection with worsening bowel preparation (p = 0.056 Chi² with a marked reduction in mean number of polyps particularly on the right side with worsening preparation.

12 colorectal cancers were detected in this population. The overall cancer rate in this high risk population was 1 in 181 patients (95% C.I. 103 – 350).

73 patients with sub-optimal or unsatisfactory preparation had a repeat colonoscopy. In 64% the preparation was satisfactory, 28% were sub-optimal, and 8% had an un-satisfactory examination.

Disclosure of Interest None Declared.

Abstract PTH-049 SUB-OPTIMAL BOWEL PREPARATION IN THE SURVEILLANCE POPULATION - WHAT DOES IT MEAN?

doi:10.1136/gutjnl-2013-304907.536

1*R J Mead, 1*Y C Lim, 1*E Cameron. ‘Gastroenterology, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK

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Disclosure of Interest None Declared.