WATER INSUFFLATION VS NARROW BAND IMAGING. WHICH MODALITY PRODUCES RELIABLE IMAGES OF TERMINAL ILEUM AT COLONOSCOPY?

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Introduction Terminal ileal (TI) images are reliable indicators of completeness of colonoscopy1. Studies have shown that TI image provide more convincing than caecal images to verify completion of colonoscopy2. Acquisition of TI images after water insufflation (WI) has been found to produce reliable images3. We wanted to identify if TI images after WI through the biopsy channel or narrow band images of TI produce more reliable as part of image documentation.

Methods 4 images of terminal ileum were captured using Olympus colonoscope®. They were 1 captured with conventional white light endoscopy (WLE), 1 captured with white light endoscopy + water insufflation (WLEWI), 1 captured with narrow band imaging (NBI) and 1 captured with NBI + water insufflation (NBWI).

Without informing that these were TI images, the 4 terminal images were sent to endoscopists by email along with an invitation to participate in a survey using survey monkey® portal. Using the survey the respondents marked each image as follows: not terminal ileum = 1, may be terminal ileum = 2, most likely terminal ileum = 3, definitely terminal ileum = 4.

Results 36 endoscopists completed our survey. 49% were gastroenterology Specialist registrar, 40% were consultant gastroenterologists and 11% were colorectal surgeons. Most of the respondents (n = 31) were from the UK, 4 were from the United States and 1 was from the rest of the Europe.

19.4% (n = 7) of respondents had colonoscopy experience of 1–2 years, 30.6% (n = 11) had colonoscopy experience of 3–5 years, 19.4% (n = 7) had colonoscopy experience of 5–9 years 30.6% (n = 11) had colonoscopy experience of more than 10 years.

Responses in Table 1:

<table>
<thead>
<tr>
<th></th>
<th>WLE</th>
<th>WLEWI</th>
<th>NBI</th>
<th>NBWI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not TI (Score 1)</td>
<td>5.6%</td>
<td>0.0%</td>
<td>2.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>May be TI (score 2)</td>
<td>33.3%</td>
<td>16.7%</td>
<td>22.2%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Most likely TI (score 3)</td>
<td>38.9%</td>
<td>22.2%</td>
<td>22.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Definitely TI (score 4)</td>
<td>22.2%</td>
<td>61.1%</td>
<td>52.8%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Conclusion Water insufflation on terminal ileum using the biopsy channel of colonoscope produce more reliable images compared to White light or narrow band images (NBI). Combination of NBI and water insufflation together produced the most reliable images.

Disclosure of Interest None Declared.

REFERENCES

Factors Associated With Reported Pain During Colonoscopy: A Retrospective Study

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Introduction The optimum role for gastroscopy (OGD) in managing dyspepsia and detecting oesophagogastric cancer (OG-Ca) is controversial. UK general practitioners (GPs) serve a gatekeeper role in selecting dyspeptic patients for OGD. We reported that variation in rates of OGD at the level of GP practise populations is associated with OG-Ca outcome, specifically that low rates are related to risk of poor outcome.[1] We wished to show that GP practices with low OGD rates are likely to be operating more selective referral practise with higher yield of serious pathology.

Methods GP practices with ≥1 incident case of OG-Ca were selected, as described.[1,2] Using a two-year download of HES data we identified all elective OGD procedures and obtained practise data to calculate age-sex adjusted OGD rates. Practices were divided into OGD rate tertiles (Low, Medium or High). An algorithm was developed to analyse coded diagnoses for first OGDs, identifying most “serious” condition: (1) OG-Ca, (2) Major acid-peptic diseases, (3) Minor findings (e.g. gastritis), (4) Benign GI neoplasms, (5) Upper GI symptom codes, (6) Miscellaneous (all others). We compared age and proportions with serious disease (categories: 1–2) across the GP practise tertiles.

Results 887,256 patients had elective OGD from 6,813 practices serving an adult population of c.39 million. Overall, yield of OG-Ca was 2.1%, major acid-peptic diseases 11.6% and the remaining 86.3% were mainly minor pathologies or symptom codes. Mean OGD rate for Low, Medium, High practices: 4.4 vs 8.1 vs 12.9 per 1,000 population. No difference in age distribution of populations across tertiles. Mean age of patients undergoing OGD was highest for low tertile practises (60.2 vs 59.5 vs 58.4 yrs; p < 0.001) which had highest yield of serious disease: 16,595/108,679 (15.3%) vs 28,177/203,771 (13.9%) vs 36,026/274,806 (13.1%) (p < 0.001).

Conclusion Low referring practices appear to target slightly older patients and achieve higher yield of serious disease. Although higher yield may be more consistent with current guidelines, it may also indicate an increased risk of referral at a later stage in the disease process and of poorer OG-Ca outcome.[1]

Disclosure of Interest None Declared.

REFERENCES