Endoscopic resection of giant colonic polyps – size matters!

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Introduction Colonic polyps sized 50 mm and above are traditionally treated by surgical resection. Endoscopic resection has now become increasingly common as the expertise of western endoscopists improves. There is very little published literature on endoscopic resection of giant polyps.

We aim to evaluate the feasibility, safety and efficacy of endoscopic resection of giant polyps ≥50 mm in size.

Methods This was a prospective study of all patients who had undergone ER between August 2007 and December 2012 in Bradford Royal Infirmary. Patients were referred by experienced consultants, from the same trust or neighbouring hospitals, and were considered difficult cases, due to lesion size and/or access. Data from every ER case were recorded into a spreadsheet and divided into upper gastrointestinal (GI) ER or lower GI ER. We recorded patient demographics, lesion size and site, sedation, outcome, complications, and lesion removal (whole/piecemeal). Cases performed before 2010 (pre-2010) were separated from those performed in or after 2010 (post-2010). Data were analysed separately for the 2 time periods and then compared.

Results There were a total of 245 ER cases over the study period (47 upper GI, and 198 lower GI).

The number of upper GI ER cases increased from 15, pre-2010 to 32, post-2010. The success rate improved over time from 87 to 97% and the complication rate fell from 26 to 6%. Complications included 1 gastric perforation and 5 cases of minor bleeding treated endoscopically. The mean doses of Midazolam (2.5 mg) and Fentanyl (30 mcg) remained the same over time; however cases performed under general anaesthesia (GA) increased sharply from 7% to 37%. Mean polyp size also increased from 14 to 18 mm, although the distribution of polyps in the upper GI tract remained the same over time, with around 50% found in the stomach. Whole piece removal increased from 53% to 66%, despite increasing polyp size.

The number of lower GI ER cases also increased substantially from 62, pre-2010, to 136, post-2010. Success rate improved from 92 to 95%, whilst the complication rate remained the same at 5%. Complications included 1 postpolypectomy syndrome and 6 cases of bleeding. Doses of Midazolam (1.5 mg) and Fentanyl (75 mcg) remained the same over time, and interestingly the use of GA in lower GI ER was considerably lower (<1%) compared to upper GI cases. There were no changes in polyp size (26 mm), polyp distribution or whole piece removal (40%) over time.

Conclusion Our results demonstrate an increasing use of ER for upper and lower GI lesions. Over time, and thus, with more experience the success rate and complication rate have improved. These results are in line with other studies, emphasising ER as a safe technique, which should be considered before surgery for managing large and difficult GI lesions.

Disclosure of Interest None Declared.

Abstract PWE-059 Table 1 Recurrence rates with polyps of different sizes

<table>
<thead>
<tr>
<th>Size</th>
<th>Recurrence</th>
<th>≤55 mm</th>
<th>≤60 mm</th>
<th>≤70 mm</th>
<th>&gt;70 mm</th>
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<tbody>
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<td>21/90</td>
<td>23.3%</td>
<td>3/34</td>
<td>8.8%</td>
<td>7/54</td>
<td>12.9%</td>
</tr>
<tr>
<td>9/63</td>
<td>14.2%</td>
<td>4/41</td>
<td>10%</td>
<td>5/43</td>
<td>11.6%</td>
</tr>
<tr>
<td>3/27</td>
<td>11.1%</td>
<td>1/9</td>
<td>11.1%</td>
<td>1/9</td>
<td>11.1%</td>
</tr>
<tr>
<td>P = 0.002</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Methods Prospective cohort study. All patients who underwent endoscopic resection of colonic polyps ≥50 mm from 2007–2013 were prospectively entered into a database. We excluded all polyps with fibrosis related to previous intervention. All patients were tertiary referrals from experienced gastroenterologists. All procedures were performed by a single experienced endoscopist.

Results N = 124 polyps in 122 patients. Mean polyp size = 71 mm. Range 50–170 mm. 27(22%) in right colon and 97 (78%) in left colon. M:F ratio 1:1:1. All polyps were resected in a piecemeal fashion. The mean procedure time was 120 min (range 90 to 240).

The complication rate was 11/124(8.9%). All these patients required inpatient stay. There were 9 bleeds (3 immediate and 6 delayed), 1 post polypectomy syndrome and 1 case of split muscle fibres (clipped endoscopically). 1 case of immediate bleeding required surgery to control the bleeding. All the others were managed conservatively. 4 of the 9 bleeds required blood transfusion. The complication rate was independent of polyp size, resection technique or site of the lesion.

Follow up data was available for 90 polyps. The recurrence rate was 21/90 (23.3%). Of the 21 recurrences, 19/21(76%) patients achieved complete clearance with a further 1 to 2 endoscopic procedures. The recurrence rate was significantly dependent on polyp size and was not dependent on the resection technique or the site of the lesion. Recurrence gradually increased with an increase in polyp size up to 70 mm. Recurrence was seen in 3/34 (8.8%) polyps ≤55 mm, in 7/54 (12.9%) polyps ≤60 , Shemm and in 9/63 (14.2%) polyps ≤70 mm. However, in polyps >70 mm, the recurrence rate greatly increased to 12/27 (44%) (p = 0.002).

Conclusion
1. It is safe and feasible to endoscopically resect polyps 50–170 mm in size.
2. Recurrence is significantly dependent on polyp size.
3. Giant polyps resected endoscopically have a significant recurrence rate. The majority of these can be cleared by further endoscopic procedures. However, we believe that the recurrence rate in polyps above 70 mm is very high and surgery should be considered in these cases.
4. Complication rates are independent of size.

Disclosure of Interest None Declared.

POLYPECTOMY PRACTICES IN THE ENGLISH BOWEL CANCER SCREENING PROGRAMME

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Introduction Most polyps are ≤10 mm in size and a range of polypectomy techniques are available with wide variations in

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