Exploring comorbidity and medication use in patients with suboptimal bowel preparation for colonoscopy

**Purpose**

The diagnostic utility of colonoscopy is dependent on the cleanliness of the colon or the quality of bowel preparation. Patient-related factors such as age, gender, co-morbidity, and medication are well known to impact on bowel preparation quality indicators. The objective of this study was to descriptively explore the impact of comorbidity and medication on patients who experience a suboptimal bowel preparation rating when undergoing colonoscopy.

**Results**

Sub-optimal bowel preparation data for colonoscopy need to be continually evaluated as these patients are often re-scheduled for a second colonoscopy. Re-scheduling patients adds burden to a busy hospital endoscopy service, exposes patients to procedure-related adverse events and delays potential pathology detection.

The impact of antipsychotic medication on bowel preparation quality outcomes merits further exploration.

**Methods**

All patients who were attributed a suboptimal bowel preparation and underwent colonoscopy over a 1-year period (10/12/2018-09/12/2019) were analysed retrospectively. Outpatients and inpatients were included. Patients with suboptimal bowel preparation were divided into two groups: fair or poor. Demographic and clinical data on impact quality of bowel preparation (comorbidity, medication use) were obtained from clinical notes.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fair prep (n=102)</th>
<th>Poor prep (n=130)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean</td>
<td>59.6</td>
<td>59.7</td>
<td>0.98</td>
</tr>
<tr>
<td>Antipsychotic use, n (%)</td>
<td>3 (2.9)</td>
<td>13 (10)</td>
<td>0.03</td>
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<tr>
<td>TCA use, n(%)</td>
<td>9 (8.8)</td>
<td>12 (9.2)</td>
<td>0.91</td>
</tr>
<tr>
<td>Opiate use, n(%)</td>
<td>15 (14.7)</td>
<td>16 (12.3)</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Overall, 232 patients were found to have suboptimal bowel preparation. The mean age was 59.6 years (SD 13.7) and 52.6% were male. 11% were inpatients, 22% had diabetes, 13.4%, 9.1% and 6.9% were on prescribed opiates, tricyclic antidepressants and antipsychotic drugs respectively. The median Charlson comorbidity index was 3 (IQR 1-4). At colonoscopy, 44% and 56% respectively were found to have ‘fair’ and ‘poor’ preparation respectively. Patients with poor preparation were more likely to be rescheduled for repeat colonoscopy compared to fair preparation group (OR 11.9, 95%CI 6.3-22.7) (p<0.01). Current antipsychotic medication use was significantly associated with poor bowel preparation at colonoscopy (OR 3.67, 95%CI 1.02-13.24) (p=0.03).

**Conclusions**

Sub-optimal bowel preparation data for colonoscopy need to be continually evaluated as these patients are often re-scheduled for a second colonoscopy.

Re-scheduling patients adds burden to a busy hospital endoscopy service, exposes patients to procedure-related adverse events and delays potential pathology detection.

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**References**


**Contributors**