Colonoscopy has a high diagnostic yield and low complication rate in older patients

SIR—Age is often considered as a risk factor for colonoscopy thereby reducing its use in this population
despite reports that it may not only be useful but also safe in the elderly population [1].

We reviewed the records of 209 patients (83 male) age 76–92 years (median 81 years) of age undergoing colonoscopy between 1993–2000 out of a total of 2216 procedures. Fifty-eight patients had had a recent barium enema of which 46 were abnormal. All patients had polyethylene glycol solution or sodium picosulphate for bowel preparation, a 165 cm Olympus colonoscope was used for all procedures and all patients were sedated with intravenous midazolam with or without intravenous pethidine, with continuous oxygen saturation monitoring. Indications for colonoscopy included cancer/polyp surveillance (91/209), anaemia (58/209), change of bowel habit (31/209) and rectal bleeding (29/209) (Figure 1). The crude (all cases) completion rate was 71.8%; when adjusted for poor bowel preparation (7 patients) and obstructing colonic disease (12 patients) the completion rate was 80.9%, which was not significantly lower than the adjusted rate for patients less than 75 years (85.0%, \( P=0.1 \)). 71.3% of examinations were abnormal compared with 51.6% of examinations in younger patients (Table 1); 73 patients had a polyp, 14 had colorectal cancer, 16 had colitis and 46 had moderate/severe diverticular disease (Figure 2). Twenty-nine patients were referred with rectal bleeding caused by polyp or cancer (16 patients) of which 14 were distal to the splenic flexure, diverticular disease (8), or colitis (2). Two patients over 75 years, and 2 under 75 years, developed a peri-procedural, transient, easily reversible, bradycardia. There were no major complications.

Colonoscopy, in expert hands, remains the most accurate investigation of colonic disease and for screening high-risk groups for colorectal neoplasia [2]. The risks of colonoscopy in the elderly may be similar to those of the younger population [1, 3].

In our study, the indications for colonoscopy were similar to other published series [4–6]. The completion rate was similar to under 75’s, and the diagnostic yield was higher, as in other studies, especially if rectal bleeding is present [4–9].

Complications of colonoscopy in the elderly have not often been reported. Perforation and late bleeding after polypectomy may occur more often than in younger patients [1, 7]. A history of cardiac or pulmonary disease is predictive of significant, though usually easily reversible, oxygen de-saturation during sedation and care should be taken [3, 10]. Alternative means of examining the large bowel such as computerised tomography, barium enema and flexible sigmoidoscopy [7, 8] can be useful in older patients, though difficulty achieving adequate bowel preparation limits all these procedures [11, 12].

In conclusion, our experience of colonoscopy in older patients is that it is a safe, high-yield investigation. An improvement in bowel preparation would further improve its usefulness.

**Table 1. Diagnostic yield of colonoscopies in patients under and over 75 years of age**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Total abnormal (%)</th>
<th>Polyp (%)</th>
<th>Colorectal cancer (%)</th>
<th>Diverticular disease (%)</th>
<th>Colitis/proctitis (%)</th>
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<tbody>
<tr>
<td>&lt;75</td>
<td>1036 (51.6)</td>
<td>462 (23.0)</td>
<td>28 (1.4)</td>
<td>252 (12.6)</td>
<td>370 (18.4)</td>
</tr>
<tr>
<td>&gt;75</td>
<td>149 (71.3)</td>
<td>73 (34.9)</td>
<td>14 (6.7)</td>
<td>46 (22.0)</td>
<td>16 (7.7)</td>
</tr>
</tbody>
</table>

**Figure 1.** Indications for colonoscopy in patients over 75 years of age.

**Figure 2.** Colonoscopic findings in patients over 75 years of age.

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