CLINICAL AUDIT

Colonicoscopy in the very old: why bother?

K K Y Yoong, T Heymann

Objectives: To evaluate the use of colonoscopy in patients aged at least 85 years. Does the ideal of an ageism free service apply?

Design: A retrospective audit.

Setting: Department of gastroenterology that carries out about 1000 colonoscopies annually in a district general hospital serving a population of about 320 000.

Subjects: All patients aged at least 85 years who underwent colonoscopy over five years to 2003.

Main outcome measures: The indications for colonoscopy and its findings. The outcome of patients found to have colonic cancers.

Results: Colonoscopy was completed in 219 cases (69%). The main reasons for failure were poor bowel preparation and severe diverticular disease. Normal findings occurred in 65 (30%) of the 219 cases that had a complete examination. Colonoscopy identified a problem that explained the patient’s symptoms in 116 (37%) cases. Polyps were found in 45 (14.2%) cases and malignancy in 28 (8.8%).

Conclusions: The absence of significant complications and comparatively high yield of colonic malignancies and polyps reinforces the value of colonoscopy as a diagnostic tool even after 85 years of age and despite the technical challenges of the procedure in this age group that limited completion. Increasing age alone should not preclude a patient from colonoscopy.

METHODS

We carried out a retrospective audit of all patients aged at least 85 years who underwent colonoscopy at our hospital over the five years to 2003. It is a district general hospital serving a population of about 320 000. The hospital’s department of medical gastroenterology carries out about 1000 colonoscopies a year. Data were obtained from medical records and our computerised endoscopy database. Demographic details along with the indication for examination, colonoscopic findings, type and amount of sedation used, complications, and completion rates were recorded.

All patients underwent routine pre-colonoscopy bowel preparation, normally with three sachets of sodium picosulphate (10 mg per sachet). Patients received intravenous sedation, midazolam and/or pethidine according to the preference and judgement of the colonoscopist. Some patients also received buscopan as an antispasmodic agent. All colonoscopists were of consultant or specialist registrar standing. During the procedure pulse and oxygen saturations were continuously monitored using pulse oximetry. Patients received oxygen via a nasal cannula.

RESULTS

A total of 5094 colonoscopies were carried out by the medical colonoscopists from April 1998 to March 2003. Of these, 316 (6.2%) colonoscopies were performed in patients aged 85 years and over. During the same period, a total of 27 719 patients were seen in our gastroenterology outpatient clinic of whom 1290 (4.7%) were aged 85 years and over. A consultant endoscopist carried out 225 (71.2%) of the procedures and trainee endoscopists the rest. The median age of patients in our study was 87.5 years (range 85–100).

Table 1 summarises the most common indications for colonoscopy. In 40 cases there was more than one indication. Colonoscopy was completed in 219 cases (69%). However, if cases with poor bowel preparation (65 cases) and strictures (14 cases) were excluded then the adjusted caecal intubation rate would be 92%. The other reported reason for failure to complete the procedure was severe diverticular disease. Patients that had an incomplete examination without

<table>
<thead>
<tr>
<th>Table 1 Common indications for colonoscopy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indication</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Anaemia</td>
</tr>
<tr>
<td>Rectal bleeding</td>
</tr>
<tr>
<td>Diarrhoea</td>
</tr>
<tr>
<td>Abdominal pain</td>
</tr>
<tr>
<td>Weight loss</td>
</tr>
<tr>
<td>Constipation</td>
</tr>
<tr>
<td>Alternating bowel habit</td>
</tr>
<tr>
<td>Abdominal mass on examination</td>
</tr>
<tr>
<td>Abnormal barium enema</td>
</tr>
<tr>
<td>Follow up of previous abnormality</td>
</tr>
</tbody>
</table>
identifying an explanation for their symptoms underwent a barium enema. Midazolam (median 4 mg, range 0–12) and pethidine (median 50 mg, range, 0–100) were used as premedications. No major complications such as perforation or bleeding occurred.

Table 2 summarises the commonest findings. For some patients, several abnormalities were recorded.

A normal colon was found in 65 (30%) of the 219 cases that had had a complete examination. Colonoscopy identified a problem that explained the patient’s symptoms in 116 (37%) cases.

Polyps were found in 45 (14.2%) cases and a malignant tumour in 28 (8.8%). All except two of these were adenomatous polyps on histological examination. The presenting symptoms for those in whom a malignant tumour was found were anaemia (53%), diarrhoea (17%) rectal bleeding (17%), and others (13%). Of these patients, 19 (68%) went on to have a curative resection.

**DISCUSSION**

Life expectancy in the UK continues to increase and advancing age is an important risk factor for the development of colorectal cancer. There is more than a 10-fold increase in the risk of developing colorectal cancer in people aged over 65 compared with younger people. That the percentage of patients above 85 years of age seen in the clinic and undergoing colonoscopy is similar suggest that we do not deny patients access to colonoscopy on the grounds of age alone.

In our elderly population the yield of polyps and malignancy of 14.2% and 8.8% respectively was higher than for an average risk population with non-specific large bowel symptoms, of about 5.8% and 0.4%. Our study suggests that colonoscopy in the very old is as safe as in the younger patients but may be technically more challenging as shown by a lower overall completion rate. Although our completion rates are comparable to those from previous studies, our failure to complete in many was attributable to the higher incidence of severe diverticular disease with increasing age. Difficulties with bowel preparation resulting in a high yield.

**REFERENCES**

Colonoscopy in the very old: why bother?

K K Y Yoong and T Heymann

Postgrad Med J 2005 81: 196-197
doi: 10.1136/pgmj.2004.023374

Updated information and services can be found at:
http://pmj.bmj.com/content/81/953/196

These include:

References
This article cites 16 articles, 7 of which you can access for free at:
http://pmj.bmj.com/content/81/953/196#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections

- Colon cancer (60)
- Endoscopy (50)
- Gastrointestinal surgery (80)
- General surgery (168)
- Surgical diagnostic tests (164)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/