

Colonoscopy In Patients Older Than 75: Experience From A District General Hospital Targeting Symptomatic Patients

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Citation

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Abstract

Introduction: Colonoscopy remains one of the best options for assessment and visualisation of the colon. It offers advantages of diagnostic and therapeutic interventions like biopsies and polypectomy. Although the prevalence of colorectal cancer increases with age, the role of colonoscopy in older patients remains debated. Technical difficulties, safety issues, tolerability, lower completion rates and reduced longevity are some considerations cited.

Aims: To ascertain the indications for and describe the outcomes of colonoscopy in older patients referred to a district general hospital (DGH).

Methods: A retrospective review evaluating the use of colonoscopy in a small DGH in England by auditing the records of 159 patients aged 75 years and above, that underwent colonoscopy as a definitive first choice procedure from June 1996 - December 2002. Approval was obtained from the local audit unit.

Results: The mean age was 79.7 (range 75—94) years with men representing 56% ($n = 89$). The commonest indications for colonoscopy were rectal bleeding - 66 (41.5%), anaemia - 49 (30.8%) and surveillance (for polyps, neoplasia etc) - 47 (29.6%). An uncorrected 67% completion rate (caecal intubation) could be ascertained, with the most common reasons for non-completion being discomfort and poor bowel preparation. No major complications such as perforation or significant bleeding were noted, nor were there any deaths due to the procedure in this series. There were 18 histologically confirmed adenocarcinomas representing 11.3% of the study group, of whom 14 (77.8%) underwent major resection surgery.

Conclusions: Colonoscopy has a good safety profile and offers high yield of significant findings, particularly in the symptomatic older patient aged ≥ 75 years. Age on its own should not preclude older patients from accessing this important procedure.

INTRODUCTION

Colonoscopy remains one of the best options for assessment and visualisation of the colon. It offers added advantages of diagnostic and therapeutic interventions like biopsies and polypectomy. Although the prevalence of colorectal cancer increases with age, the role of colonoscopy in older patients remains more closely debated than in younger adult patients where it appears to have a more established role. It is also unclear if, and at what age to stop routine screening. Technical difficulties, safety issues, tolerability, lower completion rates and reduced longevity are some debated issues. Our service does not have a formal routine screening programme in place and most of our patients have been referred for assessment on account of symptoms/signs, or for surveillance following polypectomies or cancer resection

surgery.

The aim of our study was to review the demographic data and indications of patients referred to our service for colonoscopy. We also sought to describe the procedural difficulties encountered, types of procedures undertaken and outcomes.

METHODS

We retrospectively evaluated the use of colonoscopy in a small district general hospital in England by auditing the records of 159 patients aged 75 years and above that underwent colonoscopy as a definitive first choice procedure from June 1996 - December 2002. Approval was obtained from the local audit unit.

In our centre, bowel preparation was mostly with sodium picosulphate in accordance with local guidelines; with clear fluids orally on the day before endoscopy. Endoscopists were colorectal surgeons or physicians with an interest in gastroenterology; and were of specialist registrar, staff physician/surgeon or consultant grade. Intravenous midazolam was used for conscious sedation, with buscopan and pethidine as required. Saturations were monitored with oxygen delivery provided as needed. Endoscopy records, histopathology reports and case records were reviewed and a proforma was designed to standardise data collection.

RESULTS

The mean age was 79.7 (range 75–94) years with men representing 56% (n = 89). The commonest indications for colonoscopy were rectal bleeding - 66 (41.5%), anaemia - 49 (30.8%) and surveillance (for polyps, neoplasia etc) - 47 (29.6%). Others were abdominal pain, change in bowel habits, loose stools and weight loss. Some patients had multiple indications.

A 67% completion rate could be ascertained (using documentations of caecum identified by tri-radiate fold, transillumination, ileocaecal valve and appendix orifice, or identification of the ileocolic anastomosis). Completion rates for others were difficult to ascertain on account of inadequate documentation. Descriptions like 'satisfactory colonoscopy' were often noted but could not be reliably extrapolated upon to infer completion. The stated completion rate does not correct for cases with poor bowel preparation, strictures et cetera.

Documented hindrances to complete colonoscopy were: discomfort - 19 (12%), poor bowel preparation - 16 (10.1%), poor mobility - 11 (6.9%), other technical difficulties like tortuous sigmoid - 2 (1.3%), stricture or obstructing lesion - 2 (1.3%), incisional abdominal hernia with prolapsed sigmoid loops - 1 (0.6%), and an unusually narrow descending colon - 1 (0.6%). No major complications such as perforation or significant bleeding were noted, nor were there any deaths due to the procedure in this series.

The colonoscopy findings are shown in Table 1.

Figure 1

Table 1: Colonoscopy Findings

Diverticulosis	44 (27.7%)
Polyps	33 (20.8%)
Colorectal cancer	16 (10.1%)
Haemorrhoids	12 (7.6%)
Colitis	7 (4.4%)
Stricture	2 (1.3%)
Extrinsic compression	1 (0.6%)
Procedure could not be done	6 (3.8%)
Normal	54 (34.0%)

Fifty four (34%) colonoscopies returned as normal. Some examinations returned more than one abnormality. It is noteworthy that colonoscopy also identified other treatable conditions such as colitis that could account for symptoms. Patients with incomplete or unsatisfactory colonoscopies were often subsequently referred for barium enemas, repeat colonoscopy or computerised tomography (CT) scans.

A sub analysis of the polyps found is presented in Table 2.

Figure 2

A sub analysis of the polyps found is presented in Table 2.

Numbers	
Total of cases with polyps	33 (%)
Polypectomies (17 retrieved, 6 not retrievable)	23 (%)
Polyps biopsied but not fully excised	7 (%)
Polyps not biopsied nor excised (too mobile)	3 (%)
Histology of polyps	
n = 24 (17 retrieved polypectomies + 7 biopsies)	
Tubuloadenoma	11(%)
Tubulovillous adenoma	6 (%)
Metaplastic polyps	4 (%)
Dysplastic polyp	1 (%)
Adenocarcinoma	2 (%)

Of the 33 cases with polyps, 30 either had excisional polypectomies or non-excisional biopsies, whilst three were too mobile to be biopsied or excised. Twenty four of the 30 samples were retrievable for histology following colonoscopy. Two further adenocarcinomas were noted from the polyp group bringing the total number of histologically confirmed cancers in the study to 18 (11.3% of total). The other polyps were histologically identified as tubuloadenoma (n=11), tubulovillous adenoma (6), metaplastic polyps (4) and dysplastic polyp (1).

14 (77.8%) of the 18 histologically confirmed colorectal adenocarcinomas underwent resection. The procedures undertaken were: right hemi-/extended hemicolectomy (n=8), anterior resection (3), subtotal colectomy with ileosigmoid anastomosis (1), left hemicolectomy (1) and sigmoid colectomy (1). One patient declined a left hemicolectomy, another declined a right hemicolectomy, a third was deemed to have too high an operative risk on account of metastatic disease, and the fourth could not be adequately accounted for from the records available.

DISCUSSION

Our study noted that older patients in the ≥ 75 years age group, being evaluated for significant lower gastrointestinal disease (with relevant symptoms or signs) could safely undergo colonoscopy with the added benefit of high diagnostic yield.

Some previous reports have observed that colonoscopy can be performed safely in patients aged 80 years and older, but that the diagnostic yield is low, particularly in asymptomatic patients undergoing routine screening or surveillance examinations.^{1,2,3} However, colonoscopy has a high yield when targeted at older patients with symptoms or specific clinical findings.^{1, 3,4,5,6,7,8} Our observations further support this latter viewpoint.

Completion rates tend to be lower in older patients but our uncorrected figures are comparable to those in other studies.^{3, 5, 6, 9} Some difficulties identified were combinations of preparatory, technical, physical and anatomic difficulties, as well as inadequate documentation.

The high proportion of patients in our study who were offered and chose to subsequently undergo major operative procedures is notable at 77.8%. Other authors have also previously noted a high acceptance rate for the option of surgical resection in older patients (fitness allowing) found to have colorectal carcinoma at colonoscopy. In a study spanning two years reviewing 255 colonoscopies in patients aged ≥ 80 years, 25 carcinomas were noted, out of which 21 (84%) underwent colorectal cancer resection surgery; of the other four, two had liver metastasis and two declined surgery. In our study, the relative importance of this finding is however limited by the smaller numbers and the retrospective nature of our study, as well as the fact that we did not assess other parameters like post-operative longevity or quality of life.

There have been recent attempts to address the issues of longevity and it has been described that whilst the incidence of colonic neoplasia increases with age, life expectancy and the estimated life-years saved decreases.² The latter cross-sectional study, conducted on 1244 asymptomatic individuals further demonstrated the limitations of routine screening colonoscopy in those >80 years, particularly when compared to the younger age brackets recruited into the study. We share the view that consideration be given to the potential benefits and/or risks as well as to patient preferences when considering screening colonoscopy in older patients.

CONCLUSION

Older patients vary considerably in terms of their pre-existing health or fitness for invasive procedures. Colonoscopy does have small (but not negligible) rates of complications but would appear to be reasonably safe; providing high yield when performed by appropriately trained personnel in targeted patient groups. Previously described limitations of routine screening in asymptomatic older patients need to be borne in mind and in certain cases alternative approaches to investigations may be more appropriate. In our view, biological age should be considered, but should not on its own routinely preclude symptomatic older patients from accessing this valuable resource where clinically appropriate.^{1, 10}

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