ORIGINAL ARTICLE

Colonsoscopy - An Annual Audit of Cases at Medical Unit III Services Hospital Lahore

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ABSTRACT

Objective: To document indications and endoscopic findings in patients undergoing colonoscopy in our endoscopy unit

Design: Observational

Patients and methods: The data of 62 patients who underwent colonoscopy in Endoscopy Unit of Services Hospital Lahore from 1st January 2010 to 31st December 2010 was analyzed. Demographic features, reasons for referral and endoscopic diagnoses were noted.

Results: Among 62 patients, major referrals were for abdominal pain (39%), altered bowel habits (39%), bleeding per rectum (34%), mass right iliac fossa (8%) and for malignancy screening (5%).

Conclusion: The most common presenting complaint was altered bowel habits and pain abdomen and the most common endoscopic abnormality was inflamed caecal mass (most likely due to tuberculosis followed by ulcerative colitis.

Key words: Colonoscopy, hemorrhoids, ulcerative colitis.

INTRODUCTION

Colonoscopy is acknowledged as the gold standard for examining the colon[1]. Colonoscopy, introduced in the late 1960s, has become the principal method for diagnosis, treatment, and follow-up of colorectal diseases[2]. It is assuming increasing importance in the practice of gastroenterology; practice audit is essential for determining professional education[3]. Examination of colonic surface by video endoscope (colonoscope) is the most accurate method for diagnosis of colonic disease and for surveillance of patients at high risk of developing cancer[4]. It is highly operator dependant and standards vary greatly[4,5]. There are several ways to visualize the colon. Colonoscopy is the most accurate method with the advantage that biopsy specimens can be taken from suspicious lesions and precancerous polyps can be excised. However, colonoscopy may be uncomfortable for the patient, usually entails intravenous sedation, and has perforation rates up to 0.5% and mortality approach 0.1%. The risks are thought to be higher in elderly population[5]. The standard requirements for colonoscopy are to reach caecum in more then 90% of time and perform the procedure in a reasonable period of time, find and diagnose all colonoscopic lesions and complete procedure with minimal risk of complications and patients discomfort. Completion to caecum is confirmed through use of combination of signs, indentation or transillumination in the right iliac fossa and view of appendix, the triradiate fold or the ileocaecal valve[5].

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PATIENT AND METHODS

The data of 62 patients who underwent colonoscopy in our endoscopy unit from 1st January 2010 to 31st December 2010 was scrutinized. Patients were referred from inpatient, outpatient and accident & emergency departments. Some patients had more than one indication of the procedure.

A written informed consent was taken from every patient before the procedure. Prior to colonoscopy every patient was put on a special preparation to prepare the colon. The patients were put on a liquid diet, given tablets of bisacodyl, milk of magnesia or castor oil to clear the gut of stools. The procedure was done under conscious sedation with midazolam, tramadol and using injectable flouroglucinol as antispasmodic. The end point of colonoscopy was to reach the caecum and if needed to look at the terminal ileum across the ileoceacal valve. Biopsies were taken for histopathology from abnormal areas. A withdrawal time of at least 6 minutes was ensured.

RESULTS

Data of 62 patients (our one year data patients) was scrutinized. Sex distribution is shown below:

Gender	n=	%age
Male	41	66
Female	21	34

The mean age of presentation was 43.7 years. Indications for colonoscopy are tabulated below:

Indications	n=	%age
Altered bowel habits	24	39
Pain abdomen	24	39
Bleeding per rectum	21	24
Mass right iliac fossa	5	8.1
Malignancy screening	3	4.8
Work up of iron deficiency anemia	2	3.2
IBS surveillance	2	3.2
Sub acute intestinal obstruction	2	3.2
Fap screening	2	3.2
Bleeding from ileostmy site	1	1.6

Colonoscopy findings are tabulated below

Findings	=n	%age
Normal examination	25	40.3
Inflammed caecal mass with adhesions (kochs??)	13	21
Ulcerated mucosa with exudates	9	14.5
Haemorrhoids	4	6.4
Diverticular disease	1	1.6
Polyps	3	4.8
Hard mass in sigmoid colon (ca?)	2	3.2
Telangectasia in sigmoid	1	1.6

Epage indications	=n
Screening for colorectal cancer in asymptomatic patients	27
Surveillance post-resection of polyps or colorectal cancer	28
Hematochezia	26
Abdominal pain	31
Known inflammatory bowel disease	46
Diarrhea	28
Iron-deficiency anemia	30
Change in bowel habits (predominantly constipation)	17
Other indications	20
Total	253

DISCUSSION

An open access to colonoscopic evaluation is ideal to rule out colonic disease. It is also of value to reassure the patient on more definitive grounds, but this requires specialized facilities and expertise.

There is still some controversy regarding open-access endoscopic service versus a strict criteria for doing the procedure[6,7]. Certainly, strict selection criteria for the procedure are bound to miss patients with significant and potentially treatable colonic pathology[8]. Clearly, the answer lies in a better selection of patients for the procedure based on the diagnostic yield.

In 1998, EPAGE (European Panel on the Appropriateness of Gastrointestinal Endoscopy indications) evaluated the appropriateness and necessity of colonoscopy using the RAND appropriateness method[8]. The panel was composed of 14 experts from Denmark, France, Germany, Great Britain, Italy, the Netherlands, Norway, Spain, and Switzerland and included 8 gastroenterologists, 4 general practitioners or internists, and 2 surgeons[8]. All members of this international multidisciplinary expert panel were involved in the referral for, or performance of gastrointestinal endoscopy, and they were selected with the assistance of National and European societies representing their specialties[8].

A detailed search of the literature was undertaken in order to identify all possible clinical scenarios or indications for which colonoscopy might be used or proposed. The main EPAGE indications studied in 253 patients included the following:

Interestingly, many of our patients enrolled in the study had similar indications. Altered bowel habits in our study was seen in 39%, pain abdomen in 39%, bleeding per rectum in 24%. The reason of less referral for bleeding per rectum was that more patients with bleeding per rectum were subjected to sigmoidoscopy and on finding a cause were not subject to a full colonoscopic examination. Mass in right iliac fossa as an indication of colonoscopy was seen in 8.1%. For a malignant screen as in patients with unexplained metastatic liver disease the colonoscopy was indicated in 4.8% of our patients. For iron deficiency anemia, it was indicated in 3.2%. For IBS (inflammatory bowel disease) surveillance it was indicated in 3.2% to look for the disease activity and possibility of malignant transformation. FAP (familial adenomatous polyposis) screening as indication for colonoscopy was seen in 3.2% patients and in 1.6% colposcopy was indicated for bleeding from the ileostomy site.

The commonest colonoscopic finding in our study was inflamed caecal mass with exudates most likely due to Kochs. In a study[9] the commonest colonoscopy findings in a patient with ileocaecal Kochs included mucosal nodules predominantly around the ileocaecal valve, pseudopolypoid folds, and mucosal protuberance and isolated caecal ulcer. Considering the high incidence of tuberculosis in our settings it is worthwhile taking multiple biopsies and starting these patients on anti tuberculous therapy.

A noteworthy point in our study was that 40% of our patients had a normal colonoscopy examination emphasizing that perhaps a more strict criteria be applied to screen patients who genuinely require a colonoscopy examination as it is an invasive

procedure. By doing so perhaps we can decrease the number of negative colonoscopies.

CONCLUSION

In our study, the two commonest indications were altered bowel habits and abdominal pain. 40 % of the patients had a normal examination and the commonest abnormality found was inflamed caecal mass with adhesions secondary to tuberculosis followed by ulcerated mucosa with exudates most likely due to ulcerative colitis.

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