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ROLE OF ENDOSCOPY IN EVALUATING LOWER GASTROINTESTINAL TRACT LEISONS AT A TERTIARY CARE HOSPITAL.

Gastroenterology

Dr. Viney Sambyal Lecturer Medicine, Department Of Medicine, GMC Jammu

Dr. Vijant Singh Chandail Associate Professor Medicine, Department Of Medicine, GMC, Jammu

ABSTRACT

Objective: Although radiological imaging modalities like barium enema and computed tomography provide some clues, endoscopic methods still maintain superiority in assessment and differential diagnosis of large intestinal symptoms and complaints that require biopsy. We aimed to present the results of colonoscopic procedures performed in our Endoscopic section of Medicine department in detail.

Material and Methods: 2169 patients who presented to Endoscopy section of Department of Medicine between May 2015 and November 2018 with an indication for colonoscopy and sigmoidoscopy were retrospectively evaluated.

Results: Out of the 2169 patients enrolled in the study 1739(80.2%) were male while 430 patients (19.8%) were female. The mean age of the patients was found to be 49 years. Results of colonoscopies performed on 2169 patients in our study revealed malignancy in 207 (9.5%) patients.Mortality were not observed in this study. No post procedure-related complications were seen in our study.The complication rate in our series was nil.

KEYWORDS

INTRODUCTION

Lower gastrointestinal bleeding (LGIB) continues to be a problem for physicians. Acute LGIB is defined as bleeding that occurs from a source distal to the ligament of Treitz. Although 80% of all LGIB will stop spontaneously, the identification of the bleeding source remains challenging and rebleeding can occur in 25% of cases. Some patients with severe hematochezia require urgent attention to minimize further bleeding and complications. LGIB is a more significant problem in males and elderly patients, with a greater than 200-fold increase in incidence in 80 year olds compared with patients in their 20s [1]. The rise in incidence with age may be explained by the increasing prevalence of colonic diverticulosis and colonic angiodysplasia . The mean age of patients with LGIB ranges between 63 and 77 years [2]. There is an increase in morbidity seen in older patients with LGIB secondary to their comorbidities and their associated medication use (NSAIDS) .Clinically, the most common presentation of LGIB is hematochezia, though melena, hemodynamic instability, anemia, and abdominal pain can be seen [3].

MATERIAL AND METHODS;

Patients who presented to Endoscopic section of Medicine Department GMC Jammu between May 2015 and November 2018 with an indication for colonoscopy were retrospectively evaluated. Written informed consent form was obtained from all patients before the procedure. The procedure was not performed in patients with serious arrhythmia, history of myocardial infarction, poor performance, those in the acute phase of diverticulitis, and those with contraindications to biopsy or polypectomy such as coagulation disorders. Patients were started on fluid diet 48h prior to the process and were given 142 gm of Polyethylene Glycol 3350 USP-NF in 2 Litres of water orally one day prior to colonoscopy at 22:00 hrs the day before the procedure and at 06:00 hrs on the day of the procedure. Bowel cleansing was completed with a sodium phosphate enema, which was applied in the morning of colonoscopy. One to five mg midazolam was given during the process for sedation and 20-50 mg hyoscine-N-butyl bromide (scopolamine butylbromide) i.v was preferred as a spasmolytic. The investigations were performed by the OLYMUS CF-HQ 190L colonoscopy device.

RESULTS

2169 of patients enrolled in the study 1739(80.2%) were male, while 430 patients (19.8%) were female. The mean age was found as 49 years. The youngest patient who underwent colonoscopy was 27 and the oldest was 88 years old. The duration of examination was 16 minutes, while in patients with adequate cleaning this was reduced to 10 minutes.

Table 1 depicts colonoscopy indications in detail. In our series, a statistically significant relationship was not found between gender and colonoscopy success and evaluated areas (p=0.22).

Table 2 depicts sex distribution. The endoscopic findings are summarized in Table 3 according to the predominant diagnosis. The number of patients diagnosed with malignancy by colonoscopy was 207 (9.5%) out of 2169 patients. All patients diagnosed with malignancy underwent double-contrast computed tomography for detection of distant metastases and synchronous tumours. All of these patients were treated surgically in our centre.

In our series, mortality was not observed in any patient. The complication rate in our series was nil.

DISCUSSION

In our study normal colonoscopy finding were observed in 192(8.8%) patients while Bowles et al. detected normal colonoscopic findings in 42.1% of their patients. In addition, they reported 22.5% polyps, 22% diverticuli, and 13.9% inflammatory disease [3]. Currently, colonoscopy is accepted as the gold standard in macroscopic assessment of the colon. In addition, it is used routinely for biopsy or polypectomy, for diagnosis and treatment of gastrointestinal bleeding, for extraction of foreign bodies and decompression of sigmoid volvulus (4). In another colonoscopy study done by Kirchgatterer including patients over the age of 80 years, they observed 42% diverticuli, 27% polyps and 8% colorectal cancer (5). In our study, normal colonoscopy findings were identified in 34.4%, while 4.2% had diverticulum, 3.1% inflammatory bowel disease, and 0.5% angiodysplasia.

The most feared pathology among diseases that cause lower gastrointestinal symptoms is colorectal cancer. Colonoscopy is still the most trusted diagnostic tool in the screening and diagnosis of colorectal cancer. The studies within our country reported the incidence of colorectal cancer as 3% in Elazığ, and as 14.4% in Bursa. In our study, colorectal cancer rate was found as 9.5 % with 207 patients. The differences between studies are thought to arise from differences in socioeconomic status, dietary habits, and colonoscopy indications among regions [6, 7, 8].

It is assumed that colon cancers develop from neoplastic adenomatous polyps. Therefore, even if a single polyp is detected during the test, it is recommended to view the entire colon and remove the polyp if appropriate. It has been reported that the incidence of colorectal cancer can be reduced by 76 to 90% by this approach (9).

Within the group of anorectal diseases, hemorrhoids are most frequently detected. The incidence of hemorrhoids in our country was found to be 58% in a study done by Süleymanlar et al. (10) while in our study, the rate of hemorrhoids was determined as 45.6%.

Although colonoscopy is a safe procedure, it is an invasive procedure

with particular complications. Nevertheless, mortality might be observed in rare cases, and mortality and morbidity rates related to colonoscopy have been reported as 0.02% and 0.25%, respectively. The most common complications have been identified as bleeding (0.24%-0.33%) and perforation (0.08%-0.19%). Bleeding usually occurs either from diverticuli or after polypectomy (11, 12).None of the patient in our study develops complications.

Informed Consent: Written informed consent was obtained from patients who participated in this study.

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Table 1; Classification Of Patients According To Colonoscopic Indications:

Colonoscopy indications	Number(n)	Percentage (%)
1.Lower G.I Bleed	1422	65.6
2.Lower GI Symptoms	568	26.2
3. Abnormalities on C.T Abdomen	142	6.5
4. Follow up of Operated Carcinoma colon.	37	1.7
Total	2169	100

TABLE 2; SEX DISTRIBUTION

Sex	Number(n)	Percentage (%)
Male	1739	80.2
Female	430	19.8
Total	2169	100

Table 3; Colonoscopic And Sigmoidoscopy Finding

	Colonoscopic diagnosis		Number(n)	Percentage values (%)
1.	Normal finding		192	8.8
2.	Carcinoma		207	9.5
3.	Polyp		149	6.9
4.	Ulcerative Colitis		284	13.1
5.	Solitary rectal ulcer		68	3.1
6.	Hemorrhoidal disease	Internal	669	30.8
		External	202	9.3
		Interno –external	117	5.4
7.	Amoebiasis		31	1.4
8.	Angiodysplasia		6	0.3
9.	Rectovesical fistula		3	0.15
10.	Diverticulosis		41	1.9
11	Rectal prolapsed		57	2.6
12.	Perianal fistula		44	2.03
13.	Crohn's disease		23	1.1
14.	Anal fissure		76	3.5
	TOTAL		2169	100

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