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Original Article

Colonoscopy Screening Recommended as Earlier or Better an Investigation of Choice for Colorectal Symptoms

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Article information

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Key words

Colonoscopy, symptoms, screening, investigation.

Abstract

Background: Colonoscopic techniques have expanded the role of colonoscopy beyond conventional screening, surveillance, and diagnosis to various complex therapeutic and interventional utilities in colorectal diseases.

Objective:

- (i) To determine the incidence of colorectal cancer in early and late onset.
- (ii) To determine the incidence in age cohort
- (iii) To compare clinico-epidemiological features in early and late onset
- (iv) To bring forth any discrepancies.

Methods: It was prospective study conducted in Department of Colorectal Surgery, Bangabandhu Sheikh Mujib Medical University (BSMMU), and Sir Salimullah Medical College Mitford Hospital, Dhaka total 200 cases were included in this study during the period January 2017 to June 2019.

Results: Study shows out of 200 respondent 0.5% were under 31-40 years age, 4.5% were between 41-50, and 5.5% were above 50 years. Out of 200 respondent 8% were male in malignancy and 17.5% are benign and 3% were female in malignancy and 14% are benign. Male female ratio was 1.7:1 in malignancy. The most common clinical presentation were per-rectal bleeding (64%), then anaemia/weakness (46%), alteration of bowel habit (36%), pain (10.5%) and obstruction (3.5%).

Conclusion: It concluded that proper equipment (colonoscope) and educated personnel, we can introduce colonoscopy as the mandatory screening method of examination, particularly for vulnerable groups.

INTRODUCTION

Colorectal cancer (CRC) screening is the process of detecting early-stage CRCs and precancerous lesions in asymptomatic people with no prior history of cancer or precancerous lesions. Long endorsed systematic offers of CRC screening to average-risk persons (persons without a high-risk family history of colorectal neoplasia) beginning

at age 50 years, with general evidence supporting screening reviewed in previous publications. 2

Screening differs from surveillance. Surveillance refers to the interval use of colonoscopy in patients with previously detected CRC or precancerous lesions and interval colonoscopy in patients performed to detect dysplasia in persons with

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inflammatory bowel disease affecting the colon.³ Screening is also distinct from diagnostic examinations, which refer to the investigation of patients with symptoms or positive screening tests other than colonoscopy. Colonoscopy is generally the test of choice for diagnostic examinations.

Materials and Methods

It was prospective study conducted in Department of Colorectal Surgery, Bangabandhu Sheikh Mujib Medical University, and Sir Salimullah Medical College Mitford Hospital, Dhaka. total 200 cases were included in this study during the period January 2018 to June 2019. In a pre-designed case record from detail history, physical examination, and radiological laboratory necessary investigations were recorded and the details of the operative findings and histopathological report were noted. Collected data were edited after data were analyzed using computer based programme statistical package for social science (SPSS) for windows version 20.

Result

Study shows out of 200 respondent 0.5% were under 31-40 years age, 4.5% were between 41-50, and 5.5% were above 50 years. Out of 200 respondent 8% were male in malignancy and 17.5% are benign and 3% were female in malignancy and 14% are benign. Male female ratio was 1.7:1 in malignancy. The most common clinical presentation were per-rectal bleeding (64%), then anaemia/weakness (46%), alteration of bowel habit (36%), pain (10.5%) and obstruction (3.5%).

Table I Colonoscopic procedures were assessed retrospectively

	Number	Percentage
Malignancies	21	10.5
Labeled normal	76	38
F/U of operated cases	19	9.5
Benign disease	63	31.5
Paediatric age group	2	1
Differed due to poor	19	9.5
operation or repeated late	r	

Table IIDistribution of malignancy according to age group (n=21)

	16 to 30 yrs		31 to 4	31 to 40 yrs		41 to 50 yrs		50 and above	
	M	F	M	F	M	$\overline{\mathbf{F}}$	M	F	M/F
Rt. Sided colon	0	0	0	0	2	1	3	1	5/2
Transverse colon	0	0	0	0	2	1	2	1	4/2
Lt. sided colon	0	0	0	0	2	0	1	0	3/0
Recto-sigmoid and anal	0	0	1	0	1	0	2	1	4/2

Table IIIDistribution of benign according to age group (n=63)

	16 to	16 to 30 yrs		31 to 40 yrs		41 to 50 yrs		50 and above	
	M	F	M	F	M	F	M	F	M/F
F/up	0	0	1	0	2	1	2	1	5/2
NR	5	4	4	2	2	1	3	2	14/9
Benign	6	5	2	3	1	3	7	6	16/17

Symptom	Number of patients	Percentage (%)
Bleeding PR	128	64
Alteration of bowel habits	72	36
Anaemia/weakness	92	46
Obstruction	7	3.5
Pain	21	10.5

134 Sir Salimullah Med Coll J Vol. 29, No. 2, July 2021

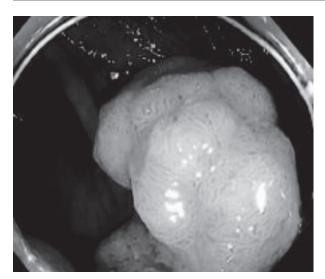


Fig.-1: Colonoscopy view of sigmoid tumour

Discussion

CRC screening is essential to decrease the burden of disease from CRC through early detection of cancerous lesions and removal of precancerous polyps. Increased CRC screening is likely to have led to the reductions in the incidence of CRC. Controversy, however, remains as to which method of CRC screening is best. Many government agencies and medical societies have published recommendations with differing results. Theoretically, the ideal CRC screening modality would be cost effective, increase life-years gained, and permit long intervals between tests. In addition, it would provide low risks, high patient compliance, and have the highest sensitivity and specificity. ⁴

In the present study out of 200 respondent 0.5% were under 31-40 years age, 4.5% were between 41-50, and 5.5% were above 50 years. Out of 200 respondent 8% were male in malignancy and 17.5% are benign and 3% were female in malignancy and 14% are benign. Male female ratio was 1.7:1 in malignancy. Colorectal cancer (CRC) incidence is generally higher with increasing age. Although most cases of CRC occur over age 50 years, initiating screening at age 45 years balances the benefits of detection and prevention with the burden on the patient and the risk of harms from screening.⁵

Previous studies Geiger et al. reported screening should begin at age 50 years in average-risk persons, except in African Americans in whom limited evidence supports screening at 45 years. CRC incidence is rising in persons under age 50, and thorough diagnostic evaluation of young persons with suspected colorectal symptoms is recommended. Discontinuation of screening should be considered when persons up to date with screening, who have prior negative screening (particularly colonoscopy), reach age 75 or have.⁴

The proportion of CRCs that are diagnosed at sites in the proximal colon increases with age in both men and women, ⁶ although this effect is more pronounced in women. ⁷ Distal colorectal malignancies followed by right sided colon cancer are the predominant subset. More patients with proximal cancer present as an emergency (i.e. with intestinal obstruction) ⁸ or with iron deficiency anaemia (IDA) and are referred directly to tertiary level hospital for gastroscopy and colonoscopy.

In this study shows most common clinical presentation were perrectal bleeding (64%), then anaemia/weakness (46%), alteration of bowel habit (36%), pain (10.5%) and obstruction (3.5%). The clinical features commonly associated with this disease, such as a change in bowel habit (CIBH), rectal bleeding, abdominal pain, weight loss and anaemia, are also common in the general population.⁹

Conclusion

In conclusion we can say that necessary to obtain the proper equipment (colonoscope) and educate personnel, we can introduce colonoscopy as the mandatory screening method of examination, particularly for vulnerable groups. The ideal colorectal cancer screening modality should be cost-effective, increase life-years gained, permit long intervals between tests with high patient compliance and low risk to the patient. Although no single colorectal cancer screening method is perfect, several options exist.

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