DOI: https://doi.org/10.53350/pjmhs22163328

ORIGINAL ARTICLE

An Assessment of Different Clinical Presentations in Cases of Colorectal Cancer

MUHAMMAD ALIM[1], BAHADUR KHAN[2], ABDUL LATIF[3], KHALEEL AHMAD KHAN[4]
[1]Senior Registrar, General Surgery Department, Loralai Medical College/Hospital, Loralai
[2]Assistant Professor, Department of Surgery, BMCH, Quetta.
[3]Assistant Professor, Department of General Surgery, Teaching Hospital Loralai Medical College, Loralai
[4]Medicine unit 2 BMCH
Correspondence to: Dr. Muhammad Alim, Email: Kdralim@yahoo.com, Cell: 03138090127

ABSTRACT

Objective: To assess the different clinical presentations in cases of colorectal cancer.

Material and methods: Between April 2021 to October 2021 total 90 diagnosed patients of colorectal cancer confirmed on histopathology, either male or female having age 25-75 years were selected from Department of Surgery, Loralai Medical College Loralai. Different clinical presentations of colorectal cancer were assessed.

Results: In present study age range was 25-75 years with mean age 48.58 ± 15.16 years. Grade-I cancer was found in 24 (27%) patients followed by grade-II cancer in 29 (32%) patients and grade-III cancer in 37 (41%) patients. Regarding clinical presentation of patients, bleeding per rectum was found in 73 (81.1%) patients followed by altered bowel habits in 67 (74.4%) patients, anemia in 27 (30%) patients and weight loss was seen in 19 (21.1%) patients.

Conclusion: Results of present study showed that most of the patients had grade-III colorectal cancer. Males were prominent as compared to females. Most common presenting symptom was bleeding per rectum. Family history of cancer and obesity have no association with presenting symptoms.

Key words: Colorectal cancer, weight loss, anemia, rectum bleeding.

INTRODUCTION

Colorectal cancer (CRC) is a major public health concern around the world, with rising incidence and fatality rates in nations that are under development.[1] CRC is becoming more common in countries with limited healthcare resources, according to various estimates.[2] CRC is the third leading cause of death in men and the second in women globally.[3] Certain disease-related demographic variables, such as sex, age and racial distribution, differ by world region. CRC is more commonly diagnosed in older adults and men in most industrialized countries, its prevalence is higher in African Americans, and higher CRC mortality is often associated with lower socioeconomic status.[4] Environmental exposures, as well as personal and family history of colorectal polyps and cancer, are all associated to the development of CRC.[5-6] CRC results are mostly determined by the disease's dispersion and spread, as well as early detection and care.[7]

Bowel changes, rectal bleeding, stomach pain, weight loss, and anemia are just a few of the symptoms mentioned.[8] These symptoms, on the other hand, are also typical in benign conditions.[9]

Colorectal cancer symptoms include changes in bowel habits, rectum hemorrhage, anemia symptoms, and weight loss.[10] Despite the fact that colorectal cancer is commonly associated with the elderly, a huge majority of patients are under the age of forty.[11] Patients with colorectal cancer who are in a later stage have a worse prognosis, regardless of gender.[12] Carcinoma of the rectum can be detected at an early stage when persons with signs of ano-rectal disease are extensively examined, including a digital rectal examination, proctoscopy, and biopsy of suspicious lesions.[13]

OPERATIONAL DEFINITIONS:

Colorectal Cancer: Patients having colorectal cancer diagnosed on histopathology after tissue biopsy.

Bleeding per rectum: Patient passing blood per rectum either mixed with stool or separate detected on stool examination.

Altered bowel habits: Patient having diarrhea or constipation alternatively for more than three months.

Anemia: Patient having hemoglobin level less than 10 g/dl detected on complete blood examination.

Weight loss: Patient's weight less than 10% of normal weight according to age and height; at time of presentation.

MATERIAL AND METHODS

Between April 2021 to October 2021 total 90 diagnosed patients of colorectal cancer confirmed on histopathology, either male or female having age 25-75 years were selected from Department of Surgery, Loralai Medical College Loralai. Previously treated patients of colorectal cancer were excluded. Study was approved by the ethical committee and written informed consent was taken from every patient. Case sheet patients were prepared for age & sex and symptoms of colorectal cancer (Bleeding per rectum, Altered bowel habits, Anemia, Weight loss**).** All the data was recorded along with demographic profile of the patients on pre-designed proforma

SPSS version 20 was used to analyze the data. Age was presented as mean and SD while categorical data was presented in form of frequencies.

RESULTS

In present study age range was 25-75 years with mean age 48.58 ± 15.16 years. Grade-I cancer was found in 24 (27%) patients followed by grade-II cancer in 29 (32%) patients and grade-III cancer in 37 (41%) patients. (Fig. 1) Regarding clinical presentation of patients, bleeding per rectum was found in 73 (81.1%) patients followed by altered bowel habits in 67 (74.4%) patients, anemia in 27 (30%) patients and weight loss was seen in 19 (21.1%) patients. (Table 1)

Male patients were 54 (60%) and female patients were 36 (40%). Bleeding per rectum was seen in 43 (79.63%) male patients while in 30 (83.33%) female patients. Insignificant (P = 0.660) association of bleeding per rectum with gender was seen. Altered bowel habits was found in 40 (74.07%) male patients and 27 (75%) female patients, but association was not significant (P = 0.921). Anemia was found in 16 (29.63%) male patients while in 11 (30.56%) female patients. Association between anemia and gender was not significant (P = 0.752). Weight loss was found in 12 (22.22%) male patients and 7 (19.44%) female patients but association was not significant (P = 0.752). (Table 2)

Obese patients were 32 (35.56%) while non-obese patients were 58 (64.44%). Bleeding per rectum was found in 28 (87.5%) obese patients while 45 (77.59%) non-obese patients. But association of bleeding per rectum with obesity was not significant (P = 0.399). Altered bowel habits was found in 25 (78.13%) obese patients while in 42 (72.41%) non-obese patients but association was not significant (P = 0.552). Anemia was found in 10 (31.25%) obese patients and 17 (29.31%) non-obese patients and association was not significant (P = 0.848). Weight loss was found in 8 (25%) obese patients and 11 (18.97%) non-obese patients but association was not significant (P 0.502). (Table 3) Total 15

patients found with family history of cancer while 75 patients found without family history of cancer. Bleeding per rectum was seen in 10 (66.67%) with family history and in 63 (84%) patients without family history. But association was not significant (P = 0.149). Altered bowel habits was found in 12 (80%) patients with family history while in 55 (73.33%) patients without family history. Association of altered bowel habits with family history was not significant (P = 0.752). Anemia was seen in 4 (26.67%) patients with family history while in 23 (30.67%) patients without family history and association was not significant (P = 1.000). Weight loss was noted in 5 (33.33%) patients with family history and 14 (18.67%) patients without family history but association was not significant (P = 0.295). (Table 4)

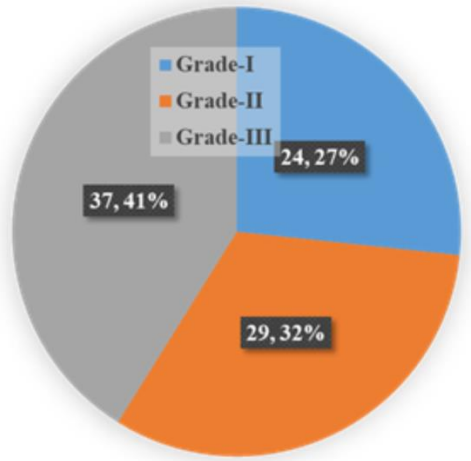

Fig. 1: Grade of cancer

Table 1: Clinical presentation of Colorectal Cancer

	Frequency (%)	
Presentation	Yes	No
Bleeding per rectum	73 (81.1)	17 (18.9)
Altered bowel habits	67 (74.4)	23 (25.6)
Anemia	27 (30)	63 (70)
Weight loss	19 (21.1)	71 (78.9)

Table 2: Stratification in relation to gender

Gender	Yes (%)	No (%)	Total (%)
Bleeding per rectum (P = 0.660)			
Male	43 (79.63%)	11 (20.37%)	54
Female	30 (83.33%)	6 (16.67%)	36
Altered bowel habits (P = 0.921)			
Male	40 (74.07%)	14 (25.93%)	54
Female	27 (75%)	9 (25%))	36
Anemia (P = 0.925)			
Male	16 (29.63%)	38 (70.37%)	54
Female	11 (30.56%)	25 (69.44%)	36
Weight loss (P = 0.752)			
Male	12 (22.22%)	42 (77.78%)	54
Female	7 (19.44%)	29 (80.56%)	36

Table 3: Stratification in relation to obesity

Obesity	Yes (%)	No (%)	Total (%)
Bleeding per rectum (P = 0.399)			
Obese	28 (87.5%)	4 (12.5%)	32
Non-obese	45 (77.59%)	13 (22.41%)	58
Altered bowel habits (P = 0.552)			
Obese	25 (78.13%)	7 (21.88%)	32
Non-obese	42 (72.41%)	16 (27.59%)	58
Anemia (P = 0.848)			
Obese	10 (31.25%)	22 (68.75%)	32
Non-obese	17 (29.31%)	41 (70.69%)	58
Weight loss (P = 0.502)			
Obese	8 (25%)	24 (75%)	32
Non-obese	11 (18.97%)	47 (81.03%)	58

Table 4: Stratification in relation to family history of cancer

Family history	Yes (%)	No (%)	Total (%)
Bleeding per rectum (0.149)			
Yes	10 (66.67%)	5 (33.33)	15
No	63 (84%)	12 (16%)	75
Altered bowel habits (P = 0.752)			
Yes	12 (80%)	3 (20%)	15
No	55 (73.33%)	20 (26.67%)	75
Anemia (P = 1.000)			
Yes	4 (26.67%)	11 (73.33%)	15
No	23 (30.67%)	52 (69.33%)	75
Weight loss (P = 0.295)			
Yes	5 (33.33%)	10 (66.67%)	15
No	14 (18.67%)	61 (81.33%)	75

DISCUSSION

The objective of this study was to assess the different clinical presentations of colorectal cancer. Age range was 25-75 years with mean age 48.58 ± 15.16 years. Grade-I cancer was found in 24 (27%) patients followed by grade-II cancer in 29 (32%) patients and grade-III cancer in 37 (41%) patients. Regarding clinical presentation of patients, bleeding per rectum was found in 73 (81.1%) patients followed by altered bowel habits in 67 (74.4%) patients, anemia in 27 (30%) patients and weight loss was seen in 19 (21.1%) patients. In one study by Bohorquez et al,[14] mean age of the patients of colorectal cancer was 57.4 years which is higher than our study. They also reported that in their study female patients were 53.2% and 49.1% patients were obese. While in our study female patients were 40% and male patients were 60%. In our study 35.56% patients of colorectal cancer were obese. Alrubaie et al[15] studied 63 cases of colorectal cancer and found bleeding per rectum in 76.2% patients and weight loss was found in 19% patients. In their study male patients were 49.2% and female patients were 50.8%. Mean age was 55.7 years. Hamilton et al[16] studied 349 cases of colorectal cancer. They found rectal bleeding in 42.4% patients, loss of weight in 26.9% patients, abdominal pain in 42.4% patients diarrhea 37.8% patients and constipation in 26.1% patients. In study of Cleary et al,[17] rectal bleeding was seen in 11% patients, weight loss in 19% patients and abdominal pain in 39% patients. Rajput et al[18] studied 70 patients of colorectal cancer for presenting symptoms. Mean age was 52.83+17.51 years, male and female patients were 57.14% and 42.85%, bleeding per rectum was noted in 68.57% patients followed by weight loss in 54.28% patients, altered bowel habits in 35.71% patients. In study of Haroon et al[19] out of 23 patients of colorectal cancer, males were 60.89% while females were 39.13%. Rectal bleeding was found in 95.6% patients and altered bowel habits were noted in 52% patients. Nisar et al[20] studied 105 patients of colorectal cancer. Mean age was 58.69±7.91 years, 65.71% patients were male and 34.31% patients were female. Rectal bleeding was seen in 86.67% patients, altered bowel habits in 72.38% patients, anemia in 33.33% patients and weight loss in 24.76% patients. Total 26.67% patients had stage-I cancer followed by 31.43% had stage-II cancer and 41.90% patients had stage-III cancer. But in our study grade-I cancer was found in 24 (27%) patients followed by grade-II cancer in 29 (32%) patients and grade-III cancer in 37 (41%) patients. Ather HM et al[21] in their study have found rectal bleeding in 49.76% patients, altered bowel habits in 28.99% patients, anemia in 4.83% patients and weight loss in 24.40% patients. Al-Shamsi SR et al[22] in their study have shown pain in 81% patients, altered bowel habits in 72% patients and bleeding per rectum in 78% patients of colorectal carcinoma.

CONCLUSION

Results of present study showed that most of the patients had grade-III colorectal cancer. Males were prominent as compared to females. Most common presenting symptom was bleeding per rectum. Family history of cancer and obesity have no association with presenting symptoms.

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