

CLINICAL PRESENTATIONS OF COLORECTAL CARCINOMA IN PATIENTS BELOW 40 YEARS OF AGE PRESENTING TO A TERTIARY CARE LEVEL HOSPITAL

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ABSTRACT

Objective: The objective of our study was to assess the clinical presentation of colorectal carcinoma in patients below forty years of age presenting to a tertiary care level hospital.

Material and Methods: This descriptive cross sectional study was done at Surgical Department, Khyber Teaching Hospital, Peshawar, from January 2007 to June 2007. Fifty patients younger than 40 years of age with colorectal cancer were included in the study.

Results: There was a total of 50 patients, 66% males and 34% females. The commonest affected age group was 31-35 years old (46%). The commonest presenting feature was altered bowel habits (86%). Anemia was present in 72% patients. Digital rectal examination detected the growth in 36% patients. Proctoscopy findings were conclusive in 64% cases. Left sided tumors were found in 70% patients, in 30% cases, right sided tumors were found.

Conclusion: Altered bowl habit should be further investigated even in younger patients as it frequently is associated with colorectal carcinoma.

Key Words: Colorectal, carcinoma; signs and symptoms.

INTRODUCTION

Colorectal cancer (CRC) is the second most common cause of death in the world. The distribution seems to be related to industrialization and socio-economic standards, so there is high incidence in the developed world and in the developing world the incidence appears to be low, this might be due to the poor registration of cancer patients¹. CRC is called a disease of the western world² and is one of the leading causes of death in Western countries. The register of General Statistics for England and Wales showed that there are about 17000 deaths per year from colorectal cancer, a figure which has not improved over the last 40 years. In USA 3% of the population will develop colonic cancer by the age of 75 years, and another 1-2% will develop rectal cancer. The cure rate for CRC remains 50% and the impact of screening program for colorectal cancer has been disappointing³.

CRC presents most commonly as altered bowel habits, bleeding per rectum, tenesmus, symptoms of anemia and weight loss⁴. Although colorectal cancer is considered as a disease of elderly, however a significant proportion of patients present below forty years of age⁵. Higher stage of colon cancer is associated with poor prognosis and is independent of sex of the patients⁶. The incidence of CRC is increasing in this part of the world especially in younger age group and about 42% present with advanced disease^{7,8}. Carcinoma of rectum can be diagnosed at an earlier stage in patients presenting with symptoms of ano-rectal condition when examined properly including digital rectal examination, proctoscopy and biopsy of suspected lesions⁹.

Studies have highlighted that emergence of colorectal cancer in younger age groups demands thorough workup of presenting bowel symptoms¹⁰. Thus it is important for surgeons to recognize the potentials for colorectal cancer in young patient and to take an aggressive approach to the diagnosis and early treatment of the disease¹¹. Because it produces symptoms relatively early and at this stage generally curable by surgery. Unfortunately these early symptoms are ignored by the patients or more commonly, insufficiently investigated by the physicians¹².

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Pakistan is the one of the developing countries having a lot of health care problems. No authentic population based studies are available on colorectal cancer in Pakistan. It is thought that Pakistan is lacking the high risk factors for colorectal cancer. But there is a general impression among the surgeons that the incidence of colorectal cancer is on the rise. In Pakistan it constitutes 25.4% and 20.1% of gastrointestinal malignancies in males and females respectively¹³.

MATERIAL AND METHODS

This descriptive cross sectional study was carried out at department of General Surgery, Khyber Teaching Hospital, Peshawar during six months from January 2007 to June 2007. Fifty patients were selected by non-probability purposive sampling technique. The inclusion criteria was patients of younger than 40 years of age with colorectal cancer, of both sexes.

Patients were admitted through the Surgical out-patient department (OPD) of Khyber Teaching Hospital, Peshawar. In all patients detailed history, physical examination, abdominal examination, and digital rectal examination was done. Base line and other relevant investigations including full blood count, serum electrolytes, blood urea, serum creatinine, chest x-ray, colonoscopy, proctoscopy, ultrasound abdomen/pelvis, CT scan abdomen/pelvis and electrocardiography were done in these patients.

The management of such patients included maintaining good hydration and administration of antibiotics, intravenous fluids and surgical treatment. In anemic patients blood transfusion was also done. The nature of surgical procedure carried out depended upon the stage and the findings at the time of surgery. All these patients were operated in the general surgical operation theater and the resection specimens were sent for histopathological examination.

RESULTS

There were 50 cases comprising of 33 (66%) males and 17 (34%) females with male to female ratio of 1.94:1. The mean age was 31.84 years \pm 5.3SD. The most common affected age group was 31-35 years old having 23 (46%) cases, followed by 36-40 years old having 13 (26%) patients. There were 8 (16%) patients in the age group of 26-30 years, 4 (8%) patients were in the age group of 21-25 years and 2 (4%) cases were in 15-20 years age group.

The common clinical symptom was altered bowel habit which was present in 43 (86%) patients followed by abdominal pain and weight loss in 42 (84%) patients. On the other hand, anemia was the commonest clinical sign which was present in 36 (72%) patients followed by jaundice in 24 (48%) patients. The clinical features are shown in Table 1. Left sided colorectal tumors were found more frequently than right

Table 1: History/Symptoms and General Physical examination in patients (n=50)

Clinical Presentation	No. of patients and percentage
Altered bowel habits	43(86%)
Abdominal pain	42(84%)
Weight loss	42(84%)
Loss of appetite	35(70%)
Bleeding per rectum	33(66%)
Tenesmus	26(52%)
Abdominal distension	17(34%)
Abdominal mass	17(34%)
GENERAL PHYSICAL EXAMINATION	
Anemia	36(72%)
Jaundice	24(48%)
Edema feet	06(12%)
Lymph node (inguinal)	05(10%)

sided tumors. Left sided colorectal tumors were present in 35 (70%) patients and right sided in 15 (30%) patients.

DISCUSSION

In Pakistan no population based studies are available regarding colorectal cancer. According to a local study colorectal cancer constitute 25.4% and 20.1% of gastrointestinal malignancies in males and females respectively¹⁴. In two recent local studies it was found that colorectal cancer was found in young patients aged 11-20 years old¹⁵ but in our study the most common affected age group was 31-35 years old. In this study of 50 cases of colorectal carcinoma, male to female ratio was 1.94:1 showing male predominance as usual which can be comparable with the studies done in other centers of the country showing male to female ratios as 2.3:1¹⁰, 2.4:1¹⁶.

An altered bowel habit was one of the main symptoms and was present in 86% patients. Most of them had been labeled by the general practitioners as cases of chronic dysentery. Two local studies of colorectal carcinoma have reported 35.71% and 30% patients with altered bowel habits respectively^{13,3}. In our series of 50 cases 84% patients complained of pain abdomen. Most of these patients had gas cramps, while a small number showed dull constant ache because of local invasion. In western countries pain abdomen is one of the common presenting symptoms in both old and young age group (< 40 years)^{17,18}.

Rectal bleeding is the earliest and constant symptom in rectal cancer. There is nothing characteristic about the time at which it occurs, neither is the color or amount of the blood distinctive¹². In our study, 66% patients presented with gross rectal bleeding with mean duration of 3 months. Studies from the western countries showed per rectal bleeding as the most frequent presenting symptoms. These findings are comparable with other studies^{17,18,19,20,21,22}. In Pakistan few studies conducted on colorectal cancer reported that gross rectal bleeding occurred in 62.05%³, 62.7%¹⁰ and 22%¹³ of the patients.

Loss of weight was one of the commonest symptoms. Among patients 84% complained of loss of weight with mean duration of four months. The exact mechanism of weight loss is not clear. Still there are some contributing factors, these are decreased intake, nausea, vomiting, anorexia, anxiety, and the last but not the least is the malignant cachexia. Ahmad M et al²³ reported weight loss in 62% patients. No doubt most of the patients presenting with loss of weight were having advanced disease. Tenesmus is characteristic of rectal carcinoma, especially stenosing variety. About 52% of the patients had this symptom in our study. In all these patients the tumor was located either in the rectum or rectosigmoid junction. Most of the victims of rectal growths were of the young age group in our study which is also reported by other study.²⁴ In our study of 50 cases, 34% had palpable mass in the abdomen mainly right iliac fossa. In a study conducted by Ahmad M et al²³ the percentage of palpable abdominal mass was 22%.

Anemia is due to iron deficiency, primarily caused by blood loss and non-iron-deficiency anemia is poorly associated with colorectal cancer. Multiple studies have found anemia to be a more common finding in right-sided lesions^{27,28,29}. Furthermore, distal lesions have higher hemoglobin than right-sided cancers. Total colonoscopy or whole colonic imaging is required to exclude cancer in patients with iron-deficiency anemia³⁰. In our series, 72% patients were anemic. Among the 50 patients, 70% had tumors on the left side and 30% had right sided tumors. Studies from different regions have documented almost similar figures regarding location of malignancy^{19,20,25,26}.

CONCLUSION

Altered bowel habits and abdominal pain are the frequent occurring complaints in young patients with colorectal carcinoma. One should have a high index of suspicion for colorectal carcinoma when these features are present for longer time.

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