

## CLINIC OPATHOLOGICAL STUDY OF COLORECTAL MALIGNANCY IN TERTIARY CARE HOSPITAL

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### Abstract

**Background:** Colorectal carcinoma is one of the most frequent malignancies in the world. It is the second foremost cause of cancer mortality in the United States.

**Methods:** The present study was carried out on 25 patients, being admitted to the various surgical wards of M.B. Govt. Hospital, attached to the R.N.T. Medical College Hospital, Udaipur between the period July 2017 to November 2019

**Results:** The presenting symptoms in the present study were change in bowel habit (92%), bleeding per rectum (32%), and loss of weight in 60% of cases. A lump abdomen was noticed in 48% of cases, pain abdomen in 36% of cases. 16% presented with acute bowel obstruction.

**Conclusion:** The common symptoms of constipation or constipation with diarrhoea are neglected and treated with simple laxative without elaborate investigation. Bleeding from malignant growth in the rectum is thought to be from piles and mis-treated accordingly, without doing a simple digital examination. It is emphasized that a thorough history taking, proper physical examination is must. To arrive in a correct diagnosis and plan a definite treatment. Also health education to the public in the forms of lectures, posters and audio-visual presentations will help the patient to seek medical advise at an earliest time.

**Keywords:** Colorectal, Carcinoma, Clinical

### Introduction

Colorectal carcinoma is one of the most frequent malignancies in the world. It is the second foremost cause of cancer mortality in the United States. Hence, colorectal cancer poses a severe concern to public health<sup>1</sup>

Compared to the western world, the incidence rates of colorectal cancer are low in India; but apart from geographical variations, the incidences are rising rapidly in India. Incidence rate in different subsides varies for age, gender, and race<sup>2</sup>

Colorectal cancer is the third most common cancer in men (746,000 cases, 10.0% of the total) and the second in women (614,000 cases, 9.2% of the total) worldwide. Almost 55% of the cases occur in more developed regions. There is wide geographical variation in incidence across the world and the geographical patterns are very similar in men and women<sup>3</sup>

### Materials and Methods

Cases of colorectal carcinoma were collected from July 2017 to November 2019 for this study. A total of 25 cases were studied of which 8 cases presented as emergencies.

Detailed history was elicited from each patient with special reference to family history, habitations and early

symptomatology. Thorough physical examination of the patient was performed for evaluation of general condition, detection of signs and per-rectal examination.

Thorough laboratory investigations were done in all patients and majority of underwent USG abdomen. Luminal contrast radiographic studies were done in selected cases. Colonoscopy and CT scan abdomen and pelvis was done in majority of cases. Chest skiagram taken for all patients for preoperative evaluation as well as detection of secondaries. Liver function test was done as routine investigation in all patients.

For all possible cases, preoperative biopsy taken via proctoscopic, colono scopic guidance and histologic type made out before planning treatment. Detailed histopathological reports were available for staging of tumour and assessing the grade of differentiation.

### Results

The present study was carried out on 25 patients, being admitted to the various surgical wards of M.B. Govt. Hospital, attached to the R.N.T. Medical College Hospital, Udaipur between the period July 2017 to November 2019

Most of the cases were from older age group. Maximum incidence was in the sixth decade, but even below the age of 30, 5 cases were reported. The tendency to develop colorectal carcinoma is considered to increase progressively with advancing age. But incidence is also increasing in adults younger than 40 years. Incidence was relatively more in females. M: F ratio in this series was 0.92:1 .

Majority of the patients though had symptoms for some time, tend to ignore them and presented at latest ages.

Eight out of 25 cases (32%) in this series are presented as acute emergencies. Twelve cases presented with obstructive

features, Out of them 4 were presented in emergency setting with acute bowel obstruction

Majority of the cases (84%) had symptoms of altered bowel habits and anaemia (84%). Weight loss was present in 60% cases, lump abdomen was present in 12 patients 48% cases, 3 cases of recto sigmoid growth, 3 cases of ascending colon, 2 cases of hepatic flexure growth, 2 cases of sigmoid colon, 1 case of descending colon and 1 case of caecum, and pain abdomen was present in 36% cases. Bleeding per rectum were seen 32% cases.

**Table 1: Colorectal carcinoma sign and symptoms in this series**

No. of Cases	R.Colon	L.Colon	Trans. Colon	Sigmoid Colon/Rectosigmoid junction	Rectum/Anal Canal	Total	Percentage
No. of cases	9	6	0	8	2	25	100%
<b>Signs / symptoms</b>							
Pain	4	1	0	3	1	9	36%
Altered bowel Habits	7	5	0	7	2	21	84%
Bleeding per Rectum	0	0	0	6	2	8	32%
Mucus per Rectum	0	2	1	4	1	8	32%
Lump abdomen	6	3	0	3	0	12	48%
Weight Loss	6	4	0	4	1	15	60%
Anemia	8	3	0	8	2	21	84%
Acute obstruction	1	1	0	2	0	4	16%
Peritonitis	0	0	0	0	0	0	0%

Altered bowel habits, anaemia and weight loss were the significant symptoms in our series. 84% of the patients presented with altered bowel habits and anemia while 60% of the patients gave history of significant weight loss.

Most of the recto sigmoid and left sided growth were either annular and stenosing or ulcerative with infiltration type. Almost all cases of carcinoma rectum were of ulcerative type. 3 sigmoid growths showed infiltration into surrounding viscera. One case of anorectal carcinoma presented within filtration of prostate. One patient presented with B/L hydronephrosis due to ureteric compression. Majority of right sided growths were polypoidal or cauliflower like growths. One hepatic flexure growth was found to infiltrate into abdominal wall. Two cases of

synchronous tumour found, one was synchronous carcinoma of caecum and sigmoid colon growth. While the other was carcinoma of second part of duodenum and carcinoma of hepatic flexure. 5 patients presented with distant metastasis. Out of them 3 had multiple liver metastasis, one had dorsolumbar spine metastasis. One patient present with peritoneal metastasis in the form of nodules.

### Staging

Histopathological staging was carried out on resection specimen and the results were obtained. No case presented in Duke Stage A (0%), 2 were in Stage B (16.67%), 3 were Stage C<sub>1</sub> (25 %), 2 were stage C<sub>2</sub> (16.67 %), and 5 cases presented in stage D (41.66%).

**Table 2: Staging**

Stage	Male	Female	Total	Percentage
A	0	0	0	0%
B	1	1	2	16.67%
C <sub>1</sub>	2	1	3	25%
C <sub>2</sub>	1	1	2	16.67%
D	3	2	5	41.66%
<b>Total</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>100%</b>

Maximum percentage of cases (41.66%) was Dukes's classification stage D.

**Table 3: Distribution of Patients according to TNM Staging**

S. No.	Stage	Male	Female	Total	Percentage
1.	0	0	0	0	0%
2.	I	0	0	0	0%
3.	IIA	1	1	2	8.69%
4.	IIB	1	1	2	8.69%
5.	IIIA	0	0	0	0%
6.	IIIB	6	4	10	43.47%
7.	IIIC	1	3	4	17.4%
8	IV	3	2	5	21.71%

1. Stage I =zero
2. Stage IIA=2 cases
3. Stage IIB=2 cases
4. Stage IIIA = Zero
5. Stage IIIB=10
6. Stage IIIC=4
7. Stage IV=5

In these study maximum cases presented in III B stage (43.47%).

Moderately differentiated tumour predominated. 12 out of 25 cases belonged to this (48%) 7 cases were well differentiated (28%) and 6 cases were poorly differentiated (24%) type.

**Table 4: Grading**

Grade	Male	Female	Total	Percentage
Grade I	4	3	7	28%
Grade II	6	6	12	48%
Grade III	2	4	6	24%
<b>Total</b>	<b>12</b>	<b>13</b>	<b>25</b>	<b>100%</b>

Predominance of moderately differentiated carcinoma can be seen.

### Discussion

Malignancy of the large bowel form one of the common types of cancer, which present with different clinical symptoms and signs. In our country because of ignorance, illiteracy, low socio-economic status and feeling of fear of colostomy, most of the patient present late in the advanced stage, where only palliative treatment can be offered. Also these cases presenting with bleeding per-rectum were treated as piles by general family practitioner, till no relief was obtained by conventional method and then referred to teaching institute. Also the incidence of malignancy in general and malignancy of large bowel particular is becoming more due to increasing life span of the people.

The commonest presenting symptom in the present study was change in bowel habit (84%) and anaemia (84%), followed by loss of weight (60%). Common symptoms

include abdominal pain, rectal bleeding, anaemia, altered bowel habits, and involuntary weight loss. Symptoms depend on cancer location, cancer size, and presence of metastases (Bond, 2000).

The symptomatology in carcinoma of colon and rectum has been well established. A change in the bowel habit, in the form of diarrhoea, constipation or absolute constipation was present in 84% percent cases in the present study. A change in bowel habit of increasing constipation was an important feature. Many patients did not take any notice of it until they developed subacute intestinal obstruction. Change in bowel habit dominate the colonic carcinoma of the left side. Other workers have also expressed similar views.<sup>4</sup> Diarrhoea occurred more often with right-sided growths as also observed in the present study.

Weight loss of a significant degree was the next common symptom, present in 60% cases in the present work. Palumbo LT et al (1953) reported an incidence of weight

loss of 66.25% and Fletcher W.J. et al. (1953) of 38% in their studies.

Bleeding per rectum has been reported as the most common symptom in carcinoma of rectum and rectosigmoid by Brindley G.V. et al. (1937); in our study bleeding per rectum was a significant symptom in 8 patients (32%).

### Conclusion

It is concluded from the present study that patients suffering from malignancy of large bowel, particularly of rectum and rectosigmoid region present for radical treatment in an advanced stages, where possibility of medical resection are very little. The common symptoms of constipation or constipation with diarrhoea are neglected and treated with simple laxative without elaborate investigation. Bleeding from malignant growth in the rectum is thought to be from piles and mis-treated accordingly, without doing a simple digital examination. It is emphasized that a thorough history taking, proper physical examination is must. To arrive in a correct diagnosis and plan a definite treatment. Also health education to the public in the forms of lectures, posters and audio-visual presentations will help the patient to seek medical advise at an earliest time.

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