Research Article

Clinical Profile, Staging, Investigations and Management of Colorectal Carcinoma-A Observational Prospective Cohort Study

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Abstract: This is prospective study on clinical features, staging, investigations and management of colorectal carcinoma. In this study we tried to determine that what will be the common clinical manifestation while presenting here at our institute and patient would be having which stage and various methods of investigations to investigate carcinoma properly and to give appropriate stage and to manage these patients accordingly. This randomized observational prospective cohort study has been carried out in 50 cases of colorectal carcinoma, admitted to department of Colorectal Surgery BSMMU (Bangabandhu Sheikh Mujib Medical University) from July 2014 to September 2015. All patients were examined clinically and their history and examinations and necessary imaging and blood investigations were done. It included 50 cases of colorectal cancer which were operated with exploratory laparotomy. In my study it revealed that the maximum number of patients was in the 41-60 years age group, i.e., 28 and the youngest patient was 23 years old and the oldest one being 75 years old. The mean age of the patients was 55.32 years. In my study it revealed that male patients (28) have higher chances of incidence of colorectal carcinoma than female patients (22). In my study it suggested that majority of the patients were having sigmoid colon carcinoma (16) and descending colon carcinoma (14) was also that much common. The most common associated risk factor for colorectal carcinoma was smoking (36%), and alcohol (20%) and obesity (16%) were slightly less common than smoking and there were many patients (28%) who had no any risk factors present. In my study it revealed that mostly patients were presented here during 3rd staging (52%) of colorectal carcinoma and then less common presenting stages were 2nd & 4th and not a single patient was presented during 1st stage. In my study it revealed that 40% of patients died after emergency surgery, this rate was way higher than death after elective surgery (6%). Hence forth the above study suggest that common presenting feature in colon carcinoma was abdominal pain and most common associated risk factor was smoking and stage 3 was most common presentation and most of the patients were treated by either right or left sided hemi colectomy.

Keywords: Clinical Profile, Staging, Colorectal Carcinoma.

INTRODUCTION

The earliest stage of colorectal cancers is called stage 0 (a very early cancer), and then range from stages I through IV [1,2]. As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. Colorectal cancer (CRC), also referred to as cancer of the colon or rectum is one of the major causes of cancer deaths worldwide. Every year globaly over 1.2 million new cases and 608,700 deaths estimated to have occurred. Incidence and mortality rates are slightly higher in males than in females [3, 4]. If a GP refers you to a specialist because they think you could have bowel cancer, you'll have tests to check for cancer. The main test for bowel cancer is a colonoscopy. This is where a thin, flexible, tube with a camera is used to look inside your bowel. It may be uncomfortable but it should not be painful. Common symptoms include abdominal pain, rectal bleeding, altered bowel habits, and involuntary weight loss. As part of a physical exam, your doctor will feel your abdomen for masses or enlarged organs, and also examine the rest of your body. You may also have a digital rectal exam (DRE). During this test, the doctor inserts a lubricated, gloved finger into your rectum to feel for any abnormal areas. Symptoms depend on cancer location, cancer size, and presence of metastases. The survival of colorectal cancer greatly replies on the stage of the disease at diagnosis and typically ranges from a 90% 5-year survival rate for cancers detected at the localized stage; 70% for regional; to 10% for people diagnosed for distant metastatic cancer [5,6]. Approximately 80% of patients now survive the first year after diagnosis, and approximately 62% survive 5 years

and more. Besides disease-free and overall survival time, quality of life has become an important outcome measure for colorectal cancer patients. Updated knowledge on colorectal cancer incidence and excellent diagnostic modalities would ultimately improve public health strategies in the management of the colorectal carcinoma.

MATERIAL AND METHODS

This randomized observational prospective cohort study has been carried out in 50 cases of colorectal carcinoma, admitted to department of Colorectal Surgery BSMMU (Bangabandhu Sheikh Mujib Medical University) from July 2014 to September 2015. All the patients were examined clinically and their history and examination were filled in proforma. Patient were selected according inclusion and exclusion criteria.

Inclusion criteria:
1. All patients admitted to Rajkot civil hospital with colorectal carcinoma.
2. Patient's age >12 years
3. Patients posted for laparotomy, either elective or emergency.
4. Pregnant women.
5. Patients with serious renal and liver disease.
6. Patients with colorectal cancer and getting neoadjuvant therapy.

Exclusion criteria:
1. Patient's age <12 years.

Procedure:

After taking proper consent and counseling patients were evaluated clinically post laparotomy fir vitals, respiratory complains, ryle's tube output and drain output measurement, abdominal distention, resovling of complains that were present at time of admission. Patints were monitored closely and staging was done according to histopathological reports and then post-operative chemo or radiotherapy was planned accordingly.

RESULTS

It included 50 cases of colorectal cancer which were operated with exploratory laparotomy between July 2014 to September 2015.

Table 1: Case distribution according to age

Age (Yrs)	Total No. Of Patients	Percentages
21-40	6	12%
41-60	28	56%
61-80	16	32%
Total	**50**	**100**

In my study it revealed that the maximum number of patients was in the 41-60 years age group, i.e., 28 and the youngest patient was 23 years old and the oldest one being 75 years old. The mean age of the patients was 55.32 years.
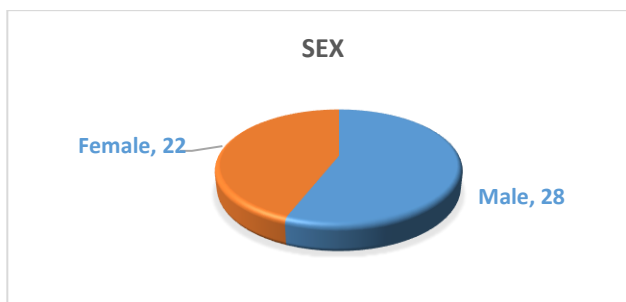
Figure 1: Case distribution according to sex

In my study it revealed that male patients 28 have higher chances of incidence of colorectal carcinoma than female patients 22.

Table 2: Case distribution according to the diagnosis

Diagnosis	No. Of Cases	Percentage
Caecal Carcinoma	4	8%
Ascending Colon Carcinoma	10	20%
Descending Colon Carcinoma	14	28%
Sigmoid Colon Carcinoma	16	32%
Rectal Carcinoma	6	12%
Total	**50**	**100**

In my study it suggested that majority of the patients were having sigmoid colon carcinoma (16) and descending colon carcinoma (14) was also that much common. Other then that mostly patients were having

ascending (10) and rectal carcinoma (6) and only few patients were having caecal carcinoma (4).
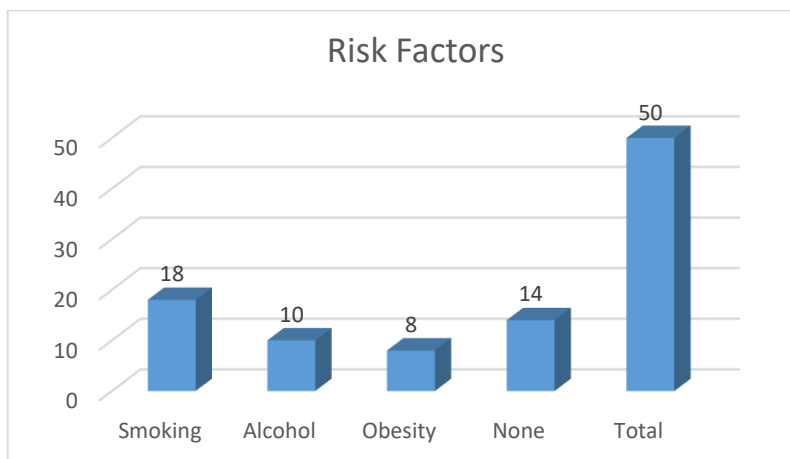

Figure 2: Associated risk factors

In my study it revealed that most common assosciated risk factor for colorectal carcinoma was smoking (36%), and alcohol (20%) and obesity (16%) were slightly less common than smoking and there were many patients (28%) who had no any risk factors present.

Table 3: According to clinical features

Clinical Features	No. Of Patients	Percentages
Abdominal pain	44	88%
Vomiting	42	84%
Bleeding PR	14	28%
Distension	30	60%
Constipation	20	40%

In my study it revealed that most common presenting complain was abdominal pain (88%) and vomiting (84%) was second most common presenting complain and other common complaint was distension (60%), constipation (40%) and bleeding PR (28%) were slightly less common than rest of the complains.
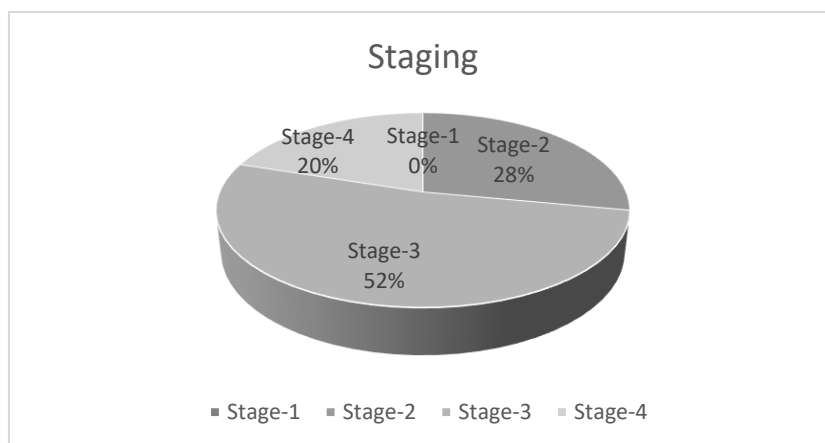

Figure 3: According to staging

In my study it revealed that mostly patients were presented here during 3rd staging (52%) of colorectal carcinoma and then less common presenting stages were 2nd & 4th and not a single patient was presented during 1st stage.

Table 4: According to management procedure

Management Procedure	No Of Patient	Percentage
Right Hemicolectomy	14	28%
Left Hemicolectomy	18	36%
Sigmoid Colectomy	12	24%
Diversion Colostomy	2	4%
Abdominoperineal Resection	4	8%
Total	**50**	**100**

In my study it revealed that mostly patients were managed with left sided hemicolectomy (36%), followed by right sided hemicolectomy (28%) and sigmoid colectomy (24%) and 8% of patients were managed with abdominoperineal resection and small number of patients were treated with diversion colostomy (4%).

Table 5: According to death rate

Procedure	No. Of Patients	No. Of Death	Percentages
Elective	30	2	6%
Emergency	20	8	40%

In my study it revealed that 40% of patients died after emergency surgery, this rate was way higher than death after elective surgery (6%).

DISCUSSION

No statistical significant differences between age, sex and ethnicity with regard to occurrence of cancer tumors and staging of tumor were found. The overall men to women ratio for CRC was 1.27:1, the corresponding distribution worldwide is 1.4:1. However, it could not be assumed that a man being more diseased with CRC than women is a representative result throughout the whole of Bangladeshi, since our materials consist of a rather limited number of patients in a single hospital [7]. Though results from other Bangladeshi hospitals also show a high man to women ratio. In my study it revealed that the maximum number of patients was in the 41-60 years age group, i.e., 28 and the youngest patient was 23 years old and the oldest one being 75 years old. The mean age of the patients was 55.32 years. In our study it shows that most affected sex was male and in others institute study it was the same result. While comparing clinical feature it shows that abdominal pain was the most common than any other features and in others institute study it also shows that abdominal pain was most common feature in comparison to others. In our study it shows that most common presenting stage of colorectal carcinoma was stage 3 while in others institute study it was stage 2. Which may be due to advanced imaging or early presentation of patients with the symptoms suggestive of carcinoma [8]. While comparing the risk factors in our study it was smoking while in others institute study it was dietary factors. Family history of CRC was the strongest predictor in the younger patients compared to middle aged and elderly patients. Patients delay may be one cause leading to diagnosis at a later stage contributing to lessened prospects for cure. At BSMMU 80% (40/50 patients) of the surgical procedures were curative [9]. This result might be difficult to compare with other hospitals not equal in standards and organization. Increased awareness about cancerous diseases could help limit patients delay and contribute to better prognosis. Differences in environmental factors can be a more western life style with among other changed dietary habits, higher alcohol intake and tobacco smoking, and less physical activity [10,11]. Curcumin in turmeric, a common spice in Bangladeshi cooking, has on the other hand been shown to have a preventative effect on colon cancer genesis. The use of turmeric and a high intake of starch within Bangladeshi food may attribute to the low level of incidence of colon cancer in Bangladeshi. Since there were no specific limits in patient area uptake, there could be no valid number of the population exposed to risk of CRC to relate our collected data with, this limiting the results of the study to be a descriptive epidemiology study of a number of cases, and no statistics on occurrence could be calculated. Early CRC may have significant symptoms comparable to advanced CRC, to improve survival early detection is important. In addition, according to different traditions, some minor ethnicity there is still custom to seek help from a holy person, instead or before seeking medical care. Patients delay and poor knowledge about cancerous diseases, are therefore important factors to acknowledge. The most common symptom among patients with colorectal cancer was pain in abdomen [12]. The remarkable high proportion of advanced stage of presentation account for poor prognosis. Smoking, urbanization and change of living-habits may have had an effect on the increasing level of CRC among the population in Dhaka city. To further investigate this is necessary. Another focus should be on genetic impact and environmental risk factors. The limited number of patients require further studies with larger materials taking account more regions in Bangladeshi. Introducing systematic nationwide statistics on cancer in the future would be valuable for studies on cancer epidemiology in Bangladeshi.

CONCLUSION

Mostly patients of colorectal carcinoma were investigated with contrast enhanced CT and it was most sensitive and specific investigation in this study. Majority of the patients were managed with definitive

surgery like left & right hemicolectomy and sigmoid colectomy and only small portion of patients were managed with diversion colostomy. In our study patient's follow-up was done up to 6 months for complications like wound infection, dehiscence, paralytic ileus and recurrence and majority of patients were having only wound infection.

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