

Symptomatic Correlation with site of Colorectal Cancer

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Abstract: Colon cancer is cancer of the large intestine (colon), the lower part of digestive system. Rectal cancer is cancer of the last several inches of the colon. Together, they're often referred to as colorectal cancers. In spite of modern treatment modalities; it is a major cause of mortality and morbidity till date. Despite a wealth of knowledge in the field of genetics and molecular biology of colorectal cancer, there is a paucity of information with respect to symptomatology. These symptoms include rectal bleeding, change in bowel habit, abdominal pain and features of large bowel obstruction. They may also present with systemic symptoms – anorexia, significant weight loss, fatigue and symptoms of anemia – features usually suggestive of advanced disease. The aim and objective of this study was to find symptomatic representation with respect to site of colorectal cancer. This study was conducted on thirty patients of colorectal cancer admitted in Department of Surgery, Govt. Medical College and Associated Hospitals, Jammu. We concluded in our study that Rectal carcinoma comprised 50% of the total colorectal carcinoma. Sigmoid carcinoma constituted 23.3% of the total number of cases. Pain and per rectal bleeding being the commonest symptoms, with higher rates of obstructive symptoms in rectal and left sided tumors as compared to right sided tumors which mainly presented with anorexia, significant weight loss, fatigue and symptoms of anemia.

Keywords: Colorectal cancer (CRC), Ascending colon cancer (ACC), Transverse colon cancer (TCC), Descending colon cancer (DCC),

I. Introduction

Colorectal cancer has been shown to present with primary symptoms^{1,2} attributable to the tumour at its primary site.³ These symptoms include rectal bleeding, change in bowel habit abdominal pain and features of large bowel obstruction. They may also present with systemic symptoms – anorexia, significant weight loss, fatigue and symptoms of anemia – features usually suggestive of advanced disease.⁴ The combination of rectal bleeding and a change in bowel habit, or rectal bleeding in the absence of perianal symptoms is believed to be a common mode of presentation,⁴ but this still has been shown to have limited discriminative value.³

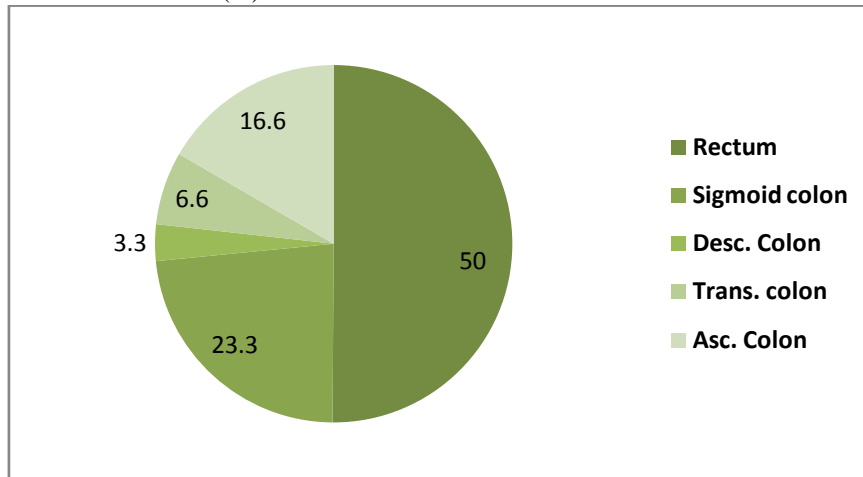
Despite a wealth of knowledge in the field of genetics and molecular biology of colorectal cancer, there is a paucity of information with respect to symptomatology. With this in mind, the aim of this study was to assess the symptomatic presentation of colorectal.

II. Material And Methods:

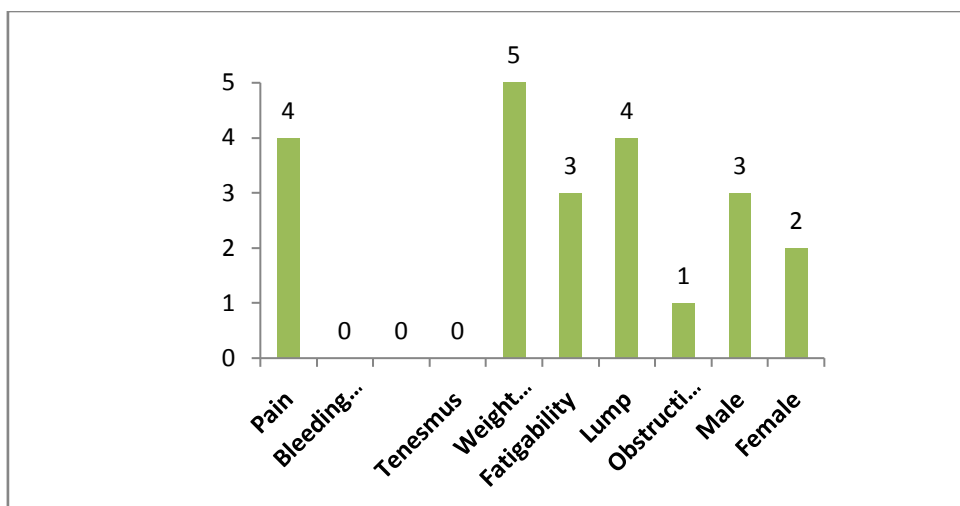
This study was conducted on thirty patients of colorectal cancer admitted in Department of Surgery, Govt. Medical College and Associated Hospitals, Jammu. All patients with history of bleeding per rectum, palpable mass and intestinal obstruction irrespective of age and sex were selected for this study. A detailed clinical history was elucidated from all the patients. Duration and nature of symptomatology like episodes of per-rectal bleeding in a week, episodes of pain, nature of pain and duration of pain. History of constipation followed by loose motion. History of weakness, weight loss in kilograms since onset of disease History of constipation followed by distension and vomiting. Any history of bleeding per-urethra. Any lump in the abdomen, its duration and progression, associated pain with the lump.

III. Results

Graphic Representation CRC cases (%) and site of tumor

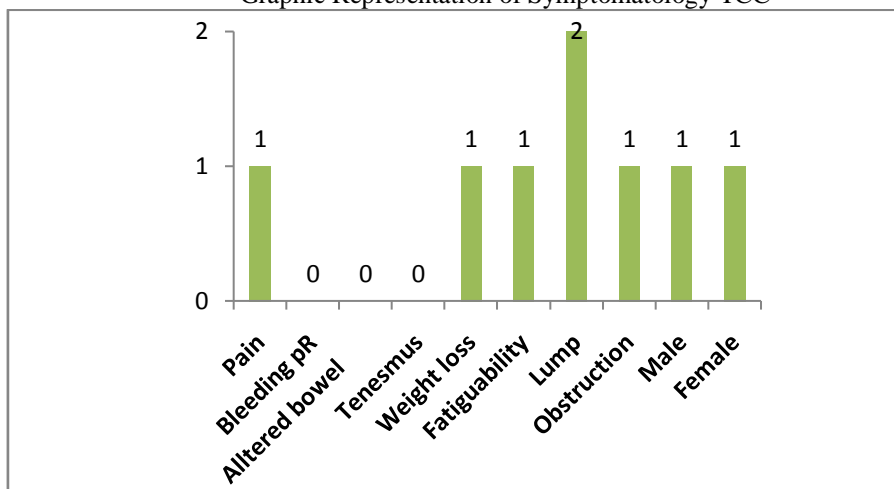


Graphic Representation of Symptomatology ACC



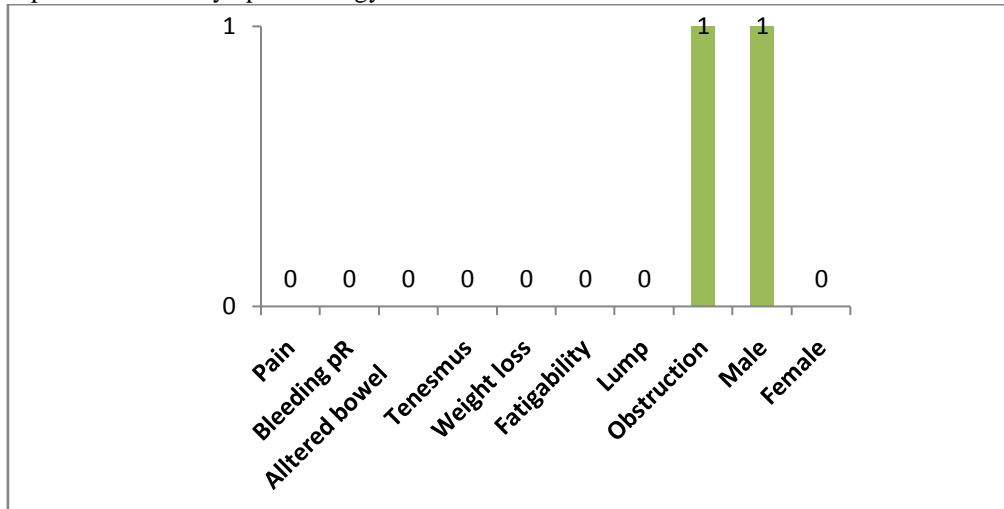
Total number of cases who presented with tumor of ascending colon were 5(16.6%).Four patients (80%) had pain lower abdomen, 5 patients (100%) had loss of weight and loss of appetite. Three patients (60%) had fatigability. One patient (20%) had obstruction and none of the patients had altered bowel,tenesmus or bleeding P/R. Three patients were males (60%) and rest were females(40%)

Graphic Representation of Symptomatology TCC



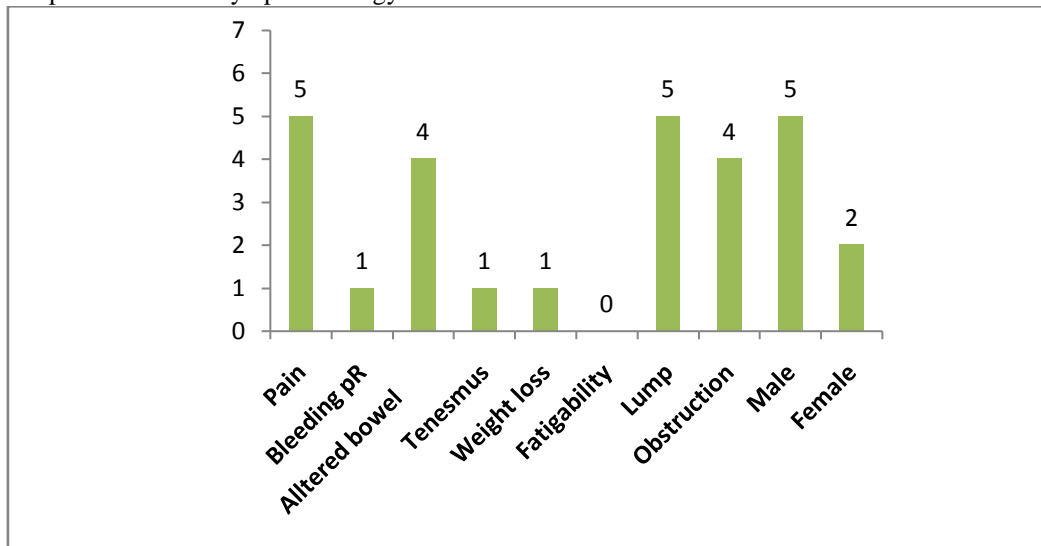
Total number of cases who presented with tumor of transverse colon was 2 (6.6%). One patient (50%) had pain lower abdomen, one patient (50%) had loss of weight and loss of appetite. One patient with fatigability and one patient with obstruction. Two patients (100%) presented with lump abdomen and none of the patients had altered bowel ,tenesmus or bleedingP/R. One patient male(50%)and one female(50%)

Graphic Representation of Symptomatology DCC



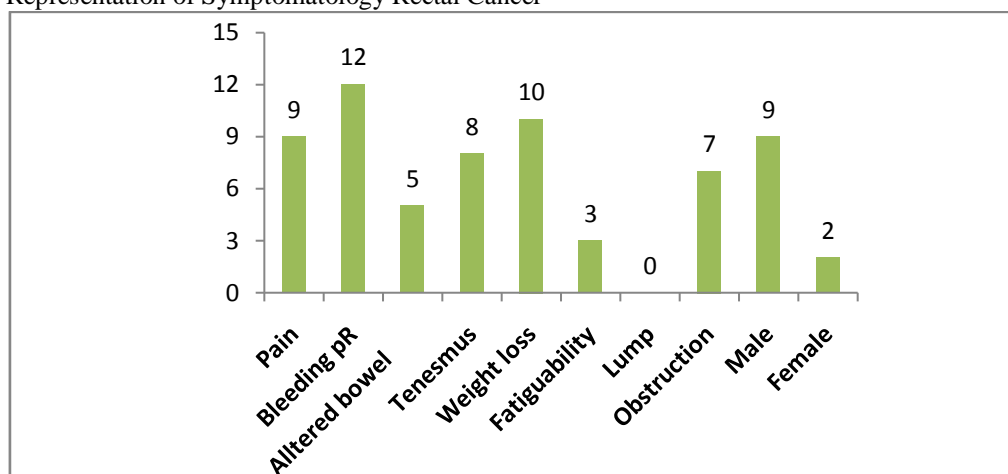
Total number of cases who presented with tumor of descending colon was 1 (3.33%). Patient presented with obstruction (100%). Males (100%) No patients had pain, altered bowel,tenesmus, weight loss ,lump or bleedingP/R.

Graphic Representation of Symptomatology SCC



Total number of patients with growth of sigmoid colon was 7(23.3%) Five (71.4%) had pain, one(14.5%) had bleeding P/R, Four patients(57.1%)had altered bowel, one (14.5%) had tenesmus, one patient (14.5%)had weight loss/loss of appetite, Five patients (71.5%)had lump abdomen, four patients(57.1%) had obstructive symptoms, one patient(14.5%) had faecal smelling urine due to colovesical fistula .None of the patients had fatigability. Five patients were male (71.4%) rest females (28.6%)

Graphic Representation of Symptomatology Rectal Cancer



Total number of patients with rectal growth were 15(50%).Nine (60%) had pain, twelve (80%) had bleeding P/R, five patients (33.3%)had altered bowel, eight (53.3%) had tenesmus, ten patient (66.6%)had weight loss/loss of appetite, Seven patients(46.6%) had obstructive symptoms Three(20%)of the patients had fatigability and haematuria was seen in one patient(16.6%). Nine patients, were male (60%) six females(40%).

Distribution of cases according to site and symptomatology

Site	Cases (%)	Pain (%)	Bleeding PR (%)	Altered bowel (%)	Tenesmus (%)	Weight loss (%)	Fatigability (%)	Lump (%)	Obstruction (%)	Haematuria (%)	Sex ratio
AC	5 (16.6)	4 (80)	NIL	NIL	NIL	5 (100)	3 (60)	4 (80)	1 (20)	NIL	3/2
TC	2 (6.6)	1 (50)	NIL	NIL	NIL	1 (50)	1 (50)	2 (100)	1 (50)	NIL	1/1
DC	1 (3.3)	NIL	NIL	NIL	NIL	NIL	NIL	NIL	1 (100)	NIL	1/0
SC	7 (23.3)	5 (71.4)	1 (14.5)	4 (57.1)	1 (14.5)	1 (14.5)	NIL	5 (71.5)	4 (57.1)	1 (14.5)	5/2
Rectum	15 (50)	9 (60)	12 (80)	5 (33.3)	8 (53.5)	10 (66.6)	3 (20)	NIL	7 (46.6)	1 (6.8)	9/6

IV. Discussion

Variations in the classification of recto sigmoid growth create difficulties in determining the relative distribution of carcinoma of colon and rectum however, several studies have shown changing incidences rates vis-à-vis site of tumor. The result of the incidence of site of tumor in this study has been found consistent with study conducted by Frazier sir John⁵ In our study incidence of rectal carcinoma was 50%, same as reported by Frezier with a male : female ratio of 2:1 which is consistent with the findings of Ponz-de Leon⁶. Sigmoid colon comprised 23%, right colon 16.6%. Synder et al. (1997) found that incidence rates of colorectal cancer have increased for cancer of right colon and sigmoid colon and decreased for those in rectum⁷. This may reflect differing susceptibilities to neoplastic transformation in the per rectum and distal colon. Pornz de Leon, Sacchetti , Sassateli R et al in their study reported a strong preponderance of cancer in males for rectum but for colon its is equal in males and females⁶. In our study, right colon compromised of 16% which is lesser than that reported by Frezier S john⁵ (25% rectal growth). Discrepancy could be explained on the basis of small number of cases in our study as compared to other series.

Postlethwait R W reported that symptoms depend on extent and location of tumor and stage of presentation. Right sided tumors usually give symptoms of lump, weight loss, easy fatigability whereas left sided tumors give symptoms of pain, obstruction and rectal tumors present with bleeding per rectum,altered bowel habits aand tenesmus⁸. The findings of this study were consistent with various studies reported. Bleeding per rectum as the chief complaint with duration of >6weeks but < 2 years was present in 43.3% of cases. Goulston reported that most charecteristic symptoms of colorectal cancer is rectal bleeding.In patients older than 40 years presenting with recent onset of rectal bleeding colorectal cancer is found in 18%ofcases⁹.In this study, fatigability, weight loss and lump was seen in 23.3%,53.3% and 36.6%.

Garcia ,Liovera J D,Delacy et al¹⁰ reported that obstruction due to colorectal cancer may occur in about 20% of patients and however is a relatively frequent cause of abdominal pain. In this study obstructive features were seen in 46% of cases and 40% required emergency exploratory laparotomy. The discrepancy between our study and Garcia could be explained due to the fact that most of the patients reported late even though they have symptoms of more than 6 months of duration. Illiteracy, poverty could be the factors for delayed presentation

R. Farbo¹¹ reported incidence of internal fistula as 0.4-3%, 6.6% of cases presented with fistula in form of vesicosigmoid or vesirectal fistulas.

V. Conclusion

Rectal carcinoma comprised 50% of the total colorectal carcinoma. Sigmoid carcinoma constituted 23% of the total number of cases. Pain and per rectal bleeding being the commonest symptoms, with higher rates of obstructive symptoms, since rectal and left sided tumors constituted 73% of cases, obstruction rates were comparatively higher in this study as compared to other series. Reason for higher obstruction rate was also due to late presentation of patients with illiterate background. Right sided tumors mainly presented with anorexia, significant weight loss, fatigue and symptoms of anemia.

References

- [1]. Department of Health. Referral guidelines for suspected cancer. London: Department of Health, Health Service Circular; Nov 1999. pp. 1–19. HSC 1999/241.
- [2]. The Royal College of Surgeons of England. Guidelines for the management of colorectal cancer. London: RCSE; 1996.
- [3]. Selvachandran SN, Hodder R, Ballal M, Jones P, Cade D. Prediction of colorectal cancer by a patient consultation questionnaire and scoring system: a prospective study. *Lancet*. 2002;360:278–83.
- [4]. Thompson M. Earlier symptomatic diagnosis of colorectal cancer. *Colonews*. 1999;8:3.
- [5]. Fraser Sir John. malignant disease of large bowel. *B.J.S* 1938; 25:647-648
- [6]. Ponz-de Leon et al. Evidence for existence of different type of large bowel tumor. Suggestion from clinical data of population based registry. *J Surg Oncol*. 1990;44:35-43
- [7]. Synder D Net al. Changes in site distribution of colorectal carcinoma in Connecticut, 1940-1973. *Am J Dis*. 1997;22:791
- [8]. Postelthwait R W. Malignant tumors of colon and rectum. *Ann. Surg*. 1949; 129-34
- [9]. Goulston K J et al .How important is rectal bleeding in the diagnosis of bowel cancer and polyp? *Lancet* 1986;2:261-264
- [10]. Garcia Valdescasas J C et al. Obstructing colorectal carcinoma. Prospective study ? *Dis. Colon Rectum* 1991;34:759-762
- [11]. R Farbo. Incidence of internal fistulas in colorectal carcinoma. *Dia. Colon Rectum* 1978;82:721-728