COLONIC CARCINOMA, CLINICAL PROFILE OF CASES IN A TERTIARY CARE CENTRE

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ABSTRACT

BACKGROUND

Recently, colonic cancer is increasing in number, so to know whether any familial, dietary and socioeconomic factors are contributing to the disease.

MATERIALS AND METHODS

All cases admitted with a diagnosis of CA colon in our hospital during one year period was studied. Clinical assessment, USG abdomen, colonoscopy and histopathology were used for the study.

RESULTS

Total of 132 cases were analysed, males - 80, females - 52. Average age of the patient is 53 years, youngest patient was a 32-year-old male and oldest was an 87-year-old male. All patients had a mixed dietary pattern and no case of pure vegetarians were present in the study. Some of the patients were smokers and alcoholics. Most of the cases presented with features of anaemia with exertional dyspnoea, constipation and obstruction, bleeding per rectum-mimicking haemorrhoids.

CONCLUSION

Colonic carcinoma is currently an important cause of morbidity and mortality among developing countries. A variety of symptoms may be associated with the disease, but anaemia, constipation, bleeding per rectum, altered bowel habits, nonspecific abdominal pains, etc were the common presentation even though rare presentation like urticaria and metastatic symptoms on presentation are also seen. Early detection and surgical intervention was found to be beneficial for prolonged survival and to lessen comorbidities.

KEYWORDS

Colonic Carcinoma, Dietary Practices, Bleeding Per Rectum, Constipation.

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BACKGROUND

Colonic cancer is a global public health concern with an increasing incidence and mortality rates in the developing countries.[1] Various estimates indicate that incidence is increasing nowadays and even younger individuals are affected. The increase in number of cases is attributed to multiple causes including dietary practices, exposure to carcinogens, environmental pollution and also genetic predispositions to mention a few. It is the third largest cause of mortality among men and second among women.[2] Age, previous history of colorectal polyps and family history of colorectal malignancy are caused well established to predispose to development of CRC.[3]

This study is to study the various clinical presentations as well to analyse the various causative or predisposing factors to CRC in the population of Northern Malabar.

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MATERIALS AND METHODS

Study Population- All diagnosed cases of colonic carcinoma who presented to Academy of Medical Sciences, Pariyaram, over a period of one year from January 1, 2016.

Inclusion Criteria- All newly-detected, biopsy-proven cases of colonic carcinoma.

Exclusion Criteria- All preciously detected colorectal carcinoma presented with relapse, biopsy inconclusive cases of neoplasm.

Study Design- Retrospective observational study.

Study Setting- Academy of Medical Sciences, Pariyaram- A tertiary care centre in northern Malabar region of northern Kerala.

All patients were informed about the nature of the study and written consent was obtained from each of the individuals before proceeding to collect and analyse the data required for the study. The data regarding nature of presentation, examination findings, investigation reports and biopsy reports were systematically collected and statistically analysed using Chi-square test and various comparisons were made after comparing similar studies and literature search.

RESULTS

Among the 134 study subjects, 56 were females and 78 were males. All patients have survived the surgical treatment and postoperative period in hospital without any complications with 3 patients succumbing to death after metastatic disease was detected during the follow up period of one year. Majority of the patients who were admitted were above 50 years of age and only 21 patients were below the age of 50 with the youngest being a 28 years old male with family history of colorectal polyposis and malignancy in family members. Of the 20 cases with definite family history of malignancies, only 4 satisfied the criteria of Lynch syndrome and one was case of familial adenomatous polyposis coli. A 30-year-old male who had presented to the centre and was treated with prophylactic colectomy and retrospective analysis of the biopsy specimen showed malignant lesion. Among the cases, most presented with symptoms of nonspecific abdominal pain and altered bowel habits with tenesmus accounting for 48.5% of the individuals. Per rectal bleed as a symptom was present in 36.6% of the cases and in few of these associated haemorrhoids were also seen, which confounded the diagnosis during initial diagnosis during the early stage of disease. 10.4% of the cases were diagnosed incidentally during colonoscopy evaluation for chronic constipation or altered bowel habits. Four cases were detected on regular follow up of patients with family history of colorectal malignancy who had requested colonoscopic evaluation. Two cases were detected after clinical suspicion of colorectal carcinoma was made by the consultant in cases presented with intractable urticaria, which was seen retrospectively in a few other cases too. The significance or association of the same symptoms in relation to colonic carcinoma could not be assessed and requires more study. On analysis of the dietary practices of the subjects, it was noticed that majority of them were following a mixed diet with predominant non-vegetarian food items and a preference for red meat and fried food almost on daily basis. The detailed analysis of the dietary constitution of the population was beyond the scope of this study. None of the subjects were pure vegetarians. Another interesting connection with dietary habits was found in this study where a family had two members diagnosed with colonic carcinoma, husband and wife, with no other contributory factors other than a common practice of diet rich in red meat. No area wise or religion wise predilection for the disease was found in the study and all subjects irrespective of the differences had similar dietary practices. Majority of the disease was found among individuals of moderate socioeconomic status with only few individuals with poor socioeconomic status being affected.

Sex/Age	Age <50	Age >50	Total
Males	14	64	78
Females	7	49	56
Total	**21**	**113**	**134**

Table 1. Age and Gender Wise Distribution of Samples

Symptoms	Number	Percentage
Altered bowel habits	65	48.5%
Bleeding per rectum	49	36.6%
Constipation	14	10.4%
Nonspecific symptoms	4	2%
Others	2	1.5%

Table 2. Symptomatology During Presentations

Symptom Complexes	Number	Percentage
Anaemia	51	38.1%
Weight loss	20	14.9%
Loss of appetite	38	28.4%
Typical GI symptoms	128	95.5%
Atypical symptoms	6	4.5%

Table 3. Patient Symptoms on Diagnosis

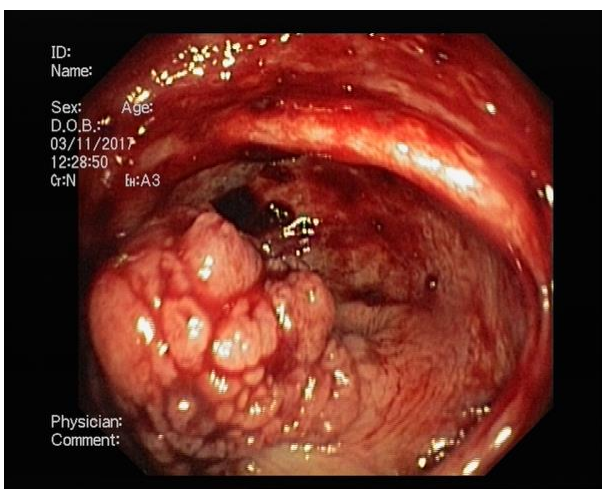

Figure 1. Colonoscopy Showing Polypoid Growth in the Right Colon, Biopsy Proven Later to be Adenocarcinoma

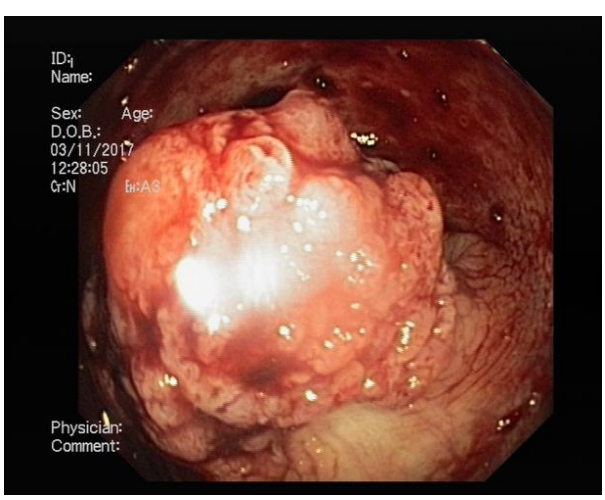

Figure 2. Colonoscopy Showing Ulceroproliferative Growth in Left Colon

DISCUSSION

This study on colon cancer showed a majority cases in older age groups than younger, which was comparable to the outcome in many other similar studies.[4,5] The majority of patients being males was in contrast to a study by Bohorquez et al,[6] but the early identification of cases among females were not seen in our study, which might point to a different sociocultural setting prevalent in the rural parts of

developing countries. Anaemia was a major constitutional feature of colonic carcinoma and was often associated with a preceding history of bleeding per rectum.[6] The symptoms of which may mimic haemorrhoids and therefore may often be neglected, especially in elderly males. The change in bowel habits as a symptom is often distressing for the patient, but the relation of such nonspecific symptom to colonic carcinoma does not carry strong association even though retrospective analysis showed it to be a common symptom in various clinical settings associated with colonic carcinoma, a finding that was consistent with other studies in similar populations.[7,8] Constipation as a predominant symptom was seen in many cases and evaluation of constipation led to diagnosis of colonic carcinoma in 10.4% of the cases. Chronic weight loss, loss of appetite, all were associated with metastatic disease and was consistent to the findings of studies by Selvachandran et al[9] and Steiner et al.[10] Dietary practices was found to have strong association with colonic carcinoma in this study with no pure vegetarians among the disease population. An observation that has significant fore bearing when referring the literature for similar studies and observations.[11] Even though the number of patients with significant family history were few, the association between family history and malignancy was found to be strong and observation made in other similar studies.[5,8,9,10]

CONCLUSION

Colonic carcinoma is currently an important cause of morbidity and mortality among developing countries. The predilection of disease among older males was seen in the study with non-vegetarian diet being a probable risk factor. A variety of symptoms may be associated with the disease, but anaemia, constipation, bleeding per rectum, altered bowel habits, nonspecific abdominal pains, etc., were the common presentation even though rare presentation like urticaria and metastatic symptoms on presentation are also seen. Early detection and surgical intervention was found to be beneficial for prolonged survival and to lessen comorbidities. Familial adenomatous polyposis coli, lynch syndrome, etc., were significant genetic risk factors and required further study. Genetic and chromosomal studies are the latest advent in diagnosis of colorectal malignancies as strong association has been found. The important genes involved in these are APC (5q), DCC/MADH2/MADH4 (18q) and TP53 (17p). Even though, familial malignancies were encountered in our study, the limited resources we have at our disposal could not be stretched to include chromosomal and gene analysis, but would have resulted in a better picture of the case study.[9]

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