

Colorectal Cancer: Late Presentation and Outcome of Treatment

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ABSTRACT

Background: *Colorectal cancer remains a major health problem especially in developed countries where it ranks as the third most common cause of cancer in both men and women. Though incidence of colorectal cancer is low in Nigeria and other developing countries, outcome of treatment remains poor due largely to late presentation, ignorance, poverty and superstition.*

Aim: *This study evaluates the stage of presentation and treatment outcome of colorectal cancer at the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria.*

Method: *Records of patients admitted into the hospital with confirmed colorectal cancer between January, 2000 to December, 2008 were retrieved. Data on age, sex, duration of illness, clinical features, treatment given and outcome of treatment were collected and analyzed.*

Results: *Out of 32 patients, 10(31.3%) were males and 22(68.7%) were females, with a male to female ratio of 1:2.1. The patients' ages ranged from 24-90 years with a mean of 55.8 years. Eighteen (56.3%) patients presented more than 6 months after onset of symptoms. Twenty-one (65.6%) patients presented with features of intestinal obstruction; 17(53.1%) with rectal bleeding; 13(40.6%) with abdominal pain and 12(37.5%) with significant weight loss. Twelve (37.5%) patients died before completion of treatment regimen. Thirteen (40.6%) patients were lost to follow-up, while 5 (15.6%) patients were discharged against medical advice. Only 2 (6.3%) patients completed their treatment regimen.*

Conclusion: *The incidence of colorectal cancer is still low in our environment but treatment outcome remains poor due to late presentation. Public enlightenment with emphasis on early presentation should be encouraged.*

INTRODUCTION

Cancer of the Colon and Rectum are quite common especially in developed countries. Worldwide, colorectal cancer is the third most common form of cancer¹. In 2000, colorectal cancer accounted for 9.4% of the world's new cancers, with 945,000 cases diagnosed, and 7.9% of the world's cancer deaths, with

492,000 deaths¹. In United states, it ranks as the third most common cancer in both men (following Prostate and lung/bronchus) and women (following breast and lung/bronchus)². It also ranks as the second leading cause of death due to cancer in the United States³. United States estimates in 2009 revealed 106,100 and 40,870 new cases of colon and rectal cancers respectively, and 49,920 deaths from both⁴. Incidence of colorectal cancer is lowest in developing countries like India and countries in Asia and Africa⁵. In Nigeria, incidence of colorectal cancer is put at 3.4/100,000 compared with 35.8/100,000 each year in USA⁵. Despite this low incidence of colorectal cancer in Nigeria, outcome of treatment still remains poor due largely to late presentation, ignorance, poverty and superstition⁶.

Colorectal cancer remains a major health problem particularly in developed countries. It continues to rank third among the new causes of cancer in both men and women². A lot of genetic and environmental factors have been implicated in the aetiology of colorectal cancer. It has also been established that there is an Adenoma-carcinoma sequence which lasts between 5-15 years². Colorectal cancer occurs in hereditary, sporadic or familial forms. Hereditary forms have been extensively described and are characterized by family history, young age at onset and presence of other specific tumours and defects. Among these defects are familial adenomatous polyposis (FAP), hereditary non-polyposis colorectal cancer (HNPCC) and some inflammatory bowel diseases like Crohn's disease and Ulcerative colitis. Due to association of these pre-malignant lesions with colorectal cancer, a lot of resources have been channeled into screening and surveillance tests especially in people with family history of colorectal cancer. In developed countries, screening; detection and treatment of these pre-malignant conditions have resulted in reduction in incidence of colorectal cancer. In countries with well-established screening programme, a lot of the cases are discovered at the asymptomatic stage with good prognosis. Screening has also resulted in reduction in the number of emergency admissions for colorectal cancer⁷⁻⁹. The aim of this study is to evaluate the stage of presentation and treatment outcome of colorectal cancer at the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria. Findings from this study will therefore help in planning healthcare programs and interventions aimed at improving outcome of treatment, hence reducing morbidity and mortality arising from malignancies.

PATIENTS AND METHODS

This is a hospital based retrospective study of all the patients admitted into hospital with confirmed cancer of the colorectum from January, 2000 to December, 2008. Patients' folders were retrieved from the Records Department. Data were collected on age, sex, duration of illness, clinical features, treatment given and outcome of treatment. The data collected were subsequently analyzed using SPSS version 17.0. Patients with unconfirmed diagnosis and those not admitted into the ward were excluded from the study.

RESULTS

A total of 32 patients met the criteria out of which 10(31.3%) were males and 22(68.7%) females, giving a male to female ratio of 1:2.1. The patients have an age range of 24-90 years with mean age of 55.8 years. The duration of symptoms ranged from 8 days to 3 years. Eighteen (56.3%) patients presented more than 6 months after onset of symptoms. Twenty-one (65.6%) patients presented with symptoms of intestinal obstruction; 17(53.1%) with rectal bleeding; 13(40.6%) with abdominal pain and 12(37.5%) with significant weight loss. Fifteen (46.9%) patients had laparotomy with colostomy out of which 5(15.6%) patients had abdomino-perineal resection (AP resection) with establishment of terminal colostomy; 10(31.3%) received cytotoxic chemotherapy. Three (9.4%) patients received no form of treatment/intervention; 2 of these were discharged against medical advice and 1 died soon after admission, before any form of intervention could be made. Twelve (37.5%) patients died before the completion of treatment regimen. Thirteen (40.6%) patients were lost to follow-up, while 5(15.6%) were discharged against medical advice. Only two (6.3%) patients completed their treatment regimen (surgical resection and adjuvant chemotherapy).

DISCUSSION

In Nigeria and some developing countries, the incidence of colorectal cancer is relatively low⁵. This has been attributed to a number of factors such as low life expectancy. Therefore, a lot of people in developing countries die before getting to the cancer age range¹⁰. Others include rarity of pre-malignant conditions^{5,6} and diet which is composed of high fibre and bulk^{5,10}. However, incidence seem to be increasing^{5,6,11} due probably to westernization of diets in some African countries¹². Despite the rarity of colorectal cancer in Nigeria, treatment outcome still remains poor due to late presentation. Most patients present when they become obstructed or have severe change in bowel habit at which stage the disease is already late and treatment modalities will be palliative and not for cure.

In this study, patients' age ranged from 24-90 years with a mean of 55.8 years, which is less than what is seen in most large series¹⁰. Male to female ratio in this study is 1:2.1 which also differs from the finding in some other studies where there is almost equal male and female incidence^{2,13,14}. In contrast, a study by Edino et al¹¹ in Kano, Nigeria showed male to female ratio of 2.5:1. Similarly, another study by Yawe et al⁶ in Maiduguri, Borno state, Nigeria; male to female ratio was 3:1. Eighteen (56.3%) patients presented later than 6 months of onset of symptoms. Most patients presented with obstructive symptoms at which stage the disease is already late and prognosis poor. This correlates with finding in other studies on colorectal cancer where intestinal obstruction was the major symptom¹⁴⁻¹⁸. About half (46.9%) of the patients received colostomy to relief intestinal obstruction. This is comparable to about 41.3% of diverting colostomies by Leitman et al¹⁸. Twelve (37.5%) patients died and all occurred within 6 months of commencement of treatment. Thirteen (40.6%) were lost to follow-up. This is less than the finding by Yawe et al⁶ where 70% of the patients were lost to follow-up within six months of treatment. Also, 5(15.6%) patients were discharged against medical advice probably to continue treatment by non-orthodox means. This is far less than 48% of patients refusing any form of treatment in the study by Yawe et al⁶.

CONCLUSION

This study has revealed a low incidence of colorectal cancer. However, most patients presented late with resultant poor treatment outcome. Improved public enlightenment and awareness campaign, with emphasis on early presentation is recommended.

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