Presentation of Colorectal Cancer in Khartoum Teaching Hospital

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Abstract

Aims: To determine the age and gender distribution in Sudanese patients with colorectal cancer, as seen in Khartoum Teaching Hospital, and to study its emergency presentation.

Patients and Methods: This retrospective study was conducted in Khartoum Teaching Hospital (Sudan). Two hundred and seventy seven (277) patients who presented in the period 1st January 2000 to 31st December 2006 were included. Data were collected from their hospital records and analyzed using SPSS computer program.

Results: More than 100(34.5%) of the study population (n=277) were below the age of 40 years, and 17.3% were below 30 years. The male to female ratio was 1.5:1. Intestinal obstruction was the most common cause of emergency presentation of colorectal cancer (94%).

Conclusion: Colorectal cancer in this study was found in young age groups. Intestinal obstruction is the main mode of its emergency presentation.

Key words: Colorectal cancer, emergency presentation.

Introduction

Colorectal cancer is one of the common cancers and is the second cause of death worldwide[1]

Hereditary factors increase the risk of development of colorectal cancer; people with positive family history in the first degree relatives have two to three folds increased risk than the general population[2]. Hereditary nonpolyposis colorectal cancer (HNPCC) which is known as Lynch syndrome, is the most common genetic disorder predisposing to colorectal cancer[3].

Colorectal cancer presents usually with rectal bleeding[2] but massive bleeding is common in benign lesions rather than malignancies[4]. Tenismus is a common presenting symptom of low rectal cancer. Emergency room presentation is having a high perioperative mortality[5].

Objectives

Our objectives were to determine the age and gender distribution of patients with colorectal cancer presented to Khartoum Teaching Hospital and to study their emergency presentation.

Patients and Methods

This is a retrospective descriptive hospital based study. It included patients who presented with colorectal cancer to Khartoum Teaching Hospital as elective or emergency in the period from 1st January 2000 to 31st December 2006. Two hundred and seventy-seven patients were included in this study. Khartoum Teaching Hospital serves Khartoum State and also accepts patients referred from different states of the country.

Demographic data of all patients were obtained with their presenting symptoms particularly those of obstruction. Also, the positive physical signs with positive relevant results of investigations were recorded.

The data were fed to and computed by the Statistical Package for social Sciences (SPSS-11).

Results

The total number of patients included in this study was 277. Patients below the age of 20 years were 4.3% and those below the age of 30 years were 17.3%. The peak frequency was 24.2% at the age group (51- 60) followed by 19.5% at the age group 61- 70 (19.5%). Males were 167(60.3%) (Fig 1)

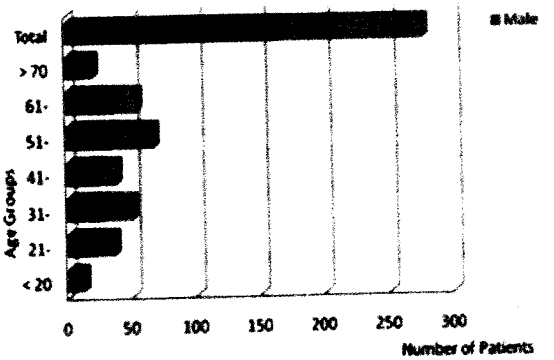

Fig 1. Age groups vs. Gender distribution in patients with colorectal cancer (n= 277).

Rectal cancer represented half of the study population followed by caecal (20%) then sigmoid cancer (14.5%). Left-sided colorectal cancer was seen in 73.6% patients (figure 2). Sixty-five percent of the patients presented as elective cases (figure 3). Out of the thirty five

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percent who presented in emergency situation 94% had intestinal obstruction

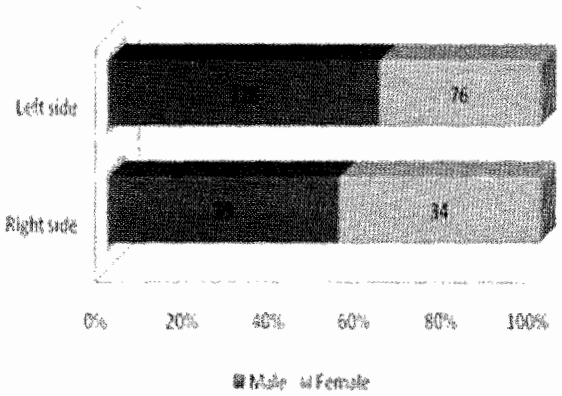

Fig 2. Site of the tumor vs. gender of patients with colorectal cancer (n=277).

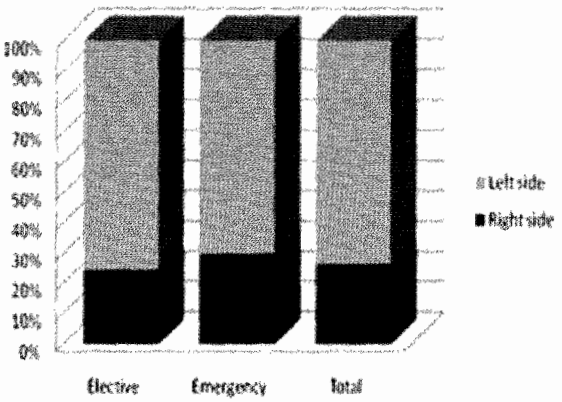

Fig 3. mode of presentation in relation to the side of colorectal cancer (n =277).

Discussion

The total number of patients was 277. In this study 17.4% of them were below the age of thirty which is similar to a study done in Soba University Hospital in Sudan in the period from July 1975 to December 1985. That study showed more than 16% of patients was below the age of 30; which reflects that, the incidence of colorectal cancer among young population is almost constant for the last three decades.

Ninety eight (35.4%) patients of our study were forty years or less, an incidence which is much higher than that mentioned in the literature[6]. Agrawal S et al recommended screening of African Americans at a younger age (45 rather than 50 years) as they were found to have a higher incidence of developing colorectal cancer at a younger age[7].

On the other hand the highest incidence was identified in the age group 51- 60 years (24.2%) which coincides with that reported by Walderon et al[5] but differ from David et al whose peak incidence was at 75 years[1].

In this study males (n=167) were more than females (n=110) a ratio of 1.5: 1 which is almost similar to that shown by others[4, 8]. On the other hand Guraya S Y & Eltinay O E showed a different male to female ratio (4: 1)[9].

In this study 204 (73.6%) patients were diagnosed as having left-sided colorectal cancer.

Keeping with literature[4], in our study the rectum was the most affected site (49.8%), followed by the caecum (20.2%) and sigmoid (14.4%). Nevertheless, a different report contrasts our findings[9].

In this study both genders showed more left-sided colorectal cancer but females had more right-sided colonic cancers than males (30.9% vs. 23.4%) and the contrary for the left-sided cancers which are more common in males (76.6% vs. 69.1%). Zbar et al reported a steady increase in both left and right-sided colonic tumours with no gender predilection[10]; our findings are in keeping with Wood S E et al findings[5].

Ninety-seven (35.0%) of our patients presented as an emergency; 92(94.8%) had acute or subacute intestinal obstruction. This percentage was higher than that shown elsewhere[1, 11,12]. This reflects that intestinal obstruction is the main emergency presentation of colorectal cancer in Sudanese patients and the first line medical providers may not be plainly frank to request rectal examination. Also, specialized surgical gastrointestinal tract service is not available in peripheral areas of the country.

Conclusions

In conclusion, colorectal cancer was found to affect Sudanese patients at younger age groups (35.4% were forty years or less) with a peak frequency at the sixth decade. Males were affected more than females and at younger age groups.

The most common emergency presentation was intestinal obstruction.

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