

ORIGINAL ARTICLES

Clinicopathological trends in colorectal cancer in a tertiary care hospital

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ABSTRACT

Objectives: This study aims to retrospectively analyze the pattern of patients with colorectal cancer seen in King Abdul Aziz Hospital and Oncology Center, Jeddah, Kingdom of Saudi Arabia from January 1992 through to December 1997, with a view to determine various epidemiological and clinicopathological features of the disease.

Methods: All cases of colorectal cancer presented to King Abdul Aziz Hospital, Jeddah between January 1992 and December 1997 were retrospectively reviewed and the data was analysed to determine age, gender, ethnicity, subsite distribution, clinical presentation, histological type and staging of disease.

Results: A total of 160 patients were included in the study, with 78% of them being Saudi Nationals. The male to female ratio was 1:0.8. The mean age was 56.3 + 14.98 years. The peak age of onset was in the 6th and 7th decade. The duration of symptoms varied from one to 24 months with the majority of patients having symptoms for more than 6 months. Sixty-eight point two percent of these patients had primary disease originating from rectum or sigmoid colon, whereas 22.5% of patients had primary disease involving ascending and transverse colon, Anemia was present in 55% of patients. Among the 160 patients, 82.5% of them were histologically found to have adenocarcinoma. A total of 38.8% of patients were in stage B and 38.1% of patients were in stage C of Aster-Coller classification. No patients was found to be in stage A.

Conclusions: In general, we share many epidemiological features of developing countries for colorectal carcinoma. These included left sided subsite distribution and delayed presentation of the disease in an advanced stage. We stress the significance of public health education and a national screening program regarding colorectal cancer to improve the outcome.

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The incidence and pattern of colorectal cancer varies remarkably from one country to another depending upon various genetic and environmental factors.¹ It is the leading cause of cancer related morbidity and mortality in North America, Western Europe and Australia. It is the 4th most frequent tumor and 2nd leading cause, of cancer related deaths in the United States of America (USA).^{2,3} The disease is believed to be relatively uncommon in South East Asia, Middle East and Africa. Some of the earlier studies from the Kingdom of Saudi Arabia (KSA) and other Middle Eastern countries reflected this trend.⁴⁻⁶

A national cancer registry (NCR) has been set up in the KSA since January 1994 and cancer has been categorized as a mandatory notifiable diseases. Since then all cancer

cases diagnosed anywhere in the KSA are expected to be registered with NCR. According to the 2nd report published by NCR in 1999, colorectal cancer accounts for 5.6% of all newly diagnosed cancers with an over all age standardized incidence rate (ASIR) of 4.5/100,000 population.⁷ King Abdul Aziz Hospital and Oncology Center is one of the main public hospitals in Jeddah, KSA. The oncology center in this hospital is the only facility in Ministry of Health Hospitals in Jeddah with the provision of all modalities of treatment for various malignancies. Consequently most of the oncology patients diagnosed in this region are referred to this hospital for further management.

The present study is aimed to retrospectively study the pattern of patients with colorectal cancer seen in this hospital from January 1992 through to December 1997 with a view to determine various epidemiological and clinicopathological features of this malignancy. We also aim to compare our results with those previously reported from the KSA and other countries.

Methods. All cases of colorectal cancer presented to King Abdul Aziz Hospital, Jeddah between January 1992 through to December 1997 were retrospectively reviewed. Their age, gender, ethnic origin, clinical presentation, duration of symptoms, site of primary and relevant past or family history was recorded on a pre designed proforma. All patients underwent standard laboratory, radiological and endoscopic studies for diagnosis and staging and these findings were noted. The histological type of the tumor was determined. Tumor staging of colorectal cancer was carried out according to Astler Collier modification of Duke's system,⁸ dividing it into stage A to C depending upon the extent of local involvement and regional node spread. Stage D was added to account for distant metastasis in accordance with Turnbull modification.⁹ The data was electronically analysed using computer software statistical package for social sciences program version 8.

Results. A total of 160 patients were included in the study. Out of these, 88 patients were male, whereas the rest were females with a male:female ratio of 1:0.8. One hundred and twenty five patients (78%) were Saudi nationals, and the remaining were non-Saudis. Their ages ranged from 22-80 years with a mean of 56.3 + 14.98 years. The distribution of patients in various age groups is shown in Table 1. Twenty eight (17.5%) patients were below 40 years of age. The highest number of patients was between the ages of 50 and 70. Table 2 shows the various presentations of these tumors. The duration of symptoms varied from one to 24 months in the majority of patients. Among the total, 55% of patients had symptoms of more than 6 months duration. No patient had past or family history of ulcerative colitis or Crohn's disease. Ten (6.2%) patients had a documented history of polyps diagnosed previously. The <

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