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Original Research Article

Colorectal Cancer in Young People Kurdish in the West of Iran

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Abstract: Incidence of colorectal cancer (CRC) in Iran has increased recently; especially the incidence of the disease in young patients is higher than expected. Aim of this study is survey on 40 young patients with CRC in Kurdish population. Between of 2010 and 2015, 40 young patients with CRC referred to Department of Radiation Oncology in Imam Reza Hospital, Kermanshah, Iran. We analyzed sex, age, type of pathology, grade tumor, patients according to the cancer diagnosis year, age distribution and overall survival. Diagrams were plotted with Microsoft Office Excel 2007. The mean age of patients at diagnosis was 32.85±5.24 years (range: 17-39 years). Twenty five (62%) patients are male. Highest and lowest number of patients about tumor site relate to rectum (60%) and ascending (2.5%). Eight patients had mucinous adenocarcinoma. Tumor grade in ten patients were moderate and 3 patients were poor. Two (5%), 5(12%), 6(15%), 7(17%), 15(38%) and 5(13%) came to our Department of Radiation Oncology in 2010,2011,2012,2013,2014 and first four months of 2015 years, respectively. We have seen increasing incidence of CRC in young Kurdish people. Year-to-year increases in its trend. So it is a serious alarm for Iran's ministry of health and specialists in this field that they have pay special attention to this problem.
Keywords: Colorectal, Kurdish, Uptrend, Young Patient

INTRODUCTION:

Colorectal cancer (CRC) is the fourth most common cancer in men and the third most common in women [1]. CRC is the third most common cancer in males and females with 663,612 new cases and Age Adjusted Rate (ASR) of 204 per 10^6 for males and 570,099 new cases with ASR of 146 per 10^6 for females [8]. Age is a major risk factor for sporadic CRC. It is a rare diagnosis before the age of 40 with the incidence beginning to increase significantly between the ages of 40 and 50 years and age-specific incidence rates increasing in each succeeding decade thereafter [9]. Incidence of CRC in Iran has increased recently [2], especially the incidence of the disease in young patients is higher than expected[3]. Estimates are that only 2–6% of CRC cases are found in patients 40 years or younger [6,7]. Young patients (< 40) often have more advanced disease on presentation and their survival is lower than older patients, perhaps because of delayed diagnosis [4]. There is controversy surrounding the prognosis of young patients with CRC [5]. Aim of this study is survey on 40 young patients with CRC in Kurdish population.

PATIENTS AND METHODS

Between of 2010 and 2015, 40 young patients with CRC referred to Department of Radiation Oncology in Imam Reza Hospital, Kermanshah, Iran. We analyzed sex, age, type of pathology, grade tumor, and percent of patients according to the cancer diagnosis year, age distribution and overall survival. Diagrams were plotted with Microsoft Office Excel 2007.

RESULTS:

The mean age of patients at diagnosis was 32.85±5.24 years (range: 17-39 years). Seventy six percent of patients are located in between 29 to 40 years. Twenty five (62%) patients are male and 15 patients (38) are female. The highest and lowest number of patients about tumor site relate to rectum (60%) and ascending (2.5%). Twenty patients had invasive adenocarcinoma and 8 patients had mucinous adenocarcinoma. Tumor grade of 20 patients were well differentiated, 10 patients were moderate and 3 patients were poorly differentiated (**Table 1**).

Thirty patients are located in between 29 to 40 years that 7 patients (23%) of them had 37 years (**Figure 1**).

Two (5%), 5(12%), 6(15%), 7(17%), 15(38%) and 5(13%) came to our department of radiation and oncology in 2010, 2011, 2012, 2013, 2014 and first four months of 2015 years, respectively.

Table 1: Comparison of colorectal cancer patients under 40 years of age

Variables	No. of Cases	Percentage
Age		
17-19	01	02
20-29	09	22
30-39	30	76
Sex		
Male	25	62
Female	15	38
Tumor Location		
Rectum	24	60
Rectosigmoid	03	7.5
Sigmoid	05	12.5
Transverse	03	7.5
Descending	02	5.0
Ascending	01	2.5
Cecum	02	5.0
Kind of Pathology		
Invasive Adenocarcinoma	25	76
Mucinous Adenocarcinoma	08	24
Unknown	07	-
Stage		
Low	13	37
High	22	63
Unknown	05	-
Grade		
Well	20	67
Mod	10	33
Poor	03	10
Unknown	10	-

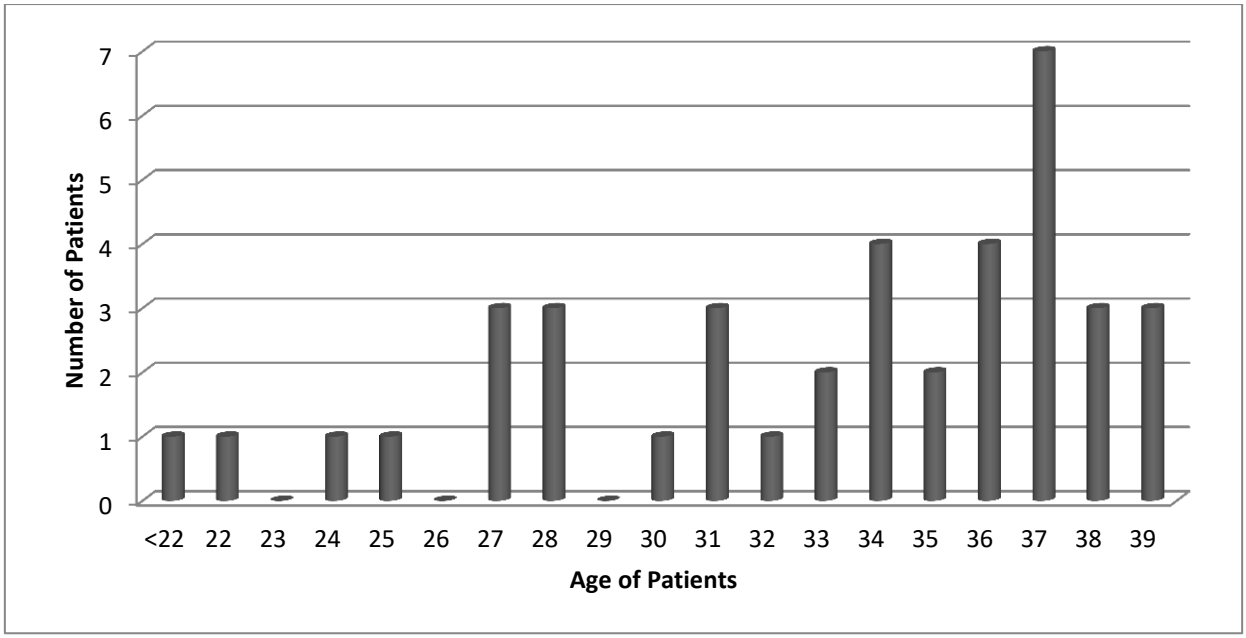

Fig 1: Age distribution in patients with colorectal cancer

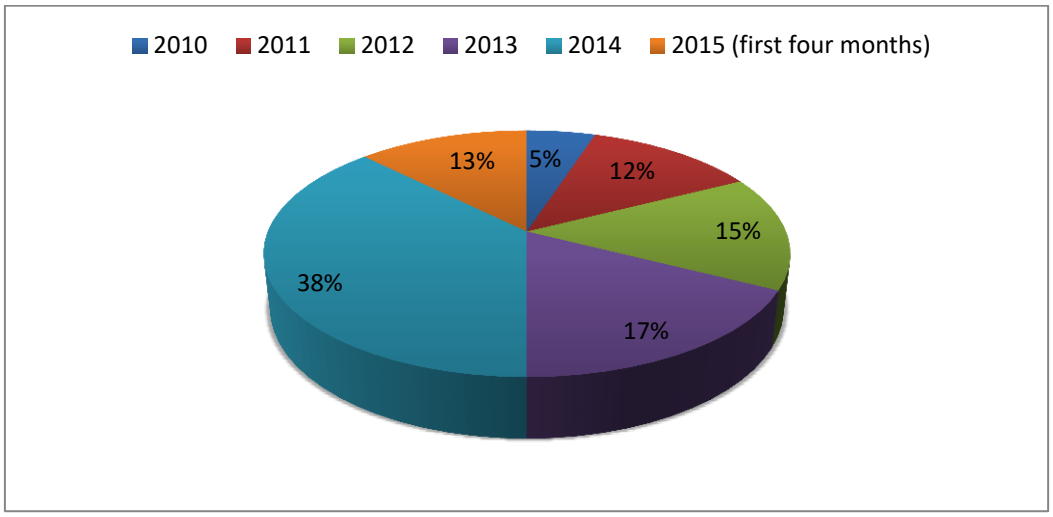

Fig 2: Percent of patients according to the cancer diagnosis year

DISCUSSION:

CRC is primarily a disease of the elderly but its incidence in younger age group is increasing [10].Our series reaffirmed the general trend towards a distal left-sided migration of CRC, especially in young individuals as 83.3% of the tumors were located distal to splenic flexure compared to 54.54% left-sided tumors in older age group. Common sites involved were rectum (43.48%) and sigmoid colon (17.39%) [10, 11]. Ayyub *et al.;* [15] and Mansoor *et al.;* [16] reported that left-sided lesions constituted about 68% of all CRC cases. Most patients in this study were male (62%) and common site were rectum (60%) and sigmoid colon (12.5%). A study from South Africa showed that among patients admitted to hospital with CRC the proportion of African patients under 40 years of age was 19%; but only 4% in the white population [12]. Other study showed CRC affects the younger population with an incidence of 1.6 to 23% [6]. In west of Iran, 280 patients with CRC referred to Imam Reza hospital that 40 (14%) patients of them had age of under 40 year. And 81 percent of young CRC had involved their left side colon. One concern of CRC affecting the younger population (<40 years old) is the poor prognosis attached to it [14].Reports from Europe demonstrate that the 5 year survival rate for young patients (30 years old or younger) is only 25–30% [13]. Two studies said fifty-six percent of tumors in our study were moderately differentiated adenocarcinoma, which is comparable to worldwide finding[16,17]. In larger series reviewed, that is a greater proportion of poor prognostic tumor variables, such as mucinous and poor grade tumors, in the young in the old [6]. In our patients, 43% of them had moderately and poorly differentiated adenocarcinoma grad tumor. And also

mucinous adenocarcinoma was kind of pathological response in24% of them.

CONCLUSION:

We have seen increasing incidence of CRC in young Kurdish people. Year-to-year increases in its trend. So it is a serious alarm for Iran's ministry of health and specialists in this field that they have pay special attention to this problem.

CONFLICT OF INTEREST: None declared.

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