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Research Article

Diagnostic and Therapeutic Characterization in Patients with Colorectal Cancer, Hospital Escuela, 2016-2019

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Abstract

Colorectal cancer is defined as the uncontrolled growth of cells in the colon and/or rectum.

Objective: Characterize the diagnosis and therapy performed in patients with colorectal cancer, Hospital Escuela, 2016-2019.

Methodology: A quantitative, descriptive, cross-sectional, retrospective study, with a universe of 92 files with a sample of 75 files and one of ours Non- Probabilistic, collecting data at the Hospital Escuela, generating an emptying with Epi Info and Excel, as well as analyzing the data by Average frequencies and percentages, including complete records of elderly people with a confirmed diagnosis of colorectal cancer and excluding those who have been used for legal proceedings, was approved by the Ethics Committee of the UIC-FCM-UNAH.

Result: The most frequent age was between 61-71 years in 29%, being men the most affected in 51%, in their majority of secondary 61%, Mestizos in 93%. Smoking was found in 56% and alcohol in 49%, the relationship between obesity or normal weight stages was not reported in 89%, 87% presented constitutional Symptoms, Mucinous Adenocarcinoma with 27% followed by Colon Adenocarcinoma with 21%, smoking occurred in 56% and alcohol with 49%, intestinal polyps presented 47% and physical inactivity was found in 43%. Surgical management was performed in 55%, the Hospital Stay, the most frequent was 5-10 days with 70% being Stages IIIb, IVa and IIb, which were found with a shared percentage of 12%.

Conclusion: Most of the patients were older than 40 years, the majority consume tobacco and alcohol, had few physical activities and a high consumption of fat in their diets and their management was mostly surgical.

Keywords: Neoplasia; Diagnosis; Treatment; Colorectal Surgery

Introduction

Neoplastic diseases have been a serious problem in the course of time, affecting both animal species and human beings, the most remote description that is known comes from the Code of Hammurabi (1700BC) [1,2]. The therapeutic options proposed by John Hunter would be shared by Morgagni, who is thought to have been the first to propose surgical excision for the treatment of rectal cancer. Finally, it would be Jacques Lis Franc, in 1826, who successfully carried out the first rectal excision as a treatment for uncomplicated rectal cancer [3-5]. Colorectal Cancer (CRC) is one of the most prevalent neoplasms in Western countries. In our country, it represents the second most frequent cause of cancer in men and women behind lung and breast cancer, respectively. In Spain, its incidence is estimated at 26,000 new cases/year, and it is the second leading cause of death from cancer. The incidence of CRC varies according to age, increasing markedly after 50 years [6]. Adenocarcinoma originates in the glands, being the most common with more than 90% of colorectal cancers being adenocarcinomas. Colorectal cancer predominates in older people. The mean age of presentation is 70-71 years, and most patients are over 50 years old at the time of diagnosis, but it must not be forgotten that it can also appear in younger people. It affects men and women almost equally [7].

Worldwide, in 2018 colorectal cancer represents the third in incidence, in Spain in 2019 in both sexes (44,937 new cases), being the second in men after prostate and the second

in women after breast. Regarding mortality, the National Institute of Statistics in December 2018 pointed out that colorectal cancer was the second tumor responsible for the highest number of deaths in both sexes (a reduction of 2.4% compared to the previous year) [7]. The incidence of Colorectal cancer is growing in countries that previously had a low incidence [8]. In 2002, colorectal cancer in men ranked fourth among neoplasms worldwide with 550,465 new cases; in women it was ranked third with 472,687 new cases. Currently, colorectal carcinoma is the most prevalent digestive tract cancer in men and women worldwide [9,10]. Often a surgery it is all that is required to extract the cancer [11]. The development of this type of disease is multietiological, authors indicate that having a history of the disease increases the risk of developing it between 3 to 6 times, and also indicates its appearance by direct inheritance between 1.5 and 2 times more than those who do not have it. Diseases such as chronic ulcerative colitis have also been associated with the evolution of this type of cancer. On the other hand, the consumption of fiber, calcium, antioxidants, folates and methioninols, are identified as protective factors, recurrent physical activity habits that are associated with a decrease in the risk factor [12-14].

Methodology

With a type of Study

Quantitative, with an Observational, Descriptive, cross-sectional, retrospective design. There was a Universe of 92 records of patients admitted for colorectal cancer, between January 2016 and December 2019.

Obtaining a Sample

Corresponding to 75 patients, calculated at a 95% CI and a 5% EI. Anticipated frequency of 50%. The type of Sampling was intentional Non- Probabilistic. The data were collected by means of a previously designed and validated instrument, provided by the general archive of the Hospital Escuela Universitario, its analysis was executed in the statistical program Epi- info and Excel. Microsoft office Word will be used for the report and Microsoft Office. The information collected was tabulated with the Epi Info v. 7.2. Once the quality control of the database and final cleaning had been carried out, the Analysis module was carried out by means of frequencies and crossing of variables, as well as to generate descriptive statistics with 95% reliability (NC95%). Including complete records, records of people aged over 18 years, patients diagnosed with colorectal cancer. Likewise, Files used for legal processes, File's incomplete, Records of people under the age of 18, Patients with another undifferentiated colorectal cancer pathology. To carry out the study, the approval of the head of the surgery service of the Hospital Escuela Universitario was requested, submitting the protocol for approval by the ethics committee of the Scientific Research Unit of the Faculty of Medical Sciences. The data will be handled with absolute confidentiality, so that the instruments will have numerical identification.

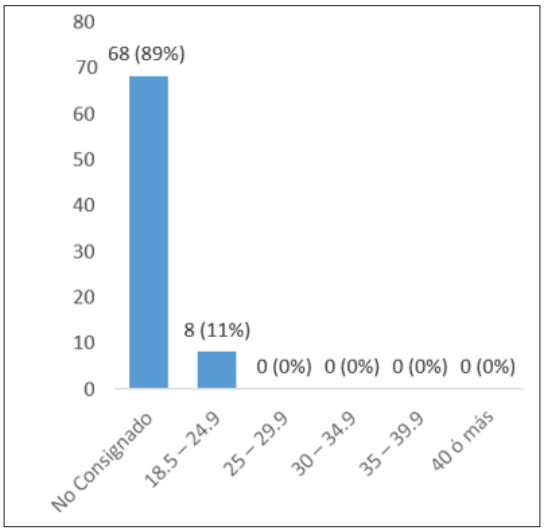
Result

In relation to age, the most frequent range was found between 61-71 years with 29% (22), followed by 49-60 years with 24% (19), the relationship between men and women was very close to 50% shared, however, men were the most affected. The most frequent level of schooling was Secondary in 61% (46), with very diverse occupations and mostly of Mestizo race in 93%. (Table 1) In relation to the history of risk presented by the patients, smoking was the most frequent with 56% (42), followed by aging with 52% (39), alcohol ranked second with 49% (37), intestinal polyps presented 47% (35) and physical inactivity was found with 43% (32). Diets high in fat with 33% (25) and finally family history with 25% (19). Most of the data that could have reflected a relationship of obesity or normal weight stages are not 89% (68) recorded in the files, and 11% (8) of them were in adequate or normal weights (Graph 1). Among the most frequent symptoms, it was found that 87% (65) presented Constitutional Symptoms, followed by Constipation in 52% (39), to a lesser extent Diarrhea was found with 23% (23) (Graph 2).

Table 1: Distribution of the sociodemographic variables of the population under study (n=75).

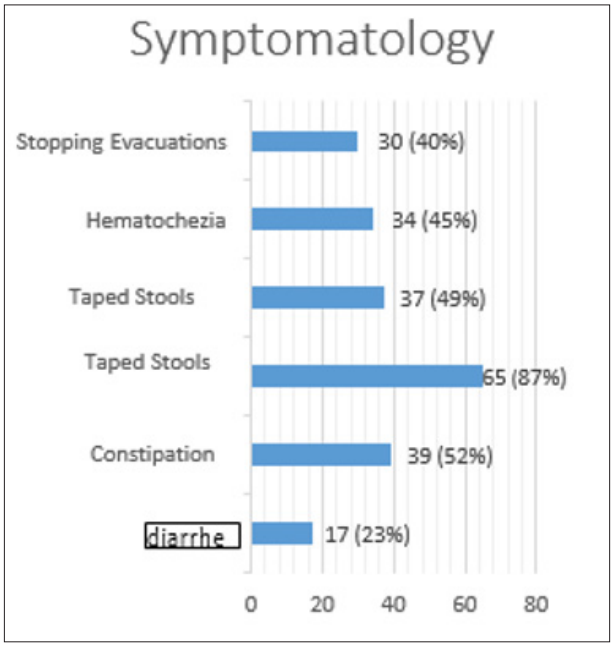
Age	n	%
25-36	7	9
37-48	14	18
49-60	19	24
61-72	22	29
Greater than 73	Fifteen	Twenty
Total	75	100
Sex	F	%
Men	39	52
Woman	36	48
Total	75	100
School grade	F	%
Primary	25	33.3
Secondary	46	61.3
Higher education	4	5.4
Total	75	100
Occupation	F	%
Businessman	5	6.7
Unemployed	7	9.4
Public	5	6.6
Private	1	1.3
Other	57	76
Total	75	100
Race	F	%
Mixed race	69	93
Black	two	3
Other	3	4
Total	75	100
Comorbidity and Pathological History	F	%
Aging	39	52
Alcohol	37	49

Smoking	42	56
Physical inactivity	32	43
Intestinal Polyps	37	Four Five
Overweight or Obesity	0	0
High Fat Diet	25	33
Genetic Factor	1	1
Family History of Colo-Rectal Cancer	19	25



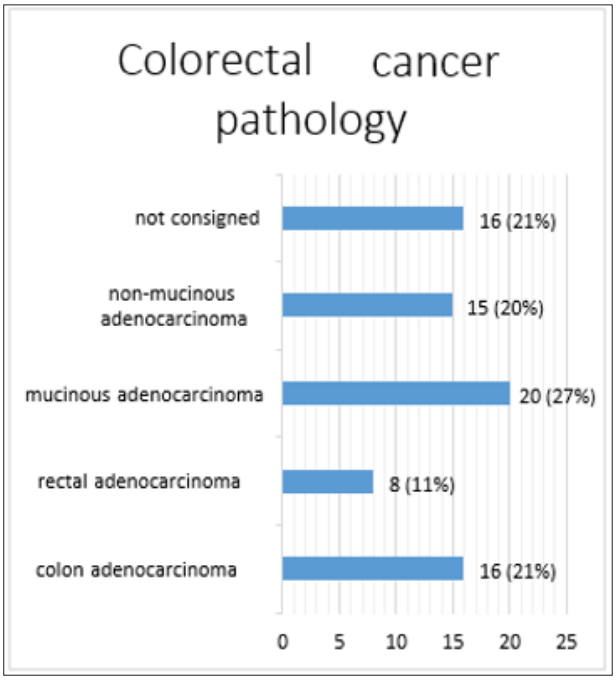
Graph 1: Distribution of anthropometric measurements in the participating subjects (n=75).

Source: Therapeutic characterization study survey of patients with colorectal cancer at Hospital Escuela.

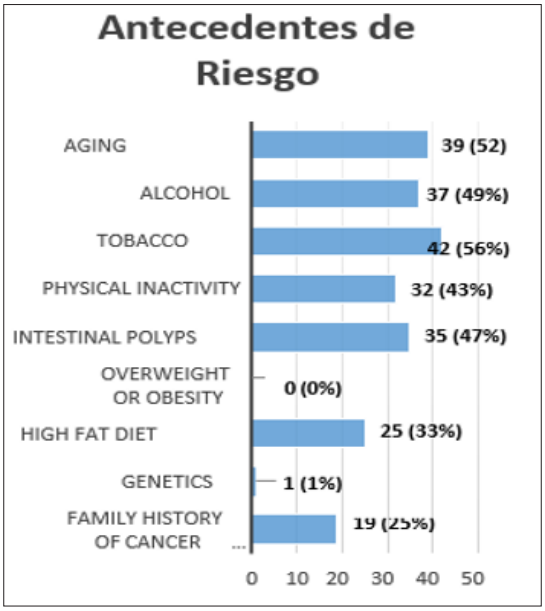


Graph 2: Frequency distribution of symptoms presented in patients with a diagnosis of colorectal cancer (n=75).

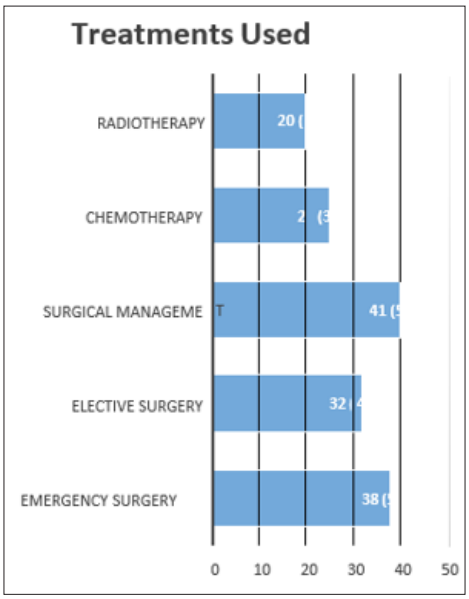
One of the most frequent characteristics within the study group was Mucinous Adenocarcinoma with 27% (20) followed by Colon Adenocarcinoma with 21% (16) and to a lesser extent Non-Mucinous Adenocarcinoma with 20% (15) (Graph 3). In relation to the history of risk presented by the patients, smoking was the most frequent with 56% (42), followed by aging with 52% (39), alcohol ranked second with 49% (37), intestinal polyps presented 47% (35) and physical inactivity was found with 43% (32). Diets high in fat with 33% (25) and finally, family history with 25% (19) (Graph 4). At the level of management and treatment used in the studied patients, it was found that surgical management was performed in 55% (41), Emergency Surgery was performed in 51% (38), followed by Elective Surgery with a 43% (32), Chemotherapy was practiced in 34% (25) and to a lesser extent Radiotherapy with 27% (20) of all patients studied (Graph 5). Regarding the type of intestinal obstruction, it was found that complete intestinal obstruction was the most frequent type in 42.47% (33), followed by partial intestinal obstruction in 40.10 (30) and 16.44% (12) of the patients did not present intestinal obstruction (Graph 6). Regarding the topographic location, it was found that the most frequent was right colon cancer in 57.33% (43), followed by 34.67% (26) of left colon cancer and 8% (6) of rectal cancer (Graph 7). Cancer, it was evidenced that the most frequent type of surgery offered was hemicolectomy plus one type of anastomosis in 37.33% (14), followed by hemicolectomy plus ileostomy in 24% (18) and thirdly, loop colostomy 21.33% (16) and only 9.33% (7) underwent ileostomy (Graph 8). Regarding the Hospital Stay, this was delimited by the Disease Stage, the most frequent being 5-10 days with 70% (52) being Stages III b, IVa and II b, which were found with a shared percentage of 12% (9), on the other hand, Stage IVa and II b, had a total frequency of 18% (13) (Table 2).



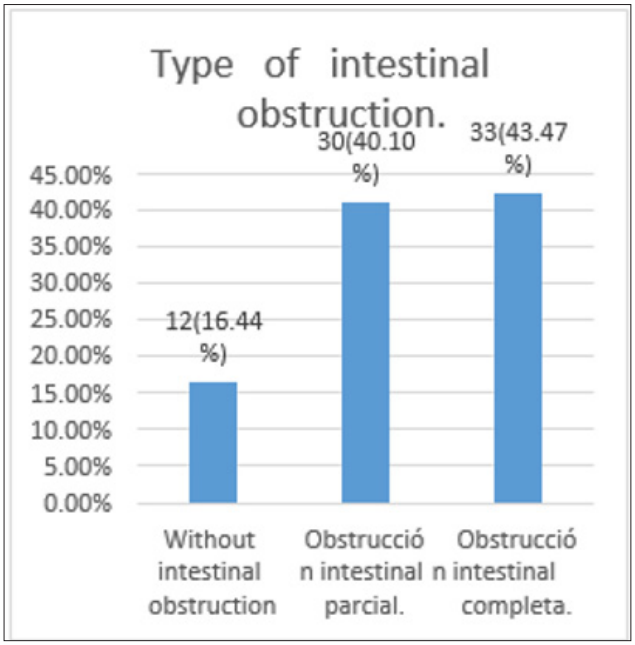
Graph 3: Distribution of the most frequent characteristics at the pathological level (n=75).



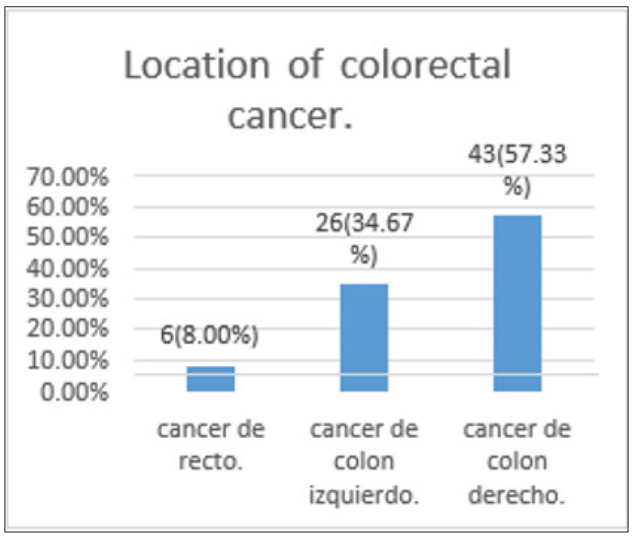
Graph 4: Distribution of the history of risk presented in the subjects under study.



Graph 5: Distribution of the most used treatments referred to in the files (n=75).



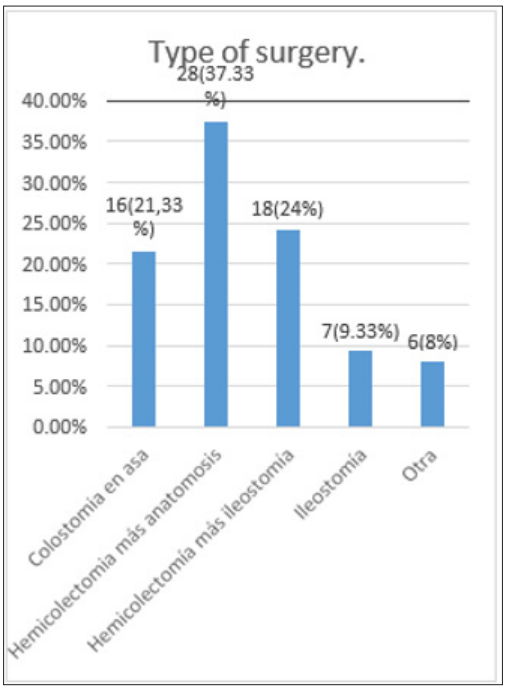
Graph 6: Type of intestinal obstruction, in patients with colorectal cancer, HEU. 2018-2019 (n=75).



Graph 7: Topographic location of colorectal cancer, in patients with colorectal cancer, HEU. 2018-2019.

Table 2: Distribution of hospital stay in relation to the stage of the disease (n=75).

Disease Stage												
Hospital Stay	I	IIa	II b	IIc	IIIa	IIIb	III c	IVa	IVb	IVc	NC	Total
11 to 15 days	0	0	2	0	1	2	1	0	0	0	2	8
16 to 20 days	0	1	2	1	0	1	0	0	0	1	0	6
5 to 10 days	1	6	9	4	8	9	2	9	1	0	3	52
More than 20 days	0	0	0	0	0	0	0	1	1	0	1	3
Less than 5 days	0	0	0	0	0	0	1	3	0	0	2	6
Total	1	7	13	5	9	12	4	13	2	1	8	75



Graph 8: Topographic location of colorectal cancer, in patients with colorectal cancer, HEU. 2018-2019.

Discussion

A study by Cuellar et al., In Spain, they indicated that the mean age of the patients was 68.25 years and 61.68% were men [15]. On the other hand, Machicado et al. [16] they indicated that the mean age was 60.5 years, and the female gender predominated with 66.7%. 100% of the histological types were adenocarcinoma [16]. Another study indicated that the youngest patient was 35 years old and the oldest, 86 years old. For this study, the most frequent age range was between 61-71 years with 29% (22), followed by 49-60 years with 24% (19), the relationship between men and women was very close to 50% shared, no, However, men were the most affected. The American Cancer Society indicates that black race has the highest colorectal cancer incidence and mortality rates of any racial group in the United States. Jews from Eastern Europe (Ashkenazi Jews) have one of the highest risks with any other ethnic group in the world [11]. In this case, only 1% of those affected belonged to the Black Race, however, 93% were Mestizos [17-23]. A Cuban study, which included 276 adult patients (92 cases and 184 controls), attended consecutively from May 2008 to May 2009, at the Institute of Gastroenterology, where a possible association between obesity as a risk factor and obesity was determined.

Colorectal cancer demonstrated that a diet rich in saturated fat, a diet low in vegetables, physical inactivity, alcohol consumption and obesity 21 PAHO noted that a high BMI at a young age is associated with a 39% increased risk of colorectal cancer in adult men (RR=1.39, 95% CI 1.20-1.62, P<0.0001) and a 19% increased risk of colorectal cancer in adult women (RR=1.19, 95% CI 1.06-1.35, P=0.004) [22]. For his study, 11% (8) were found in adequate or normal weights, the remaining 89% (68) were not included in the files. For Balaguer F. Tumors of the left colon generally manifest in the form of rectal bleeding and/or changes in the stool rhythm, conditioned by the reduction of the lumen of the colon. Tumors of the right colon usually cause occult bleeding and the symptoms reported by the patient are those attributable to secondary chronic anemia, although it is also possible that it manifests in the form of enterorrhagia. A rare complication of colon cancer but one that worsens the prognosis is intestinal perforation, which leads to fecal peritonitis or the formation of an abscess [23]. For this study it was determined that more frequent symptoms in 87% (65) had Symptoms Constitutional, followed by Constipation in 52% (39), to a lesser extent Diarrhea was found with 23% (23). In a study carried out by Amarillo HA, the incidence of smoking patients was 29% (15 of 51 patients), who consumed an average of 22 cigarettes/day (range 5-60) and whose average age was 63.2 years (41-77) mostly male (53%). Among non-smokers, the mean age was 69.2 years (27-90) of which 58% were women [17]. The American Cancer Society, colorectal cancer has been linked to excessive consumption of alcohol. Have regular physical activity at moderate to vigorous intensity it can help reduce the risk [11]. The results found for our study showed that Smoking was the most frequent with 56% (42), followed by Aging with 52% (39), alcohol ranked second with 49% (37). The High Fat Diets with 33% (25) and finally the Family History with 25% (19). Previous studies have identified that for some cases of rectal and colon cancer, the chemotherapyin conjunction with radiotherapy can offer better results [11]. On the other hand, for Chacón, the most frequent surgical stage was II with 22 cases. The hospital stay ranged from 3 to 35 days with a mean of 8 days. At 30 days post- surgery, there were 3 deaths that were in patients with major complications, which represented 6% of the population studied. Of the patients undergoing surgery, 28 (57%) received adjuvant chemotherapy after surgical recovery. Follow-up was carried out in the remaining 46 patients with a range of 12-60 months, with a mean of 36 months, finding a disease- free survival during that period of 28.2%, that is, 13 patients; Curative surgery was performed in all of them [24]. At the level of management and treatment used in this study, surgical management was performed in 55% (41), Emergency Surgery was performed in 51% (38).

Conclusion

Most of the patients who were studied were older than 40 years, the body mass index could not be visible as to generate a more viable discussion with the literature that indicates that this is an important determinant, within the practices and antecedents, the majority use Tobacco and Alcohol, also had low physical activity and a high consumption of fat in their diets, which can be a trigger for the development of Colorectal cancer their management was mostly surgical.

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