

## CARE OF PATIENTS WITH COLORECTAL CANCER - AN OPPORTUNITY FOR PREVENTION

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### ABSTRACT

**Introduction** : Over the last twenty years there has been a significant increase in the incidence of colorectal cancer ( CRC ) and malignant diseases in the world in general, and especially in the developed countries of the west .

**Purpose:** To show the prevalence of CRC in Eastern Macedonia in the period from 2008 to 2013 . To be recognized occurrence of CRC among different groups , or how prevalent in men , and as women.To the situation , for how screening or colonoscopy affect prevention CRC.

**Materials and Methods** : Data from the archives of the National Institute for Health Protection of the Republic of Macedonia. Archive data from the specialized practice of Internal Medicine , Clinical Center Stip. **Results** : In the Republic of Macedonia in 2012, colorectal cancer is 12 % of all malignant diseases with incidence of 25.7 cases per 100,000 residents .According to data from surveys that have been made in Eastern Macedonia , patients often in Strumica , Delcevo Berovo M.Kamenica , Kocani , Probishtip Vinica Radovish , St. Nicolas, ie the total number of 3205 colonoscopy done in time from 2008 di 2013 dijagosticirani total of 287 cancers of the colon , or an average of about 57 cancers per year . **Discussion** : Colorectal cancer occurs more often in men than women . Since 3205 hits in 660 has diagnosed bolest.**Conclusan** : CRC is a cancer that is a second incidence of all cancers globally level.At the 95 % of cases of colon polyps turn into cancer .The clinical picture is different and multisimptomatska , depending on the type size , tumor localization .

**Keywords** : colorectal cancer ,prevention.

### Introduction

In the last two decades the world The significant increase in the incidence of cancer of the digestive tract that has the highest incidence of colorectal cancer ( CRC ) . This problem in global scale covering all aspects of health , medical and ethical to socioeconomic has the potential solution lies in : better organization of health care , design and implementation of prevention and screening program and vocational education and the general population . Colon (intestinum crassum) is part of the system digestion. It follows the small intestine and a length of 1.5 meters . Unlike the small intestine , the colon is a larger diameter . On it are three different parts: appendicitis (coecum) with crvoviden node (appendix vermiformis); colon (colon); Law - rectum (rectum) which ends with the anus is a muscular tube hose.Thick ligavichen tubular body . Digestion and resorption of food almost entirely accomplished in the small intestine . The intestinal juice colon contains ferments ( enzymes ) . The main component is mucin and elektrohemie reaction is alkaline . In the first part of the colon takes place pretensions of nedovarenite products at impact ferment that came with himusot of the small intestine . At the same time the process of resorption and minimal amounts of glucose , amino acids , fatty acids and glycerol . Colon delivering rich intestinal flora in normal cases does not mind of man. Enteric bacteria with its enzymes break down proteins , carbohydrates and their degradation products in the colon creates gases : carbon dioxide , hydrogen, sulfur hydrogen , methane , nitrogen and toxic substances : indole , ammonia and others . Most of these substances are eliminated from organizations and one part is absorbed and neutralized by the liver . Intestinal bacteria participate in the breakdown of cellulose . Some of them are responsible for the synthesis of vitamins , such as vitamin K case .

Colon functional perspective can:The colon is part of the digestive system and is made up of three parts: appendicitis (coecum) with crvoviden node (appendix vermiformis); colon (colon); right

- rectum (rectum) which ends with anal cancer. According to the road and the location is divided into four parts: upward colon (colon ascendens), cross (colon transversum), descending (colon descendens) and sigmoid colon (colon sigmoideum). Colon from functional point of view can be divided into two parts. In the home, proximal part of the colon takes place resorption of water and electrolytes, Distal half serves disposal of fecal matter before being ejected in the external environment in the act of defecation. Colorectal cancer is a malignancy of the colon. Excluding skin cancers, colon cancer is the third most frequently diagnosed cancer in men and women. It occurs in the last 1.8 meters of intestine known as colon and / or rectum, which ends the colon and leaves the body in feces.

**Etiology and risk factors**-Environmental factors in the development of CRC .Inflammatory bowel disease .Hereditary syndromes associated with the occurrence of CRC.Biological Basis of Colorectal Cancer.

**Clinical picture of CRC.** -The most common signs of colon disease are: constipation or diarrhea ,intestinal cramps and difficulty in bowel movements, manifest or occult bleeding. Pain occurs in the advanced stage of the disease and generally fit the topographical location of the lesion. If the pathological process is localized in the right half of the colon, the pain occurs in the right side of the abdomen.

**Prevention of CRC**-Today increasingly conduct research on the causes and prevention of cancer of the colon , and they show that the disease gradually develops from benign polyps . The discovery and early-stage removal of polyps can help prevent the occurrence of colon cancer .The research examined the effect of cessation of smoking , taking nutritional supplements , aspirin and similar drugs , reduced alcohol consumption and increased physical activity in the prevention of colon cancer .Some experts believe that niskokalorichnata diet low in fat and high in fiber has influence in the prevention of colon cancer.

**Objectives** :To show the prevalence of CRC in Eastern Macedonia in the period from 2008 to 2012. To be recognized occurrence of CRC among different groups, or how prevalent in men, and as women. To the situation, for how screening or colonoscopy affect prevalence of CRC. **Materials and methods**:Professional literature in the field of pathology and diagnostics .Data from the official website of the World Health Organization ( WHO ) . Data from the archives of the National Institute for Health Protection of the Republic of Macedonia. Archive data from the specialized practice of Internal Medicine , Clinical Center Stip.

**Results and discussion:**In Western Europe and the United States , colorectal cancer ( CRC ) has the greatest impact on public health . CRC is the second in cancer incidence in the United States , where every year 135,000 new registered patients , while 54,000 die bolni.In worldwide in 1996 were registered 950,000 new cases , representing 9 % of all cancers. Mortality from CRC is the third in the lung in men and the second breast cancer in women . The introduction of new surgical technique influenced the reduction in mortality from the disease in the last 40 years . Gender does not affect the incidence ( in some countries declining incidence in females ) . Overall, more common over 45 years of age. 90 % of patients with CRC are over age 50 , with a mean age of 64 years . Population between 65-85 years has 6 times higher risk of getting CRC .According to the National Institute of Public Health of the Republic of Macedonia in 2002, colorectal cancer is responsible for 12 % of all malignancies in our state and occurs with incidence of 25.7 cases per 100,000 residents .

Data from the official website of the World Health Organization ( WHO ) .Data from the archives of the National Institute of Public Health of the Republic of Macedonia . According to the data , which came up during my research, which I received from Archive data from the specialized practice of Internal Medicine , Clinical Center Stip,in terms of checks that are made in Eastern Macedonia,mostly in patients from Strumica Decevo Berovo M.Kamenica , Kocani , Probistip Vinica Radovis, Sv. Nicolas, the total the number of colonoscopy between 2008 di 2012 dijagosticirani total of 287 cancers of the colon , or an average of about 57 cancers per year . The obtained data are presented in the following table ( Table 1).

Table no 1

Период Period	Вкупно Total Views	колоноскопски прегледи	Вкупно Total, kolonoskopi дијагностицирани diagnosed CRC CRC	Просек година Average per year	КРК по
2008 - 2012	3205		287	57	

Also, we will follow the situation and that what is sexual frequency of colorectal cancer, or how many of the patients with CRC were men and how many women.

Data from the specialized practice of Internal Medicine , Clinical Center Stip, talk about the following situation, which is presented in Table 2.

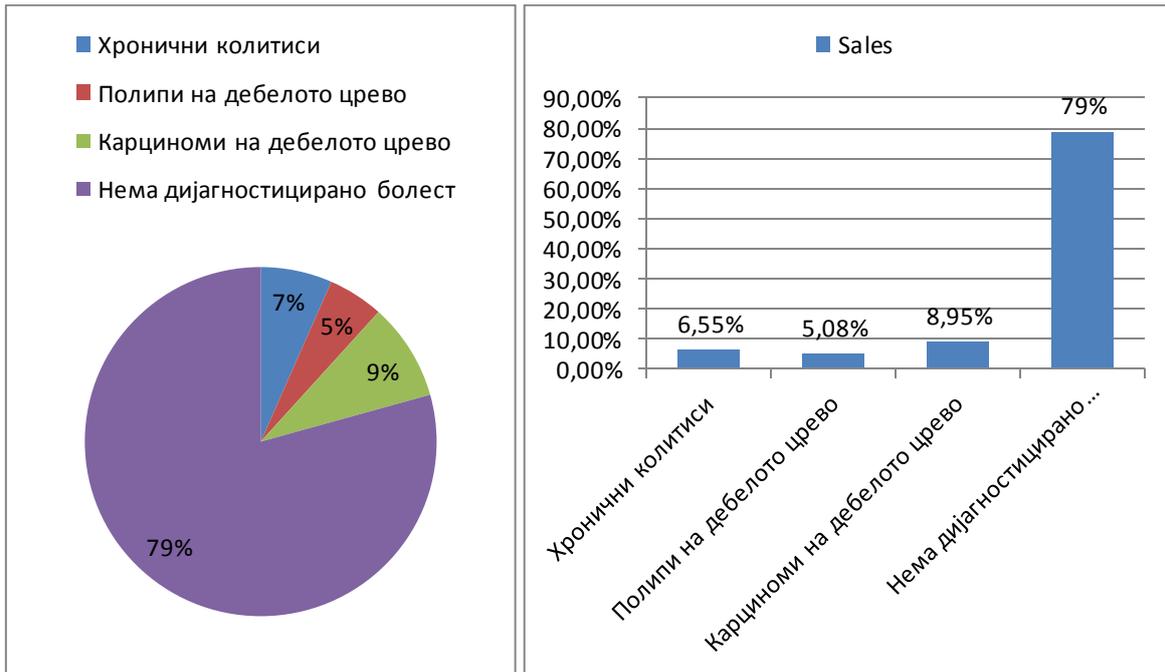
	Мажи/men	Жени/women
2008	30	14
2009	27	19
2010	37	27
2011	51	27
2012	36	37

Table no. 2 Sex incidence of CRC in Eastern Macedonia

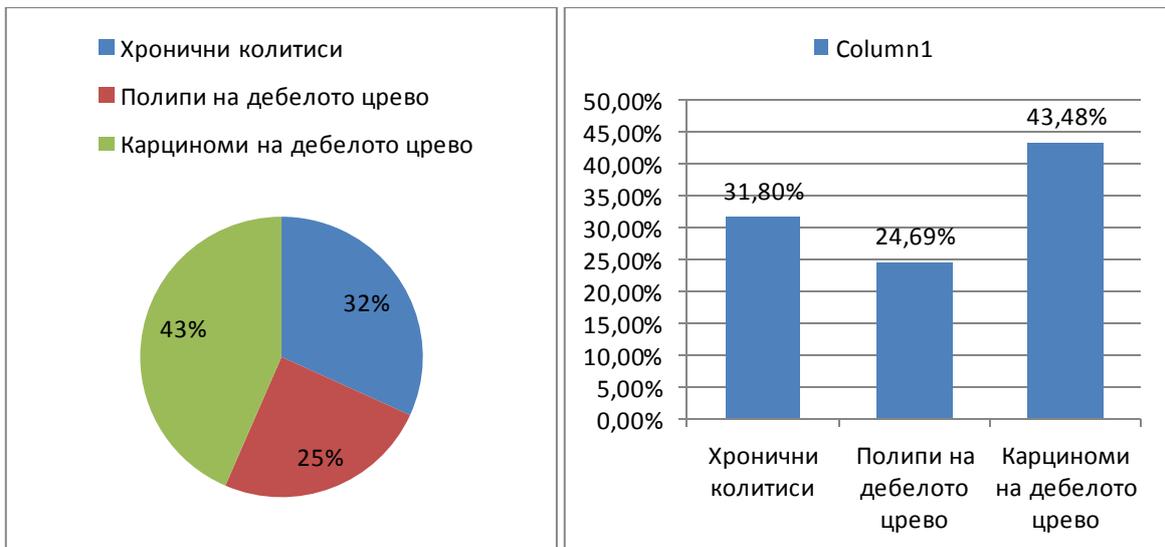
From a total of 305 colorectal cancers diagnosed in the past 5 years, from 2008 to 2012 years, 41% have populacija girls and 59% of the male population.

Година	Вкупно прегледи	Хронични колитиси	Полипи на дебелото црево	Карциноми на дебелото црево
2008	512	33	52	47
2009	528	16	35	39
2010	698	22	16	60
2011	687	65	25	73
2012	780	74	35	68

Moreover, in the following table (Table 3.) Will show data on how many of kolonoskopie who are committed to specialized practice of Internal Medicine , Clinical Center Stip diagnosed as colitis, polyps or colon cancer, in the same period, from 2008 to 2012.



Reviews Since 3205 the 660 has diagnosed disease. According diagnosis would look like this schematic representation: Total number of hits in the period from 2008 to 2012 3205th chronic colitis Total 210 Total 163 polyps, cancers 287th in 2545 listed not set any of these diagnoses.



According to the WHO, that globally we see that colorectal cancer is the second most frequent cancer, and a year in the U.S. alone there are 135,000 patients, 54,000 patients are dying. Also, the incidence is pravopropocionalna with age, so that 90% of patients with CRC are over the age of 50, and the population between 65-85 years has 6 times higher risk of getting CRC. In Macedonia, however, colorectal cancer, in 2002, the incidence is 12% of the total number of cancers or incidence is 25.7 cases per 100,000 residents.

In terms of the data in the first table (see Table 1.), We can conclude that around 10% of total colonoscopy, stretch as pathologically diagnosed colorectal cancers, which actually is not a high percentage, but on the other hand, when I saw that 10 percent of them, or of 287 on average in the year after a 57 CRC, it is not exactly a small number, just in Eastern Macedonia.

In Table . 2 again you realize how colorectal karicom occurs in men , and as women. Thus the data obtained in the period from 2008 to 2012, in the table showing the status of the colorectal cancer occurs more often in men than women , with some iskuchoci .

And in the last table ( see Table 3 ) presented data on the total number of colonoscopic examinations , how many of them are diagnosed colitis , polyps and cancers . At the same time you realize that , by chance about 10 to 12 % of the total number of hits diagnosed colorectal cancers .Also you realize that year after year the number of hits increases, which is good for early diagnosis of CRC , as well as early detection of polyps and their treatment is the key to prevention and preventing the further course of CRC.

**Conclusion:**Since this thesis work and everything mentioned , realize it , we can come to the conclusion that , CRC is a cancer that is a second incidence of all cancers globally .For its occurrence factors are responsible , that has multiple etiologies , and the exact cause and mechanism of occurrence is not known. Most often , in 95 % of cases of colon polyps turn into cancer .The clinical picture is different and multisimptomatska , depending on the type size , tumor localization , etc. . In terms of prevention , it is necessary to pay attention to diet , lifestyle , and most certainly need to do regular screening examinations ( colonoscopy , sigmoidoscopy , etc. . ) .

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