### ОРИГИНАЛЬНЫЕ СТАТЬИ.

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# CLINICAL AND MORPHOLOGICAL ANALYSIS OF COLON CANCER ACCORDING SAMARKAND ONCOLOGY DISPENSARY.

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**Keywords:** colon cancer (cc), morbidity, tumors, 5-year survival, adenocarcinoma, mucinous adenocarcinoma, medullary adenocarcinoma, undifferentiated and unclassified carcinoma, exophytic, endophytic, mixed forms, chemotherapy, histological structure, samarkand regional oncology dispensary.

**Таянч сўзлар:** йўгон ичак саратони, ўсма, 5 йиллик яшаш кўрсаткичи, аденокарцинома, муциноз аденокарцинома, медулляр аденокарцинома, дифференциялашмаган, эндофит, экзофит, аралаш тури, гистологик тури, самарканд вилоят онкология диспансери.

**Ключевые слова:** рак ободочной кишки (рок), 5-летняя выживаемость, опухоль, аденокарцинома, муцинозный рак, недифференцированный, эндофитный, экзофитный форма, гистологическая структура, самаркандский областной онкологический диспансер.

Each year are diagnosed worldwide about 600 000 new cases of colon cancer. In Uzbekistan, colon cancer is registered with a frequency of 3.7 per 100 thousand population. The aim of our study was to identify the incidence of clinical and morphological forms CC according to Samarkand Regional Oncology Dispensary (SROD). The analysis of the medical records of 103 patients diagnosed with CC received treatment at SROD from 2010 to 2012. The most frequent localization CC are sigmoid and cecum. From histological forms in CC mainly determine adenocarcinoma. Investigation the degree of malignancy (grading) has showed that the most frequently occurring type is moderately differentiated (G2). In most cases patients diagnosed with CC came to hospital with advanced stages of the disease.

## САМАРҚАНД ВИЛОЯТ ОНКОЛОГИЯ ДИСПАНСЕРИ МАЪЛУМОТЛАРИГА КЎРА ЙЎҒОН ИЧАК САРАТОНИНИНГ КЛИНИК-МОРФОЛОГИК ТАХЛИЛИ

А.Ф. Асатуллаев, Ф.М. Рауфов

Жахон микёсида хар йили 600 000 га якин инсонларда йўғон ичак саратони ташхиси кўйилади. Ўзбекистонда ушбу касаллик кўрсатгичи 100 минг ахоли сонига 3.7 га тўғри келади. Самарканд онкология диспансерида 2010-2012 давомида йўғон ичак саратони ташхиси билан даволанган 103 беморнинг касаллик тарихи ва амбулатор карталаридан йўғон ичак саратонининг кўп учрайдиган клиник ва морфологик турлари ўрганилди. Жойлашган жойига қараб йўғон ичакнинг энг кўп учрайдиган жойлашуви сигмоидал ва кўр ичак соҳаси бўлди. Ўрта дифференциаллашган ўсманинг тури (G2) беморларнинг яримидан кўпида кузатилди. Аденокарцинома ўсманинг энг кўп учрайдиган гистологик турилиги аникланди. Беморларнинг катта кисми йўғон ичак саратонининг кечки 3-4 боскичларида мурожаат килишган.

# КЛИНИКО-МОРФОЛОГИЧЕСКИЙ АНАЛИЗ РАКА ОБОДОЧНОЙ КИШКИ ПО ДАННЫМ САМАРКАНДСКОГО ОБЛАСТНОГО ОНКОЛОГИЧЕСКОГО ДИСПАНСЕРА

А.Ф. Асатуллаев, Ф.М. Рауфов

Ежегодно в мире диагностируется около 600 000 новых случаев рака ободочной кишки. В Узбекистане рак ободочной кишки (РОК) регистрируется с частотой 3,7 на 100 тыс. населения. Целью нашего исследования было выявить частоту встречаемости клинико-морфологических форм РОК по данным Самаркандского Областного Онкологического диспансера (СООД). Проведен анализ медицинской документации 103 пациентов с диагнозом РОК, получившие лечение в СООД с 2010 по 2012 годы. Самая частая локализация РОК является сигмовидная и слепая кишка. Из гистологических форм при РОК в основном определяют аденокарциному. При определении степени злокачественности (градации) обнаружено что, самый часто встречающийся вариант умеренно-дифференцированный. Пациенты с диагнозом РОК поступают с запущенными стадиями в большинстве случаев заболевания.

**Introduction:** In spite of such widespread conducting primary preventive measures, the number of patients diagnosed with colon cancer (CC) is increasing annually. In particular, in the United States 102.480 patients diagnosed with primary CC was recorded for 2013. In Samarkand region it was registered 46 cases initially diagnosed with colon cancer in 2012, including 24 male and 22 female patients. In the structure of morbidity colon cancer is in the ninth place in the Samarkand region and the eighth in the Republic of Uzbekistan. Long-term results of treatment of the patients in the early stages CC satisfactory. When tumors are bordered with only mucous shield of the intestine, 5-year survival rate of the patients consist 90-100%. In stage II, the figure drops to 70%. The small number of patients with CC reach 5-year survival rate after diagnosis of the primary set CC in stage III-IV. According to morphological classification CC has the following forms: adenocarcinoma, mucinous adenocarcinoma, medullary adenocarcinoma, undifferentiated and unclassified carcinoma. The most common among them is adenocarcinoma. As the growth of the tumor are divided into: exophytic, endophytic and mixed forms. Age is also a major

factor in the development of the CC. The reason for identifying late stages due to the fact that CC is not visual tumors and to identify this pathology is difficult to achieve. Furthermore, CC is not oncological diseases for which screening methods is carried out annually. Most patients randomly diagnosed with primary colon cancer during examination of patients for other diseases, which makes this topic more important comparing to other cancers.

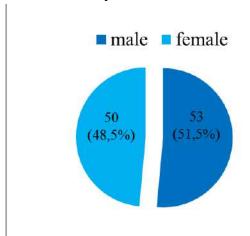
In the treatment of colon cancer refer special methods like surgical techniques and chemotherapy, but in the outcome of this disease play a major role histological structure and location of the tumor. In addition, the outlook is deteriorating in the case of treatment of patients with advanced stages of colon cancer.

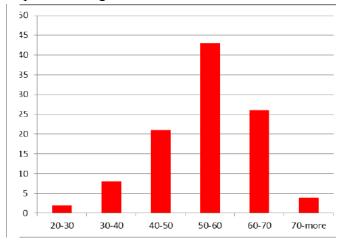
## **Purpose of the study:**

Identify the incidence of clinical and morphological forms CC according to the Samarkand Regional Oncology Center.

## **Materials and methods:**

The analysis of the medical records of 103 patients diagnosed with CC received treatment





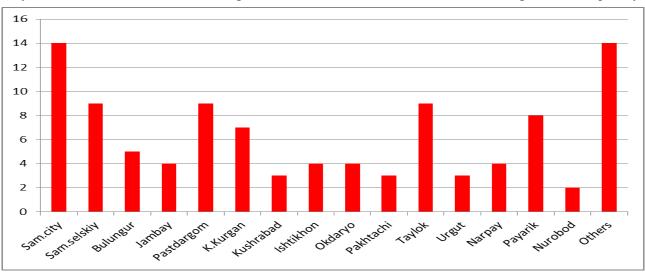
Pic.1. Proportion of CC by gender.

Pic.2. The rate of CC by age.

our dispensary from 2010 to 2012. And 53 (51.5%) of those patients representatives of the female and 50 (48.5%) male (Pic.1).

According to our information by age CC rate increases several times. The peak incidence of CC reach a peak in the age group 50-60 years (43 patients (44.3%)). At the age of 40-50 years (21 patients - 21.6%) (Pic.2).

According to the regional prevalence in Samarkand region CC often occurs in Samarkand city, Samarkand rural areas, Pastdargom, and in other areas of the Samarkand region CC frequency



Pic.3. Epidemiology.

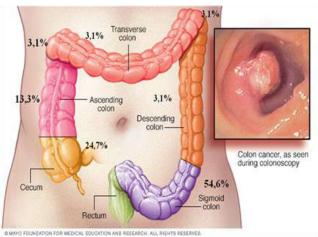
of occurrence was only some cases. In the above areas the average percentage of patients is 24.7% (Pic.3).

According to the study it was found that the localization of colon tumors were located as follows (Pic.4): caecum - 24 (24.7%), ascending colon - 13 (13.4%), hepatic angle - 3 (3.9%), the transverse colon - 3 (3.9%), splenic angle - 3 (3.9%), descending colon - 3 (3.9%), and most often localized in sigmoid colon - 53 (54.6%). A common form of colon cancer was observed in only one case that was (1.03%).

In growth form exophytic tumor growth was observed in 55 (56.6%) patients. In the next place is mesophytic or mixed form of tumor growth in 25 (25.75%). The most rarely occurring form - endophytic 23 (23.7%). In particular, all forms of growth occurs between 10% to 20% in the right half of the colon. In 10% of cases, endophytic, 12% mesophytic and 20% exophytic form. When in the left half of the colon most often occur form exophytic growth is 40%, and only 14% of cases mesophytic form. In our study we did not find endophytic growth of the tumor in the left half of the colon.

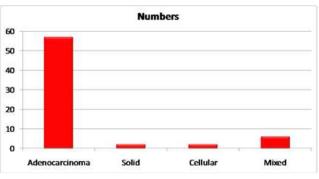
Histological study of CC rarely encountered such aggressive variants of cancer as squamous and solid form - 2 cases (2.06%), whereas the other forms (Pic.5): adenocarcinoma - 57 (58.7%) and squamous type 6 (6.2%).

## Location of CC.



Pic.4.

## Histological type



Pic.5

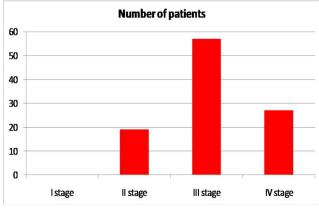
When studying grade found that when more frequent CC moderately differentiated forms CC (Pic.6): grade 1 - in 28 cases (28.84%), grade 2 - 43 (44.3%), grade 3 - 31 (31.93%). Undifferentiated forms of CC found only in 1 case (1.03%).

When studying the disease staging, it was found that 57 patients (58.7%) was set III stage of CC. In 19 patients (19.2%) the II stage of the disease and 27 patients (27.81%) with IV stage of the

## Grade (Differentiation)

#### Number 50 45 40 35 30 Grade - 1 25 20 15 ■ Grade - 4 10 5 0 Grade-1 Grade-4 Grade-2 Grade - 3 Pic.6

## Stage of CC.



Pic.7

disease (Pic.7).

From our analysis of observed clinical course of the following forms of colon cancer: toxicanemic form in 10 patients (18.5%), intestinal obstruction - 8 (8.2%).

From accompanying diseases: chronic calculous cholecystitis was diagnosed with CC in 32 cases (33%), and in 7 (7.2%) patients with hypertension were found. Kidney disease with CC in 4 (4.1%) cases: chronic pyelonephritis - 3 (3.1%) and polycystic kidney disease - 1 (1.03%). Diseases like simplicity, pneumonia, endometritis, ovarian cyst was found only in few cases.

### **Conclusions:**

- 1. The most frequent localization of CC is sigmoid and caecum.
- 2. From the histological forms at CC mainly determine adenocarcinoma.
- 3. When determining the degree of malignancy (grading) found that the most frequently occurring type moderately differentiated.
- 4. In most cases, patients with a diagnosis of CC comes with advanced stages of the disease.
- 5. The peak incidence with CC diagnosed are in 50 60 aged patients.

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