



**СЕКЦІЯ 16**  
**КЛІНІЧНА ОНКОЛОГІЯ, ПРОМЕНЕВА ДІАГНОСТИКА ТА ПРОМЕНЕВА ТЕРАПІЯ**

**Bodyaka V.Yu.**

**CHOICE OF OPTIMAL SURGERY IN THE TREATMENT OF RECTAL CANCER**

*Department of Oncology and Radiology  
Higher State Educational Institution of Ukraine  
"Bukovinian State Medical University"*

Despite the development of modern medicine, colon cancer in Ukraine ranks second in the structure of morbidity and mortality. Over the last 10 years, there has been a significant increase in the above-mentioned indicators, both among the male and female populations.

Radical treatment of rectal cancer is possible only if surgery is performed. Despite current methods of sphincter-saving and colostomy surgery, many questions remain radical ensuring optimal quality of life and reducing the number of postoperative complications.

Therefore, the study aimed to study and compare some of the technical characteristics of sphincter sparing and colostomy surgery, as well as the quality of life of patients during the 1-year postoperative period.

A retrospective analysis of 115 outpatient case histories of patients with rectal cancer, who under conditions of the Chernivtsi Regional Clinical Oncology Center experienced abdominal perineal extirpation of the rectum according to Kenyu-Miles and abdominal-anal resection of the rectum with descending of the significate.

The duration of surgery and early postoperative period depending on the stage of the disease, the location of tumor were studied. The quality of life of patients for 1 year after surgery was examined, using a questionnaire from the American Society of Colorectal Surgeons (ASCRS) with the inclusion of the Cleveland Clinical Incontinence Scale.

The results of the study indicate a probable predominance of the duration of abdominal and perineal extirpation, approximately 1.17 times ( $p < 0.001$ ). However, there is a lack of a likely difference in the duration of each surgery, depending on the stage of the disease. It should be noted that there is no plausible difference in the duration of the early postoperative period, depending on the type of surgery, tumor localization, and stage of the disease.

Patients' quality of life improves more rapidly after abdominal-perineal extirpation, but over time, the number of individuals after performing abdominal-rectal resection with sigmoid reduction, with a slight degree of disruption of quality of life, is likely to be three times greater.

Therefore, both the sphincter-sparing and colostomy surgery can be the optimal choice for the treatment of distal colon cancer, since they have several advantages and disadvantages. Given the better quality of life of patients early in the post-abdominal Kenyu-Miles extirpation, the previous surgery should be preferred.

**Chuprovskaya Yu.Ya.**

**CHARACTERISTICS OF BREAST CANCER PROGRESSION**

*Department of Oncology and Radiology  
Higher State Educational Institution of Ukraine  
"Bukovinian State Medical University"*

Despite the rapid development of oncology, the prediction of breast cancer metastasis still remains a disputable and unexplored issue.

A retrospective study of the characteristics of breast cancer progression will provide an opportunity for better understanding of the problem. This one can serve as the basis for further research aimed at identifying objective criteria for predicting breast cancer progression.

The objective of the research was to study the clinical and statistical characteristics of the breast cancer course with the verified progression of the tumor process, depending on the stage of the disease and the molecular subtype of the tumor.

A retrospective analysis of 242 outpatient records of patients with breast cancer was carried



out. The female patients, depending on the breast cancer progression after treatment, were divided into two groups: the one consisted of 179 people “without breast cancer progression” and the second one - of 63 (26.0%) people “with verified breast cancer progression”. The average age of the patients was  $57.3 \pm 0.69$  years.

On the basis of the data obtained, it can be concluded that there is a clear dependency on the increase in the persons' percentage with breast cancer progression and the stage of the disease. There is no significant difference between the two research groups in the course of the study of a female average age, the frequency of the right or left mammary glands lesions, the number of regional lymph nodes affected by metastases, except for an average tumor size, where the rates in patients with verified progression of breast cancer are significantly higher. The longest period to verify the progression of breast cancer is common for stage II B of the disease, with the Luminal-A subtype of the tumor.

As a result of the retrospective study, we can draw the following conclusions: all of the listed: woman's age, localization of tumors in the right or left breast, the number of regional lymph nodes affected by metastases do not affect the breast cancer progression; within breast cancer progression, larger average tumor size is noted, especially with the Luminal-A the subtype of the tumor; the longest period to verify the progression of breast cancer is common for stage II B of the disease, with the Luminal-A subtype of the tumor.

**Ivanushko Ya.G.**

**LASER RADIATION EFFECT  
ON THE PROTEOLYSIS STATE OF RAT LIVER**

*Department of Disaster and Military Medicine  
Higher State Educational Establishment of Ukraine  
«Bukovinian State Medical University»*

Proteolysis is an enzymatic rupture of peptide bonds in proteins. In some pathological conditions there is an excessive activation of it, which is an important pathogenetic chain in the development of destructive, inflammatory, allergic reactions, disorders of hemostasis. In its turn, the resonant nature of electromagnetic laser radiation oscillations influences the state of the microcirculatory bed and fibrinolytic activity.

The purpose of the work was to elucidate the nature of laser radiation on the fibrinolytic system state and proteolysis in rat liver.

The study was conducted on 48 white non-linear male rats weighing 120-150g, which were kept on a standard diet of vivarium. Laser irradiation was carried out through previously shaved skin on the liver area in 60 seconds for 10 (group 1), 20 (group 2) and 30 (group 3) days with 24 hour intervals at LGN-207-A apparatus ( $\lambda=632.8\text{nm}$ , beam diameter 0.3 mm). Decapitation of rats was performed under ether anesthesia in dynamics at the end of the course of laser radiation (first, tenth, twentieth and thirtieth days). The control group consisted of intact rats, which were decapitated at the same time as the experimental ones. The tissue proteolytic activity was determined by the lysis of azoalbumine, azocaseine and azocolagene. The drugs used in the work were manufactured by Simko LTD, Lviv. Statistical processing was performed by means of Student t-criterion. The results of the research were expressed as a percentage of the control.

Theten-day course of laser irradiation (one day after its completion ) caused the proteolysis system activation, which was manifested in the increase of azoalbumine, azocaseine and azocolagene. Twenty -and thirty daily course of laser irradiation has weakly influenced the great - and low molecular proteins – the content of azoalbumine degradation products and azokazeine differed a little from the control. The effect of these irradiation courses on colagene degradation was significant: an increase in the products of azocolagene degradation equaled to 93% and 57% for the 2nd and 3rd groups, respectively.

In 10 days after the end of the laser radiation, proteolytic activity remained high in the 1st group. High - and low molecular proteins degradation increased: azokazeine and azoalbumine increased by 83% and 93% respectively. Azokolagene content had a tendency to decline , but