remained significantly higher (48%) of the control parameters. High proteolytic activity concerning collagene (206% and 155% respectively) remained in the 2nd and 3d groups. Activities in relation to high - and low molecular proteins remained without changes. By the 30th day, there was no complete normalization of proteolitic activity in the study groups.

It is believed, that helium-neon laser radiation leads to changes of protein charges, their conformational structure. When laser radiation interacts with protein molecules, a combinational radiation scattering or a resonant absorption of energy by a protein can occur. The destruction of the solvate shells, the reduction of electrostatic repulsion stipulates an increase in protein fluctuation, their coagulation.

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**THE POSSIBILITIES OF COMPUTED TOMOGRAPHY
IN DIAGNOSIS OF COLON CANCER**
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Based on the study of 25 patients with colon cancer, the possibilities were examined and the diagnostic effectiveness of computed tomography (CT) was evaluated. The inclusion of this method in the diagnostic algorithm enables you to pre-determine the spread of tumor lesions according to the international TNM classification. Establishing the radiological stage of the disease involves determining the location of tumor, the extent of damage to the intestinal wall, the assessment of regional and retroperitoneal lymph nodes, the tumor of adjacent organs, the presence of distant metastases.

Between 2018 and 2019, 14 men and 11 women with colon cancer were examined. In all patients, the research results were verified histologically as a result of biopsy during colonoscopy and in the course of subsequent surgery. Spiral CT with intravenous contrast and subsequent reconstruction of the obtained images made it possible to correctly determine the extent and prevalence of colon cancer before surgery. CT more accurately than colonoscopy found the localization of tumor in a specific part of the colon. On CT an endophytic tumor is detected in the shape of thickening of the intestinal wall, uneven narrowing of the lumen, uneven contours, and infiltration of the surrounding tissue. An exophytic tumor is detected in the shape of an additional soft tissue formation in the intestinal cavity, which adheres to the intestinal wall with a broad base, with uneven contours, with uneven contrast accumulation. Propagation to the neighboring organs (stage T4) is diagnosed on the basis of the following symptoms: disappearance of a layer of the border of the connective tissue and adipose tissue, deformation of the contour of an organ, and its growth by tumor. Of great importance for the choice of tactics for further treatment is the assessment of the regional and retroperitoneal paraaortic and paracaval lymph nodes. The probability of metastatic damage to the lymph nodes is assessed on the basis of a thorough qualitative and quantitative analysis using an algorithm similar to the well-known X-ray algorithm for describing pulmonary shadows. It is necessary to evaluate the following characteristics of the lymph nodes: location, quantity, size, shape, sharpness and irregulars of the borders, uniformity of structure and density change due to accumulation of contrast. It is also important to assess the condition of large blood vessels in the tumor area, which is important in the process of subsequent surgical treatment of the patient.

The use of CT in a complex of endoscopic and radiation methods for the diagnosis of colon cancer enables you to get an idea not only about the spread of the tumor along the length and around the intestine, but also about metastases to the lymph nodes and other organs. This allows the attending oncologist to choose the right treatment tactics. CT in the postoperative period of treatment enables you to more accurately assess the immediate and long-term results of surgical, comprehensive or combined treatment. Thus, CT is a modern method of radiation investigation, which is necessary and highly informative in the diagnosis and assessment of the spread of colon cancer.