

### TO THE QUESTION OF MEDICAL PATHOMORPHOSIS AFTER NEOADJUVANT TREATMENT OF GASTRIC CANCER

*The problem of studying of malignant tumors, despite the considerable success achieved in the last decades continues to remain in the center of attention of scientists of the whole world in connection with continuous growth of incidence. The chemotherapy of tumors underwent essential changes in recent years and now is in the same row with surgical treatment and radiotherapy methods.*

**Keywords:** gastric cancer, neoadjuvant treatment, medical pathomorphosis, tumor regression.

The gastric cancer remains to one of the main problems of modern oncology. Annually in the world about 800000 new cases and about 600000 death are registered [1]. At a turn of the XX-XXI centuries it isn't reached satisfactory results of treatment of this nosology. Indicators of 5-year survival according to most of authors seldom exceed 20% a boundary. One of the main reasons for unsatisfactory results of treatment is late diagnosis of a disease and imperfection of the available methods of therapy [2]. Now the specific weight of the patients with gastric cancer revealed in 1-2 stages doesn't exceed 34,2%, and in 4 stages – 22,7%. Thus, about 43% of patients are defined on the III stages of tumor process when application only of one local method of influence is insufficient [3]. Therefore search of new methods and schemes of treatment of a locally-spread carcinoma of the stomach is very justified.

**Research objective:** assessment of short-term results of efficiency of neoadjuvant treatment of gastric cancer.

**Materials and methods:** Research of efficiency of treatment of locally-spread forms of gastric cancer is conducted. The combined treatment with neoadjuvant polychemotherapy and operation is carried out to 62 patients. Preoperative treatment is carried out according to the scheme: docetaxel 75 mg/sq.m in 1 day + fluorouracil 500 mg/sq.m 2-5 days + calcium folinate 50 mg/sq.m 2-5 days.

Short-term results of a preoperative chemotherapy were estimated according to objective and subjective effect of treatment.

According to WHO recommendations [4] judge efficiency of antitumoral treatment on extent of regression of a tumor:

1 - full regression of a tumor (resorption) is characterized by disappearance of all symptoms of a disease for the term of not less than 4 weeks;

2 - partial regression of a tumor is characterized by decrease of the measured tumors and metastasises by 50% not less than 4 weeks;

3 - stabilization is characterized by decrease of a tumor and metastasises less than for 50% without emergence of the new tumoral centers;

4 - treatment without effect is characterized by lack of objective decrease of a tumor with metastasises and advance of process.

The medical pathomorphosis was determined by Lavnikova G. A. technique. (1976) [5]:

- at the I damage rate of noticeable changes in the general structure of a tumor it isn't possible to note. There is a polymorphism only not inherent to this tumor and a dystrophia of cells, suppression of a mitosis;

- at the II degree in the irradiated tumors the bulk of a parenchyma is kept, but on historiographical sections the centers of regressive changes of various character in the presence of the expressed dystrophic changes in cells are clearly visible. Disturbance of division with the advent of huge cells, vascular changes, activation of connective tissue cells becomes perceptible;

- at the III degree the structure of a tumor is sharply broken due to fibrous replacement either an extensive necrosis, or the round cell infiltration expressed in different tumors in unequal degree. On this background define the tumor remains in the form of separate groups of parenchymatous cells usually with sharp dystrophic changes. The expressed vascular disorders in the form of a hemorrhage and a lymphostasis become perceptible. In surrounding normal tissues the phenomena of an atrophy and a dystrophia accrue;

- The IV damage rates it is characterized by a total disappearance of parenchymatous elements of a tumor on historiographical sections. In these cases in preparations only "traces" of the former tumor in the form of granulomas round the cornual masses, the centers of a necrosis deprived of cellular elements, lakes of slime (can be defined sometimes at muciparous tumors). Also replacement of a necrotic tumor with a connecting tissue, an impregnation with its salts of a lime, formation of cysts is taped.

**Results of research and discussion.** Research of objective indicators of efficiency of the carried-out neoadjuvant treatment is conducted. The analysis showed that 31 patients (50%) who transferred a polychemotherapy in a neoadjuvant regimen had signs of regression of a tumor. In 3 (4,8 ± 0,22%) cases full regression of a tumor is noted. In 13 (20,9 ± 0,41%) cases process stabilization, however, according to criteria of WHO is noted, we didn't consider this result positive (see table 1).

Table 1 - Efficiency of a neoadjuvant chemotherapy (n=62)

Efficiency of a neoadjuvant chemotherapy (criteria of WHO)	Absolute number	%
Full regression	3	4,8 ± 0,22
Partial regression	28	45,2 ± 0,5
Stabilization	13	20,9 ± 0,41
There is no effect	18	29,1 ± 0,46

The medical pathomorphosis was studied and in the course of treatment (after carrying out courses of a polychemotherapy), and also at final morphological research of operational material.

At morphological research of operational material the medical pathomorphosis of the I-II degree at 18 patients (29,0%) is taped. In 7 cases (11,3%) will reach a medical pathomorphosis of the III degree. Besides, in 3 cases (4,8%) full regression of a tumor is noted. At the same patients at morphology necrotic changes in metastatic lymphonoduses (a degree III-IV pathomorphosis) are taped. In 34 (54,9%) cases morphological research of postoperative material didn't tap effect of neoadjuvant therapy (see the chart 1).

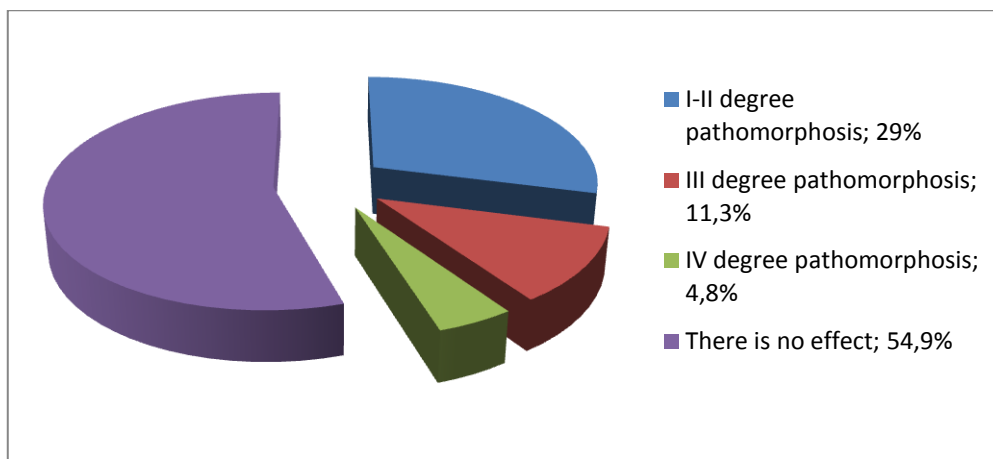


Chart 1 - Efficiency of neoadjuvant therapy on the basis of a medical pathomorphism

Thus, carrying out neoadjuvant therapy to patients a locally-spread form of gastric cancer leads to full or partial regression of a tumor that is confirmed by results of morphological research a pathomorphism of various degree of expression.

#### REFERECES

- 1 Parkin D.M., Whelan S.L., Ferlay J., Teppo L., Thomas D.B., eds. Cancer Incidence in Five Continents // IARC Scientific Publication Lyon. - France: IARC Press, 2003. - No. 155. - Vol. VIII. - P. 88-96.
- 2 Chissov V.I., Starinskii V.V. (red.) Condition of the oncologic help to the population of Russia in 1999. - M.: 2000.-132 p.
- 3 Nurgasiev K.S., Baipeisov D.M., Auesova E.T., Zhilkaidarova A.Z., Seisenbaeva G.T. Indicators of oncologic service of the Republic of Kazakhstan in 2014 // Statistical materials. - Almaty: 2015.- №3. - C. 97-103.
- 4 МКБ-О: International classification of oncologic illnesses // 2nd edition Percy K, Holten V. V., Moore K. (edition) of WHO. - Geneva: 1995. - 247 p.
- 5 Lavnikova G. A. Some patterns of a radial pathomorphism of tumors of the person and their practical use // Messenger of Academy of medical sciences of the USSR. - M.: 1976. - No. 6. - P. 13-19.

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#### **К ВОПРОСУ О МЕДИЦИНСКОЙ ПАТОМОРФОЗ ПОСЛЕ ЛЕЧЕНИЯ НЕОАДЪЮВАНТНОЙ РАКА ЖЕЛУДКА**

**Резюме:** Проблема изучения злокачественных опухолей, несмотря на значительный успех, достигнутый в последние десятилетия продолжает оставаться в центре внимания ученых всего мира в связи с непрерывным ростом заболеваемости. Химиотерапия опухолей претерпела существенные изменения в последние годы, и сейчас находится в одном ряду с хирургического лечения и лучевой терапии методами.

**Ключевые слова:** рак желудка, неoadъювантной лечения, медицинской paedomorphosis, регрессия опухоли.