

LONG-TERM RESULTS OF SURGICAL TREATMENT PATIENTS WITH STOMACH CANCER

Nurov J.R.¹, Khalikova F.Sh.² Email: Nurov6101@scientifictext.ru

¹Nurov Jamshid Rahmatovich – Assistant;
²Khalikova Feruza Sharofovna - Master Student,
DEPARTMENT OF ONCOLOGY,
BUKHARA STATE MEDICAL INSTITUTE,
BUKHARA, REPUBLIC OF UZBEKISTAN

Abstract: we have studied the long-term results of surgical treatment of stomach cancer in the period from 6 months to 3 years in 105 patients: 51 patients after extended gastrectomy with splenectomy and 54 patients who underwent extended gastrectomy without splenectomy. Thus, our long-term results indicate that splenectomy is undoubtedly justified, since it contributes to the radical nature of the surgical intervention, but at the same time reduces the three-year survival rate of patients with gastric cancer.

Keywords: stomach cancer, splenectomy.

ОТДАЛЕННЫЕ РЕЗУЛЬТАТЫ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ БОЛЬНЫХ РАКОМ ЖЕЛУДКА

Нуров Ж.Р.¹, Халикова Ф.Ш.²

¹Нуров Жамшид Рахматович – ассистент;
²Халикова Феруза Шарофовна – студент магистратуры,
кафедра онкологии,
Бухарский государственный медицинский институт,
г. Бухара, Республика Узбекистан

Аннотация: нами изучены отдаленные результаты хирургического лечения рака желудка в сроки от 6 месяцев до 3 лет у 105 больных: 51 больной после расширенной гастрэктомии со спленэктомией и 54 больных, которым была выполнена расширенная гастрэктомия без спленэктомии. Таким образом, полученные нами отдаленные результаты свидетельствуют, что спленэктомия является, несомненно, обоснованной, поскольку способствует радикальности проводимого оперативного вмешательства, но вместе с тем уменьшает трехлетнюю выживаемость больных раком желудка.

Ключевые слова: рак желудка, спленэктомия.

UDC 616.33-006.6-005.-089

Relevance. Currently, the surgical method of treating gastric cancer has practically reached the limit of its capabilities, which is reflected in the stabilization of the survival rates of the operated patients over the past decade [4, 10]. If at stages I – II the 5-year and even 10-year survival rate is 80–95%, then at stage III it decreases to 15–50%, and at stage IV the 5-year survival rate does not exceed 4% [5]. Considering the fact that in 60–90% of patients with gastric cancer the disease is first detected in stages III – IV, while the proportion of stage IV has no tendency to decrease and is 50–60%, treatment of patients with gastric cancer in clinical oncology is a problem. far from a solution. This largely explains the many different approaches and treatment programs for stomach cancer.

It is believed that the results of gastric cancer treatment can be improved through the use of more aggressive combined operations, the main indication for which is the visually determined invasion of the stomach tumor into neighboring organs in the absence of distant metastases and tumor dissemination along the abdominal cavity [2, 9]. Among the combined operations for gastric cancer, the most common are gastrectomy or gastric resection by so splenectomy [1, 8].

Their frequency is 22.5–92.4% of the combined operations [3, 14]. It should be noted that the use of splenectomy as an element of extended lymphadenectomy has not become widespread in practical oncology, although the suspicion of the presence of metastases in the lymph nodes of the spleen gates and any other involvement of the organ in the pathological process dictates the need for splenectomy [2, 10, 15]. At the same time, the attitude towards standard splenectomy in the world is ambiguous, and there is a large amount of data indicating that removal of the spleen worsens immediate and even long-term results [6, 9, 16]. The question of survival of patients who underwent splenectomy and patients with preservation of the spleen also remains controversial [7, 8, 11, 17]. Thus, in modern literature there is a consensus about the feasibility of splenectomy in the surgical treatment of gastric cancer.

Purpose of the study - to evaluate the long-term results of surgical treatment of gastric cancer patients when performing gastrectomy with splenectomy and splenosaving operations.

Material and research methods. We studied the long-term results of surgical treatment of gastric cancer in the period from 6 months to 3 years in 105 patients: 51 patients after extended gastrectomy with splenectomy and 54 patients who underwent extended gastrectomy without splenectomy. Overall survival was calculated from the time of initiation of treatment until the death of the patient from any cause.

Research results and their discussion. At the first stage of the research, we studied the features of the course of the postoperative period in patients with gastric cancer who underwent extended gastrectomy. The structure and number of complications in the long-term period in patients with gastric cancer, depending on the volume of surgery, are presented in the table 1.

Table 1. The structure and number of complications in the long-term period in patients with gastric cancer, depending on the volume of surgery

№ o/n	Complications	Patient groups				Total (n= 105)	
		I Group (n= 51)		II group (control) (n=5)			
		abs.	%	abs.	%	abs.	%
1	Broncho-pulmonary	21	41,2*	8	14,8	29	27,6
2	Frequent SARS	21	41,2*	4	7,4	25	23,8
3	Increased fatigue	18	35,3	0	0	18	17,1
4	Vegeto-vascular disorders	16	31,4*	3	5,6	19	18,1
5	Hyperthermia	12	23,5	0	0	12	11,4
6	Swollen lymph nodes	11	21,6	0	0	11	10,5
7	Purulent skin diseases	6	11,8	0	0	6	5,7
8	Others	2	3,9	0	0	2	1,9

Note: * – shows the difference in parameters with a level of confidence $p < 0.01$ relative to the data of the control group.

According to our data, the best results in the long-term postoperative period are found in the group of patients who underwent splen-preserving operations (control group). Of the 54 surveyed in this group, 39 (72.2%) did not present any complaints related to the previous operation. These patients felt satisfactory and led an active lifestyle. At the same time, out of 15 (27.8%) patients with complications after splen-preserving surgery, 8 (14.8%) bronchopulmonary complications in the form of chronic bronchitis and pneumonia were revealed, the course of which had no clinical features. In three patients, in addition to chronic bronchitis, the development of vegetative-vascular disorders, accompanied by dizziness and headache, was noted. Four patients had frequent colds (more than three times a year). Comparatively worse results were observed in the group of patients who underwent gastrectomy with splenectomy. It should be emphasized that 30 (58.8%) people felt completely healthy. At the same time, 21 (41.2%) patients presented various complaints, the main of which were caused by the involvement of the pleura and lungs in the pathological process. Thus, the most frequent complaints presented by patients of the main group were due to the development of chronic bronchitis. Such complaints were detected in 21 (41.2%) patients, i.e. in 100% of all patients with complaints. Exacerbation of bronchitis was noted by patients 3-4 times a year, and the course was protracted.

All patients considered themselves healthy people after the surgery. An increase in temperature was noted by 12 (23.5%) of the surveyed. The temperature rose to subfebrile numbers for no apparent reason, and lasted for 1–2 days. At the same time, the increase in temperature was not accompanied by intoxication and normalization occurred independently. Swollen lymph nodes were found in 11 (21.6%) patients. All patients noticed an increase in the inguinal lymph nodes, which increased for no apparent reason and decreased within a few days without requiring additional treatment. Their increase was not accompanied by complaints, patients did not notice either pain or fever.

Vegetative-vascular disorders (headache, dizziness, increased blood pressure, pain in the heart) were detected in 16 (31.4%) patients. Of these manifestations, dizziness was most often noted. They, in our opinion, are associated with impaired microcirculation due to increased blood viscosity.

Purulent skin diseases (boils, pararitiums) were detected in 6 (11.8%) patients. The tendency to purulent skin diseases manifested itself several months after the operation and was accompanied by other signs of decreased immunity (frequent colds). Such manifestations may be due to a decrease in the immune status, which is confirmed by changes in the parameters of the immunity of the examined patients. Increased fatigue, irritability, sleep disturbance, persistent weight loss were found in 18 (35.3%) people. Among other complications after the surgery, in one case, chronic pyelonephritis with frequent exacerbations was revealed, in the second - tonsillitis with frequent exacerbations (see table).

It should be noted that the complications that arose after operations with the removal of the spleen developed gradually. During the first months, nonspecific complications related directly to surgical intervention appeared. Over the next 3 years, general somatic complaints, accompanied by immunological disorders, associated, in our

opinion, with the development of postsplenectomy syndrome, come to the fore. The first manifestations of this syndrome include a decrease in the body's immune defense, which was expressed by a tendency to frequent "colds" diseases and swollen lymph nodes. The development of complications in this sequence was observed in 39 (76.5%) of the examined patients.

At the next stage of the research, we studied the survival rate of patients with gastric cancer after surgical treatment, depending on the volume of the operation performed. Of the 112 patients with gastric cancer included in the study, after the end of treatment, 73 patients (65.2%) were available for observation - 36 patients in group I and 37 patients in group II. Of the 36 traced patients who underwent gastrectomy with splenectomy, 18 lived for three years, and in the control group (operated without splenectomy) of 37 traced patients, 21. Both one-year and three-year survival rates in the groups of operated patients had no significant differences ($p > 0.05$). Thus, the annual survival rate averaged 89.0%, respectively for groups - 86.1 and 91.9% ($p = 0.348$). A similar trend persists for 3-year survival - an average of 51.0%, in group I - 46.9% and in group II - 55.1% ($p = 0.336$). We believe that the absence of statistically significant differences in both one- and three-year survival, depending on the volume of surgical intervention performed, can indirectly serve as evidence of the correct determination of indications for splenectomy in the surgical treatment of gastric cancer. The median overall one-year survival was 12.85 months, in group I it was 12.74 months. and in group II - 12.96 months. There were also no significant differences between the studied groups ($p = 0.378$). The median 3-year overall survival was 31.62 months. There were also no significant differences between the studied groups ($p = 0.446$). However, there is some tendency to an increase in survival during splenoscopic operations. Thus, the three-year survival rate in the II (control) group was 32.84 months. against 30.39 months in group I.

For a more objective assessment of the data obtained, we traced the long-term results of surgical treatment of patients with gastric cancer, depending on the presence of metastases in the N2 lymph nodes. To do this, we identified groups of N2-positive ($n = 15$) - with metastatic changes in the lymph nodes in the area of the spleen hilum and the splenic artery traverse and N2-negative ($n = 30$) patients (the above-mentioned lymph nodes were intact). Both one-year and three-year survival rates in the groups of operated patients did not have significant differences ($p > 0.05$). Thus, the annual survival rate averaged 88.7%, respectively for the groups - 84.6 and 92.8%. A similar trend persists for 3-year survival - on average 45.4%, in the N2 + group - 38.4% and in the N2 group - 52.4%. As can be seen from the data presented, one- and three-year survival in the N2 + group is lower than in the N2 group, although the differences are statistically insignificant ($p > 0.05$). The median overall one-year survival was 12.76 months, in the N2 + group it was 12.59 months. and in the N2 group - 12.92 months. There were no significant differences between the studied groups ($p = 0.421$). The median overall 3-year survival rate was 31.02 months. Despite the difference of 2.86 months, there were no significant differences between the study groups either ($p = 0.350$). At the same time, it can be seen from the presented data that long-term results in the N2-positive group are inferior to those in the N2-negative group. We explain this by the fact that the prevalence of the tumor process, namely the presence of metastatically enlarged lymph nodes in the hilum of the spleen, as well as tumor infiltration in the gastro-splenic ligament, increases the prevalence of the tumor process, thereby significantly (difference of 2.86 months) affecting long-term results. Due to the fact that the majority of 76 (67.8%) operated patients had stage T4N2M0, we considered the long-term results of gastrectomy in this category of patients with gastric cancer, depending on the volume of surgery. One-year survival in groups of operated patients with gastric cancer with stage T4N2M0 (86.1 and 90.9%, respectively) practically does not differ from overall survival in groups without considering the stage (86.1 and 91.9%, respectively) ($p > 0.05$). At the same time, with the general trend of worsening three-year survival rates for patients with stage T4N2M0 in groups I and II (40.7 and 42.8%, respectively) versus 46.9 and 55.1% of the corresponding indicators of groups without the stage of the disease, it is necessary to note a slight fluctuation in indicators between both groups within the same stage.

Thus, the one- and three-year survival rate of gastric cancer patients with stage T4N2M0 after surgery with splenectomy practically does not differ from the survival rate of the group of patients who underwent splenectomy. The median overall one-year survival in patients with stage T4N2M0 was 12.76 months, in group I it was 12.56 months. and in group II - 12.95 months. There were no significant differences between the studied groups ($p = 0.081$). The median 3-year overall survival was 29.64 months. There were also no significant differences between the studied groups ($p = 0.084$). However, there is some tendency to an increase in survival during splenoscopic operations. Thus, the three-year survival rate in the II (control) group was 30.40 months. against 28.87 months in group I. It should be noted that all of the above indicators were lower than the corresponding indicators of the groups without considering the stage of the disease ($p > 0.05$).

Conclusion. Thus, our long-term results indicate that splenectomy is undoubtedly justified, since it contributes to the radical nature of the surgical intervention, but at the same time reduces the three-year survival rate of patients with stomach cancer.

References / Список литературы

1. *Abdullaev Kh.N., Nurov Zh.R., Khalikova F.Sh., Mamedov U.S.* Neposredstvennyye rezultaty khirurgicheskogo lecheniya bol'nykh rakom zheludka [Immediate results of surgical treatment of patients with gastric cancer]. // *Problems of Biology and Medicine*, 2019. № 4.2 (115). P. 7-10 [in Russian].
2. *Akhmedova N.Sh., Sokhibova Z.R., Boltayev K.J.* Some features of laboratory indicators of micro and macro-elementary status of the organism of female age women in normality and in iron deficiency // *Biomedical and practice magazine*, 2020. № SI-2. P. 238-244.
3. *Davlatov S.S.* The regeneration of plasma plasmapheresis in the treatment of patients with purulent cholangitis // *Materials of the IV international (XI concluding) scientific-practical conference of young scientists*. Chelyabinsk, 2013. P. 5-8.
4. *Davlatov S.S., Kasimov S.Z.* Extracorporeal technologies in the treatment of cholemic intoxication in patients with suppurative cholangitis // *The First European Conference on Biology and Medical Sciences*, 2014. P. 175-179.
5. *Davlatov S. S.* Indirect electrochemical detoxication of plasma in the treatment of cholemic endotoxiosis // *The 17th international medical congress of students and young scientists*. Ternopol, 2013. P. 22-24.
6. *Mamedov U.S., Aslonov S.G.* Lecheniya raka slizistoy polosti rta i neposredstvennyye ikh rezultaty [Treatment of cancer of the oral mucosa and their immediate results]// *Problems of Biology and Medicine*, 2020. № 1 (116). P. 75-78 [in Russian].
7. *Muslimov O. et al.* Some Aspekt of Pathogenesis of Noncariosis Diseses and its Interrelation with Hormonal Disorders // *American Journal of Research*, 2018. T. 1. P. 2.
8. *Khudoiberdiev D.K.* Bir oylik oq kalamush oshqozoni topografijasi, oshqozon devorining makro va mikroskopik tuzilisi [Topography of the stomach of a one-month-old white rat, macro and microscopic structure of the stomach wall] // *Problems of biology and medicine*, 2020. № 3 (119). P. 165-168 [in Uzbek].
9. *Kasimov S. et al.* haemosorption In Complex Management Of Heparargia: o27 (11-1) // *The International Journal of Artificial Organs.*, 2013. T. 36. № 8.
10. *Kurbaniyazov Z.B., Rakhmanov K.E., Saidmuradov K.B., Davlatov S.S., & Raxmatova L.T.* (2013). Surgical treatment of patients with intraoperative damages of the main cholic ducts. *Academic Journal of Western Siberia*, 9(1), 32-32.
11. *Kurbaniyazov Z. B. et al.* Khirurgicheskoye lecheniye bolnykh s sindromom Mirizzi [Surgical treatment of patients with Mirizzi syndrome] // *Vrachaspirant-Doctor Aspirant*, 2012. T. 51. № 2.1. P. 135-138.
12. *Kurbaniyazov Z. B. et al.* Khirurgicheskii podkhod k lecheniyu bolnykh s posttravmaticheskimi rubtsovymi strukturami magistralnykh zhelchnykh protokov [Surgical approach to the treatment of patients with posttraumatic cicatricial strictures of the main bile ducts] // *Akademicheskii zhurnal Zapadnoy Sibiri–Academic Journal of Western Siberia*, 2013. T. 9. № 2. P. 14-14.
13. *Khudoiberdiev D.K.* Jangi tugilgan oq kalamush oshqozoni makro-mikroskopik anatomijasining uziga xos xususijatlari [Peculiarities of macro-microscopic anatomy of the stomach of a newborn rat].// *New day in medicine*, 2020. № 2/1 (29/1). P. 191-194 [in Uzbek].
14. *Khalikova F.Sh., Nurov Zh.R.* Oshqozon saratoni bilan og`rigan bemorlarda jarrohlik davolashining bevosita natijalari [Direct consequences of surgical treatment in patients with gastric cancer]// *Problems of Biology and Medicine*, 2020. №1 (116). P. 139-142 [in Uzbek].
15. *Saidmuradov K.B. et al.* Khirurgicheskoye lecheniye bolnykh s posttravmaticheskimi rubtsovymi strikturami magistralnykh zhelchnykh protokov [Surgical treatment of patients with posttraumatic cicatricial strictures of the main bile ducts] // *Akademicheskii zhurnal Zapadnoy Sibiri–Academic Journal of Western Siberia*, 2013. T. 9. № 1. P. 27-28.
16. *Teshaev S.J., Idiev O.E.* Morphological and functional state of the jaw facial area and chewing muscles in children with cerebral palsy // *Academicia: An International Multidisciplinary Research Journal*, 2019. T. 9. № 12. P. 56-58.
17. *Teshaev S.J., Turdiev M.R.* Morphological characteristics of the spleen of white rats in normal, chronic radiation sickness and when corrected with a biostimulator // *Metabolism*. T. 1. № 2. C. 4.