

MEDICAL SCIENCES

PREVALENCE AND INCIDENCE OF PATIENTS WITH STOMACH CANCER COMPLICATED BY BLEEDING

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Abstract: Stomach cancer is one of the most common oncological diseases, ranking 5th in the world in terms of prevalence. Bleeding is the most common complication of this disease – it accounts for about 60-70% of all urgent complications of tumors of the gastrointestinal tract. The incidence of stomach cancer in Ukraine is one of the highest among European countries, reaching 27.1 per 100 thousand population. Despite the introduction of endoscopic research methods, Early diagnosis of stomach cancer remains at a low level. In some patients, stomach cancer is asymptomatic, other patients are treated for a long time for peptic ulcer disease, which masks the malignant process. The topic is relevant and needs to be studied.

Key words: Stomach cancer, complications, malignant diseases, bleeding, perforation, stenosis, surgical tactics, treatment.

According to the GLOBOCAN world registry, the incidence of stomach cancer varies by region, with the highest rates seen in Asia and parts of South America. The tumor is more often diagnosed in men, and the peak incidence occurs at the age of 60-70 years. [7]

The authors Burch, J., Collins, B., note that stomach cancer is one of the most complex and aggressive oncological pathologies, continues to be a serious threat to the health of people around the world, including Ukraine [3].

According to the National Health Commission of The People's Republic of China, one of the complications of stomach cancer is gastric bleeding. This tumor, according to various sources, causes between 5.1 and 22.4% of all gastric bleeding over several years. Patients at an early stage usually do not have specific symptoms. Symptoms similar to those of gastritis or ulcers may appear with the progression of the disease, which include: 1) an early feeling of satiety and discomfort in the epigastrium, aggravated after eating; and 2) anorexia, belching, acid reflux, nausea, vomiting, melena, etc. In addition to these symptoms, patients with advanced stomach cancer often experience weight loss, anemia and fatigue, stomach pain, while if the pain continues to intensify and radiate to the lumbar back, this may indicate a potential invasion of the pancreas and abdominal plexus. Complications of malignant tumors of the stomach develop mainly with advanced stomach cancer [19].

The authors Abdiev N. et al., Troncone E. et al., note that obstruction of the outflow of the stomach in cancer patients causes nausea, vomiting, abdominal pain, malnutrition and dehydration, that is, stenosis of the cardiac or pyloric parts of the stomach in patients with malignant tumors is the cause of the formation of an energy imbalance that develops as a result of food loss with vomiting, increased energy expenditure due to the oncological process and inadequate supply of nutrients and deterioration of exocrine functions of the stomach, pancreas and liver. Continued nutritional exhaustion of patients sharply worsens the course of the disease, further reduces therapeutic chances, leading to death within a year after diagnosis [1, 26].

Camargo M. et al., argue that the progression of gastric cancer is associated not only with early lymphogenous and peritoneal dissemination, but also with local spread involving surrounding organs and tissues in the tumor process [4].

Song Z. et al., note that the germination of all walls of the stomach by a malignant tumor leads to its necrosis and arrosion of the large vessel that feeds the wall, creating conditions for the development of serious complications, primarily

perforations with the development of peritonitis, and bleeding. Perforation, bleeding, stenosis, penetration are the most common complications of malignant tumors of the stomach with potentially dangerous consequences [24].

According to Jwo S.C. et al., bleeding occurs in 41.5% of cases, stenosis in 26.1%, and perforation in 14.0% [12]. Other data are provided by Prudnikova O. B., Ivanchov P.V. et al., according to their studies, bleeding was detected in 252 out of 418 patients with stomach cancer (60.3%), stenosis – in 89 patients (21.3%), perforation – in 15 patients (3.5%) [20]. According to the observations of Shalimov A.A., Saenko V.F., blood loss of mild degree was noted in 67 (16.0%) patients, moderate severity – in 136 (32.5%), severe – in 49 (11.7%) [22].

Researchers Del Gaizo A.J. et al., Vasas P. et al., note that gastric perforations associated with malignant neoplasms, such as adenocarcinoma, lymphoma, and large stromal tumors, occur occasionally (0.4–6.0%) [6, 26]. Adachi S. et al., Kandel B.P. et al., Lim R.H. et al., argue that these complications have a poor prognosis, accompanied by high rates of postoperative complications and mortality [2, 14, 17].

According to Kalisz K. et al., the frequency of bleeding in malignant tumors ranges from 4.6% to 23.4% of all cancer cases, and in the structure of non-ulcerative gastric bleeding, malignant tumors make up 10.0 – 55.0%. At the same time, bleeding occupies the 2nd-3rd position among other complications of malignant tumors [13].

According to Schatz R.A., Rockey D.C., gastrointestinal bleeding was the initial symptom of malignancy in 55/71 (77.5%) patients; 26/71 (36.6%) patients had advanced metastatic disease at the time of examination [21].

According to Imbesi J.J., Kurtz R.C., tumor bleeding in malignant inflammation of the stomach occurs against the background of primary tumors, metastatic spread or with a locally invasive tumor [9].

The authors of Sheibani S. et al., emphasize that about 3.0 – 11.0 % of acute bleeding from the lower gastrointestinal tract is associated with neoplasms of the colon, and vice versa, 1.0 – 5.0 % of bleeding in the upper sections are mainly associated with stomach cancer [23].

According to the definition of Schatz R.A., Rockey D.C., the postoperative

mortality of patients with bleeding in gastric cancer reaches 50-60%, which is largely associated with disorders of homeostasis, water-electrolyte metabolism and determines the severity of the patient's condition and their operability [21].

According to Jung K, Moon W., the most intense bleeding is characteristic of the localization of a malignant tumor along the small curvature of the stomach, where the branches of the left gastric artery pass [11].

According to studies by Kim Y.J. et al., the average age of patients (n=12) who had bleeding in gastric cancer was 72.5 years. The initial mean hemoglobin level was 6.75 g/dL. The median systolic blood pressure was 114 mmHg. Art. Eleven patients (91.7%) had advanced gastric cancer and one had gastrointestinal stromal tumor. The lower part of the stomach was the most common tumor localization (58.3%), and the average tumor size was 40 mm [15, 16].

Wang L. et al., argue that being a consequence of tumor decay, bleeding can occur at any stage, namely, in patients with upper stomach cancer with bleeding, gastric cancer was detected at less advanced stages of the oncological process and had a better prognosis than in patients with stomach cancer without bleeding [28].

Johnstone C., Rich S., note that bleeding in cancer patients is associated with local tumor invasion, tumor angiogenesis, and systemic consequences of cancer. Patients may develop acute catastrophic bleeding, episodic major bleeding, or bleeding of small volume. At the same time, patients often have nonspecific manifestations, although they can be seriously ill and hemodynamically unstable [10].

According to the studies of Minhem M.A., et al., the clinical picture of bleeding is quite typical and the main (46.6%), and sometimes the only, symptom is vomiting with "coffee grounds". In 40.7% of patients, melena is observed. At the same time, there is a significant decrease in hemoglobin levels. Patients complain of general weakness (67.0%), dizziness (40.7%) and dizziness (10.4%), pallor of the skin and visible mucous membranes, tachycardia and a decrease in blood pressure are observed. 55.5% of patients complain of abdominal pain, which is significantly less than in patients with bleeding stomach ulcers (88.7%). With severe profuse bleeding,

accompanied by a rapid decrease in hemoglobin levels (below 50 g / l), severe cardiovascular collapse develops with a decrease in blood pressure to 60-40 mm Hg. Art. and below.

The pulse quickens to 120-140 beats per minute. In addition, 41.5% of patients with complicated stomach cancer have a decrease in body weight. It should be borne in mind that latent bleeding in stomach cancer is not recognized against the background of existing chronic anemia and cachexia [18].

According to the results of research by Smyth E.C. et al., stenosis is most often complicated by stomach tumors localized in the pyloric region and cardia. The frequency of cancer of the pyloric part of the stomach varies from 40 to 70%, and stenosis is complicated by stenosis up to 26.1% [25]. According to the observations of Kim Y.J., et al., the cardiac department is affected in 7.3-16.3% of cases of gastric cancer [15].

Hosokawa O. et al. treated 1106 patients with early malignant tumors of the stomach for 20 years, among which 9 cases (0.8%) had pyloric stenosis. The mean age of these patients (5 men) was 57.1 years. It was very difficult to establish an accurate preoperative diagnosis, and 7 cases before surgery were considered progressive gastric carcinoma.

In all these cases, lesions were found on the pyloric ring or in the antrum. In addition, all cases indicated submucosal infiltration and/or ulceration in the lesion. Most cases of stenosis had lesions greater than 3.1 cm in diameter [8].

Chen J.H., et al., found that the 5-year overall and relapse-free survival rate for distal gastric adenocarcinoma in patients with pylorus stenosis was significantly lower than in the group of patients without stenosis.

Deeper cancer invasion and more lymph node metastases have also been found. At the same time, in patients with pyloric stenosis, metastasizing to the lymph nodes of the retropancreatic region was significantly higher (5.17 versus 0.53%). The authors argue that distal gastric cancer with pyloric stenosis exhibits worse biological behavior than cancer without stenosis and has a poor outcome [5].

Thus, stomach cancer remains one of the most common human malignant

tumors, occupying the fifth place in the structure of oncological morbidity and the second in the structure of mortality from malignant neoplasms in the world. The most common urgent complications of gastric cancer are acute or recurrent gastric bleeding, decompensated gastric stenosis at any of its localization (cardia, gastric body, outflow), perforation or disintegration of a stomach tumor.

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