



"TYPOLOGICAL" FEATURES OF ULCER GASTRODUODENAL BLEEDING IN THE ELDERLY

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Relevance of the problem. This problem in urgent surgery continues to be the subject of large-scale scientific research conducted in clinics and laboratories of our Republic, in the CIS countries and abroad [2;3].

In our opinion, in case of UGDB, age-related features of the organism are not given due attention. This puts the clinician in a difficult position due to the impossibility of unambiguous interpretation of the obtained results. Meanwhile, without solving these issues, recommendations to practical medicine regarding the choice of one or another surgical tactic are not fully substantiated. All this served as a reason for conducting this study.

Material and methods of the study. The work is based on a clinical analysis of the results of 326 patients with ulcerative gastroduodenal bleeding who were hospitalized in the 3rd surgery of the Otabekov Clinic. Yu.O. at the Department of Surgical Diseases of the Andijan State Medical Institute *and* at the Andijan branch of the Republican Scientific Center for Emergency Medical Care for the period from 2019 to 2023.

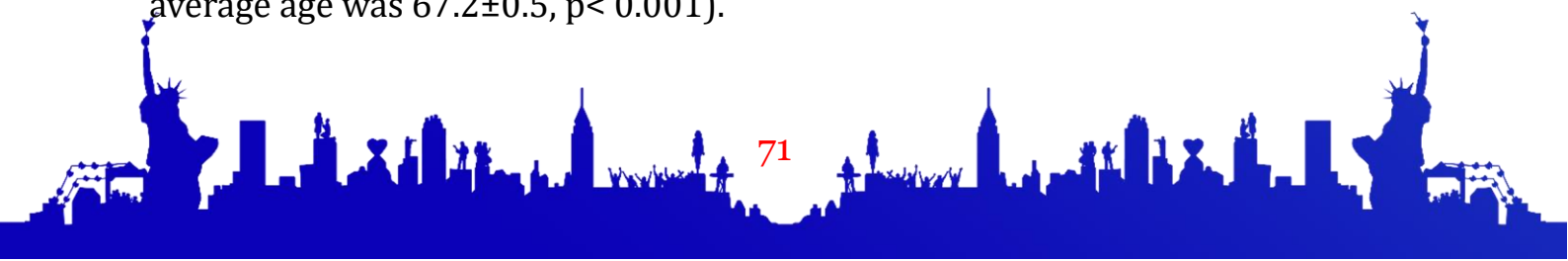
According to the purpose and objectives, the study is divided into two stages:

The first stage **is** the determination of some "typological" features of the course of the ulcerative process in acute (drug ulcers) and chronic (peptic ulcer) ulcers of the stomach and duodenum and ulcerations in gastroduodenal ulcers in the elderly compared with similar patients under 60 years of age.

For this purpose, following the WHO classification [1], we have conditionally identified two groups:

- control group (234 patients with UGDB) - from 2019 to 2021, aged 18-59 years, i.e. patients of adolescence, young and mature ages (the average age was 35.3 ± 0.5 , $p < 0.001$);

- the study group (92 patients with UGDB) – 2022-2023, in old age (the average age was 67.2 ± 0.5 , $p < 0.001$).





2) the second stage - after determining some "typological" features of the course of UGD in the elderly compared to patients under 60 years of age, the study group of patients is also conditionally divided into two groups:

- comparison group - (51 patients with UGDB) - 2022, elderly, where they adhered to "traditional approaches to surgical treatment;
- the main group - (41 patients with UGDB) - 2023, elderly, where optimized surgical tactics were followed.

To solve the tasks set, general clinical, laboratory, instrumental and statistical research methods were used in accordance with the protocols approved by the Ministry of Health of the Republic of Uzbekistan.

Results and their discussion. Method of excision of a bleeding gastric ulcer complicated by penetration into the pancreas (IAP 20240286 dated 16.05.2024).

The purpose of the invention is the reduction of the duration of the operation and the decrease of the frequency of postvagotomy disorders, which is achieved by the fact that when the ulcer is located on the anterior wall of the stomach, a gastrotomy is performed, longitudinally retreating 1.5 cm from the lesser curvature with simultaneous excision of the ulcer. The length of the incision is from the cardia to the angle of the stomach with preservation of the motor branches of the Latarjet nerve. The dissected wall of the stomach is sutured with a two-row suture, then a posterior trunk vagotomy and serotomy are performed in the cardiac section, starting from the upper end of the gastrotomy. When the ulcer is localized on the posterior wall of the stomach, a gastrotomy is performed in the specified manner, the ulcer is sutured with suturing and ligation of the bleeding vessels or excised.

Objective of the invention:

- to develop an organ-preserving technology for precision excision of a bleeding gastric ulcer, accompanied by penetration into the pancreas, which allows for simplifying the surgical technique and preventing injury to the pancreas with the development of postoperative pancreatic necrosis;
- ensure reliable hemostasis;
- remove the edges of the ulcer (the affected edges of the layers of stomach tissue) to its bottom, as a source of possible recurrent bleeding;
- preserve all parts of the stomach and its innervation;
- to achieve optimal plastic restoration of the gastric wall and, consequently, the natural shape and function of the stomach.





The set task is solved by the fact that in the method of excision of a bleeding gastric ulcer complicated by penetration into the pancreas, including gastrotomy up to 5 cm long, assessment of the size of the ulcer infiltrate, its location, presence of penetration, degree of prevalence, relationship of the ulcer process with important topographic-anatomical and functional structures, active aspiration of gastric contents, excision of the edges of the bleeding ulcer, installation and control of a nasogastric duodenal tube for gastric sanitation, restoration of the ulcer defect of the stomach, control of hemostasis, suturing of the gastrotomy opening, after active aspiration of gastric contents, the edges of the bleeding ulcer are excised precisely, with two bordering incisions including the mucomuscular layers, within healthy tissues to its bottom in the direction of muscle fibers, leaving the bottom of the ulcer penetrating into the thickness of the tissue pancreas, intact, then the specified ulcer bottom is treated with alcohol and electrocautery, after installation and control of the nasogastric tube, the edges of the stomach defect are restored with interrupted single-row sutures on an atraumatic needle to achieve extragastric ulcer bottom, the operation is completed in the generally accepted manner.

The technical essence, novelty and inventive level of the claimed method consist in the fact that in the projection of a bleeding gastric ulcer, accompanied by penetration into the pancreas, the lumen of the stomach is opened by a gastrotomy up to 5 cm long. The size of the ulcer infiltrate, its location, the presence of penetration, the degree of prevalence, as well as the relationship of the ulcer process with important topographic-anatomical and functional structures are assessed. Establishing the exact localization of cicatricial-ulcerative lesions of the stomach relative to the most important topographic-anatomical formations is the most important and necessary condition for performing an organ-preserving operation.

After active aspiration of gastric contents, the edges of the bleeding ulcer are excised precisely by two bordering incisions taking into account the direction of muscle fibers, including the mucous-muscular layers, within healthy tissues to its bottom. The bottom of the ulcer, which penetrates and is located in the thickness of the pancreatic tissue, is left intact (since it is the desire to remove it that leads to the development of pancreatic necrosis with a fatal outcome), which is treated with alcohol and electrocautery. A nasogastric duodenal tube is installed and controlled for gastric sanitation, and the edges of the gastric defect are restored with interrupted single-row sutures on an atraumatic needle, which achieves extragastration of the ulcer bottom (the ulcer





bottom is outside the digestive tract, thereby eliminating the pathological substrate, i.e. the ulcer bottom) and excluding trauma to the pancreas with the development of postoperative pancreatic necrosis. Hemostasis control. The gastrotomy opening is sutured using the generally accepted technique.

The shape of the stomach is restored without visible deformation, which is achieved by using precision technology, as well as excision of the ulcer edges taking into account the direction of muscle fibers (in their direction) and using single-row interrupted sutures on an atraumatic needle. All this allows avoiding local areas of tension and dilation of the gastric wall in the sutures when performing gastropasty.

Optimal conditions for the regeneration of adapted tissues of the combined gastric suture are provided by gastrointestinal decompression and, if necessary, gastric mucosal lavage. Intraoperatively, a polyvinyl chloride tube from a blood transfusion system with lateral microperforation holes is installed through the gastrotomy opening. During the first day after the operation, gastric lavage is performed every 3-4 hours to evacuate stagnant gastric contents. We have not observed cases of suture failure.

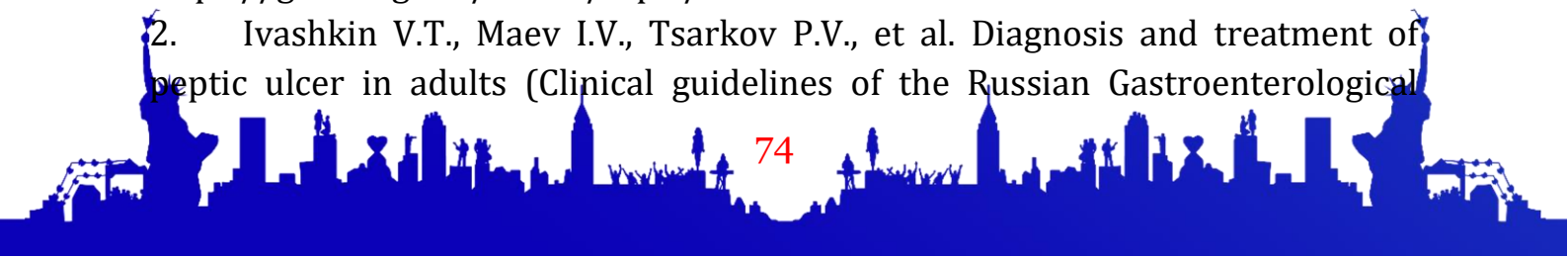
In the period from 2019 to 2022, this method was used in 10 patients with gastric ulcer complicated by bleeding accompanied by penetration into surrounding organs (mainly into the pancreas).

Conclusion. The developed method of excision of a bleeding gastric ulcer with penetration into the pancreas allows avoiding injury to the pancreas (due to extragastration), with the development of postoperative pancreatic necrosis with a fatal outcome. The shape of the stomach is restored without visible deformation, which is achieved by using precision technology, as well as single-row interrupted sutures on an atraumatic needle to restore the edges of the defect, which eliminates the effect of gastric juice and pain syndrome. The technical implementation of this method does not cause difficulties, reliable hemostasis is achieved and special medical equipment is not required. All this allows avoiding local areas of tension and dilation of the gastric wall in the sutures when performing gastropasty.

We did not observe any cases of postoperative pancreatitis or suture failure.

Bibliography:

1. Age classification of the World Health Organization (WHO). 2021. April 4. <https://glavkniga.ru/forum/topic/6904#>.
2. Ivashkin V.T., Maev I.V., Tsarkov P.V., et al. Diagnosis and treatment of peptic ulcer in adults (Clinical guidelines of the Russian Gastroenterological





Association, Russian Society of Colorectal Surgeons and Russian Endoscopic Society). Russian Journal of Gastroenterology, Hepatology, Coloproctology. 2020;30(1):49–70.

3. Ismailov B.A., Sadykov R.A., Palymbetova D.N. Delivery device for the use of hemostatic coating Geprocel in minimally invasive surgery // Problems of biology and medicine. - Samarkand - 2018. - No. 4 (104) - P. 160 - 163.

