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ANALYSIS OF THE RESULTS OF THE EFFECTIVENESS OF SURGICAL TREATMENT OF PATIENTS WITH COMBINED POST-BURN CICATRICIAL STRICTURES OF THE ESOPHAGUS AND STOMACH

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Abstract

Currently, the treatment of combined burns of the esophagus and stomach continues to be an urgent problem of thoracoabdominal surgery. To analyze the treatment of patients with combined post-burn cicatricial strictures of the esophagus and stomach. This research work is based on the experience of the Department of Surgery of the esophagus and stomach, in which 247 patients with post-burn cicatricial strictures of the esophagus and stomach were hospitalized and treated from 1990 to 2022. The nature of the combined gastric lesion was as follows: pylorus in 24 (9.7%), antrum in 51 (20.6%), gastric outlet (pylorus+antrum) in 143 (57.9%), stomach body in 7 (2.8%), antrum + stomach body in 11 (4.5%), subtotal in 4 (1.6%) and total in 7 (2.8%). The fatal outcome occurred in 2.3%, in 2.3%, after 2 years, progression of esophageal stricture was detected, and a course of bougie was carried out.

Keywords: surgical treatment; combined post-burn cicatricial strictures; the esophagus and stomach; esophageal stricture

INTRODUCTION

Currently, the treatment of combined burns of the esophagus and stomach continues to be an urgent problem of thoracoabdominal surgery. This is due to the presence of not one, but two levels of obstruction of the digestive tract – esophagus and stomach, which leads to a sharp violation of the alimentary status of patients [1]. The frequency of combined burns of the esophagus and stomach according to various authors ranges from 15 to 53% [2].

Patients with chemical burns of the upper gastrointestinal tract account for up to 32% of patients in acute poisoning treatment units, and burns of the esophagus and stomach have a frequency of occurrence of 15-16 cases per 10,000 among adolescents and 7-8 among adults, the gender ratio of pathology is 1:2 with a predominance of men [3].

The main objectives of the treatment of this category of patients is to restore the patency of the esophagus and stomach. Augmentation remains the main method of treating esophageal strictures. However, it cannot be used for stomach constrictions. The appearance of modern hydroballon dilators opens up new possibilities in the treatment of patients with combined lesions [4, 5, 6, 7, 8]. However, their capabilities in ensuring the restoration of evacuation from the stomach at the stages of providing medical care to patients with combined burns still remain unexplored [9, 10].

Purpose: to analyze the treatment of patients with combined post-burn cicatricial strictures of the esophagus and stomach.

Material and methods. This research work is based on the experience of the Department of Surgery of the esophagus and stomach of the Republican Specialized Scientific and Practical Medical Center for Surgery Named after Academician V.Vakhidov, in which 247 patients with post-burn cicatricial strictures of the esophagus and stomach were hospitalized and treated from 1990 to 2022.

Results and discussion. The nature of the combined gastric lesion was as follows: pylorus in 24 (9.7%), antrum in 51 (20.6%), gastric outlet (pylorus+antrum) in 143 (57.9%), stomach body in 7 (2.8%), antrum + stomach body in 11 (4.5%), subtotal in 4 (1.6%) and total in 7 (2.8%).

An analysis of the localization of combined gastric damage from the nature of the burn showed that in most cases the antrum or exit (gatekeeper + antrum) parts of the stomach are affected, regardless of which chemical reagent the patient used. This fact, apparently, is due to the anatomical features of the stomach, since more of the reagent is concentrated in the outlet of the stomach.

Various disorders of the evacuation function were revealed in 231 (93.5%) patients after an X-ray examination of the stomach. Of these, 5 (2.2%) patients had no evacuation disorders, 65 (28.1%) patients had grade I (compensated stenosis), 63 (27.3%) patients had grade II (subcompensated stenosis) and 98 (42.4%) patients had grade III (decompensated stenosis).

5.7% of the patients had normal body weight, and the rest of the patients had a weight deficit: up to 5 kg in 21 (8.5%), from 5 to 10 kg in 39 (15.8%), from 10 to 15 kg in 58 (23.4%), from 15 to 20 kg in 64 (26%) and more than 20 kg in 51 (20.6%). In patients with compensated stenosis, weight loss of more than 15 kg was noted in 34%, while with subcompensated stenosis, this figure was 53.9%, and with decompensated stenosis – 60.2%. This indicates deep alimentary disorders in patients with combined narrowing of the esophagus and stomach due to the presence of two levels of obstruction of the digestive tract.

Only 13 patients, which was 5.3%, showed no signs of impaired patency of any food through the esophagus. The remaining 234 (94.7%) had various degrees of impaired food patency: I degree – 26 (10.5%), II degree – 96 (38.8%), III degree – 80 (32.4%) and IV degree – 32 (13%) patients. With grade II dysphagia, compensated stenosis was diagnosed in 37.5% of cases, subcompensated stenosis in 30.2% and decompensated stenosis in 27%. In grade III dysphagia, 2.5% were not diagnosed with stenosis, with compensated stenosis in 30%, subcompensated stenosis in 32.5% and decompensated stenosis in 27.5% of patients. In 32 (13%) patients, grade IV dysphagia was detected, in which complete obstruction of any food is noted.

We considered it advisable to divide patients into three groups, depending on the degree of predominance of the clinic of esophageal obstruction or impaired evacuation from the stomach, as well as depending on the time since the burn.

43 patients were included in group I, which was 17.4%. Of the 43 patients, 21 (48.8%) patients treated in the early post-burn period, and 22 (51.2%) patients in the late period. In the clinical picture and according to instrumental examination methods, the clinic of gastric evacuation disorders prevailed in patients. At the same time, in the presence of cicatricial deformation of the esophagus, violations of its patency were not established or were expressed minimally, which did not require instrumental and surgical interventions.

101 patients were included in group II, which was 40.9%. In the early post-burn period, 60 (59.4%) patients were admitted, and in the late 41 (40.6%) patients. In these patients, a violation of the patency of the esophagus was prevalent in the clinical picture, and therefore, there was no need for reconstructive interventions on the stomach in this group.

Group III included 103 patients, which was 41.7%. All patients were treated in the late post-burn period in whom it was impossible to determine the prevalence of esophageal obstruction or gastric evacuation disorders, which were expressed equally and required simultaneous or step-by-step instrumental or surgical correction.

Conclusion: of the patients with post-burn cicatricial strictures of the esophagus and stomach with the prevalence of gastric evacuation disorders, 97.7% of patients showed a good result and normalization of gastric evacuation without postoperative complications. The fatal outcome occurred in 2.3%, in 2.3%, after 2 years, progression of esophageal stricture was detected, and a course of bougie was carried out.

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