

A DISTINCTIVE FEATURE OF ENDOSCOPIC EROSIVE-ULCERATIVE LESIONS IN PATIENTS WITH CORONARY HEART DISEASE AND EROSIVE-ULCERATIVE LESIONS WITHOUT CORONARY HEART DISEASE**Kodirov Sh. S.^{1*} and Daminova L.T.²**¹Republican Specialized Scientific and Practical Medical Center of Cardiology.²Tashkent State Dental Institute. Tashkent, Republic of Uzbekistan.***Corresponding Author: Kodirov Sh. S.**

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INTRODUCTION

Zones erosive-ulcerative lesions of gastroduodenal (ZEULG) cardiological patients are often found in a fairly high profile.^[1,3] According to A. L. et al., and Vertkin (2018), the patients who died had ulcers and erosion in the intestines and stomach (CHD) heart disease with ischemic with chronic with 23,9%, b — myocardial infarction from deceased cases, 28% b-these lesions were found in the majority of patients with 33,7%, b- (CHF) heart failure was worsened by bleeding.^[2,6]

In CHD patients, the rise in the incidence of acute erosive and ulcerative lesions of the upper gastrointestinal tract (UGT), not only due to the trophic tissue disorders, but a significant consumption of various drugs for the treatment of CHD causing the increase of acid-peptic factor and a decrease in the secretion of mucus that protects the mucosa from these influences, in particular, the therapeutic strategy of the use of antiplatelet therapy (AAT), based on the vast experience of the destination of acetylsalicylic acid (ASA), oral anticoagulants, thienopyridines and their combinations.^[1,7,9] When taking standard doses of ASA (75-150 mg) or vitamin K antagonists, the risk of bleeding increases by 1,8 times, when prescribing clopidogrel-by 1,1 times. Double AAT is accompanied by higher relative risk of bleeding: the combination of ASA and dipyridamole is accompanied by an increase in the risk of bleeding by 2, 3 times; ASA and indirect anticoagulants-by 5,3 times; ASA and clopidogrel - by 7,4 times.^[6,8,10] The assessment of lesions of the mucosa of the upper gastrointestinal tract has been poorly studied, especially in patients with cardiac arrhythmia on the background of CHD.

The solution of these issues is an urgent task for the preventive treatment of lesions of the gastrointestinal tract as in isolated CHD. To study the features of the lesions of the mucosa of the UGT in patients with chronic coronary heart disease (CCHD) without rhythm disturbance and complicated AF, the most informative diagnostic method is endoscopic, in particular esophagogastroduodenoscopy (EFGDS).

In patients with CCHD without rhythm disturbance and with AF, there are various changes in the mucosa of the gastrointestinal tract in the form of inflammatory, hyperplastic, metaplastic, erosive and ulcerative processes.^[2,3,8] Nonsteroidal anti-inflammatory drugs (NSAIDs), including acetyl salicylic acid (ASA), are drugs that promote the formation of erosions and ulcers of the stomach and duodenum in patients, which in turn can be worsened by gastrointestinal bleeding (GB), which creates an additional risk for the prognosis of patients' lives.

According to some observations, the probability of bleeding is highest in the first months of taking these drugs.^[1,6] This probability gradually decreases by the end of the first year of taking NSAIDs, and increases again in old age. At the same time, this is not the only factor contributing to the defeat of the gastrointestinal tract in CHD.^[3,10] The prognosis in patients with CHD complicated by bleeding of various degrees of severity is worse, since the coronary reserve decreases, and the problems of the consequences of a coronary catastrophe are aggravated by anemia, inevitable disorders of the regulation of hemostasis, homeokinesis and central hemodynamics with impaired nitrogen-releasing kidney function, with an increase in serum creatinine.^[2,8]

It is known that the bacterium *Helicobacter pylori* (HP), being an etiological factor in the development of gastritis, peptic ulcer disease and stomach cancer, can participate in the pathogenesis of chronic vascular diseases, which is due to the common pathogenesis of atherosclerosis in CHD and inflammation in HP. In patients with CHD, HP was detected somewhat more

frequently by both cytological (70%>57,3%) and histological (84%>73,3%) methods. The remaining morphological parameters of the antral gastric mucosa in patients with stable angina pectoris and the control group were almost the same.^[6,10]

THE AIM OF THE STUDY

To determine the characteristic features of the endoscopic picture of the gastroduodenal zone in patients with and without CHD.

MATERIALS AND METHODS

146 patients with CHD were examined, including 12 (8, 22%) patients with acute myocardial infarction (MI), 68 (46,57%) patients with progressive strenuous angina (PNS), 66 (45,21%) patients with strenuous angina (NS, functional class III – IV), and 71 patients with chronic peptic ulcer disease without CHD. The average age of the patients was 56, 3±2,4 years.

All patients with clinically established CHD, along with conventional clinical, laboratory, and instrumental studies, underwent EFGDS fibroesophagogastroduodenoscopy (FUJINON 2500 and PENTAX5000, Japan). Patients with CHD received traditional therapy of the drug, including heparin or HMG (bolus, followed by infusion and subcutaneous administration), aspirin and clopidogrel (loading doses, followed by switching to maintenance).

One of the main objectives of the research was to determine the features of ulcerative formations in the stomach and duodenum with the establishment of their characteristics in patients with and without CHD. For this purpose, the EFGDS technique was used in the examinations of patients on the FUJINON 2500 and PENTAX 5000, Japan.

Table 1: Quantitative distinctive endoscopic characteristics of erosive and ulcerative lesions with CHD and erosive - ulcerative lesions without CHD (abs).

Indicator	Group1 (n=146) EUL with CHD		Group2 (n=75) EUL without CHD	
	Abs	%	abs	%
Abs.				
A single ulcer	85	45,94%*	69	76,66%
Multiple ulcer	97	53,29%*	21	23,33%
Combined ulcer	35	23,97%**	7	9,33%
The size of the ulcer				
To 1sm	122	83,57%*	22	29,3%
1,1-1,5 sm	20	13,69%	42	56%*
1,6-2,0sm	4	2,74%	11	14,7%*
Localization of the ulcer				
Cardiac part	14	5,93%**	4	3,8%
Antral part	109	46,18%	25	23,80%*
Pyloric part	61	25,84%*	9	8,57%
Duodenum	52	22,05%	67	63,81%*
A stomach and duodenum with duodenogastric reflux of bile	36	24,66%**	5	4,54%
HP contamination	27	17,80%	73	97,33%*
A medical history of ulcer (post-ulcer scarring)	33	22,60%	71	94,6%*

*- $p < 0,001$; **- $p < 0,05$

The standard technique of performing the EFGDS method did not differ from the known methods, but the study of the internal state of the esophagus, stomach, and duodenum was visualized on a computer monitor and the occurring picture was recorded by a special program.^[4,5] and recorded in the device memory. As a result, in color format, it was possible to distinguish the nature of ulcers, the size and localization of ulcers. In the course of the work, we conducted a comparative analysis of the endoscopic patterns of GDZ in patients with CHD and EUL and duodenum without CHD. The results obtained, presented in Table 1, showed the highest occurrence of single ulcers in patients with EUL without CHD (81,3%), with high confidence ($p < 0,001$), and multiple ulcers were characteristic of patients with EUL with

CHD (66, 44%), also with high confidence ($p < 0,001$). This phenomenon confirms the well-known postulate about the influence of risk factors and the timeliness of treatment of peptic ulcer disease. Localization of the ulcer process in the antral part of the stomach and the duodenum (65,1% and 28,57%, respectively) is a characteristic picture for patients with EUL without CHD, while for patients with EUL with CHD, the formation of most ulcers in the cardiac (5,93%) and pyloric (25,8%) departments is more characteristic. Gastric ulcers and duodenal bile reflux (42, 67%) are more common in patients with EUL without CHD. In turn, HP contamination is more common in the same patients (97, 33%). When comparing the period of limitation of the ulcerative process, in patients with EUL

without CHD, the time of peptic ulcer disease is longer and more common (94,6%).

CONCLUSIONS

The obtained EFGDS data indicate a preference for small-sized gastric ulcers and duodenal ulcers in individuals with EUL in CHD, while larger ulcers are more often detected in individuals with EUL without CHD. Most often, ulcers occur in the antral part of the stomach, which is more typical for people with EUL without CHD, when the presence of ulcers in the pyloric and cardiac parts is preferred in people with EUL with CHD.

REFERENCES

1. Iskakov B. S., Kalykov A. B., Mukanova G. K., Buralkieva A. K., Mamyrainova D. M. Clinical and endoscopic characteristics of nsaid-gastropathy in patients with ischemic heart disease. Bulletin of KazNMU, 2013; 4(1): 258-260.
2. Kalinkin M. N., Osadchiy V. A., Bukanova T. Yu. Clinical and morphological features of inflammatory and atrophic changes in the gastroduodenal zone in elderly patients with congestive heart failure, concomitant ischemic heart disease, and the role of microcirculation, hemostasis, and gastric secretion disorders in their development. Clinical gerontology, 2015; 3-4: 18-23.
3. Kodirov Sh. S., Daminova L. T., Shek A. B. The severity of pain syndrome in gastric ulcer and duodenal ulcer in ischemic heart disease. Bulletin of the Tashkent Medical Academy. Mat. International Conference " Innovative approaches to diagnosis and treatment in medicine: the view of young scientists, 2019; 103-104.
4. Kodirov Sh. S., Shek A. B., Daminova L. T., Nurmukhamedov Kh. K., Urazmetov Kh.R., Karakhanov N. A. Method for measuring the size of gastric and duodenal ulcers. Agency for Intellectual Property of the Republic of Uzbekistan. Official Announcement (Rasmiy akhborotnoma), 2020; 10(234): 13-13.
5. Kodirov Sh. S., Shek A. B., Kurbanov R. D., Daminova L. T., Nurmukhamedov Kh. K., Urazmetov Kh. R. System of operational analysis for setting high-precision diagnoses "Gaster-Endoskopics Program" Patent DGU 07867.2020. Certificate of official registration of programs for electronic computers. Agency for Intellectual Property of the Republic of Uzbekistan.
6. Luzina E. V., Lareva N. V., Zhilina A. A., Zhigzhitova E. B., Ustinova E. E. Erosive and ulcerative lesions of the upper gastrointestinal tract in patients with ischemic heart disease. Treatment and prevention. Russian Medical Journal, 2017; 23(6): 328-329.
7. Pavlov O. N. Results of endoscopic examination of the upper parts of the digestive tract of patients with ischemic heart disease. Doctor, 2015; 5: 34-36.
8. Shek A. B., Daminova L. T., Kodirov S. S. Ulcerative lesions of the stomach and duodenum in patients with ischemic heart disease. Bulletin of the Tashkent Medical Academy. Mat. International Conference " Innovative approaches to diagnosis and treatment in medicine: the view of young scientists, 2019; 102-103.
9. Salomone Di Saverio., Marco Bassi., Nazareno Smerieri., Michele Masetti et al. Diagnosis and treatment of perforated or bleeding peptic ulcers: 2013 WSES position paper. World Journal of Emergency Surgery, 2014; 2-14.
10. Shih-Chi Wu., Chu-Wen Fang., William Tzu-Liang Chen., Chih-Hsin Muo. Acid-reducing vagotomy is associated with reduced risk of subsequent ischemic heart disease in complicated peptic ulcer An Asian population study. //Wu et al. Medicine, 2016; 95: 50: 2-7.