

**FEATURES OF ANTICOAGULANT THERAPY IN PATIENTS WITH CHD AND ITS  
EFFECT ON THE STATE OF THE GASTRODUODENAL ZONE****Kodirov Sh. S.<sup>1\*</sup>, Daminova L. T.<sup>2</sup> and Nurmuhamedov H. K.<sup>3</sup>**<sup>1</sup>Republican Specialized Scientific-Practical Medical Center of Cardiology.<sup>2</sup>Tashkent State Dental Institute.<sup>3</sup>Tashkent Pediatric Medical Institute. Tashkent, Republic of Uzbekistan.**\*Corresponding Author: Kodirov Sh. S.**

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**ABSTRACT**

Developing and progressive disorders of the hemostatic system in ischemic heart disease (CHD) are leveled by a fairly compact and long-term antiplatelet therapy. However, recent studies persistently demonstrate the development of up to 25% of all possible side effects and complications of anticoagulant and antiplatelet therapy.

**KEYWORDS:** ischemic heart disease, anticoagulant therapy, gastroduodenal zone.

Gastropathies formed with prolonged use of nonsteroidal anti-inflammatory drugs (NSAIDs), threatening the development of complications from the gastrointestinal tract, were found to be the most significant.<sup>[2,8]</sup> These side effects of NSAIDs are that they are able to directly penetrate the cells of the mucous membrane (CO) in an acidic gastric environment. Changes in the Mucobicarbonate barrier and reverse diffusion of hydrogen ions lead to contact "damage to the integumentary epithelium. The process of oxidative phosphorylation, developing as a result of blocking the enzyme systems of mitochondria of epithelial cells, reduce the cells' tolerance to aggressive action of hydrochloric acid and pepsin, the formation of necrobiotic processes, the appearance of erosive and ulcerative processes, infringement of processes of regeneration of the mucous membrane.<sup>[1,6]</sup>

**The purpose of research:** to study the features of anticoagulant therapy in patients with CHD and its effect on the state of the gastroduodenal zone.

**MATERIAL 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), and 66 (45,20%) patients with strenuous angina (NS, functional class III – IV). The average age of patients was 56.3±2.4 years. All patients with clinically established CHD, along with conventional clinical, laboratory and instrumental studies, underwent fibroesophagogastroduodenoscopy (EFGDS (FUJINON 2500 and PENTAX5000, Japan), fecal occult blood tests. Patients with CHD received traditional therapy, including heparin (bolus, then infusion and subcutaneous

injection), aspirin and clopidogrel (loading doses, followed by a transition to maintenance). Statistical processing was performed in the Excel-2017 program.

**RESULTS AND DISCUSSION**

In this study, the ulcerative history was evaluated and whether there was a complication (bleeding, penetration or perforation). The detailed data of the anamnesis allowed us to establish that "ulcerative" anamnesis was detected only in 22, 60% of cases. In other cases, as the duration of the course of the disease increases and, accordingly, the duration of the use of antiplatelet agents and anticoagulants, a directly proportional dependence of the increase in the frequency of gastropathy is noted. It should be noted that upon admission, after determining the severity of the condition, the presence of complications, age-related data, therapy of the underlying disease (CHD) continued (B-blockers, statins, glycosides, diuretics), but according to the obtained coagulogram indicators and emerging complications, combined types of therapy were used.

**Table №1. Variants of antiplatelet and anticoagulant therapy in patients in a comparative aspect of the form of CHD (abs).**

Gr o u p s	Combined therapy	CHD. Unstable angina CHD. PSN n=80	HD. Stable angina n=66	Male	Female
1	Monotherapy: antiplatelet agents (clopidogrel or aspirin)	0(0%)	26(39,39%)*	11 (7,53%)	15(10,27%)**
2	Combined 2nd therapy: antiplatelet agents (clopidogrel+aspirin)	12(15%)	39(59,09%)*	43(29,45%)*	8(5,47%)
3	Combined 3rd therapy: (anticoagulant + antiplatelet 2+1), heparin or NMG, aspirin, clopidogrel	68 (85%)*	1 (1,51%)	56(38,35%)*	13 (8,90%)

\*- p 0,001; \*\*- p 0, 05

The conducted studies included a plan to study the effect of antiplatelet therapy in patients with CHD, depending on its form, detected in both men and women. As a result, the frequency of antiplatelet therapy options was determined in patients with CHD with stable (group 1) and unstable (group 2) forms. Considering the data given in Table 1, it should be noted that the monotherapy option was not used in group 1 patients, while this type of treatment was used in group 2 patients in 39, 39% of cases (26), in men in 7,53%, and in women in 1,27% of cases, out of the total number of patients in these groups, with slightly low critical values. Patients of group 1

received a double type of antiplatelet combined therapy in 15% of cases, while patients of group 2 received 59,09%, while men received 29,54% and women received 5,47% of the total number of patients in the groups with high reliability of results ( $p < 0,001$ ) and low critical values. Triple antiplatelet therapy was used in 85% of patients in group 1 and only in 1,51% of patients in group 2, while men were used in 38,35% and women in 8,90% of cases, with a high degree of reliability of results ( $p < 0,001$ ), with high critical sample values, out of the total number of patients in the groups.

**Table №2. Characteristics of antiplatelet and anticoagulant therapy in GCC in a comparative aspect in patients depending on the form of CHD (abs).**

Gr o u p s	Combined therapy	CHD.Unstable angina CHD. PSN n=80	CHD. Stable angina n=66	Number of patients without GCC	GCC complications
1	Monotherapy: antiplatelet agents (clopidogrel or aspirin)	0 (0%)	26 (39, 39%)*	16 (17, 20%)**	10 (18, 86%)
2	Combined 2nd therapy: antiplatelet agents (clopidogrel+aspirin)	12 (15%)	39 (59, 09%)*	41 (44, 08%)*	10 (18, 86%)
3	Combined 3rd therapy: (anticoagulant + antiplatelet 2+1), heparin or NMG, aspirin, clopidogrel	68 (85%)*	1 (1, 51%)	36 (38, 70%)**	33 (62, 26%)

\*- p 0, 001; \*\*-p 0, 05

The formation of such a formidable complication as LC, leaves a certain imprint on the course of coronary heart disease, in connection with which patients were used various options of antiplatelet and anticoagulant therapy. The study revealed (Table. 2), that during the monotherapy option in patients of group 1 (CHD. Unstable angina) and group 2 (CHD. Stable angina pectoris) there were no GCC events in 17, 20% of patients, and in 18, 86% of cases, complications in the form of LC were noted. The implementation of the method of double combined therapy was performed in 15% patients of the 1st group and in 59,09% of patients of group 2 with a high degree of confidence ( $p < 0,001$ ), and low values of the critical sample, and phenomena not observed in GCC 44,08% of patients when 18,86% - discovered complications GCC. In turn, the method of triple combined therapy was used mainly (85%) in patients of group 1, and only in 1.51% - in patients of

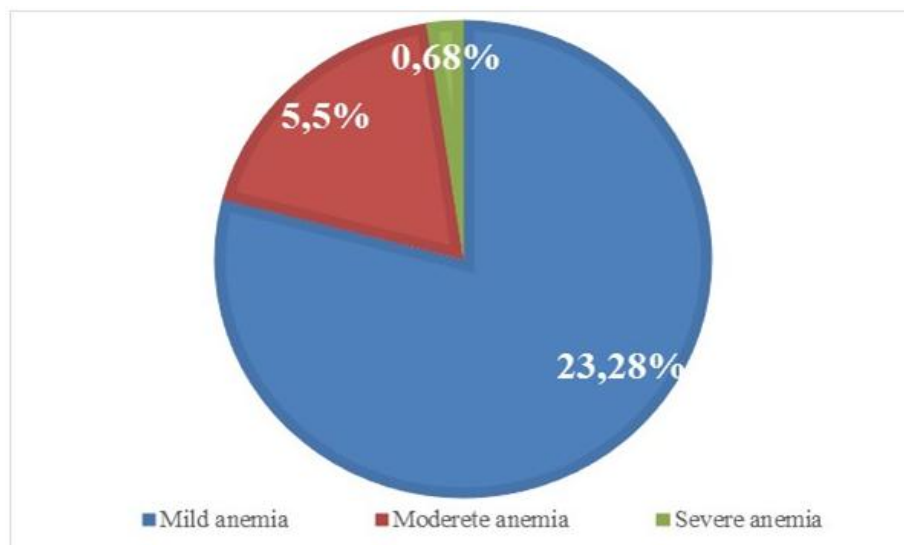
group 2, with a high degree of confidence ( $p < 0,001$ ), and high values of the critical sample without complications of GCC, the frequency of patients was detected in 38, 70% of cases, and complications of GCC were determined in 62, 26% of patients.

As is known, the complication of the ulcerative process in patients with erosive- ulcerative lesions of the GDZ is anemia. Developing anemia, as a complication of the ulcerative process of GDZ, leads to hypotension, ischemia of the GDZ mucosa, which, in turn, causes reverse diffusion of  $H^+$ , acidosis, depletion of buffer systems, death of epithelial cells, leading to damage to the integrity of the mucous membrane.<sup>[6]</sup>

When studying this issue, anemia was detected in 43 (29, 45%) of the observed patients and was 1-2 degrees. (Table 3). When analyzing the presence of anemia in the

observed CHD patients, mild anemia (Hb 119-90 g/L) was detected in 34 (23, 28%) patients, moderate (Hb 89-

96 g/L) — in 8 (5, 5%) people, severe (Hb <60 g/L) — in 1 (0,68%) patients.



**Figure 1. Characteristics of patients according to the degree of anemia (abs).**

Isolation of patients by age groups showed that all elderly patients (104 patients) had anemia of 1-2 degrees of severity. Mild anemia (Hb 119-90 g/L) was detected

in 33 (31,7%) patients, moderate anemia (Hb 89-96 g/L) — in 3 (2,88%) people, severe anemia (Hb <60 g/L) - in 1 (0,96%) patients (Table 3.)

**Table 3. Characteristics of the frequency of anemia in elderly people with CHD in gastric ulcer and duodenal ulcer (abs).**

Age	Anemia		No anemia		Total
	Male	Female	Male	Female	
56-65	12(17,64%)*	9 (13,24%)	43 (63,24%)*	4(5,8%)	68 (100%)
66-75	9 (25%)*	7 (10,29%)	16 (23,5%)*	4 (11,1%)	36 (100%)

It should be noted that the reliability of the severity of anemic syndrome in patients aged 56-65 years, both in men and women, is directly proportional, but without a certain reliability of the results and low critical sample values. In the group of patients aged 66-75 years, the directly proportional dependence is also unreliable in terms of performance, with lower critical sample values.

## DISCUSSION

Thus, the development of erosive ulcerative lesions in patients with CHD is greatly facilitated by the use of antiplatelet or anticoagulant drugs. GCC as complications of gastric and duodenal lesions in CHD patients in most cases (47.3%) were associated with the use of combined antiplatelet therapy (clopidogrel+aspirin). According to the literature, the prognosis in patients with CHD complicated by bleeding of their gastrointestinal tract is worse, since the coronary reserve decreases, and the problems of the consequences of a coronary catastrophe are aggravated by anemia, unavoidable violations of the regulation of homeostasis and homeokinesis of central hemodynamics with a violation of the nitrogen-releasing function of the kidneys, with an increase in serum creatinine.<sup>[3,5]</sup> Existing strategies for the treatment of these complications adhere to the "gold standard" of the use of

pharmacological drugs based on acetylsalicylic acid (ASA), which provide for a statistically significant reduction in the risk of myocardial infarction and stroke, with a reduction in fatal outcomes.<sup>[1,9]</sup> In clinical practice, it is difficult to draw a clear line between NSAIDs-gastropathies and so-called "stress" erosions and ulcers that occur in patients with acute myocardial infarction and other severe pathology or surgical interventions.<sup>[4,7]</sup>

Only a carefully detailed medical history indicating the duration of administration of ASA and NSAIDs can identify these injuries to the upper digestive tract. According to the literature data, the pathogenetic relationship of anemia (including post-hemorrhagic) with CHD is peculiar. The manifestation of hemic hypoxia leads to the aggravation of angina pectoris, and the relief of anemia "softens" its course.<sup>[2,8,6]</sup> At the same time, paradoxically, anemia has a positive effect on the course of CHD, thinning the blood and reducing the risk of coronary thrombosis.<sup>[1,5,7]</sup>

## CONCLUSION

1. Features of anticoagulant therapy in patients with CHD are the effectiveness of the use of corrective treatments, which allows you to prevent a number of

risks of emerging complications from the gastrointestinal tract.

2. The influence of the course of the form of CHD, gender and age differences, the timing of the development of pathology leave a certain imprint on the formation of all kinds of complications from the gastroduodenal system.
3. The effect of anticoagulant therapy in patients with CHD on the state of the gastroduodenal zone is accompanied by activation of the reparative processes of ulcerative lesions.

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