Chronic Heart Failure and Progressive Angina

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<td>Chronic heart failure (CHF) is a “pathophysiological syndrome in which, as a result of a particular disease of the cardiovascular system or under the influence of other etiological causes, the heart’s ability to fill or empty is impaired, accompanied by an imbalance of the neurohumoral systems (RAAS, sympathoadrenal system, natriuretic peptides, kallikrein-kinin system). As well as the development of vasoconstriction and fluid retention, there is a dysfunction of the heart (remodeling) and other target organs (proliferation), as well as a discrepancy between the provision of organs and tissues of the body with blood and oxygen with their metabolic needs” [1-3].</td>
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1. Introduction

Currently, the relevance of the problem of CHF for healthcare is due to the prevalence of the pathology and significant economic costs due to the severe progressive course of the disease, multiple hospitalizations, early disability, expensive cardiac surgery and long-term drug treatment, complex program rehabilitation and high mortality rates [4-7]. One of the main strategic directions in the effective treatment of patients with CHF, improving their quality of life, reducing mortality and prolonging the life of patients is the study and identification of this pathology at the earliest possible stages of the underlying disease [8,9,10,11]. For a long time, one of the main directions in cardiology was the study of the problems of atherosclerosis, coronary heart disease and arterial hypertension, this is due to their high medical and social significance for society, however, a new understanding of the essence of CHF, consideration of this syndrome as the largest non-infectious pandemic led to a deeper understanding the international medical community addresses the problem of CHF [12,13,14].

More than 65% of patients with CHF are in age groups over 60 years. The ratio of the number of women with CHF to the number of men is approximately 3:1 [15-16]. Among patients with FC I–IV CHF, the average annual mortality rate is 6.0%. At the same time, the mortality rate within a year for patients with clinically significant CHF reaches 12% (even in conditions of treatment in a specialized hospital). Scientists’ forecasts show that in 10–20 years, 30–50% of patients attending an outpatient appointment will be diagnosed with CHF. Although, according to a study of CHF, up to 40% of patients who seek medical care in cardiology and general therapeutic institutions currently suffer from CHF [17]. Clinical status assessment scale (CSAS) for patients modified by Mareeva V.Yu. (2000) was recommended by the World Scientific Society of Cardiology (WSC) to objectify the functional class (FC) of CHF. The questions included in the scale require only a history and routine physical examination, which is especially appropriate in patients requiring emergency care. Determining the functional status of patients with CHF is extremely important for prescribing appropriate treatment. Meanwhile, in patients with different etiologies of CHF, including various forms of coronary artery disease, only one symptom is taken into account - shortness of breath, which can lead to incorrect diagnosis and, as a consequence, inadequate treatment.
Purpose of the study. To analyze the structure of the diagnosis of CHF in patients with progressive angina, namely: to assess the validity of the established FC and compliance with the prescribed therapy using a clinical assessment scale to determine the FC of CHF upon admission to the hospital and over time. Results: In 98% of patients with progressive angina, upon admission to the cardiology department, class III CHF was diagnosed, based only on the nature of shortness of breath. Further, when analyzing the treatment, it was found that all patients with FC III were not prescribed loop diuretics, recommended by the World National Organization of Cardiology in the group of basic drugs for the treatment of this category of patients.

2. Materials And Methods
A retrospective analysis of 205 medical records of patients who were treated for the period from September to December 2022 with a diagnosis of coronary artery disease was carried out. Progressive angina." The average age of the patients was 58.7±8.6 years; The study did not include patients with chronic obstructive pulmonary disease, diabetes mellitus, or grade III obesity. Also, 49 patients on the day of admission and over time on the 10th day of treatment underwent a scoring test according to Mareev V.Yu., according to which 10 points were assessed: shortness of breath, weight, interruptions in heart function, position in bed, swelling of the neck veins, the presence of wheezing in the lungs, gallop rhythm, edema of the lower extremities, liver size, systolic blood pressure level. Depending on the number of points, the FC of CHF was determined. Statistical data processing was carried out using the statistical software package Statistica 6.0. To compare discrete values, the χ-square test was used. P values <0.05 were considered statistically significant.

3. Results and Discussion
At the first stage of the work, it was revealed that 98% of patients with progressive angina pectoris upon admission to the cardiology department were diagnosed with FC III CHF, justified only by the nature of shortness of breath. Further, when analyzing the treatment, it was found that all patients with class III were not prescribed loop diuretics, recommended by the GFCI in the group of basic drugs for the treatment of this category of patients. However, with such a “violation” of the standards of therapy, not a single patient showed a deterioration in their condition. In this regard, at the second stage of work, 49 patients with progressive angina were directly tested according to Mareev V.Yu. and compared with data from medical records. It was found that upon admission, 76% of patients (37 people) were assigned FC III, and 24% (12 people) were assigned FC II. However, using CSAS in these same patients, FC I-II was determined in 92% (45 people) of cases and FC III was determined in only 8% of cases. When repeating the test, Mareeva V.Yu. after 10 days, 3 (6%) patients showed a complete absence of signs of CHF, 28 (57%) patients had FC I, and 18 (37%) had FC II.

4. Conclusion
All patients with CHF, especially those who do not have the opportunity to conduct stress tests to determine FC, must use the scale for assessing the clinical state of the CSAS modification by Mareev V.Yu., which will help avoid errors in the diagnosis and treatment of this category of patients.

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