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## Comparative Anticoagulant Therapy Of Acute Coronary Syndrome Without St-Segment Elevation In Young Men

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### ABSTRACT

The comparative effectiveness of enoxiparin sodium and non-fractional heparin (NPH) in the treatment of acute coronary syndrome (ACS) in young men was studied. 100 patients with ACS were examined on the basis of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care from 2018 to 2020. The average age of the patients was  $34 \pm 5$  years. The patients were divided into 2 groups. The first group consisted of 54 men who received anticoagulant therapy with enoxiparin sodium at a dose of 1 mg / kg after 12 hours of 0.5 mg/kg. The second group consisted of 46 men who received NSF, with the first dose of 10,000 units administered intravenously by bolus, and then 5000 units 6 hours subcutaneously.

### KEYWORDS

Anticoagulants, acute coronary syndrome, young age, non-fractional heparin, enoxiparin sodium.

## INTRODUCTION

According to the World Health Organization, coronary heart disease (CHD) remains the leading cause of death globally, accounting for 12.8% of all deaths on the planet. One of the most common forms of CHD that requires active tactics is acute coronary syndrome (ACS). In the structure of cardiovascular diseases themselves, the mortality rate from ACS is 40% [1,3].

In the pathogenesis of ACS, a leading role is played by coronary artery thrombosis, the development of which begins with the adhesion and aggregation of platelets in the area of endothelial damage. The use of drugs that inhibit platelet aggregation is now the basis of ACS therapy [2,4].

In accordance with the recommendations of the IOC, the European Society of Cardiology and the American Heart Association, in the treatment of ACS, the appointment of anticoagulants is mandatory. Officially recommended use: unfractionated heparin (NPH), low-molecular-weight heparins (NMH) and indirect factor Xa inhibitor fondaparinux. These drugs are prescribed in doses that have been proven effective in numerous international randomized trials [6,8].

Despite the availability of modern antithrombotic drugs in our country, the problem of rational use of medicines remains unresolved, taking into account all aspects of the use of medicines, with an emphasis on optimizing the use of the drug and determining the necessary medication for a particular patient. In addition, drug provision at all stages of therapy is not always postulated in each specific region, taking into account the peculiarities of the marketing structure of the regional pharmaceutical market, the pharmacoepidemiological

features of CHD and its extreme manifestation-ACS [5,7].

In addition, the issue of rational use of antiplatelet drugs in patients with ACS, taking into account pharmaco-economical factors, remains unresolved. Thus, the improvement of treatment methods at all stages of medical care and drug provision, taking into account pharmacoepidemiology and pharmaco-economics, will contribute to a reduction in mortality from CHD (especially from acute forms), reduce the economic costs of treatment and rehabilitation due to a reduction in the time of hospitalization by 2 or more times [10,12].

This will reduce the time of disability of patients, reduce the risk of vascular accidents (cardiovascular death and disability), including repeated ones, and also help solve problems with stent thrombosis and restenosis. All this, of course, will determine a tangible economic effect and significantly affect the quality and life expectancy of citizens of our country and determines the relevance of the research topic [11].

## THE AIM OF THE STUDY

A comparative study of the effectiveness of enoxiparin sodium and NPH in the treatment of ACS in young men.

## MATERIALS AND METHODS

100 patients with ACS were examined on the basis of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care (SF RNCMP) from 2018 to 2020. The average age of the patients was 34±5 years. The patients were divided into 2 groups. The first group consisted of 54 men who received anticoagulant therapy with enoxiparin sodium at a dose of 1 mg / kg after

12 hours of 0.5 mg/kg. The second group consisted of 46 men who received NSF, with the first dose of 10,000 units administered intravenously by bolus, and then 5000 units 6 hours subcutaneously. The duration of anticoagulant therapy in both groups was 5-7 days. The patients received anticoagulant therapy in full.

### THE RESULTS OF THE STUDY

Patients of group 1 had  $10.1 \pm 0.5$  angina attacks during the day, and group 2 had  $11.6 \pm 0.6$ . After completion of anticoagulant therapy, patients of both groups had a significant ( $p < 0.001$ ) decrease in angina attacks to  $1.3 \pm 0.07$  and  $3.4 \pm 0.2$ , respectively, but this improvement was significantly ( $p < 0.05$ ) more pronounced in patients receiving enoxiparin sodium. After completion of anticoagulant therapy, complete cessation of angonotic attacks was observed in 74% of patients in group 1, which is significantly ( $p < 0.05$ ) more than in group 2, in which after treatment with NSF, the complete absence of angina pectoris was noted in 52.3% of patients. In group 1, 5% of patients retained refractory angina, but the number of patients who failed to achieve stabilization in group 2 was significantly higher ( $p < 0.05$ ) (12.3%). Another 23.3% of group 1 and 34.3% of group 2 patients achieved relative stabilization, but they still had rare angina attacks.

### CONCLUSIONS

Thus, taking into account the almost complete identity of the patients of the compared groups according to the initial data, the significant differences are explained by the use of different anticoagulants. Enoxiparin sodium, which is used for anticoagulant purposes in patients with ACS, is characterized by a more pronounced clinical efficacy.

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