

OPTIMIZATION OF INTENSIVE CARE FOLLOWING ENDOVASCULAR INTERVENTIONS IN ELDERLY PATIENTS WITH ACUTE CORONARY SYNDROME

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Abstract. The leading cause of death in elderly patients currently remains heart disease, in particular acute coronary syndrome (ACS). Recently, revascularization therapy centers have been opened in almost all regions of our country. In particular, percutaneous coronary interventions (PCI) are carried out effectively to manage patients with ACS to improve the quality of life. These so-called endovascular interventions are currently a highly effective treatment method that can significantly improve the condition of patients and increase their tolerance to physical activity, returning people to normal everyday life.

This article presents a retrospective analysis of intensive care of elderly and senile patients who underwent percutaneous coronary intervention with different types of stenting. The analysis revealed that most patients were diagnosed with ACS. Over 267 endovascular interventions were performed in 178 patients.

Key words: intensive care, percutaneous coronary intervention, stenting, acute coronary syndrome, postinfarction cardiosclerosis.

Relevance. The problem of acute coronary syndrome (ACS) is the focus of scientific research, since the consequences of coronary atherosclerosis lead to almost half of the deaths of the population [18, 19]. Recently, indications for myocardial revascularization in this group of patients have been expanding, which allows increasing tolerance to physical activity, significantly reducing the risk of recurrent myocardial infarction, and increasing long-term survival. Old age of the patient is often

associated with a large number of concomitant diseases, as well as with high risks of cardiac surgery [11, 20] . In this regard, it became necessary to classify age groups of the population.

The World Health Organization (WHO) adopted a classification of age groups approved by the Congress of Gerontologists and Geriatricians; the entire population over 50 years of age is divided into four age categories: 1) mature age - 45-59 years; 2) elderly age - 60-74 years; 3) old age - 75-90 years; 4) long-livers - 90 years and older [12, 21] . In elderly patients with severe forms of acute coronary syndrome (ACS), conservative treatment methods cannot always provide adequate control of anginal symptoms of the disease and reduce the risk of coronary events. In such cases, interventional interventions with revascularization of the coronary arteries are the only methods of choice. They are the "gold" standard in the treatment of patients with severe forms of ACS and not only relieve them of anginal symptoms , but also increase survival. In this regard, there is data according to which the authors claim that the operations of choice for patients of older age groups are endovascular methods, the implementation of which has a minimal surgical risk, and also reduces the risk of developing acute myocardial infarction (MI) in the late postoperative period [5, 16, 19]. Detection of ACS in the elderly and old people is facilitated by the high frequency of stenosing coronary atherosclerosis [9, 17]. Percutaneous coronary intervention does not reduce mortality, but improves the quality of life, especially in severe angina [4, 10]. Modern revascularization technology allows interventions to be performed even in patients 85 years of age and older without reducing efficiency and with an acceptable risk [2, 15]. In patients 75 years of age and older, as well as in younger patients, radial access reduces the risk of bleeding and complications at the site of vascular access [6, 8]. Active discussions regarding the advantages of stents of various modifications are not yet complete. According to the RESEARCH and T-SEARCH registries, in patients over 80 years of age, implantation of drug-eluting stents reduced the risk of vascular events by 50% compared to bare metal ones. stents [1, 7, 11]. When choosing stents ,

one can take into account information about the greater safety of modern polymer stents that release everolimus (Xience) or zotarolimus (Rezolute) [3, 13].

Thus, diagnosis and treatment of ACS in elderly patients requires knowledge of the characteristics of the aging organism, the peculiarities of the manifestations of the disease in old age, the increased risk of complications of treatment, which can help practicing physicians more successfully control this dangerous disease.

Objective: To analyze the methods of intensive care after percutaneous coronary intervention as one of the methods of managing patients with acute coronary syndrome in elderly patients.

Materials and methods: We conducted a retrospective analysis of elderly patients who underwent PCI from January 1 to September 1, 2023, according to the data of the Samarkand Regional Branch of the Republican Specialized Scientific and Practical Medical Center of Cardiology . A total of 178 patients were analyzed who underwent interventional intervention (PCI) via radial access 96.32% ($n = 169$) and other approaches 3.68% ($n = 9$) . Men accounted for 68.1% ($n = 111$), women 31.9% ($n = 52$).

The average age was 66.67. Of these, the middle age (45-59) was 28.83% ($n = 47$) , the elderly age (60-74) - 63.8% ($n = 104$) and the old age (75-90) - 6.75% ($n = 11$). The majority of patients were diagnosed with coronary artery disease: post-infarction atherosclerosis (PICS) – 31.9% ($n = 52$) , with a diagnosis of acute coronary syndrome (ACS) with ST segment elevation – 28.83% ($n = 47$) , with a diagnosis of acute coronary syndrome without ST segment elevation – 13.49 % ($n = 22$) , with myocardial infarction 8.59% ($n = 14$) , with a diagnosis of coronary artery disease: angina pectoris FC 3 17.79% ($n = 29$).

During the study, the right type of circulation in 130 patients was 79.7 %, the balanced type in 22 – 13.6% and the left type of circulation in 11 – 6.7%. The indication for endovascular intervention (EV) was the presence of acute coronary syndrome, as

well as angiographic presence of coronary artery stenosis of more than 70%. A total of 337 PCIs were performed in 163 patients. Recanalization of coronary artery occlusions was performed in 50 patients (30.67%), balloon angioplasty - 69 (42.33%), circumflex branch (CBC) stenting - 50 (30.67%), right coronary artery (RCA) stenting - 66 (44.49%), left coronary artery (LCA) stenting - 4 (2.45%), anterior interventricular branch (LAD) stenting - 93 (57.05%), diagonal branch (DB) stenting - 5 (3.07%). Clinically good results were considered to be the absence of angina and increased exercise tolerance.

In this cohort study, all patients underwent coronary artery stenting only, coronary artery bypass grafting was not taken into account. There were no deaths or serious complications during the intervention or after it during the hospital stay.

Results. According to these indicators, it is evident that the majority of patients were diagnosed with acute coronary syndrome - 69 patients (42.32%). It is necessary to study the comparative long-term observation of patients diagnosed with acute coronary syndrome with and without ST segment elevation, who underwent coronary artery stenting and patients with the same diagnosis who were observed on basic therapy. The second place in coronary artery stenting was occupied by patients with post-infarction cardiosclerosis of elderly and senile age - 52 patients (31.9%). All patients before and after PCI were prescribed statins, double or triple anticoagulant therapy.

Conclusions. The importance of stenting patients with ACS to prevent myocardial infarction and all the resulting severe complications in elderly and senile people, who have a high level of comorbidity is most likely quite high, while the need for stenting patients who have had myocardial infarction with postinfarction cardiosclerosis raises many questions. It is necessary to study the condition of patients according to the data of a remote 6-month observation, who have undergone stenting of elderly and senile age and are on constant therapy with statins, antiplatelet agents and anticoagulants.

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