

**PECULIARITIES OF PROVIDING MEDICAL AND
PHARMACEUTICAL ASSISTANCE TO PATIENTS WITH ACUTE
MYOCARDIAL INFARCTION IN THE FIRST (PRE- HOSPITAL) STAGE**

Kurylenko Yu.Ye., Podkolzina M.V.

National Pharmaceutical University, Kharkiv, Ukraine

economica@nuph.edu.ua

Acute myocardial infarction differs among cardiovascular diseases of particular weight due to its high prevalence among people of working age and high mortality rates. There are about 50,000 cases of myocardial infarction annually in Ukraine. At the same time, the death rate from this disease remains consistently high - 30% of patients die from acute myocardial infarction, while in Western countries 5%. Recently, the problem of improving the provision of emergency medical care to patients with acute myocardial infarction has become particularly relevant. Current world trends in this direction tend to be more widespread use of thrombolytic therapy, interventional cardiac surgery.

Until now (2019), there has been no systematic approach in Ukrainian medical statistics that would provide detailed, focused and structured information on mortality, morbidity, prevalence of terminal stages of oncology and other diseases requiring palliative care, regional distribution, time intervals, etc.

The source of information on the causes of death is the medical certificate of death (as well as the medical assistant's death certificate, medical certificate of perinatal death). Together with the death records, they are transmitted to the bodies of state statistics by the civil registration authorities (Ministry of Justice system).

Thus, the most superficial analysis reveals that 67% of all causes of death belong to the class "9. Diseases of the circulatory system. " At the same time, 35% of all deaths were allegedly caused by one disease: "Atherosclerotic heart disease", mortality from acute coronary insufficiency (myocardial infarction) is also referred to in this section in medical statistics.

For comparison, in England and Wales in 2018, there were 132,233 deaths from causes belonging to the circulatory system, or 24% of all deaths. (The UK is ranked N 1 in the world for "quality of death" - that is, palliative care levels).

The purpose of the study was to study current approaches to the timely detection of acute coronary syndrome and to study the recommendations of clinical protocols for the use of certain groups of drugs in myocardial infarction at the first stage of medical and pharmaceutical care.

Data from international registries, which also included centers from Ukraine, indicate that acute coronary syndrome (ACS) without ST segment elevation is observed more often than with ST segment elevation, with an annual incidence of

approximately 3 cases per 1,000 population. Hospital mortality of patients with MI with ST segment elevation is higher than in patients without ST elevation (7% vs. 3–5%, respectively), but after 6 months the probability of death from cardiovascular causes is aligned in both categories of patients and is 12% and thirteen%. Long-term follow-up revealed that after 4 years the mortality in patients with acute coronary syndrome without ST segment elevation was twice as high as in patients with acute coronary syndrome with ST segment elevation.

This difference can be explained by the unacceptably low level of attention of cardiologists to this category of patients, which makes the preparation of a modern clinical protocol extremely relevant and useful for cardiologists of different POPs. In addition, it is necessary to take into account the fact that a group of patients with acute coronary syndrome without ST-segment elevation are usually older, have comorbid conditions such as diabetes and renal failure, and require clearer "protocol" treatment and secondary prevention.

Unified clinical protocol of emergency, primary, secondary (specialized), tertiary (highly specialized) medical care and medical rehabilitation (UKPMD) was developed by a multidisciplinary working group, which included representatives of various medical specialties, general practitioners, general practitioners cardiologists, cardiovascular surgeons, cardiologists conducting percutaneous interventions, and the like.

According to the licensing requirements and standards of accreditation in a health care facility (POP), a Local Medical Assistance Protocol (LMPD) should be in place, which defines the interaction of POPs, medical personnel, etc. (local level).

Features of the medical care process. The main purpose of this unified clinical protocol is to create an effective system to assist patients with symptoms of acute coronary syndrome without ST-segment elevation. The main feature of this system is the strict stratification of patients at risk, each of which has its own characteristics of diagnosis and treatment (from complex invasive and surgical procedures to standard, commonly available methods), as well as an appropriate prognosis of the disease.

The protocol defines a clear procedure for stratification of patients depending on the symptoms of the disease, laboratory tests and electrocardiographic signs of myocardial ischemia, divides all patients into four main groups with acute coronary syndrome without ST segment elevation, which determines their further treatment and prognosis in medical facilities Aid and specialized structural units of the POPs (POPs structural units and integrated POPs (centers, etc.) operating in accordance with applicable regulatory and ter regulating activity of cardiology and cardiac care).

For the emergency (ambulance) brigade. Early diagnosis and hospitalization of patients with signs of acute coronary syndrome in specialized structural units of hospitals for the purpose of timely diagnosis of heart damage in patients with Acute

coronary syndrome and percutaneous coronary intervention reduces mortality and disability.

List of drugs for the treatment of myocardial infarction, according to the clinical protocol:

1. Vasodilators used in cardiology. Organic nitrates. C01D A02. Nitroglycerin..tab Nitroglycerin 0.5 mg; district nitroglycerin 1% 2.0ml
2. Analgesics and antipyretics. N02B A01. Acidum Acetylsalicylicum. Tab Acetisalicylic to-and 325 mg
3. Antithrombotic agents Inhibitors of platelet aggregation. B01A C04. Clopidogrelum. Tab Clopidogrel 75mg; Low molecular weight heparin B01A B05.Enoxaparin. Enoxaparin 0.4 ml
4. β -adrenoceptor blockers. C07A A05. Propranololum. Tabran Propranolol 40 mg. Metoprololum. Metoprolol 25 mg
5. Analgesics. Opioids. Natural opium alkaloids. Morphine. N02A A01. Morphine hydrochloride 1% 1.0 ml
6. Medical gases. V03A N01.Oxygen. Medical gaseous oxygen
7. Serum-lowering cholesterol and triglyceride drugs. HMG-CoA reductase inhibitors. C10A A05. Atorvastatinum. Tab Atorvastatin 20 mg; C10A A07. Rosuvastatinum. Tab Rosuvastatin 20 mg
8. Angiotensin II antagonists. ATX code C09C A03. Valsartanum. Tabs Valsartan 80 mg
9. Potassium preserving diuretics. C03DA01. Spironolacnone. Tabi Spironolactone 25 mg.

Conclusions. According to the results of the research, it is established that the problems of timely detection of acute coronary syndrome, timely provision of medical and pharmaceutical assistance to patients with myocardial infarction are receiving the attention of specialists all over the world; clinical protocols of emergency, primary, secondary (specialized), tertiary (highly specialized) medical care and medical rehabilitation have been defined and approved in Ukraine. Groups of medicines and specific drugs (including doses) for the provision of pharmaceutical assistance to patients with acute coronary syndrome at the pre-hospital stage have been identified.