RESOLUTION

Of Scientific and Practical Conference «CardioTIME 2.0: chronic and acute coronary heart disease»

September 29, 2022
Kyiv, Ukraine

4000 health care specialists have registered to participate in Teleconference «CardioTIME 2.0: chronic and acute coronary heart disease».

The teleconference was held in a multidisciplinary format and brought together doctors of various specialties: cardiologists, rheumatologists, general practitioners and family doctors. These doctors face daily the patients with coronary heart disease.

The purpose of the teleconference is to draw the attention of doctors to the problem of endothelial dysfunction and myocardium energy supply disorders in case of coronary heart disease, as well as to the problem and role of ischemic cascade during acute coronary syndrome (ACS), to demonstrate the doctors' own experience of use of ischemic cascade blocker in case of ACS.

Seven reports were offered to the participants for review and discussion and they were dealing with the following issues:

- Pathogenesis of coronary heart disease (CHD), the role of endothelial dysfunction;
- ways to increase the tolerance to physical activity in patients with CHD;
- mechanisms to protect the cardiovascular system from stress;
- the role of iron deficiency in the cardiological patient and methods of correction;
- the role and mechanism of ischemic cascade development in case of ACS, the blocking options.

The speakers drew the attention of the audience, especially the primary level, to the need to observe the step therapy at the outpatient stage, as the recovery of vessels and neurons lasts up to 1-2 months or more.

During the scientific and practical conference «CardioTIME 2.0: chronic and acute coronary heart disease» the chat worked, thanks to which each participant had the opportunity to ask a question to the speakers and get the answer. An interactive listener survey was conducted, thank you for your answers! There was also a quiz with valuable prizes, they will be delivered to the winners within 2 weeks after the event.

The event is registered at the Testing Center of the Ministry of Health of Ukraine. Event Number: 1007701. All participants will receive a certificate, which gives the right to accrue 5 points to the Continuous Professional Development in accordance with the Order of the Ministry of Health of Ukraine dated 22.02.2019 #446. The registration number of the Continuous Professional Development provider is 1208.

Conclusions and decisions after the discussion of reports:

1. Today, researchers and physicians are focusing not only on atherosclerotic changes in coronary vessels, but also on the level of endothelial dysfunction, as it is a clinical manifestation of endothelial dysfunction. Normalization of endothelial function is a way to slow down the progression of atherosclerosis. The use of a fixed infusion combination of L-arginine and L-carnitine is pathogenetically conditioned. According to international studies, L-arginine improves vascular endothelium function, increases vascular lumen diameter by 3-24%, inhibits atherosclerotic plaque progression and improves lipid profile performance. In its turn, L-carnitine resumes β-oxidation of fatty acids, reduces the risk of development of ventricular arrhythmias and AV-blockages, and contributes to improvement of lipid profile indicators.

2. Coronary heart disease is an «engine without fuel», as far as secondary carnitine deficiency is observed in case of CHD and it results in reduced ATP synthesis in cardiomyocytes. Switching to glycolysis allows ATP to be synthesized 3-3.5 times less than during β-oxidation of fatty acids. To assess the degree of tolerance to physical activity in CHD, it is necessary to use instrumental methods of research: ergospirometry or bicycle ergometry. Treatment of CHD requires a complex approach: correction of endothelium function, improvement of lipid profile and restoration of normal ATP energy synthesis path. In order to increase physical activity tolerance, cardiac rehabilitation programes are recommended, as well as the addition of a fixed infusion therapy combination of L-arginine and L-carnitine, which eliminates ischemia and restores myocardium energy supply in case of CHD.

3. Anxiety-depressive disorder is an independent factor in the progression of cardiovascular diseases. Cardiological symptoms can actually be manifestation of anxiety. The key mechanism for their development is sympathetic nervous system dysfunction and endothelial dysfunction. To treat anxiety disorders in patients with cardiovascular diseases (CVD), drugs that reduce the impact of stress on the body, and endothelium protective therapy are used. Anxiolytics are an integral part of the treatment of a patient with CVD and stress, but have a number of side effects. Lodixem is an all-purpose organ protector with an effect of daily tranquilizing drug: it reduces anxiety, fear and uneasiness, restores endothelium function; at the same time Lodixem doesn't cause sleepiness and addiction. To directly restore endothelial function, patients with chronic stress require L-arginine infusion – an indispensable donator of nitrogen oxide. To eliminate even a minor endothelium defect, it may take 60 or more days, because endothelium regeneration significantly slows down in hypercholesterolemia, hypertension, with age, in repeated lesions. Therefore, after completion of the infusion course of treatment, it is necessary to prescribe an oral solution of L-arginine aspartate to continue the course of vascular recovery. Full course of L-arginine treatment (infusion plus oral course) lasts up to 2 months.

4. Iron deficiency is a direct threat to the survival of the cardiological patient, it is associated with CHD, general and cardiovascular mortality. It is inefficient and even dangerous to compensate iron deficiency by means of a diet. Iron deficiency correction is effective only when intravenous iron preparations are used, for example, iron (III)-hydroxide sucrose complex, which is transferred to the transferrin and ferritin directly from the drug, and then deposited. The latter explains the impossibility of overdosage, in contrast to saline iron compounds, which include intramuscular forms of iron, which are absorbed behind a gradient of concentration. Iron (III) hydroxide sucrose complex without dextrin does not create free radicals upon entry into the body, which gives high tolerance. Prolonged injection (on autoblood) let us compensate iron deficiency even in the outpatient settings.

5. Acute coronary syndrome triggers the development of ischemic cascade in cardiomyocytes. Its key steps are cell overloading with calcium ions, hyperproduction of oxygen free radicals, lipid peroxidation and endothelium damage. The end of an ischemic cascade is the death of cardiomyocytes by apoptosis and ferroptosis. The ischemic cascade begins long before its clinical manifestation. Even ECG changes in case

of ACS are already almost irreversible ischemic cascade. The addition of edaravon to standard ACS therapy is accompanied by a decrease in the enzymatic size of the infarction, a weakening of apoptosis and ferroprotosis of cardiomyocytes, an increase in the fraction of the left ventricular ejection. Edaravone is mentioned in ACS treatment protocols (guidelines) in Japan, where it is indicated that the use of edaravone in patients with ACS reduces reperfusion damage. In case of ACS, the first dose of edaravone is injected within 10 minutes intravenously by stream before reperfusion, after which 30 mg (1 amp) are applied twice a day by intravenous administration by drop as a course up to 14 days.

6. Earlier in case of thrombolysis, reperfusion arrhythmias were considered as a favorable symptom, which indicates a recovery of coronary blood flow. It turned out wrong, as with the introduction of percutaneous coronary intervention it became apparent that reperfusion arrhythmias are associated with an increase in the heart attack zone and reduced contractional myocardial function. In studies edaravone has demonstrated the ability to reduce reperfusion myocardial damage and to prevent the development of reperfusion arrhythmias.

Директор Ситник М.М.
ТОВ «Бартейм прайс»

Номер провайдера 1208
Реєстраційний номер заходу БПР 1007701