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ABSTRACTS

Flowmetric study with hyaluronidase and chondroitin sulfate demonstrates the partaking of endothelial glycocalyx in microcirculation disturbances

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Abstract
Modification of bovine testicular hyaluronidase with chondroitin sulfate altered on the contrary the glycation character of native and modified enzyme with neutral and charged saccharide derivatives. Monoand di- saccharides inactivated more the native enzyme than modified biocatalyst. The glycation with
N-acethylhexosamines showed the counter picture: modified enzyme has been inactivated more then native hyaluronidase. The reason of observed effect was related with interactions between N-acethylhexosamine (with reducing end) glycation agents, on the one hand, and modified hyaluronidase with altered surface electrostatic potential due to modification with chondroitin sulfate, on the other hand. These properties of hyaluronidase derivatives gives us the informative research enzyme test for determination in vivo the dominant glycation agents in bloodstream and their origin. The interaction of hyaluronidase derivatives with hyaluronan fragments and their mixture has confirmed the opportunity of such evaluation. On the rat model of post ischemic perfusion of limb we evaluated the restoration of microcirculation level with help of laser doppler flowmetry method with application of enzyme derivatives and their components. After preventive administration the native hyaluronidase accelerate the microcirculation restoration in post ischemic period of rat limb. Modified enzyme was inhibited with glycocalyx degradation products (with N-acethylhexosamines at reducing end) pronouncedly. The results of laser doppler flowmetry (after different schemes of assayed substance administration) warranted the participation of endothelial glycocalyx in microcirculation disturbances.
Key words: endothelial glycocalyx, proteoglycans, glycasaminoglycans, hyaluronan, chondroitin sulfate, hyaluronidase, glycocalyx degradation products, microcirculation, laser doppler flowmetry, wavelet analysis,optimal reperfusion.

Acute coronary syndrome. What is the place of statins?

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Abstract
The aim of this article is to make a review of current literature concerning the possibility of the reduction of cardiovascular risk in patients with acute coronary syndromes with early statin initiation. Recent meta-analysis and guidelines for the prevention of recurrent coronary events are discussed.

Metabolic syndrome: the problem of the hepatotoxicity in patients treated with statins

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Abstract
In this paper the use of statins in patients with metabolic syndrome is described. Various disorders that increase risk of liver-related complications are shown, and the ways to overcome them are discussed.

Diagnosis and treatment of family combined hyperlipidemia

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Abstract
Family combined hyperlipidemia (FCH) - one of the most common inherited form of hyperlipidemia, and is associated with an increased risk of CHD. In clinical practice, the disease often goes unrecognized, leading to a later appointment treatment. The article describes the diagnosis and treatment FCH in families. Presented research data demonstrating the characteristic of the disease indices of lipid disorders and transportation system
Keywords: ischemic heart disease, lovastatin, family combined hyperlipidemia, triglycerides, cholesterol.