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MECHANISMS OF NITRIC OXIDE PARTICIPATION IN THE DEVELOPMENT OF PATHOLOGICAL PROCESSES CARDIO – VASCULAR SYSTEM

Currently a number of studies examining the role of nitric oxide and various isoforms of NO-synthase in the development and regulation of physiological and pathological processes. However, some mechanisms involving of NO-synthase isoforms in particular inducible NOS in the pathology of cardiovascular diseases poorly understood. Positive or negative influence on the activation of iNOS structural and functional state of cardiomyocytes depends on the amount of nitric oxide, the duration of its products as well as the conditions under which it is synthesized, in particular, under hypoxic conditions. To reduce the appearance of hypoxic myocardial damage in

cardiovascular diseases applies modern medicines. However, the mechanisms of action for many of it are not enough or not clear understood. According to the theoretical and experimental data of the pathogenesis of myocardial disturbances may be useful drugs which reduce the intensity of the formation of free radicals, eliminate the prolonged overproduction of nitric oxide and, consequently, prevents the destruction of cardiomyocytes. Therefore, the main task of theoretical medicine and clinical practice is the investigation and development of drugs that would eliminate or reduce the structural and functional damage to the myocardial cells.