

Formation of mitochondrial apparatus of contractile cardiomyocytes during normal and hypoxic injury of cardiogenesis

Ivanchenko M.V., Tverdokhlib I.V.

State institution “Dnipropetrovsk Medical Academy of the Healthcare Ministry of Ukraine”

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Summary. Changes of cardiomyocytes mitochondrial apparatus can be marked as the main factors which are the basis of various forms of cardiovascular disease, but the dynamics of morphogenetic rearrangements heart mitochondria are poorly researched under normal conditions and under the influence of harmful factors. Mitochondria of contractile cardiomyocytes are different in their morphology and localization in the cell, the biochemical properties and are able to form differently association with other intracellular structures. Question of the relationship between function and heterogeneity of regional specialization of mitochondria and the realization of the heterogeneity in the cell and the degree of their dependence on the disease during ontogeny is important and relevant. There are relatively few ultrastructural studies that investigate adaptive techniques and alternative processes in the mitochondria of atrial and ventricular myocardium under prenatal hypoxia during the development of the myocardium. It is interesting to find mechanisms for the implementation of the ultrastructural changes in the mitochondrial apparatus and extracellular tissue levels in hypoxic conditions on the stages of ontogeny.

Key words: myocardium, mitochondrial ultrastructure, cardiogenesis, rats, hypoxia.

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