



**ACADEMICA**  
**An International  
 Multidisciplinary  
 Research Journal**  
 (Double Blind Refereed & Peer Reviewed Journal)



**DOI: 10.5958/2249-7137.2021.02328.4**

**PECULIARITIES OF HEMORHEOLOGICAL DISORDERS IN THE  
 PATHOGENESIS OF MICROCIRCULATOR DISORDERS OF THE  
 LIVER DURING THE DEVELOPMENT OF HYPOXIC HYPOXIA**

**Khamrakulov Tulkinjon Zokirovich\*  
 Shermatov Rasuljon Mamasiddikovich\*\*  
 Khasanov Fazlidin Sharobitdinovich\*\*\***

\*Candidate of Medical Sciences,  
 Head of the Department of Fundamentals of Pathology,  
 Fergana Medical Institute of Public Health, UZBEKISTAN  
 Email id: tolqinjon.xamroqulov.66@mail.ru

\*\*Candidate of Medical Sciences,  
 Head of the Department of Pediatrics,  
 Fergana Medical Institute of Public Health, UZBEKISTAN

\*\*\*Assistant,  
 Head of the Department of Fundamentals of Pathology,  
 Fergana Medical Institute of Public Health, UZBEKISTAN

**ABSTRACT**

*The experiments were carried out on 50 white rats of a mixed population with an initial weight of 150-220 grams, kept in a vivarium on a standard laboratory diet. The state of the microvasculature of the liver has been studied, and a quantitative assessment of the changes occurring during experimental hypoxic hypoxia has been given. A comprehensive analysis of the state of the rheological properties of blood in close relationship with the properties of the erythrocyte membrane in the dynamics of the development of experimental hypoxia is presented.*

**KEYWORDS:** *Hypoxia, Microcirculation, Hemorheology, Liver.*

**LITERATURE**

1. Voronina T.A. The role of hypoxia in stroke and convulsive states. Antihypoxants. FSBSI “Zakusov Institute of Pharmacology”, Moscow, Russia For citation: Reviews on Clinical Pharmacology and Drug Therapy, 2016, vol. 14, No. 1, pp. 63-70. (In Russ).
2. Goldberg E.D., Dygai A.M., Zyuzkov G.N. The mechanisms of regulation of the blood system in oxygen deficiency and the participation of neural stem cells in adaptation to hypoxia // Bulletin of Siberian Medicine, No. 2, 2006. P. 43-51.
3. Hypoxia. Adaptation, pathogenesis, clinic / Ed. Yu.L. Shevchenko. SPb.: OOO ELBI-SPb., 2000.384 p.
4. Zinchuk V.V., Gatsura S.V., Glutkina N.V. Correction of oxygen transport function of blood in pathology of the cardiovascular system / Monograph. GRSMU. - 2016.-312 p.
5. Zyuzkov G.N. Mechanisms of hematological changes in the posthypoxic period. Bulletin with RAMS, No. 1 (107), 2003. p. 20-23.
6. Lukyanova L.D. Modern problems of hypoxia // Bulletin of the Russian Academy of Medical Sciences. - 2000. -No. 9. - S. 3-12. [Lukyanova LD. Modern problems of hypoxia. Vestnik Rossiiskoi Akademii meditsinskikh nauk. 2000; 9: 3-12. (In Russ).]
7. Lukyanova L.D. Mitochondrial dysfunction as a typical pathological process, the molecular mechanism of hypoxia. Problemy gipoksii: molekulyarnye, fiziologicheskiye I meditsinskiye aspekty. Ed. by LD Lukyanova, IB Ushakov. Moscow: Istoki; 2004:8-50. (In Russ).
8. Ushakov I.B. Hypoxic mechanisms of combined impacts. Problemy gipoksii: molekulyarnye, fiziologicheskiye I meditsinskiye aspekty. Ed. by LD Lukyanova, IB Ushakov. Moscow: Istoki; 2004:297-397. (In Russ).]
9. Shvets D.A. Pathogenetic substantiation of the use of helium-oxygen therapy in the correction of hemorheological and autonomic dysfunctions in hypoxic conditions of obstructive-respiratory genesis // Dis, Cand. honey, sciences. M., -1996. - p. 136.
10. In'tAnker P.S., Noort W.A., Scherjon S.A. et al. Mesenchymal stem cells in human second-trimester bone marrow, liver, lung, and spleen exhibit a similar immunophenotype but a heterogenous multilineage differentiation potential // Haematologica. 2003. V. 88. P. 845-852.
11. Li C., Jackson R.M. Reactive species mechanisms of cellular hypoxia-reoxygenation injury // Am. J. Physiol. Cell Physiol. (USA). 2002. V. 282. №2. P. 227-241.