

229. Title: Experimental substantiation of efficiency of preventive application of the influence of terahertz waves of nitric oxide frequencies onto the disturbed rheological properties of blood
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Abstract: Results of the research are presented that testify to an increase in blood viscosity and infringement of functional red blood cell activity increase their ability for aggregation and deformability in white male rats after sharp immobilisation stress. During preliminary influence on animals of terahertz waves at the frequencies of the molecular spectrum of radiation and absorption (MSRA) of nitric oxide, 150,176-150,664 GHz with 5-, 15- and 30-minute exposition, it was shown that the preliminary irradiation with electromagnetic terahertz waves at the frequencies of the specified range is capable of preventing, depending on time modes, the influence of sharp stress dependent on blood viscosity and functional activity of red blood cells (deformability and aggregation). Five-minute preliminary irradiation with electromagnetic waves at nitric oxide frequencies MSRA was not effective in restoration of blood viscosity and functional activity of red blood cells, however, 15- and 30-min time modes of preventive irradiation with the electromagnetic terahertz waves at MSRA nitric oxide frequencies of 150,176-150,664 GHz completely prevent stress-dependent changes in blood viscosity and red blood cells functional activity.