

Effect Of Infrared Low Power Laser Irradiation On Blood Acid-Base Balance And Respiratory Gases Tension

[Article in Russian]

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Small volume (0.5 ml) of arterial or venous rat's blood was subjected to impulse LPILR ($\lambda = 0.89$ microns) in the light transparent cuvette. In arterial blood, a decrease of the pO₂ (by 15.5 +/- 2.6%) and an increase of the pCO₂ (by 22.0 +/- 4.8%) in respect to initial values, were determined. The acid-base shift from 7.39 +/- 0.02 to 7.34 +/- 0.02 was recorded. Only in few experiments, there were changes of pO₂, pCO₂ and pH in venous blood. Probable mechanism(s) of the mentioned parameters changes are discussed.

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