

INFLUENCE OF HYPOXIC TRAINING ON THE STATE OF PULMONARY HEMODYNAMICS IN ELDERLY PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Abstract. The aim of the study: to find out the effect of hypoxic training on the state of pulmonary hemodynamics in elderly patients with chronic obstructive pulmonary disease (COPD).

Materials and research methods. We examined 42 elderly patients with COPD, stage I-II, without exacerbation, groups A and B, that were divided into a group (21 people) which received interval normobaric hypoxic training and a group (21 people) which received simulated training. Pulmonary hemodynamics was studied using rheopulmonography and oxygen saturation by pulse oximetry. To assess the body's resistance to hypoxia, a hypoxic test was performed with inhalation of a hypoxic gas mixture (12 % oxygen and 88 % nitrogen) for 20 min. The course of interval normobaric hypoxic or simulated training consisted of 10 daily sessions. All studies were conducted before training, immediately after the training course, in a month and three months after the training course.

Conclusions. In elderly patients with COPD, blood circulation in the lungs is associated with the body's resistance to hypoxia. The course of hypoxic training improves blood circulation in the lungs in elderly patients with COPD. At the same time, the beneficial effect of hypoxic training preserves for a month. In elderly patients with COPD, the effectiveness of hypoxic training's influence on blood circulation in the lungs is associated with resistance to hypoxia. At the same time, the greater effectiveness of hypoxic training is observed in patients with lower resistance to hypoxia.

Keywords: COPD, old age, pulmonary hemodynamics, hypoxic training.