CHRONIC COR PULMONALE: MECHANISMS OF PATHOGENESIS AND PRINCIPLES OF THERAPY

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Summary

The mechanisms of decompensation of blood circulation in chronic cor pulmonale (CP) and chronic heart failure (HF), caused by cardio-vascular diseases, are highlighted in this article. The trigger mechanism of edema syndrome development in both CP and HF is the reduction of effective volume of circulating blood. The difference is that in HF patients this happens due to decreasing cardiac output, whereas in CP patients — due to increasing vascular bed capacity as a result of vasodilation and reduced total peripheral vascular resistance. Besides in HF patients a hematocrit is within normal range or below it because of increased circulating blood volume. In CP patients edema often develops on the background of increased hematocrit, i.e. blood concentration. The said peculiarities determine the differences in therapy of CP and HF.

Important role in treatment of CP patients belongs to the management of respiratory failure, especially hypercapnia. Strict control of basis therapy of underlying disease, utilization of fluids infusions, aimed on improvement of pulmonary microcirculation, stimulation of lung ventilation are the major solutions of this task.