RESPIRATORY FAILURE: MECHANISMS OF DEVELOPMENT, EVALUATION METHODS, OXYGEN THERAPY

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Abstract

Respiratory failure is inability of lungs to sustain normal arterial blood gas composition at rest or at moderate physical exercise.

Current article summarizes the mechanisms of respiratory failure, which include obstructive and restrictive lung ventilation disturbances, alveolo-capillary diffusion and pulmonary circulation disorders, and reduction of functioning lung tissue. Respiratory failure is a part of more complex pathology—respiratory insufficiency, where also extrapulmonary mechanisms (such as central regulation of breathing, muscular disorders, blood circulation disturbances) are involved.

Common dyspnea evaluation scales are presented, while (Medical Research Council) MRC scale holds the central place.

Oxygen therapy indications are listed and side effects described, mainly those, associated with carbon dioxide retention and oxygen bronchial and lung tissue toxicity.

Key words: respiratory failure, mechanisms, methods of evaluation, oxygen therapy.

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