

## MANAGEMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE ASSOCIATED WITH HEART FAILURE

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**Background.** Chronic obstructive pulmonary disease (COPD) and heart failure (HF) often coexist, causing a significant burden on patients and healthcare systems. The interaction between these two conditions leads to worsened symptoms, increased hospitalizations, and reduced quality of life. **Objective of the study.** Assessing management strategies for COPD with heart failure to optimize patient outcomes and quality of life. **Material and methods.** A single case of COPD with heart failure was analyzed. Relevant medical records, diagnostic data treatment plans were reviewed. **Results.** A 62-year-old male patient with exacerbated COPD type B with heart failure NYHA II FC and a history of smoking for about 40 years. The patient presents with dyspnea on exertion, exercise intolerance, and exacerbations. He has a height of 175 cm, weighs 80 kg, and has a BMI of 26.1 kg/m<sup>2</sup>. His vital signs were 130/84 mmHg, 78

bpm, 21 breaths/min, and SpO<sub>2</sub> of 91%. Pulmonary function tests indicate moderate airflow limitation, with FEV<sub>1</sub> of 60% predicted and an FEV<sub>1</sub>/FVC ratio of 55%. Echocardiography shows a reduced ejection fraction of 40%. The patient was managed with oxygen therapy, bronchodilators, inhaled corticosteroids, diuretics, and ACE inhibitors. During the follow-up, the patient maintained stable respiratory and cardiac symptoms. **Conclusions.** The management of COPD associated with HF requires a multidisciplinary approach that recognizes and addresses the connection between respiratory and cardiac impairments. A comprehensive management strategy that covers both respiratory and cardiac components is essential to optimize patient outcomes, improve quality of life, and reduce the burden of this challenging comorbidity. **Keywords:** Chronic obstructive pulmonary disease, heart failure.