

# Heart Failure and Chronic Obstructive Pulmonary Disease

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Chronic obstructive pulmonary disease (COPD) and heart disease have accounted for one of the top ten causes of death in Taiwan for many years, which has a great impact on the health of our people, especially in the aging society. The number of patients with COPD and heart failure (HF) is increasing year by year. COPD patients may also have HF, although the symptoms are similar (e.g. fatigue, frequent wheezing, chest tightness, dyspnea, etc.). The clinical diagnosis and treatment of this coexisting is more difficult, and the treatment strategy is different, but is worthy of special attention by clinicians. In view of this, the Taiwan Society of Pulmonary and Critical Care Medicine and the Taiwan Society of Cardiology invited medical experts to co-publish the first edition of the "Manual of Taiwan Expert Consensus for the Diagnosis and Treatment of Coexisting HF and COPD" to provide clinicians and nursing staff as a first-line medical care reference. With the development of evidence-based medicine in the diagnosis and treatment of COPD and HF in recent years, the two societies worked together again this year to set up an editorial working group and hold several consensus meetings, which reviewed the latest international guidelines, evidence-based medical literature and combined clinical experience to build consensus on the identification diagnosis, clinical evaluation and drug treatment guidelines for coexisting HF and COPD. In the consensus, there were several important discussed issues, such as evaluations of COPD with comorbid HF, what kind of bronchodilators, steroids beta-blockers for coexisting HF and COPD, oxygen therapy for HF and COPD, and so on. In addition to an electrostatgram and chest X-rays, the blood N-terminal B-type natriuretic peptide (NT-proBNP) level should be checked when a COPD patient with suspecting HF. While suspecting a HF patient with comorbid COPD, pulmonary function test and follow-up treatments are recommended after the patient has reached a stable period (before discharge or within one month of discharge). Based on the available clinical evidence and the pharmacological characteristics of COPD and HF treatment drugs, the basic prescriptions for both diseases can be safely applied to patients with coexisting conditions without significant side effects. Inhaled long-acting bronchodilators and oral cardioselective beta-blockers have been shown to be safe and tolerated in patients with COPD and HF. High-flow oxygen therapy should not be used in patients with HF and COPD, and oxygen therapy is not beneficial for patients without hypoxemia or right HF. In order to enhance the diagnosis and management of COPD and HF, cooperation between cardiac and chest specialists is even more important.