

The role of continuous positive airway pressure in the treatment of congestive heart failure.

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Congestive heart failure (CHF) is a serious medical condition frequently associated with sleep-related breathing disorders, which remain underdiagnosed and undertreated. Recent studies have provided important insight into the pathophysiology of sleep apnea syndrome in patients with CHF, with potential therapeutic implications. In addition to abolition of sleep apnea, continuous positive airway pressure (CPAP) treatment can improve cardiac function and relieve symptoms of CHF. Postulated mechanisms include beneficial hemodynamic effects on ventricular remodeling, unloading of fatigued respiratory muscles, and neurohormonal modulation. Although medium-term studies using CPAP to treat sleep-related breathing disorders associated with CHF have been encouraging, more definitive data from ongoing large clinical trials are necessary to clarify its therapeutic role.

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