281. ACUPUNCTURE IN THE COMPREHENSIVE MANAGEMENT OF STABLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction. Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of mortality and disability worldwide. Acupuncture is increasingly discussed as an adjunctive therapy. Although its effects on dyspnea and exercise tolerance are widely reported, its impact on objective spirometric parameters remains controversial.

Aim of study. To assess the role and therapeutic potential of acupuncture in the comprehensive management of stable COPD based on current evidence from scientific literature.

Methods and materials. A systematic search and analysis of relevant scientific literature were conducted across PubMed/MEDLINE, Embase, Web of Science, and the Cochrane Library. The scope included original research and publications in specialized peer-reviewed journals focused on acupuncture and complementary medicine. The search covered the period from 2021 to 2026. A comparative analysis of major meta-analyses was conducted.

Results. Fan et al. (Medicine) included 28 RCTs (n=2,130) exclusively in stable COPD. Yu et al. (Heliyon, 2024) analyzed 23 RCTs involving mixed respiratory populations. Zeng et al. (IJCOPD, 2024) evaluated methodological quality and certainty of evidence. Outcomes assessed were FEV1, FEV1/FVC ratio, 6-minute walk distance, dyspnea (mMRC), and quality of life (SGRQ, CAT). Studies restricted to stable COPD demonstrated significant improvements: FEV1 increased by 0.33 L and FEV1/FVC by 6.45%. Functional capacity improved consistently, with 6MWD increasing by 36.93 m (Fan et al.) and 52.39 m (Yu et al.). Quality of life scores improved (SGRQ: −8.39 points), and dyspnea severity decreased. Proposed mechanisms include immunomodulatory effects (regulation of T-helper balance, increased NK-cell activity), anti-inflammatory action (reduction of IL-8, TNF-α, and C-reactive protein), and antioxidant effects via activation of endogenous enzymes such as superoxide dismutase.

Conclusions. Acupuncture demonstrates dual therapeutic potential in stable COPD. Beyond symptomatic improvement, current evidence suggests measurable enhancement of pulmonary ventilation parameters in carefully selected patients. These findings support acupuncture as a complementary therapy with potential pathogenetic relevance in stable COPD.

Keywords. Acupuncture, stable COPD, FEV1, lung function.

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