

Tips from Other Journals

Adult Medicine

1150 Adjunctive Acupuncture Reduces COPD-Related Dyspnea

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Adjunctive Acupuncture Reduces COPD-Related Dyspnea

Background: Dyspnea associated with chronic obstructive pulmonary disease (COPD) is generally progressive over time, and its severity is predictive of survival. As a result, managing dyspnea is considered to be one of the most important parameters in treating COPD. Suzuki and colleagues conducted a prospective randomized controlled trial to evaluate the effectiveness of acupuncture for the treatment of dyspnea in patients with COPD.

The Study: Patients enrolled in the COPD-Acupuncture Trial were randomized to receive real or sham acupuncture treatments on a weekly basis, in addition to their usual daily medication. During each 50-minute treatment period, needles were manually rotated for three to four minutes at each of the following acupuncture points selected according to traditional Chinese medicine theory for bronchial asthma and chronic bronchitis: LU1 (*Zhongfu*) and LU9 (*Taiyuan*) in the lung meridian; LI18 (*Futu*) in the large intestine meridian; CV4 (*Guanyuan*) and CV12 (*Zhongwan*) in the conception vessel; ST36 (*Zusanli*) in the stomach meridian; KI3 (*Taixi*) in the kidney meridian; GB12 (*Wangu*) in the gallbladder meridian; and BL13 (*Feishu*), BL20 (*Pishu*), and BL23 (*Shenshu*) in the bladder meridian.

To be eligible, participants had to have stage II, III, or IV COPD without an exacerbation or medication change in the previous

three months, the ability to walk unassisted, and no pulmonary rehabilitation in the previous six months. Patients were excluded if they had renal failure, collagen disease, cardiovascular disease, or evidence of thyroid or hepatic dysfunction. A six-minute walk test was performed at baseline and after 12 weeks of treatment, with patients reporting their dyspnea on a modified Borg scale of 0 (breathing very well, barely breathless) to 10 (severely breathless). The primary outcome was the change in patients' post-walk dyspnea at 12 weeks compared with baseline, with secondary outcomes including six-minute walk distance and the lowest oxygen saturation recorded during the six-minute walk test.

Results: A total of 68 patients participated in the study. All medications remained unchanged during the study period. After 12 weeks, significant reductions in dyspnea occurred in the real acupuncture group versus the placebo group (difference in Borg scale score = -3.6 versus 0.4 points, respectively; mean difference = -3.58 points; 95% confidence interval [CI], -4.27 to -2.90). By the end of the study, the real acupuncture group also had significantly greater improvement in six-minute walk distance compared with the placebo group (63.5 versus -19.4 m, respectively; mean difference = 78.68 m; 95% CI, 54.16 to 103.21) and in oxygen saturation (3.5 versus -1.6 percent, respectively; mean difference = 4.73 percent; 95% CI, 3.49 to 5.96).

Conclusion: Once-weekly adjunctive acupuncture treatment for 12 weeks significantly improves measures of dyspnea and exercise capacity among patients with COPD.

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Source: Suzuki M, et al. A randomized, placebo-controlled trial of acupuncture in patients with chronic obstructive pulmonary disease (COPD): The COPD-Acupuncture Trial (CAT). *Arch Intern Med*. June 11, 2012; 172(11):878-886. ■