A randomized, placebo-controlled trial of acupuncture in patients with chronic obstructive pulmonary disease (COPD): the COPD-acupuncture trial (CAT).


Author information

1Department of Respiratory Medicine, Graduate School of Medicine, Kyoto University, Japan. masuzuki@meiji-u.ac.jp

Abstract

BACKGROUND:
Dyspnea on exertion (DOE) is a major symptom of chronic obstructive pulmonary disease (COPD) and is difficult to control. This study was performed to determine whether acupuncture is superior to placebo needling in improving DOE in patients with COPD who are receiving standard medication.

METHODS:
Sixty-eight of 111 patients from the Kansai region of Japan who were diagnosed as having COPD and were receiving standard medication participated in a randomized, parallel-group, placebo-controlled trial (July 1, 2006, through March 31, 2009) in which the patients, evaluators, and statistician were unaware of the random allocation. Participants were randomly assigned to traditional acupuncture (real acupuncture group, n=34) or placebo needling (placebo acupuncture group, n=34). Both groups received real or placebo needling at the same acupoints once a week for 12 weeks. The primary end point was the modified Borg scale score evaluated immediately after the 6-minute walk test. Measurements were obtained at baseline and after 12 weeks of treatment.

RESULT:
After 12 weeks, the Borg scale score after the 6-minute walk test was significantly better in the real acupuncture group compared with the placebo acupuncture group (mean [SD] difference from baseline by analysis of covariance, -3.6 [1.9] vs 0.4 [1.2]; mean difference between groups by analysis of covariance, -3.58; 95% CI, -4.27 to -2.90). Patients with COPD who received real acupuncture also experienced improvement in the 6-minute walk distance during exercise, indicating better exercise tolerance and reduced DOE.
CONCLUSION:
This study clearly demonstrates that acupuncture is a useful adjunctive therapy in reducing DOE in patients with COPD.

TRIAL REGISTRATION:
umin.ac.jp/ctr Identifier: UMIN000001277.

Comment in
- Acupuncture for dyspnea on exertion in chronic obstructive pulmonary disease: no blindness, [Arch Intern Med. 2012]
- Reevaluating acupuncture research methods: comment on "A randomized, placebo-controlled trial of acupuncture in patients with chronic obstructive pulmonary disease (COPD)", [Arch Intern Med. 2012]

PMID:
22905352
[PubMed - indexed for MEDLINE]