Comparison of lidocaine and bronchodilator inhalation treatments for cough suppression in patients with chronic obstructive pulmonary disease

馬漢平

Chong CF;Chen CC;Ma HP;Wu YC;Chen YC;Wang TL

摘要

Abstract

Background: This study aimed to assess and compare the effectiveness of lidocaine and bronchodilator inhalation treatments for rapid cough suppression in patients with chronic obstructive pulmonary disease (COPD).

Methods: Prospective comparison study carried out in a tertiary emergency department. Consecutive COPD patients presenting with intractable cough were randomly assigned to receive lidocaine or terbutaline inhalation treatments for cough suppression. Patients with dyspnoea, unstable vital signs, and pneumonia or neoplasm on chest x ray were excluded. A subjective, 10 point questionnaire based cough severity score was used for assessing the outcome.

Results: The final study sample included 127 patients (mean (SD) age, 69.2 (12.1) years; 33.1% women) of whom 62 received nebulised lidocaine and 65 nebulised bronchodilator. The cough severity score was significantly reduced one hour after inhalation treatment with both lidocaine and bronchodilator, with no significant difference in efficacy. Common but mild side effects in the lidocaine group included oropharyngeal numbness and bitter taste, and, in the bronchodilator group, tremor and palpitation. Dyspnoea, dizziness, and nausea and vomiting were equally uncommon in both groups. None of these problems caused any of the patients to discontinue their treatments and no allergic reactions were reported.

Conclusions: Both lidocaine and bronchodilator inhalation treatments are equally effective for short term cough suppression in patients with COPD