

Comparison of 2.5 vs 7.5 mg of inhaled albuterol in the treatment of acute asthma

Emerman CL, Cydulka RK, McFadden ER
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In this randomized, double-blinded study, a comparison was made between 2.5 and 7.5 mg of nebulized albuterol for the treatment of acute asthma. One hundred sixty patients between 18 and 50 years were enrolled in the study and were randomly assigned to receive 2.5 mg or 5 mg of nebulized albuterol every 20 minutes for 3 doses. Spirometry was performed (to measure FEV₁) before the first nebulizer treatment and 40 minutes after the third nebulizer treatment. Improvements in FEV₁ were similar for the low-dose and high-dose groups (50.3% versus 44.6%). Additionally, there was no difference in the admission rate in the low-dose group (43%) compared with that of the high-dose group (39%). The authors conclude that doses of nebulized albuterol greater than 2.5 mg every 20 minutes confer no therapeutic advantage in the management of adults with acute exacerbations of asthma.

[Editor's note: *The sample size was sufficient to exclude a 17% difference in %FEV₁ improvement. The reader is left to determine the clinical significance. This study excluded patients with severe asthma and children, so these results should not be extrapolated to these groups.]*

Mark E Hoffmann, MD

Type of alcoholic beverage and risk of myocardial infarction

Gaziano JM, Hennekens CH, Godfried SL, et al
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Consumption of light to moderate amounts of alcohol has been linked to a reduction of coronary heart disease. This case-control study examined the relationship between risk of myocardial infarction (MI) and type of alcoholic beverage consumed. The study con-

sisted of 340 cases of MI and an equal number of age-, sex-, and community-matched controls. Questionnaires identified alcohol drinkers as those who consumed more than a half drink per day. Beer, wine, or liquor drinkers consumed at least half of their alcohol from 1 beverage type. Fasting lipid profiles were obtained on all subjects.

Compared with nondrinkers, reductions in risk of MI were similar for regular drinkers regardless of type of beverage consumed. High-density lipoprotein levels were significantly higher in all beverage categories compared with nondrinkers. The authors conclude that small to moderate amounts of alcohol reduce the risk of MI, and that this benefit is largely related to increases in high-density lipoprotein levels. They did not identify 1 type of alcoholic beverage as superior to others in risk reduction.

[Editor's note: *Choose your poison. Cheers!]*

Jason D Hunt, MD

For COPD a combination of ipratropium bromide and albuterol sulfate is more effective than albuterol base

Campbell S
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The purpose of this study was to compare the safety and efficacy of the combination of ipratropium bromide and albuterol sulfate with albuterol base alone. In a multicenter, double-blind, 29-day trial, 357 patients with chronic obstructive pulmonary disease (COPD) were assessed at 15, 30, and 60 minutes and hourly up to 6 hours after treatment with study medication on days 1 and 29 of the trial. The primary outcome measure was improvement in FEV₁. The study showed that combination therapy produced a greater peak and mean improvement in FEV₁ compared with albuterol base alone. The overall incidence of adverse effects was larger in the albuterol group than in the combination group. The authors conclude that a fixed combination of ipratropium bromide and

albuterol base is more effective than albuterol base in equivalent doses.

[Editor's note: *The potential benefits of the fixed combination inhaler are outlined in a thoughtful discussion.]*

Bobby Peters, MD

Factors associated with delayed admission to hospital and in-hospital delays in acute stroke and TIA: A prospective, multicenter study

Wester P, Rådberg J, Lundgren B, et al
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A prospective, multicenter, consecutive study was performed using 15 Swedish hospitals during a 1½-month period to determine risk factors for delay in prehospital and in-hospital care for acute stroke and transient ischemic attack (TIA). All patients were included who presented with focal neurologic symptoms of presumed vascular origin within 7 days of symptom onset, were admitted to a stroke unit, and were able to be interviewed within 3 days of admission. Patients were excluded if they had evidence of a symptom cause other than stroke or TIA at discharge. A total of 329 eligible patients were interviewed to determine causes for prehospital and in-hospital delays in obtaining head CT or admission to a stroke unit. Multivariate ANOVA of the data found several risk factors significantly associated with delay in care. These factors included brain infarct, gradual symptom onset, mild symptoms, patients alone at symptom onset or who did not contact anybody, living in a large catchment area, not using an ambulance for transportation, and initially visiting a primary care site.

[Editor's note: *These data, like previously reported data, indicate that public awareness must be elevated substantially if acute stroke intervention is to affect outcomes.]*

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