THE CHOICE OF OPTIMAL BRONCHOLYTIC THERAPY IN VIRUS-INDUCED EXACERBATIONS OF ASTHMA

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Abstract

Respiratory viruses are responsible for about 75 % of all cases of exacerbation in adult asthma patients. There is a positive correlation between seasonal outbreaks of acute viral respiratory diseases and frequency of hospitalizations for asthma exacerbations.

An increase of eosinophylic inflammation of respiratory tract, caused by respiratory viruses, intensifies a production of acethylcholine. This effect makes the use of anti-cholinergic agents reasonable in combination with anti-inflammatory compounds and β2-agonists.

One of highly effective method of treatment of patients with asthma exacerbation is the use of fixed β2-agonist fenoterol and cholinolytic ipratropium bromide combination (Berodual H and Berodual). A combination of pharmacological agents gives additional (synergic) effect, which is more expressed and lasts longer that in each component alone. The combination is safer than β2-agonist monotherapy in patients with concomitant heart diseases. It has superior effect on neurogenic mediator-dependent cholinergic bronchoconstriction. Lower doses of drugs, used in combination, cause less side effects.

Nebulizer use is most effective way of delivery of medicine, which allows to reach higher concentrations of broncholytics in respiratory tract, causing maximum bronchodilation.

Key words: asthma, virus-induced exacerbation, ipratropium bromide, fenoterol, nebulizer therapy.

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