INHALATION THERAPY BY NEBULASER IN CHILDREN WITH ACUTE ASTHMA: EFFICIENCY OF SALBUTAMOL (NEBUTAMOL)

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Summary

Objective: *The aim of this study was to evaluate the efficiency of salbutamol in children with acute asthma depending on use of the delivery device.*

Materials and Methods: *65 children aged 6–12 years with mild to moderate acute asthma were enrolled in this study. Depending on the delivery device (nebulaser, metered dose inhaler + Spacer) all children were divided into two groups: the main (33 children) and the comparison group (32 children). The main group received nebulized salbutamol 2.5 mg (Nebutamol), the comparison group – MDI salbutamol sulphate 100 mg. «Wood asthma score» after each of the three inhaled doses; lung function by the spirometry testing and the duration of treatment in the hospital were performed in all patients.*

Results: *The number of children with «positive» clinical response was significantly higher in the main group after the first dose inhalation Nebutamol (54.5 % of children in the main group versus 31.3 % in the comparison group, $p < 0,05$); determined valid gain peak volumetric exhalation rate (PEF) and of the maximum volumetric exhalation rate of 75 % (MEF75) in the main group of children after the first hour of treatment; patient treatment period was 7.5 days versus 12.5 days in children of comparison group ($p < 0.05$). 56 (86.15 %) patients preferred to use the nebulaser.*

Conclusions: *The method of delivery of nebulized β2-short-acting agonists in treatment of children with acute asthma is effective. Administration of nebulized salbutamol (Nebutamol) can stop an asthma attack effectively in most children with mild to moderate exacerbations, improve bronchial patency of peripheral respiratory tract, shorten hospital treatment of patients.*

Key words: *asthma, exacerbation, children, nebulaser.*

Theoretical and practical J. «Asthma and allergy», 2016, 4

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