

NITRIC OXIDE IN THE CONDENSATE OF EXHALED AIR AT CHILDREN WITH ASTHMA AFTER HYPOXIC ASSAY

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The purpose: to study parameters of stable metabolites of nitric oxide in a condensate of exhaled air in children with bronchial asthma (BA) before and after hypoxic assay (HA).

Stuffs and methods: 23 children with remission of moderate BA in the age from 6 to 16 years were surveyed. All children were in stable state without clinical manifestation of disease. The values of respiratory functional test were within the normal range.

Stable metabolites of integral concentration of nitrites and nitrates investigated by a method of a spectrophotometry before and after HA. HA was carried out for definition of individual sensitivity to hypoxia, for selection of an individual regimen and an assessment of a degree of adaptation to hypoxia. HA consists in an inhalation hypoxic admixtures (12%O₂) during 10 minutes, with gradual decrease of degree SaO₂ to 85-88%.

Results: At the majority of children (14) after HA parameters of metabolites of nitric oxide in a condensate of exhaled air have decreased (from 90,3 Mkm until assay up to 80,5 Mkm after assay), $p < 0,05$. Parameters have remained without change in 5 children. At 4 patients rising NO in a condensate of expired air was marked.

Thus, after HA at the majority of children in remission of BA decrease of integral concentration of nitrites and nitrates in a condensate of exhaled air was detected. This can serve as padding criterion of efficacy of treatment.