THE TREATMENT OF PULMONARY HYPERTENSION IN THE CHILDREN WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Background and aims: Improving the treatment of pulmonary hypertension in children with chronic obstructive pulmonary disease.

Methods: A survey of 70 children, mean age $9,8 \pm 4,5$ months with chronic obstructive pulmonary disease. Pulmonary artery pressure (pLA) was determined before treatment. The 45 patients (main group) received phosphodiesterase inhibitors (FOS) (2 mg/kg/day), the control group (25 children) - angiotensin-converting enzyme (ACE) (dose 0.5 mg/kg/day). In 30, 60, 90 days after initiation of therapy pLA was defined again.

Results: In children of main group pLA was $31,7 \pm 2,3$ mmHg, in the control group $-31,5 \pm 1,98$ mmHg. Patients treated with inhibitors of FOS in 30 days pLA decreased to $9,2 \pm 0,7\%$, which was significantly better than children who received ACE inhibitors ($p < 0,05$). After 60 days in children treated with inhibitors of FOS pLA was $24,47 \pm 1,9$ mmHg. In the control group pLA was $28,68 \pm 1,9$ mmHg ($p < 0,05$). On the 90 day treatment in children of main group pLA was $23,67 \pm 1,6$ mmHg, in the control group $-26,98 \pm 2,3$ mmHg.

Conclusions: In children with chronic obstructive pulmonary disease to effectively reduce the pressure in the pulmonary artery, preventing the progression of hypoxia and fibrosis the phosphodiesterase inhibitors may be used in a dose of 2 mg/kg/day.