

Iatrogenic effects with inhaled bronchodilators  
and corticosteroids

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In recent years, the combined appointment of inhaled synthetic

glucocorticosteroids (beclomethasone, benacort) and  $\beta_2$  adrenergic agonists (berotek, berodual) in the treatment of broncho-obstructive conditions. Preparations, in features of adrenergic agonists, are positioned as selective drugs actions with moderate  $\beta_{one}$  stimulating effect in case of overdose in the form of tachycardia, extrasystole, headache, dry mouth, nausea, reduction blood pressure. In some cases, hand tremors or a mild feeling of anxiety may appear, which do not require treatment. The indication for the appointment of inhaled glucocorticoids is their anti-inflammatory effect, the ability to restore the patient's response to bronchodilators, which makes it possible to reduce the frequency of use of the latter, and a low concentration in blood plasma (up to 0.01 mmol / l). It is believed that a one-time excess of average therapeutic doses leads to a slight decrease in the function of the hypothalamic-pituitary-adrenal system, which does not require any emergency measures, and glucocorticoid treatment should be continued. Hypothalamic function

the pituitary-adrenal system is restored after 1-2 days.

In 2008, 18 patients (12 men, 6 women) aged from 20 to 45 years old with diagnoses of chronic bronchitis, chronic obstructive bronchitis, bronchial asthma, who received constant inhalation therapy with the above drugs in various combinations, applied to the MC. The duration of treatment ranged from 8 months to 6 years. In 10 cases, patients for a long time (over 1 year) used in the treatment only  $\beta_2$  adrenergic agonists.

Examination and diagnosis by the method of vegetative resonance test (ART) revealed the following features in the condition of patients.

Firstly, in all cases there was a pronounced psychological dependence on the presence of the drug and, as a result, inhalations were carried out with minimal signs of bronchial obstruction, often in order to prevent their development, which regularly led to the clinical picture of drug overdose.

Secondly, regardless of the nature of the drug used, in all cases, pronounced degenerative changes in the adrenal cortex were revealed, confirmed by changes in the morphology scale.

Functionally, they were characterized by low potencies of the organopreparation, the predominance of catabolic metabolic processes against the background of tissue acidosis, inhibition of the autonomic reaction in the sympathetic type, deficiency of endogenous glucocorticosteroids, immunodeficiency, mainly in the cellular link.

Thirdly, degenerative processes in the adrenal cortex developed against the background of autoimmune inflammation. Endogenous and synthetic glucocorticosteroids were tested as the main allergen.

Thus, the ART method allows you to identify previously unknown

pathogenetic mechanisms of action of widely used and considered safe drugs. Understanding and taking into account the possible iatrogenic effect of the most common bronchodilator drugs should change the tactics of treating patients with broncho-obstructive processes.

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