

THE USE OF BASIC DRUGS IN THE TREATMENT OF BRONCHIAL ASTHMA IN CHILDREN

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INTRODUCTION

Bronchial asthma is a chronic disease that causes a significant limitation of life, a decrease in social and physical activity. Constant attention to the problem of asthma is also due to the fact that with insufficiently effective treatment, frequent exacerbations of the disease, the quality of life of patients decreases, limiting their vital activity. Severe forms of bronchial asthma are accompanied by impaired functions not only of the respiratory organs, but also of other body systems [13-14]. Disability develops in 7% of officially registered children with bronchial asthma. Currently, this problem has acquired not only medical, but also socio-economic significance. Based on the pathogenesis of bronchial asthma, modern therapy is aimed at eliminating allergic inflammation of the bronchial mucosa, reducing bronchial hyperreactivity, restoring bronchial patency and preventing structural changes in the bronchial wall. Late diagnosis and inadequate therapy are the main causes of severe disease and mortality in patients with bronchial asthma. The choice of treatment is determined by the severity of the course, the degree of control and the period of bronchial asthma. However, in any case, an individual approach is required in the choice of means and methods of treatment [1-3].

In the pharmacotherapy of bronchial asthma, a “stepwise” approach is recommended, which includes an increase or decrease in the amount of therapy depending on the severity of clinical symptoms. In complex therapy, it is also possible to use non-drug methods of treatment, although the effectiveness of some of them is debatable and needs further study. At the same time, it must be remembered that successful treatment of asthma is impossible without establishing a partnership, trusting relationship between the doctor and the patient. Significant progress in the treatment of bronchial asthma was achieved with the introduction of basic (controlling) therapy that affects the chronic allergic inflammatory process in the bronchi, thereby reducing the likelihood of developing bronchial obstruction and the formation of irreversible structural changes in the bronchial wall. The means of basic therapy include: glucocorticosteroids (inhalation and systemic); leukotriene receptor antagonists; prolonged B₂-agonists in combination with inhaled glucocorticosteroids; cromones (cromoglycic acid, nedocromil sodium); prolonged theophyllines; antibodies to IgE [4-6].

MATERIAL AND METHODS

To achieve this goal, the study included children over the age of 3 years (the group of patients consisted of 26 children), with different forms and severity of bronchial asthma. Patients of the main group took L-Montus (montelukast), children of the comparison group ketotifen. The general condition of patients, objective data were assessed, and clinical, laboratory and instrumental studies were carried out.

RESULTS

The use of the drug L-Montus as a basic therapy led to an improvement in clinical parameters, which was characterized by a decrease in shortness of breath, cough, asthma attacks and adverse effects, such as sedation and in the form of neurosis, were not observed in children of younger and older age. These adverse reactions have been observed with ketotifen at therapeutic doses [11,12].

DISCUSSION

Leukotriene receptor antagonists (montelukast, zafirlukast) are the first mediator-specific therapy for AD and represent a new therapeutic class of drugs in the treatment of the disease. The efficacy of leukotriene receptor antagonists has been proven in randomized clinical trials in adults and children with asthma [7,8]. Antileukotriene drugs are of particular interest in pediatric practice as oral nonsteroidal drugs. It's no secret that some patients have "inhaler phobia". In addition, montelukast can be administered once a day, which creates the prerequisites for better compliance [9,10].

CONCLUSION

Leukotriene receptor blockers, in particular L-Montus, alleviates the symptoms of BA and is a drug for the basic therapy of this disease, leads to a significant improvement in control, reduces the frequency of exacerbations of BA caused by a viral infection in children aged 3–5 years. It has an anti-inflammatory effect, complementary to the action of glucocorticosteroids.

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It can be argued that antileukotriene monotherapy is highly effective and acts as an alternative to inhaled corticosteroids in children with mild persistent asthma, but the effect of inhaled corticosteroids on spirometry is more pronounced.

REFERENCES

1. Bronchial asthma in children: treatment strategy and prevention. National program. 5th ed., revised. and additional M.: Originalmaket, 2017.
2. Bronchial asthma in children: federal clinical guidelines. 2017. Russian Union of Pediatricians. Russian Association of Allergists and Clinical Immunologists. Available: <https://www.pediatr-russia.ru/>. Access 20.04. 2019.
3. Guilbert T.W., Bacharier L.B., Fitzpatrick A.M. Severe asthma in children // *J. Allergy Clin. Immunol. Pract.* 2014. Vol. 2, No. 5. P. 489–500.
4. International ERS/ATS guidelines on de nition, evaluation and treatment of severe asthma / K.F. Chung, S.E. Wenzel, J.L. Brozek et al. // *EUR. Respir. J.* 2014. Vol. 43. P. 343–373.
5. Global Initiative for Asthma. Difficult-to-treat and Severe Asthma in adolescent and adult patients. Diagnosis and Management. Pocket Guide for half professional. Available from: <https://ginasthma.org/gina-ebooks>. // Accessed 2019. Apr 20.
6. Polikarpov A.V., Aleksandrova G.A., Golubeva N.A. General morbidity of the Russian child population (0–14 years old) in 2017: statistical materials. Part VI. 2018. 144 p. Available at the link: <https://www.rosminzdrav.ru/ministry/> Access from 04/20/2019.

7. Centers for Disease Control and Prevention. Asthma in the US. Available from: <https://www.cdc.gov/vitalsigns/asthma/>. Accessed 2019 April 20.
8. Asthma status and severity affects missed school days / S.A. Moonie, D.A. Sterling, L. Figgs et al. // *J.Sch. health*. 2006 Vol. 76. P. 18–24.
9. Severe asthma in childhood: assessed in 10 year olds in a birth cohort study / Lang A., Carlsen K.H., Haaland G. et al. // *Allergy*. 2008. Aug. Vol. 63, No. 8. P. 1054–1060.
10. Klykova T.V., Tereshchenko F.M. Prevalence and clinical and allergological features of severe bronchial asthma in children and adolescents in Kazan // *Practical Medicine*. 2009; 35:52-54. 22
11. Stress and quality of life in urban caregivers of children with poorly controlled asthma: a longitudinal analysis / M.H. Bellin, P. Osteen, J. Kub et al. // *J. Pediatric Health Care*. 2015. Vol. 29. P. 536–546.
12. Costs of asthma are correlated with severity: a 1-yr prospective study / P. Godard, P. Chanez, L. Siraudin et al. // *EUR. Respir. J*. 2002, Jan. Vol. 19, No. 1. P. 61–67. Epub 2002/02/15. eng.
13. Centers for Disease Control and Prevention // Asthma in the US. Available from: <https://www.cdc.gov/vitalsigns/asthma/>.
14. Puig-Junoy J., Pascual-Argente N. Socioeconomic Costs of Asthma in the European Union, United States and Canada: A Systematic Review // *Rev. Esp. Salud. publica*. 2017. Vol 91. P. 1-15.