

# OPTIMIZATION OF OUTPATIENT TREATMENT OF BRONCHIAL ASTHMA IN SCHOOL-AGE CHILDREN

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## Abstract

Bronchial asthma is a chronic inflammatory disease of the airways, accompanied by episodes of shortness of breath, coughing, and wheezing. In school-age children, asthma is relatively common and significantly affects their physical and emotional well-being, academic performance, and overall quality of life. Therefore, modern outpatient treatment methods aimed at long-term symptom control and prevention of exacerbations are of great importance.

**Keywords:** Bronchial asthma, children, treatment, inhalers, allergens, physical activity, prevention, maintenance therapy.

## Introduction

Bronchial asthma is one of the most common chronic respiratory diseases in children. The main causes include genetic predisposition, exposure to allergens, frequent respiratory infections, adverse environmental conditions, and emotional stress. In schoolchildren, asthma symptoms may interfere with learning, physical activity, and social development.

The main symptoms include frequent coughing (especially at night), wheezing, chest tightness, and difficulty breathing. Effective outpatient treatment can lead to long-term remission, reduce the frequency of attacks, and allow the child to live a full life.

## Individualized Treatment

As asthma manifests differently in each child, therapy should be personalized. Factors such as age, disease severity, coexisting allergies, and drug tolerance must be considered.

Modern recommendations suggest a stepwise approach to therapy. In mild cases, treatment may be limited to medications used as needed, while more severe cases require regular anti-inflammatory treatment.

## Medication Therapy

The main medications for asthma control include:

- **Inhaled corticosteroids** – to suppress chronic airway inflammation;
- **Short-acting bronchodilators** – to relieve acute symptoms quickly;
- **Leukotriene receptor antagonists** – effective in children with allergic components;
- **Combination therapies** – for persistent asthma.

Using inhalers correctly and consistently greatly improves treatment outcomes. Both parents and children must be trained in proper inhaler techniques.



### Prevention and Non-Pharmacological Measures

Non-drug measures play a vital role in asthma control:

- **Allergen avoidance** (dust, animal dander, pollen, mold);
- **Maintaining clean indoor environments**, using air purifiers;
- **Physical activity** – swimming, walking, and cycling are preferred;
- **Balanced nutrition** – antioxidant-rich foods support the immune system;
- **Psychological well-being** – stress management and psychological support are essential.

It is also recommended to keep a symptom diary and use peak flow meters to assess asthma control.

### Education and Family Involvement

Education of both children and their parents is a critical component of effective treatment. Training includes:

- Recognizing early warning signs of asthma attacks;
- Correct use of inhalers and spacers;
- Emergency response strategies;
- Understanding the importance of treatment adherence.

Collaboration between families, healthcare providers, and school staff promotes successful asthma management in daily life.

### Conclusion

Outpatient treatment of bronchial asthma in school-age children requires a comprehensive and individualized approach. Combining modern medications, preventive strategies, educational programs, and psychological support ensures stable disease control, prevents complications, and improves the quality of life of children. Effective asthma management is possible only through active participation of healthcare professionals and the child's family.

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