

Journal of Advanced Scientific Research (ISSN: 0976-9595)

Vol.5. Issue 3 page 39

Editorial Board Members

Dr. Hazim Jabbar Shah Ali

Country: University of Baghdad , Abu-Ghraib , Iraq. Specialization: Avian Physiology and Reproduction.

Dr. Khalid Nabih Zaki Rashed

Country: Dokki, Egypt.

Specialization: Pharmaceutical and Drug Industries.

Dr. Manzoor Khan Afridi Country: Islamabad, Pakistan.

Specialization: Politics and International Relations.

Seyyed Mahdi Javazadeh

Country: Mashhad Iran.

Specialization: Agricultural Sciences. Dr. Turapova Nargiza Ahmedovna

Country: Uzbekistan, Tashkent State University of Oriental Studies

Specialization: Art and Humanities, Education

Dr. Muataz A. Majeed

Country: INDIA

Specialization: Atomic Physics. Dr Zakaria Fouad Fawzy Hassan

Country: Egypt Specialization: Agriculture and Biological

Dr. Subha Ganguly

Country: India

Specialization: Microbiology and Veterinary Sciences.

Dr. KANDURI VENKATA LAKSHMI NARASIMHACHARYULU

Country: India.

Specialization: Mathematics.

Dr. Mohammad Ebrahim

Country: Iran

Specialization: Structural Engineering

Dr. Malihe Moeini Country: IRAN

Specialization: Oral and Maxillofacial Radiology

Dr. I. Anand shaker

Country: India.

Specialization: Clinical Biochemistry

Dr. Magdy Shayboub

Country: Taif University, Egypt Specialization: Artificial Intelligence

Kozikhodjayev Jumakhodja Hamdamkhodjayevich

Country: Uzbekistan

Senior Lecturer, Namangan State University

Dr. Ramachandran Guruprasad Country: National Aerospace Laboratories, Bangalore, India.

Specialization: Library and Information Science.

Dr. Alaa Kareem Niamah

Country: Iraq.

Specialization: Biotechnology and Microbiology.

Dr. Abdul Aziz

Country: Pakistan

Specialization: General Pharmacology and Applied Pharmacology.

Dr. Khalmurzaeva Nadira - Ph.D., Associate professor, Head of the Department of Japanese Philology, Tashkent State University of Oriental Studies

Dr. Mirzakhmedova Hulkar - Ph.D., Associate professor, Head of the Department of Iranian-Afghan Philology, Tashkent State University of Oriental Studies

Country: India

Specialization: Chemical Engineering, Nanotechnology, Material Science and Solar Energy.

Dr. Neda Nozari

Country: Iran

Specialization: Obesity, Gastrointestinal Diseases.

Bazarov Furkhat Odilovich

Country: Uzbekistan

Tashkent institute of finance

Shavkatjon Joraboyev Tursunqulovich

Country: Uzbekistan Namangan State University

C/O Advanced Scientific Research,

8/21 Thamotharan Street,

Arisipalayam, Salem

Vol.5. Issue 3 page 40

FEATURES OF THE CLINICAL COURSE OF OBSTRUCTIVE BRONCHITIS IN YOUNG CHILDREN

Xusainova Shirin Kamildjanovna

Assistant of department 1- Pediatrics and neonatology, Samarkand State Medical University, Samarkand, Republic of Uzbekistan

Abstract: The article analyzes the issues of terminology, clinical presentation, and diagnostic criteria for obstructive bronchitis in young children.

Keywords: children, obstructive bronchitis, clinic, diagnostic criteria.

The term "bronchial obstruction" refers to a pathological condition that occurs as a result of obstruction of bronchial patency with a subsequent increase in resistance to air flow during ventilation and is characterized by episodes of shortness of breath as a result of bronchoconstriction, inflammatory infiltration, hypersecretion and discrimination of the submucosal glands, edema and hyperplasia of the mucous membrane of the respiratory tract, in particular the bronchi. The syndrome of acute bronchial obstruction in young children has been in the field of close attention of researchers and practitioners for half a century, which is associated with the heterogeneity of its genesis, high prevalence and difficulties in differential diagnosis [1,5]. During the formation of BOS, inflammation of the airways develops with the participation of epithelial and endothelial cells, granulocytes, macrophages, monocytes, and there may be T-cell activation in response to an infectious antigen or allergen. As a result of inflammation, a disturbance in the geometry of small bronchi is formed due to wall thickening, closure of the lumen with mucus and cellular detritus, increased release of proinflammatory cytokines, increased bronchial neuroregulatory hypersensitivity, disruption and of mechanisms parasympathetic hyperreactivity [1,2]. Swelling of the bronchial mucosa by just 1 mm causes an increase in air flow resistance by more than 50% [6]. One of the clinical manifestations of airway hyperresponsiveness is coughing. In young children, due to morphofunctional characteristics, the cough reflex is imperfect. Therefore, with respiratory tract infections in newborns and children in the first months of life, cough is often absent. In addition, it can provoke refusal to eat, regurgitation and vomiting. In some cases, cough does not perform a drainage function [10]. The most important pathophysiological components of acute BOS in children are swelling of the bronchial mucosa, hypersecretion of mucus and bronchospasm. With the protracted nature of SBO, mucosal hyperplasia develops, and with chronic inflammation, typical of BA and bronchopulmonary dysplasia (BPD), fibrosis and sclerosis gradually develop, which indicates a structural restructuring of the bronchi (remodulation) [3, 7, 9].

Thus, the anatomical and physiological characteristics of the respiratory organs and vegetative orientation of young children determine the significant frequency of SBO and the characteristic features of its clinical manifestations. Thus, the leading role in the development of bronchial obstruction in acute asthma is played by

Journal of Advanced Scientific Research (ISSN: 0976-9595)

Vol.5. Issue 3 page 41

pronounced swelling of the bronchial mucosa and hypersecretion of viscous mucus, in contrast to asthma, in which bronchospasm is the basis of bronchial obstruction [3-5]. At the same time, the weak development of bronchial smooth muscles characteristic of young children gives the exacerbation of BA a pronounced "bronchitis" coloration, caused by the hyperproduction of viscous secretions. This masks the essence of the disease and complicates the differential diagnosis with OB, although in some children, already in the first year of life, typical signs of bronchospasm form as the main component of bronchial obstruction [3-5]. Most often and clinically, BOS manifests itself in children of the first years of life, which is due to the morphofunctional characteristics of the respiratory organs: narrowness of the respiratory tract, insufficient elasticity of the lungs, softness of the cartilage of the bronchial tree, insufficient rigidity of the chest, a tendency to develop edema, hypersecretion of viscous mucus, poor development of smooth mucus. bronchial muscles [8-11]. b2adrenergic receptors are widely represented in the respiratory tract and are present on smooth muscle cells, epithelial cells, submucosal gland cells, numerous inflammatory cells, alveoli and presynaptic nerves [2]. The function of the b2-adrenergic receptor depends on the connection with the Gs protein, stimulated by adenylate cyclase, which increases the level of cyclic adenosine monophosphate in the cell; its high content, in addition to relaxing the smooth muscles of the bronchi, suppresses the release of mediators of the immediate hypersensitivity reaction from inflammatory cells (primarily from fat cells), which is important for children with atopy.

After this, the sensitivity of the b-adrenergic receptor to further stimulation decreases. Improving the drainage function of the respiratory tract. To reduce the viscosity of the secretion and its evacuation, in the complex therapy of SBO, various expectorants are used, the selection of which requires an individual approach. Clinically, the degree of bronchial obstruction in various pathologies depends on the ratio of individual components of bronchial obstruction, the presence of genetically determined bronchial hyperreactivity, the characteristics of causative factors and inflammation. The most important pathophysiological components of acute BOS in children are swelling of the bronchial mucosa, hypersecretion of mucus and bronchospasm. With the protracted nature of BOS, mucosal hyperplasia develops, and with chronic inflammation, typical of BA and bronchopulmonary dysplasia, fibrosis and sclerosis gradually develop, which indicates a structural restructuring of the bronchi (remodulation) [7, 8, 11]. The results of our studies showed that obstructive bronchitis was clinically manifested by expiratory shortness of breath, noisy breathing with wheezing exhalation, often heard remotely in 89% of children, a rise in body temperature was observed in 93.7% of children, disturbances in general condition in 94.9%, box percussion sound and emphysematous swelling of the chest were observed in almost all patients, weakened breathing in 18% of children, cough and dry wheezing in 100% of children. Respiratory failure of varying degrees were identified in 97.9%.

X-ray data of the observed children; increased transparency of the lung tissue, horizontal position of the ribs, low location of the diaphragm. When studying the clinical manifestations of obstructive bronchitis in young children, it was revealed

Journal of Advanced Scientific Research (ISSN: 0976-9595)

Vol.5. Issue 3 page 42

that the spastic component of an allergic nature plays a leading role in the genesis of bronchial obstruction. Children are relatively adapted to biofeedback. Physical data is more varied throughout the day. The duration of biofeedback is short-term, especially when the allergen is removed. But it can be long-lasting, and with infectious respiratory failure it is more pronounced. The duration of the infectious process is 1-2 weeks. The pathological process is characterized by cyclicality.

Bibliography

- 1. Germanova O.N. Clinical and immunological features of obstructive bronchitis in children with respiratory tract infections. Sci. Stavropol, 2011. 22 p.
- 2. Mizernitsky Yu.L. Broncho-obstructive syndrome in ARI in young children: differential diagnosis and principles of differentiated therapy / Materials of the V regional scientific and practical conference "Vorontsov Readings. St. Petersburg-2012". St. Petersburg, 2012. R. 130-144. 72
- 3. Gaibullaev Zhavlon Shavkatovich, Khusainova Shirin Kamiljonovna Risk factors and incidence of myocarditis in children after acute bronchial obstruction // jcrr. 2022. No. 1. url: https://cyberleninka.ru/article/n/faktory-riska-i-chastota-formirovaniya
- 4. Khusainova Sh.K., Mukhamadieva L.A., Umarova S.S. Modern ideas about recurrent bronchitis in children. biology va tibbiyot muammolari (https://elibrary.ru/contents.asp?id=44799584) ISSN: 2181-5674
- 5. Shavazi Nurali Muhammad Ugli, Zakirova Bakhora Islamovna, Kuldashev Sardor Furkatovich, Khusainova Shirin Komiljonovna (2020). Optimization of therapy for the recurrent course of broncho-obstructive syndrome in children. Achievements of science and education, (3 (57)), 58-62.