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RELEVANCE AND PREVENTION MEASURES FOR CHRONIC BRONCHITIS

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Abstract
Bronchitis is a pathological condition in which inflammation of the bronchi develops. Respiratory diseases are chronic non-infectious diseases and are one of the most socially and economically significant groups of diseases today. International studies have shown that over the past 10 years the number of patients with chronic respiratory diseases has doubled. In the chronic form, the main cause of development is recognized as smoking. Smokers are diagnosed with the disease 2-5 times more often than non-smokers. Chronic bronchitis differs from acute in its etiology, pathophysiology and treatment methods.

Keywords: Atherosclerosis, prevalence, shortness of breath, healthy lifestyle, prevention.

Introduction

Chronic bronchitis (CB) is the most common chronic nonspecific respiratory disease. Unfortunately, this condition remains poorly understood. As bronchitis progresses, the bronchial walls become damaged by inflammation [1]. Chronic bronchitis is an inflammation of the bronchial tree wall, which can affect various layers. From an epidemiological perspective, chronic bronchitis is a condition characterized by a productive cough lasting for three months over two consecutive years [2]. Respiratory diseases remain a pressing issue. Among the factors leading to the development of broncho-obstructive syndrome, respiratory infections account for 5-40% of cases and occupy a leading position [3]. According to WHO recommendations, bronchitis can be considered chronic if the patient coughs up sputum on most days for at least 3 months in a row for more than 2 years in a row. Chronic bronchitis is divided into primary and secondary [4,5]. The increase in the incidence of chronic bronchitis is currently associated with air pollution by pollutants, vehicle emissions, unfavorable climatic factors (hypothermia and overheating), smoking, an increase in viral (flu, adenoviruses) and infectious diseases (S. pneumoniae, H. influenzae, M. catarrhalis), the significance of which increases sharply during an exacerbation of chronic bronchitis, and the impact of industrial factors [5,7]. The main symptoms of chronic bronchitis are a persistent cough and progressive shortness of breath. One of the characteristic features of chronic bronchitis is the alternation of acute episodes with remission. In developed countries, smoking is the cause of chronic bronchitis and chronic obstructive pulmonary disease in 85% to 90% of cases [6,7]. The first symptoms of bronchitis include chest pain, shortness of breath, a painful cough with copious mucus production, and general weakness. Other symptoms include difficulty breathing, wheezing, soreness and spasms in the throat, fever, and, in rare cases, asthma attacks [7,9]. In recurrent or chronic bronchitis, attention should be paid to the absence or reduction of the frequency of exacerbations

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and blood oxygen saturation [8,10]. By 2016, the incidence of chronic bronchitis was recorded at 251 million people worldwide. According to experts, 3.17 million people died from this disease in 2015, which accounted for almost 5% of deaths worldwide that year. [9,10]. Chronic obstructive pulmonary disease (COPD) is one of the major human diseases characterized by high prevalence, mortality and loss of ability to work [11,14]. The problem of COPD is closely intertwined with socio-economic problems in society, including environmental pollution and smoking [12,15,17]. Exposure to infectious or toxic agents causes swelling of the mucous membrane of the tracheobronchial tree, increased mucus production, and impaired mucociliary clearance [13,15,16].

Objective:

To study the prevalence of chronic bronchitis in middle age. To determine the importance of prevention and the impact of chronic bronchitis on health.

The main manifestations of chronic bronchitis are cough and sputum production. In addition, general symptoms (sweating, weakness, fever, fatigue, decreased performance, etc.) may appear during an exacerbation of the disease or be the result of prolonged chronic intoxication [4,15,17]. Since the main symptom of chronic bronchitis is a persistent cough, it is necessary to rule out other conditions that cause a persistent cough. Another common symptom of chronic bronchitis is developing shortness of breath. The development of shortness of breath is related to the gradual pathological changes that the bronchial tissue undergoes, gradually becoming obstructed [1,4,7]. Due to the increasing prevalence of this pathology, further study is an important task, the solution of which will contribute to the formation of fundamental ideas about the disease. [9,10,17].

Materials and methods of research:

A total of 65 middle-aged individuals with chronic bronchitis, who were being treated in the pulmonology department, were examined. Based on age, the patients were divided into two main groups: All patients underwent a comprehensive clinical examination, taking into account their complaints, anamnestic data, physical examination results, general clinical laboratory tests, and chest X-rays.

Results:

Among the 65 patients examined, men suffered from chronic bronchitis more often (46.6%) than women (26.6%). In men (62.6%), obstructive bronchitis was observed more often than in women (36.4%). Chronic obstructive bronchitis in men often occurred against the background of an aggravated premorbid background. Food allergy was observed in 48.6% of patients, atopic dermatitis in 23.5%, anemia in 40%, formula feeding in 56.8%, and overweight in 29.5%. A BMI greater than the 90th percentile was found in almost one in three patients (27.5%) with obstructive bronchitis. A BMI below the 25th percentile was found in only 19.2% of the study subjects.

Conclusions:

The main symptoms of chronic bronchitis include cough, shortness of breath, and respiratory failure. Diagnosis is based on the characteristic clinical picture, including an analysis of symptoms, patient history, and smoking history. Chronic bronchitis in smokers is particularly prominent, emphasizing

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the connection between chronic bronchitis and smoking. Most scientists suggest that infection plays a significant role in the development of bronchitis, as chronic bronchitis is often a consequence of incompletely treated acute bronchitis [1,17,18]. Primary prevention measures include prohibiting smoking in institutions and enterprises, improving the external environment, prohibiting work in polluted (dusty and gas-filled) atmospheres, ongoing prevention of acute respiratory infections, treatment of nasopharyngeal pathologies, etc. Secondary prevention measures include all actions aimed at preventing the development of exacerbations of the disease [4,16]. CB is a bronchial disease that manifests itself as cough and sputum production on most days for at least 3 months a year and for at least 2 consecutive years, when other known bronchopulmonary or cardiovascular diseases accompanied by chronic productive cough are excluded [5,14]. Chronic bronchitis, clinical and functional studies are essential for the timely diagnosis of the disease [8,14,15]. Therefore, any clinical case whose symptoms fit the concept of "chronic bronchitis" should be comprehensively analyzed to identify the causes of chronic inflammation in the bronchial wall. It is almost always possible to either find its cause (for example, smoking) or identify another (pulmonary or extrapulmonary) pathology causing similar symptoms [2,17,18]. Currently, chronic bronchitis occupies a leading place in the structure of respiratory diseases. It is important to understand the causes and risks of developing chronic bronchitis. A range of research methods is used to diagnose chronic bronchitis. Drug-based and non-drug-based treatments for chronic bronchitis exist and are used. Effective prevention of chronic bronchitis, one of the principles of which is minimizing exposure to risk factors, helps maintain the health of the modern population [5,7,8]. At the most recent International Pulmonology Congress, the European Respiratory Society, in the presence of a productive cough for at least three months a year and not confirmed by changes in pulmonary function, proposed classifying patients into a "zero" or high-risk group for developing COPD [12,17,18]. Preventive medical examinations and timely prevention of complications will help keep the nation healthy and significantly reduce the incidence of respiratory diseases.

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