

ASSESSMENT OF CLINICAL FUNCTIONAL CHANGES AND QUALITY OF LIFE IN BRONCHIAL ASTHMA

Salayeva M.S., Po'latova N.O'

Tashkent Medical Academy, Tashkent, Uzbekistan

Annotation: Asthma, a well-known chronic respiratory disease, is one of the most common global problems, with an estimated total of 300 million affected individuals comprising all age groups and exerting a significant burden on patients and their families. The asthma load report by the Global Initiative for asthma indicates that the prevalence of asthma ranges from 1% to 18% of the population. This disease is a prevalent hyperactive airway disease with physical and emotional impact. Severe asthma is associated with considerable health-related quality of life (HRQoL). The aim of this study is to assess the quality of life through physical, emotional, social and occupational aspects and evaluate the factors affecting HRQoL in patients with asthma.

Key words: Bronchial asthma, health-related quality of life, affecting factors, peak expiratory flow rate (PEFR), peak flow meter spirometry.

Theme actuality: Asthma is a chronic lung disease affecting people of all ages. The pathophysiology of asthma is complex and involves airway inflammation, intermittent airflow obstruction and bronchial hyperresponsiveness. Asthma symptoms typically occur episodically and at any time of day, although it is common for them to appear predominantly at night and during the early morning hours. The most common symptoms are: breathing difficulty, wheezing chest sounds, chest tightness, persistent dry cough. Some people will have worse symptoms when they have a cold or during changes in the weather. Other triggers can include dust, smoke, fumes, grass and tree pollen, animal fur and feathers, strong soaps and perfume.

Purpose of the research: Assessment of clinical functional changes and quality of life in bronchial asthma patients. Assessment of the clinical course of the disease in patients with bronchial asthma.

Materials and methods: Our research was conducted at the multidisciplinary clinic of the Tashkent Medical Academy. Clinical functional changes were conducted among 46 patients with bronchial asthma. The average duration of the disease is 24,2 years. When we analyzed the patients with bronchial asthma, the degree of clinical functional changes in patients increased with the increase of disease. Patients enrolled in the study between 30 and 70 years, diagnosed by a physician to have asthma according to GINA criteria (Global Strategy For Asthma Management And Prevention). We used various questionnaires and instrumental examination methods to assess the quality of life of patients and determine the severity of the disease. We performed electrocardiography of patients to evaluate changes in the heart. We used peak flowmetry and spirometry to determine the degree of respiratory failure and external respiratory activity. Bronchial asthma patients have a high frequency of concomitant diseases, especially cardiovascular diseases.

Results: When we compared the severe persistent degree of BA disease with the mild persistent degree, it was found that shortness of breath – 1,3 times, paroxysmal cough – 1,8 times, sputum difficult to separate with cough – 1,8 times higher. Indicators of obstructive disorders a

significant decrease in peak expiratory flow rate (PEFR) up to $55,6 \pm 6.9\%$ and Lung capacities up to $69.7 \pm 6.4\%$ confirms the nature of clinical signs and obstructive disorders.

PEFR showed a significant decrease from 78% to 35% with the severity of the disease stage in BA patients and an increase in clinical symptoms depending on the level of the disease. This, in turn, significantly affects the quality of life of patients. III, IV level patients had rapid shortness of breath, paroxysmal cough, shortness of breath, restricting self-service and stealing their mental state. According to the electrocardiography results changes in the cardiovascular system were also observed with the depending of the degree of the disease in patients with BA. In the severe persistent degree of the disease compared to the mild persistent degree the excitability disorder is 2 times higher ($15\% \pm 29$), the conduction disorder is 1.1 times higher ($9\% \pm 19\%$), shift of the electric axis to the right was 2.2 times ($4.5 \pm 9.7\%$), P-pulmonale was found to be 4.7 times ($6.7 \pm 32\%$).

Conclusion: It can be concluded that the intensity of clinical symptoms increased with the progression of the disease in BA patients. The severe persistent course of BA is characterized by obvious clinical signs, a significant violation of bronchial permeability, and a violation of heart muscle excitability. Obstructive, restrictive, and mixed type of breathlessness was detected in BA patients, and it was found that most of them are obstructive type disorders. When we studied the relationship between quality of life indicators and the level of ventilation disorders in BA patients, it was observed that all indicators of the quality of life reliably decreased with the obvious manifestation of obstructive disorders. In patients with BA, changes in the cardiovascular system are also observed as the course of the disease worsens.

References:

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