

MODERN NURSING APPROACH TO BRONCHIAL ASTHMA

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The urgency of the problem. Bronchial asthma is an urgent problem in the health sector of our country and the whole world. Despite the improvement of diagnosis and treatment of the disease, the morbidity and mortality rate of bronchial asthma worldwide is increasing year by year. BA affects the quality of life of millions of people of all ages. Increased susceptibility of patients with chronic obstructive pulmonary disease to allergic diseases, environmental pollution, widespread use of antibiotics, serums, and vaccines cause an increase in morbidity and mortality from bronchial asthma.

The purpose of the study. Comparative analysis of activities of approach to patients with bronchial asthma (BA) by nurses.

Materials and research methods. In the study, a comparative analysis of the activities of the nurses working in the Republican Allergology Center, the regional pulmonology center, and QOPs, was conducted for BA patients. For this, seminars were organized for patients and nurses with bronchial asthma. The main tasks of these workshops are to use the peak flow meter, to determine peak expiratory flow through the peak flow meter, and to keep a diary for self-monitoring. It was attended by 2 pulmonologists, 1 allergist, and 1 phtisiatrist doctor. The seminar-training was held twice in the pulmonology center of the Syrdarya region and in the Syrdarya district. 50 nurses and 62 patients from the pulmonology center, 28 nurses and 58 patients from the rural family polyclinic of Sirdarya district took part in it. During the workshop, patients and nurses received extensive information about how patients with bronchial asthma can monitor their health through self-monitoring and keeping a diary.

The results obtained. Teaching the patient how to use the peakflowmeter and how to keep a diary should be the nurse's first priority. In the control of bronchial asthma, it is very important to acquaint the patient with the correct use of the peak flow meter and the rules of daily maintenance, and to form theoretical knowledge about the assessment of his health. The measure of exhalation or maximum expiratory rate is the passage of air through the airways during a full deep inhalation and exhalation, often from the lungs. And the method of measuring this is called peak pressure. Peakflowmetry helps to assess lung function, partially to determine the degree of narrowing of the bronchi and airways. The maximum expiratory velocity during the first minute of deep exhalation compares well with accelerated expiratory volume (OFV1). OFV1 indicator is determined by spirometry. Peak expiratory flow rate is commonly used to diagnose asthma. A normal expiratory flow rate is determined for each patient, and its prognosis is monitored and compared by peak flowmetry. The important point of peakflowmetry is that if the reading is below the norm, it warns of the development of asthma complications. Peak flowmetry provides an objective assessment of the course of asthma. The importance of regular screening twice a day for 2-3 weeks to diagnose the disease in the initial period is of great benefit to the attending physician and the patient, and it closely helps in identifying the triggers that cause an asthma attack and conducting the appropriate therapy.

In particular, if the patient does not achieve 80% better results or improvement in expiratory flow prognosis even after taking broncholytic drugs for 2-3 weeks, it is necessary to start a course of corticosteroids to normalize the peak flowmeter stages. Unfortunately, many patients do not understand what a peak flowmeter is and how to use it.

The "Traffic Light" principle is used to simply estimate the maximum expiratory rate. Accordingly, important indicators are divided into three areas according to the traffic light colors: green, yellow and red.

The green area is a norm indicator. It is a signal that asthma is under control. Asthma is characterized by the absence of specific symptoms, the patient's physical activity, sleep problems, and the ability to take medication independently. A peak expiratory velocity (PSV) reading of 80% to 100% in the green zone is considered good.

Yellow zone - when the indicator in the forecast is between 50% and 80% of the maximum exhalation rate, it means a warning signal that a dangerous situation is approaching. It will alert you to asthma episodes, coughing, wheezing, decreased physical activity, and bothersome nighttime symptoms, and to increase your medication. In this case, it is necessary to contact the attending physician immediately.

The red zone is a strong warning signal. In the red area, the PSV indicates a range below 50%. Rather, it warns you that an asthma attack is imminent. You should immediately start using inhaled bronchodilators and contact your doctor immediately. If your PSV does not return to the yellow or green zone within a short period of time, you should be hospitalized immediately.

How to evaluate peak flowmetry results

Green area: NChT personal record is multiplied by 0.8 when NChT is 500 l/min, where $500 \times 0.8 = 400$ l/min.

All NCS readings above 400 indicate that they are in the green zone.

Yellow area: NChT personal record is multiplied by 0.5 when NChT is 500 l/min, where $500 \times 0.5 = 250$ l/min. If the NChT indicator is less than 250 l/min from 400 l/min.

Red zone: When all NChT readings are below the limit of the yellow zone ie 250 l/min. When it is lower than , it falls into the red zone and it is necessary to apply emergency measures to stabilize breathing immediately.

First of all, when managing BA, a person should rely on self-control. For such a serious work, the patient should be able to be properly trained first of all by the treating physician. Peakflowmetry has been proven to be one of the most reasonable and effective ways to manage BA. Peak flowmetry is the best way to evaluate the function of the respiratory system, especially the bronchi. It is carried out using a special tool - a peak flowmeter.

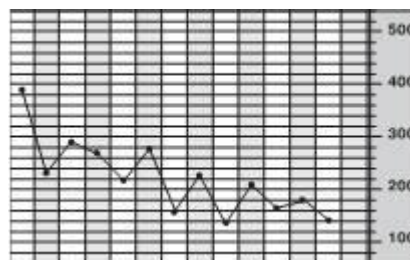
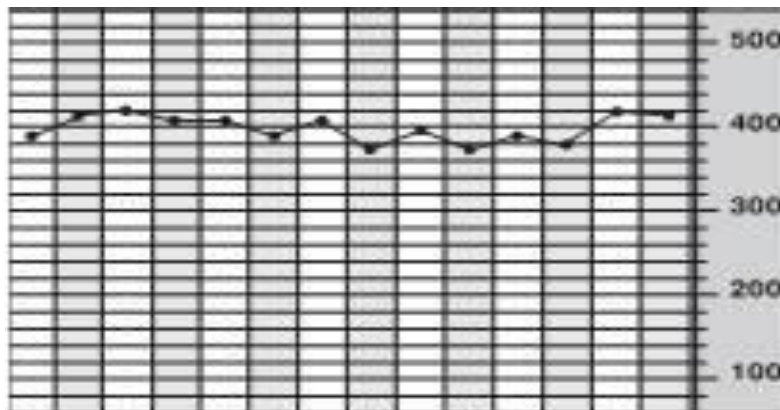
A peak flow meter is a special device for determining the main indicators, which determines the maximum (peak) exhalation rate. The maximum exhalation rate indicates the degree of narrowing of the airways due to the inflammatory process.

All over the world, patients with BA disease determine this indicator in the morning and in the evening when monitoring their health status. For this, each patient has a special diary, and they record these indicators in this diary.

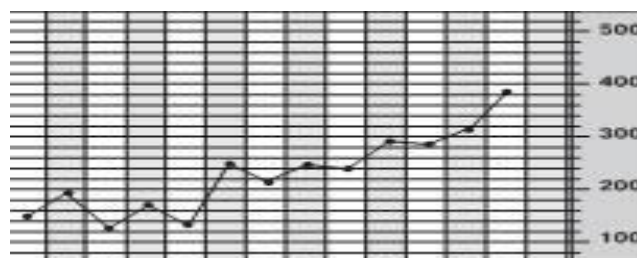


In order for patients to be able to monitor themselves independently, they must keep a diary. For this, patients need to know how to use the peak flowmeter correctly. It is important to record the results in daily and weekly diaries. The diary looks like this:

If you have good control, the graph will appear.



This is a sign of an asthma attack.



In this case, it helps in treatment, PSV increases, asthma symptoms decrease.

This diary has the following advantage:

- ✓ Allergen detection (the PSV indicator drops during the day);
- ✓ Determining the level of bronchial narrowing in asthmatic inflammation;
- ✓ Determination of diurnal fluctuation of respiratory tract permeability;
- ✓ Early detection of BA attack;
- ✓ Assess effective treatment.

If you use the peak flowmeter correctly, the patient should learn all about his disease. This helps to analyze the reasons that lead to deterioration of PSV indicators. It is also important to acquire theoretical knowledge with practical skills. To take the right approach in any situation and to evaluate these actions, working on one's illness allows to have complete information and an idea about it. In addition, they will get information about the possible complications of self-treatment and when to consult a doctor. You can control BA independently and communicate with the doctor easily.

Summary. In order to evaluate the effectiveness of the conducted training, 30 patients were selected from rural family polyclinics of Syrdarya region, and their use of a picfluometer and keeping a diary were monitored for 3 months. The results were analyzed: the number of attacks decreased, the cost of medicine decreased, and the number of visits to the doctor decreased. Medical social economic efficiency has been achieved.

Used literature

1. Аликулова Д. Я. и др. Организация работы «Астма школы» в Республике Узбекистан //Современная медицина: актуальные вопросы. – 2015. – №. 10-11 (43). – С. 88-92.
2. Маматкулов, Бахромжон, Дилдора Яшхибаевна Аликулова, and Ильмира Равкатовна Уразалиева. "ОЦЕНКА КАЧЕСТВА ЖИЗНИ ПАЦИЕНТОВ СТРАДАЮЩИХ БРОНХИАЛЬНОЙ АСТМОЙ." *Научная дискуссия: вопросы медицины* 10-11 (2015): 161-164.
3. Rustamovna A. D., Xasanovna A. S. MODERN PEDAGOGICAL TECHNOLOGIES AS A MEANS OF IMPROVING THE QUALITY OF EDUCATION //Zbiór artykułów naukowych recenzowanych. – С. 176.
4. Алаудинова, Дилноза. "Theoretical approach of oral communication competency." *Общество и инновации* 3.3/S (2022): 147-151.
5. ALAUDINOVA, D. PEDAGOGICAL PRACTICE-TEST RESULTS ASSESSMENT CRITERIA, QUANTITY AND QUALITY MULTIPLIER ANALYSIS. *ЭКОНОМИКА*, (8), 7-10.