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# FREQUENCY OF SPREAD OF BRONCHIAL ASTHMA AMONG MIDDLE-AGED PEOPLE AND EFFECTIVENESS OF TREATMENT.

## Almaty, City Clinical Hospital No. 1

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### ABSTRACT

Bronchial asthma (BA) is a global problem. The incidence of bronchial asthma is growing all over the world. It is among the top ten non-communicable chronic diseases, which are the main cause of death among people, reducing life expectancy by 6.6 years for men and 13.5 years for women.

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**Purpose of presentation of clinical observation.** The aim of the study is to identify the effectiveness of treatment of bronchial asthma among middle-aged people by taking into account the etiological features, risk factors, frequency of its spread and severity.

**Actuality.** Among the diseases of the respiratory system, bronchial asthma occupies a leading place. Worldwide, 339 million people suffer from bronchial asthma. This figure may increase by 400 million by 2025. According to WHO, 15 million people lose their ability to work with asthma every year. The worldwide damage caused by this disease is 1%. According to experts, 250 thousand people die from asthma every year in the world. More than 2 million people with bronchial asthma need treatment in the intensive care unit; over the past 5 years, the number of patients with bronchial asthma in Kazakhstan has increased by 18.6%. In 2018, 105,365 cases of bronchial asthma were registered in Kazakhstan. Of these, 80% were middle-aged patients.

**Methods and research materials.** A study was conducted among patients with bronchial asthma. The study involved 20 patients from the pulmonology and Allergology departments of the City Clinical Hospital No. 1.

**Results.** according to the study method, the oldest of the patients was 74 years old, the youngest was 20 years old, and the average age was 55 years. According to the average age of patients, 55% of the results were obtained by the Department of Allergology and 45% by the Department of Pulmonology. By nationality, 5% of patients were of Russian nationality, and 95% were of Kazakh nationality. According to the address, the incidence of bronchial disease was 70% in Almaty, 25% in Almaty region, and 5% in other regions. According to the percentage report, it was found that patients living in Almaty have a higher incidence of bronchial asthma. It can be noted that patients suffering from bronchial asthma living in Almaty are more likely to be found in men (57% ) than in women (43%) in terms of gender characteristics.

In the specialty mastered by patients, it is possible to determine that among builders there was a high frequency of occurrence of bronchial asthma. They were 15%, the second place was occupied by agronomists, medical workers and students (10%), the smallest percentage were patients in the following specialties: welder, blacksmith, poultry farmer, electrician, educator, correspondent, accountant, driver, cook, economist, security guard (5%). In terms of the duration of the disease, the maximum was 38 years, and the minimum was 3 years. According to the types of bronchial asthma, 50% of patients develop allergic type, 15% non-allergic type and 35% of mixed types of bronchial asthma.

Etiological factors: drug allergy was 36%, seasonal allergy was 36%, food allergy was 7%, mixed (drug, seasonal, food) was 21%. According to the degree of control: controlled - 55%, average controlled-35%, uncontrolled-10%. According to the severity of the disease, intermediate BA was found with a frequency of 20%, mild persistent 30%, moderate persistent 40%, severe persistent 10%. As a result of a study of 20 patients, the drugs used in the treatment of the disease were as follows: the most commonly prescribed "Berodual" 70%, "Salbutamol" 35%, "Seretide" 30%, "Pulmicort" 25%, "Symbicort" 25%, GCS 15%, "Bentalin" 10%.

Hence the conclusion: the type of allergic asthma is higher in frequency among bronchial asthma. This type of allergic asthma can be caused by a variety of etiologies. The main research area of the work is the role of additives in the composition of medicines in the bronchial mucosa.

**Results.** we conducted a prospective study of 20 patients with bronchial asthma in the Departments of Allergology and pulmonology of CCH No. 1 from 15.02 to 26.02.2019.

Research progress:

- average age of the studied patients: - 55 years
- gender: 60% male, 40% female.
- 70% of patients are residents of Almaty, 25% are residents of Almaty region, and 5% are residents of other regions.
- among the population of Almaty, 57% are men and 43% are women.
- 55% of patients with bronchial asthma are treated in the Allergology Department.
- the average duration of morbidity of patients is 11 years, Max - 38 years, min - 3 years.
- 50% of patients with bronchial asthma also have an allergic form of bronchial asthma. Of these, 36% are medicinal(drug), 36% are seasonal, 21% are mixed (medicines, food, seasonal dust), and 7% are food allergies.
- by degree of control: controlled - 55%, average controlled - 35%, uncontrolled - 10%
- by severity of BA: intermediate - 20%, light persistency - 30%. average persistency - 40%, heavy persistently- 10%.
- medications taken: Salbutamol - 35%, Pulmicort-25%, Seretide - 30%, Symbicort25%, Ventalin - 10%, GCS - 15%, Berodual - 70%.

**Conclusions.** 1) as a research paper, nonsteroidal anti-inflammatory drugs and tartrazine, which is used as a synthetic coloring agent in the composition of many drugs, were taken into account as one of the leading factors in the development of allergic asthma.

Tartrazine is a yellow lemon colored synthetic dye, food additive E102. It has the property of inhibiting TSOG-1, but only in small quantities. Aspirin is detected only in patients with a high degree of sensitivity to the development of bronchial asthma. However, this property of tartrazine is that it is recommended to limit foods containing yellow products and salicylates from the diet of all patients.

2) While prescribing hypoallergenic dietary therapy, you should pay attention to the following foods. Very high content of salicylates in the composition: apricots, pineapples, oranges, tangerines, grapes, plums, dried fruits, berries; canned olives, peppers, canned tomato paste and mushrooms; nuts, food spices, Cacos and olive oils, fruit juices, aromatic teas, wines, beer.

Foods that contain high amounts of salicylates: watermelon, melon, grapefruit, kiwi, peach, apple; zucchini, broccoli, cucumbers, blueberries, spinach, nuts, spices (vanilla, cinnamon, bay leaf), coffee.

Foods that contain moderate amounts of salicylates include: pomegranate, pear, lemon, dates, mushrooms, potatoes, beans, carrots, beets, pumpkins; walnuts, Cacos, pumpkin seeds; Cucurbita oil.

Foods that contain low and very low amounts of salicylates: bananas, limes, yellow apples, ripe pears, beans, green beans, onions, cauliflower, celery, kale varieties of potatoes; sunflower seeds, hazelnuts; sugar, salt, garlic, sunflower oil, butter, water, cocoa, milk, decaffeinated coffee, pear juice. Taking into account the above foods, patients are prescribed a diet.

Prescribing medications: care should be taken with drugs containing tartrazine (yellow dye), such as No-shpa, Tavegil.

3) In an allergic form of bronchial asthma, Berodual is considered an inhaler whose effectiveness is higher than that of other drugs.

4) In case of, when aspirin and nonsteroidal anti-inflammatory drugs should not be abandoned, then method of desensitization is carried out. Desensitization is a reducing sensitivity to a drug that is important for the patient to take. The method is based on the pathogenetic mechanism of the disease, i.e. repeated administration of nonsteroidal anti-inflammatory substances 24-72 hours after an attack that occurs after primary administration of nonsteroidal anti-inflammatory substances. Stevenson shows that this method improves the control of the symptoms of rhinosinusitis and bronchial asthma. The therapy scheme is selected individually. It starts with 5-10 mg of aspirin, reaches a dose of 650 mg or more, and then for a long time aspirin is administered in a supportive dose. It is 325-650 mg per day. BA is performed at the suppression stage.

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