EFFECTIVE METHOD OF TREATMENT OF BRONCHIAL ASTHMA IN OUT-PATIENT CONDITIONS

Cand. med. science Sadyrkhanova G. Zh.,
Cand. med. science Mussakhova M. O.,

Intern-therapists:
Makhmudova M. Zh.,
Makhatova A. B.,
Raiymbekova M. M.,
Amankulova M. N.,
Zhumanova B. A.

Kazakhstan, Shymkent
Ahmet Yesevi named International Kazakh-Turkish University

Abstract. In findings was established, Klast, which applied once per day - specific antagonist of leukotriene receptor, is effective in treatment of patients with bronchial asthma. Klast is well tolerated, its safety profile was generally similar a bread pill. The results received by us coincide with the results of application of a montelukast, established in researches and confirm them. Results of the real research allow considering that Klast can become an effective method of a choice among the existing approaches to therapy of bronchial asthma in general.

Keywords: a bronchial asthma, Klast, treatment, control of asthma.

Introduction. Prevalence of bronchial asthma and number of the related hospitalization around the world increase [1,2]. The existing antiasthmatic drug, have a number of shortcomings. Between these are, for example, need of inhalant application, repeated addition or monitoring of its level for plasma [3-5]. Leukotriene are important in pathogenesis of bronchial asthma, causing a bronchospasm, strengthening of secretion of slime and increase of permeability of vessels. Researches of the preparations blocking action, leukotriene showed that they improve control of manifestations of bronchial asthma at adults [6-8]. Klast (montelukast) - the specific antagonist of leukotriene receptors for ingestion. In the conducted researches, it was shown that montelukast at adults, appointed in a dose of 10 mg once per day, for the night, led to improvement of the indicators characterizing extent of control of bronchial asthma, including volume of the forced exhalation in 1 second (VFE1), the level of day and night symptoms [9-12].

The research objective consisted in establishing, in comparison with bread pill, influences of the klast (appointed in the form of tablets in a dose of 5 mg once per day for the night) on the indicators characterizing extent of control of bronchial asthma including on the obstruction of airways, final points estimated by patients and asthma outcomes, and also profile of safety of a medicament.

Materials and methods. Research is conducted in therapeutic, pulmonary offices at 40 patients (male -18, women - 22), at the age of 33-61 years at which VFE1 was 50-85% of due size, reversibility of bronchial obstruction after application inhalation β-stimulators-at least 15%, the level of symptoms of asthma wasn't lower minimum, in advance established in the afternoon, and were daily used β-stimulators. Inhalation corticosteroids in a constant daily dose were applied at 39% of the patients receiving Klast and at 33% of the patients who received placebo. After the 2-week preliminary period of reception of placebo patients received in during 8 weeks once per day, for the night or Klast (a tablet in a dose of 5 mg) or placebo, indistinguishable on appearance.

The size VFE1 was in advance established main indicator of efficiency (a final point) in the real research. Other in advance established final points were: symptoms of bronchial asthma in the afternoon; the peak speed of an exhalation (PSE) in morning and evening hours; a daily dose of the inhalation β-stimulators of short action used as required; number of awakenings at night; the questionnaire intended for an assessment of quality of life; global assessment of results of results of treatment (doctors, patients and integrated assessment); change of quantity of eosinophil in peripheral blood.

Results and discussion. In group of patients, the average size VFE1 increased from 1,85 to 2,01 l receiving Klast, and in group of the accepting placebos - from 1,85 to 1,93l. In comparison with
initial sizes it corresponded to increase in VFE1 in group receiving Klast for 8.23% (from 6.33 to 10.13% at a confidential interval of 95%); \( p<0.001 \) (in comparison Klast and placebo).

Results of this research testify to therapeutic efficiency Klast-the antagonist of leukotriene receptors - at patients with bronchial asthma. Application of a Klast (in the form of a tablet in a dose of 5 mg once per day, for the night) at patients who received or only In - \( \beta \) stimulators used as required, or inhalation corticosteroids, led to reliable improvement of control of manifestations of bronchial asthma. Though degree of expressiveness of the observed dynamics of indicators can be considered moderate, those not less, it is similar to those changes which were received during the researches existing now. In comparison Klast and placebo, I led to reliable positive dynamics of the following VFE1 (the main indicator of efficiency in this research).

The beginning of action of Klast was fast. Medical action of Klast was characterized not only quick start, but also permanent preservation therapy continuation. Data on development of resistance to this medicament weren’t established neither in the present, nor in earlier conducted researches at adults that allows hopes for preservation of efficiency of Klast at long-term treatment of bronchial asthma.

The steady effect of a Klast is revealed in all subgroups of patients and didn't depend on the initial size VFE1. These data are similar to the results which received in other researches and allow hoping that Klast can be applied with effect at a wide range of patients with bronchial asthma. Similarity of the effect observed at the patients both who were using, and not using inhalation corticosteroids specify that by means of Klast is possible to strengthen medical action of this type of therapy. Moreover, application of a Klast allows reaching reliable (in comparison with placebo) reduction of a dose of inhalation corticosteroids what based on the research findings. In comparison Klast and placebo made more reliable improvement of all three groups of the indicators characterizing activity, a symptom and the emotional status (distinctions were compared by initial sizes).

Application of Klast was followed by positive dynamics of some other the indicators characterizing extent of control of bronchial asthma. Throughout the active period of treatment authentically improved an assessment of results of therapy, and also the combined assessment of results of therapy. Also that application of Klast was followed by statistically reliable increase in average percent of days during which wasn't observed exacerbations of bronchial asthma, and also reduction of percent of patients at whom one exacerbation of a disease was noted at least is important.

Frequency of the adverse phenomena of clinical character in groups of the patients accepting Klast or placebo was identical. The adverse phenomena of laboratory character were infrequent, both transitory, and frequency in groups of the patients accepting Klast or placebo are poorly expressed, was identical. In groups of the patients accepting Klast or placebo, there was also identical a frequency of increase of level of transaminase in blood serum. In general, during the period, treatment shipping of Klast was good. Studying of shipping of long therapy for Klast will require further researches. However toxic effects weren't revealed up to dates which were caused by the mechanism of action of Klast.

Conclusions. Thus, as a result research was established that Klast is effective in treatment of patients with bronchial asthma what applied once per day. Klast is well tolerated by patients, its profile of safety was similar to placebo generally. The results received by us coincide with the results of application of a montelukast established in researches and confirm them. In general results of the real research allow considering that among the existing approaches to therapy of bronchial asthma Klast can become the effective and well tolerated by choice method.

REFERENCES


