METABOLIC EFFECTS OF ANTIOXIDANTS IN CHRONIC INFECTIOUS DISEASES

Farmanova Maxtob Alimovna
Bukhara State Medical Institute, Uzbekistan
https://doi.org/10.5281/zenodo.10185065

We followed up 85 patients aged from 17 to 74 years. Standard general, serological, biochemical and statistical methods were used in all patients. Patients according to clinical forms were distributed as follows: primary chronic brucellosis (BCB) - 22 (25,8%) and secondary chronic brucellosis (SCB) - 63 (74,2%). Subcompensation phase was observed in 62,3% of examined patients, decompensation phase was revealed in 37,7%.

Keywords: Chronic brucellosis, clinic, diagnosis, antioxidant system, etiopathogenetic treatment

According to WHO, the annual incidence of brucellosis is 500 million people. According to M. Avijgan et al., the number of patients with brucellosis is actually 10-25 times higher than those who were registered with this disease [1]. According to Academician G.G. Onishchenko, among 100,000 people, the greatest spread of brucellosis was observed in Nepal, the United Arab Emirates, Jordan, Egypt, and Turkey [2]. The etymological state of brucellosis in Russia is unstable and the incidence per 100 thousand of the population is 0.2-0.7 [3]. Among the countries of the Commonwealth, i.e. in Kyrgyzstan [5], Georgia, Azerbaijan [2], Kazakhstan [4], Uzbekistan [2], Tajikistan and Turkmenistan, the incidence of brucellosis remains high, they are among the 25 countries with the highest indicators of the spread of brucellosis [3]. In Uzbekistan, the incidence of brucellosis per 100 thousand population is from 1.8 to 2.8.

In chronic active brucellosis (ChAB), patients complain of periodic body temperature rise, tremors, sweating, malaise, rapid fatigue, muscle, joints, spine pain, headaches, morning stiffness, cold stiffness of hands and feet, dyspeptic symptoms, slowing cognitive function. Clinical, laboratory and functional studies indicate changes in organs and tissues and the presence of multiple focal lesions (fibrosis), as well as lymphatic node lesions. Polyorgan insufficiency, which arises as a result of the systemic effect of brucellas on macroorganism, can lead to a deterioration in the prognosis of the disease. In ChAB, damage to various systems is observed as a result of damage to most organs and tissues.

Various infectious factors faollashtir free radical processes in the body. Polyorgan deficiency, which develops in ChAB, is associated with hemodynamic

disorders from multiple disorders, intensification of lipid perecisyl oxidation (LPO). This requires an improvement in the treatment regimen.

Objective: To evaluate the effectiveness of phosphargine succinate in patients with chronic brucellosis.

Materials and methods: The object of the study were 85 patients aged 17 to 74 years who were treated at the Bukhara Regional Infectious Diseases Hospital.

Results and discussion: According to clinical forms, the patients were distributed as follows: primary chronic brucellosis (BCB) - 22 (25.8%) and secondary chronic brucellosis (ICB) - 63 (74.2%). Patients mainly complained of fever, weakness, headache, loss of appetite, tremor, sweating, and the like. But their meeting was different in primary and secondary chronic brucellosis.

According to DAS28, it was 3.95±0.13 and 4.23±0.12 points in primary and secondary chronic brucellosis. The DAS28 index decreased from 4.4±0.1 points to 2.7±0.1 points after traditional treatment, and after taking phospharginine succinate, from 4.0±0.1 points to 1.08±0.04 points. After traditional treatment, the level of joint damage according to DAS28 decreased: high activity was not observed in patients, moderate activity - in 10.2% of patients, low activity and remission - in 46.2 and 43.6% of cases. 4.3% low activity and 95.6% transition to remission were observed when phospharginine succinate was added to conventional treatment. This indicates the effectiveness of the proposed treatment.

We also evaluated LPO processes in the blood serum of patients with MDA levels. Based on the results obtained, we tried to improve the treatment of CB and for this we used the drug phosphargine succinate, produced in our republic. This drug has antihypoxant and antioxidant properties. Studies have shown it to be more effective than conventional treatment for chronic brucellosis.

Conclusions: Chronic brucellosis is characterized by an increase in the amount of MDA, a weakening of the antioxidant defense system and a decrease in the compensatory capabilities of the antioxidant system, and their changes depend on the severity of the disease. The inclusion of the drug Phosfargin in the treatment of chronic brucellosis leads to early elimination of clinical symptoms.

References:

1. Avijgan M., Rostamnezhad M., Jahanbani-Ardakani H. Clinical and serological approach to patients with brucellosis: A common diagnostic dilemma and a worldwide perspective // Microbial Pathogenesis.- 2019.- Vol.129.- P.125-130.

2. Andreeva L.I., Kozhemyakin L.A., Kishkun A.A. Modification of the method for determining lipid peroxides in the test with thiobarbituric acid // Lab. a business. - 1988. - No. 1. - P.41-43.

3. Brucellosis. The current state of the problem / ed. G.G. Onishchenko, A.N. Kulishchenko. - Stavropol: Gubernia LLC, 2019. - 336 p.
4. Belozerov E.S. Brucellosis / E.S. Belozerov. - L.: Medicine, 1985. -184 p.
5. Valiev A.A., Kasymov I.A., Azimov Sh.R. The prevalence of brucellosis infection in children in the Republic of Uzbekistan. - Pediatrics. Tashkent.- 2010.- №1-2.- P.5-8.