CLINICAL AND BIOCHEMICAL ASPECTS OF BRUCELLOSIS IN MODERN CONDITIONS

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Abstract: The purpose of this work was to study the clinical and diagnostic features of the course of chronic forms of brucellosis. We conducted a clinical diagnostic examination of 60 patients with chronic brucellosis who were hospitalized.

The issue of great theoretical and practical importance is the study of the clinical status of the adult organism of patients with brucellosis in the age aspect. Among the patients with chronic brucellosis examined by us, in 54 (90.0%) patients, the disease began chronically (gradual onset in 10.0%) with high fever in 56 (93.3%), accompanied by chills in 54 (90.0%) and sweating 56 (93.3%). 52 (86.6%) patients also had headaches and weakness.

When the infection was generalized against the background of high temperature, the knee, ankle (35%) and relatively rarely hip (5%) joints, as well as the cervical spine (1%) were more often affected.

Keywords: Chronic brucellosis, clinic, symptoms, Wright-Hedelson

One of the most common zoonoses in the territory of the Republic of Uzbekistan is brucellosis infection. The socio-economic significance of the problem of brucellosis is determined by the peculiarities of the course of this infection with the frequent development of chronic forms, often leading to long-term disability and disability, and the working-age population is the main affected contingent, which is associated with both professional factors and social reasons [1,2].

According to M. Avijgan et al. (2019), according to the WHO fact sheet, although about half a million cases of brucellosis are registered annually, the true incidence is always 10–25 times higher than the reported number of cases [4]. In the book "Brucellosis. The current state of the problem", published by Academician of the Russian Academy of Sciences G.G. Onishchenko and corresponding member. RAS A.N. Kulichenko in 2019, presented a

systematic analysis of the incidence of brucellosis per 100 thousand population in individual countries [9].

Thus, the highest incidence is observed in Saudi Arabia - 6.0-149.5, in Jordan - 25.7-130.0, in Egypt - 0.28-70.0, in Turkey - from 11.9 to 49.5 . According to the same authors, the incidence in China is increasing annually, averaging 4.3, and the number of registered cases in 2015 increased to 60,000 [7,8]. Seven republics of the former Soviet Union: Kyrgyzstan, Georgia, Azerbaijan, Kazakhstan, Uzbekistan, Tajikistan, Turkmenistan are included in the list of 25 countries with the highest incidence of brucellosis worldwide[8].

Thus, in Kazakhstan, the incidence rate per 100 thousand population was 10.0 [6], in Kyrgyzstan 20.5–25.0, in – 42.7–76.4) [5], in Tajikistan for 2000–2014. in some disadvantaged areas of the country, more than a thousand cases of the disease have been registered [3]. In the Republic of Uzbekistan in 2001-2017. the incidence of brucellosis in people varied from 1.8 to 2.8 per 100 thousand population, mainly Surkhandarya - 9.6, Jizzakh - 8.0, Navoi - 7.9, Bukhara - 5.6, Syrdarya - 4.5 and Kashkadarya - 4.3 regions of the republic [2].

The purpose of this work was to study the clinical and diagnostic features of the course of chronic forms of brucellosis.

Material and research methods. We conducted a clinical diagnostic examination of 60 patients with chronic brucellosis who were hospitalized. The diagnosis was established on the basis of clinical and diagnostic data, confirmed by serological tests of Wright, Hedelson and TPHA and bacteriological method. To characterize the patients, we used the classification of N.I. Ragoza, supplemented by V.M. Majidov. Results and its discussion. The issue of great theoretical and practical importance is the study of the clinical status of the adult organism of patients with brucellosis in the age aspect. According to the age structure of patients, we found that in most cases infection with chronic brucellosis is observed among the working age. So the peak incidence falls on the age period from 18 to 30 years and is 40%.

During the primary epidemiological diagnosis of chronic brucellosis in 46.6% of patients, the professional nature of the disease with a contact route of infection was established: 20% - farmers who did not receive specific prophylaxis did not always use meat raw materials; 26.6% - housewives (milkmaids) during care

behind cattle, in contact with sick animals, their secretions. In 8.3% of patients, the alimentary route of infection:

consumption of unboiled milk and raw dairy products (feta cheese, cream, sour cream, etc.). It should be noted that the proportion of patients (54.1%) among the owners of the individual sector remains high.

The main sources of chronic brucellosis among the surveyed were cattle and small cattle. However, the prevailing role in this case belongs to small cattle, which are more sensitive to brucella.

In all patients, the diagnosis was established on the basis of serological studies. The results of the serological reaction.

Wright's reaction in 100% of patients with chronic brucellosis was positive in various diagnostic titers, but dilutions in titers of 1:200 (46.7%) and 1:400 (43.3%) were more common. Heddelson's reaction was positive. Out of 60 patients in 12 (20.0%) patients, the diagnosis was established by bacteriological method. At the same time, growth of Brucella melitensis was found in 8 patients, and Brucella abortus was isolated in 4 patients.

In the course of the work, we revealed a large percentage of unrecognized chronic brucellosis: out of 60 patients under our supervision with an incorrect diagnosis, 35 (58.3%) received treatment. The most commonly misdiagnosed diseases of the respiratory system (ARVI, bronchitis) - 11 (31.4%), lymphadenopathy of unknown etiology - 4 (11.4%), rheumatism - 4 (11.4%) diseases of the liver and biliary system (chronic cholecystitis, cholecystopancreatitis) - 10 (25.5%) Arthritis, sciatica - 6 (17.2%). Misdiagnosis led 58% of cases to late hospitalizations.

As a result of a clinical examination, taking into account the timing of infection and epidemiological history, we found chronic brucellosis with a combined lesion of the osteoarticular and nervous systems in 39 (65%) patients, and with a predominant lesion of the osteoarticular system in 21 (35%) patients. Assessing the severity of the condition of the examined patients, we noted that in patients in most cases chronic brucellosis proceeded in a moderate form (28.3% and 71.7%, respectively). The general well-being of patients with chronic brucellosis, as a rule, did not suffer much, even during a period of high fever, which is a characteristic sign of the chronic brucellosis period of infection.

Complaints at the onset of the disease were varied, such as a feeling of general weakness (89.0%), chills (up to 90%), sweating (up to 91%), various pain sensations (up to 35.0%). Up to 35.0% of patients complained of mild joint pain without objective changes in the joints. For pain in the lumbar spine - 3%, for neuromuscular pain - 1.0% of patients.

Among the patients examined by us with chronic brucellosis, in 54 (90.0%) patients, the disease began chronically (gradual onset in 10.0%) with high fever in 56 (93.3%), accompanied by chills in 54 (90.0%) and sweating 56 (93.3%). 52 (86.6%) patients also had headaches and weakness. The nature of the temperature curves was different. Wavelike (53.0%), febrile (35.0%) and subfebrile (6.6%) types of fever were observed. As our data show, after the start

of antibiotic therapy in 57 (95.0%) patients, the fever subsided on the 4th - 5th day, and in the remaining 5.0% of patients it lasted up to 6 - 7 days. Following the disappearance of the fever, the chill also disappeared. However, sweating in 90.0% of patients with chronic brucellosis persisted longer up to 20 days.

At the height of the febrile period in our patients, we observed a decrease in appetite (in 35%), and occasionally nausea (2%). The tongue is usually moist, slightly coated, the abdomen is soft, painless. 3 patients had constipation.

We noted an increase in the liver to varying degrees in 65.0% (39.0) of patients, of which (20.0%) (8) - the liver was located at the edge of the costal arch by 1-2 cm, in 17.9% (7) - by 2.1 - 3.0 cm. In most patients, the liver was soft or medium density, painless, only in 17.9% (7) of patients, the liver was dense and sensitive to palpation.

Among the examined 60 patients with chronic brucellosis, 43.3% (26) showed an increase in the spleen, arch by 0.5 - 1.0 cm. Moderate splenomegaly was detected in 3.7%) (4). In our patients, we did not observe any particular changes in the kidneys and urinary tract. However, at the height of the febrile period, 8.3% of patients had mild albuminuria (traces). As the temperature dropped, the changes in the urine disappeared. When the infection was generalized against the background of high temperature, the knee, ankle (35%) and relatively rarely hip (5%) joints, as well as the cervical spine (1%) were more often affected.

Clinically, these lesions were manifested as volatile and mild soreness and redness. The pains were short-term, unstable and quickly disappeared, because of which the patients did not pay attention to their localization.

Conclusion: 1. Clinical and epidemiological analysis of chronic brucellosis showed that the clinical picture of chronic brucellosis remains seasonal, men are more likely to get sick, and the level of bacteriological analysis is low (10%). 2. In the clinical course of chronic brucellosis, a chronic moderate course of the disease is noted, arthritis prevails and is transient. Mono- (60%) and polyarthritis (40%) are relatively common.

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