

Promising areas of diagnosis and treatment of opisthorchiasis

M.V. Goryacheva, T.Yu. Travnikova

(Altai State Medical University, Barnaul, Russia)

The problems of diagnostics and treatment of helminthiasis remain relevant in the epidemiology of parasitic diseases of the West Siberian region.

Opisthorchiasis takes the first place in the region in terms of the complexity of diagnostics, the variability of syndromic manifestations and the severity of prognoses and the mass scale of infection (from 60% to 90% in different regions). Opisthorchiasis - oral helminthiasis caused by the trematodes *Opisthorchis felinus* and *Opisthorchis viverrini*, is a natural focal, but quite common disease. In Russia, helminthiasis is widespread mainly in the territories of the Ob, Irtysh, Volga, Kama, and Dnieper basins. Recently, opisthorchiasis has been found in non-endemic regions including North America and Western Europe. According to official statistics, the number of individuals infested by *O. felinus* in Russia exceeds 2 million, but,

cancer research the causative agent of opisthorchiasis attributed to human carcinogens the first group.

Examination and treatment methods

The group surveyed was Group persons with clinical suspicions of opisthorchiasis and negative results of a scatological examination for the presence of helminth eggs.

Opisthorchiasis was diagnosed in three ways:

1. Electropuncture diagnostics (EPD) by the method of R. Voll with using nosodes of helminths recorded in the drug selector (MS) of the hardware-software complex "IMEDIS-EXPERT".

2. Inverse bioresonance diagnostics using micropreparations of helminths.

3. ART with the use of potentiated preparations of helminths from medication selector "IMEDIS". (For a detailed description of the survey options, see the materials of the IV International Conference, Moscow, 1998). In all cases, antibodies to opisthorchiasis were determined in patients by enzyme-linked immunosorbent assay (ELISA) and, after appropriate preparation, scatological examination for opisthorchiasis was carried out by the ether-formol method.

Opisthorchiasis was treated with frequency programs F394, F395, with preliminary testing. The effectiveness of treatment was assessed by a set of criteria: the absence of subjective complaints, manual clinical examination, scatological examination, testing for the presence of a parasite by the above methods.

Results and its discussion

According to modern medical standards, verification of the diagnosis "opisthorchiasis" is possible only using a set of different methods,

taking into account the epidemiological history and establishing the fact of eating potentially infected fish of the cyprinid family. With a combination of clinical and epidemiological data, the final diagnosis can be established only by methods of parasitological studies, which gives the right to use standard chemotherapeutic drugs for the treatment of this helminthiasis - the drug of choice is currently biltricide (praziquantel). But the effectiveness of direct parasitological methods depends on many objective and subjective factors:

egg production of the helminth at the time of the study, the qualifications of the laboratory doctors used in the clinical diagnosis of scatological techniques, the state of the patient's bile ducts: their patency, the preservation of the evacuation function. Therefore, to reliably exclude opisthorchiasis when examining patients, even multiple coproovoscopy or examination of bile samples (which is extremely inhumane in relation to the patient) for the presence of opisthorchus eggs may not be enough.

Enzyme immunoassay (ELISA) used in primary modern laboratory diagnostics of opisthorchiasis, allows to detect in the blood serum of the examined the presence of antibodies specific to the antigens of opisthorchiasis. The sensitivity of the method is sufficient for detecting antibodies to opisthorchus antigens both in the preimaginal and imaginal periods of invasion. But upon contact with antigens of opisthorchis, the peak of the synthesis of class M immunoglobulins (Ig M) falls on 1.5-2 weeks after infection, and after 6-8 weeks it begins to fall rapidly. The peak of the synthesis of class G immunoglobulins (Ig G) is detected 2-3 months after infection and persists for a long time. But with long periods of the disease (according to a number of data after 2 years from the moment of infection), patients often have a significant decrease in the level of specific antibodies - to values below the threshold level, which cannot be determined by modern methods. One of the reasons for this is the binding of antibodies to the eskretorny-secretory antigens of helminths and the formation of circulating immune complexes (CICs), and patients develop tolerance towards the helminth. But with helminthiasis, CICs play a noticeable role in the pathogenesis of the disease, and their circulation in the body correlates with the duration and severity of the pathological process. At the same time, a common disadvantage of ELISA is the possibility of cross-reactions with antigens of other helminths from the group of trematodes, which are close to *O. felineus* in the antigenic spectrum, as well as the possibility of false positive results due to the high reactivity of the organism due to a complex of other causes not associated with helminthic invasion. ...

Of the group of patients examined by us, 152 (79%) showed positive tests for opisthorchiasis. In each survey, all three of the above test methods were used. In all patients, the test results were completely correlated. This fact indicates the possibility of using any of these methods by doctors of the practical level on the basis of the availability of performance and ease of use. In the group of patients with positive tests for opisthorchiasis, only 32% had a positive result, according to ELISA data, which indicates a long period of invasion in the remaining 68% of the subjects. But in all the examined patients, a positive test for opisthorchiasis was verified by scatological methods carried out by

after appropriate preparation of the bile ducts.

The second problem of nosology is the chemotherapeutic method for the treatment of opisthorchiasis. Biltricide is the drug of choice and the recommended standard of use for trematodes. But one cannot ignore the highest toxicity of the drug in relation to the human body: it has been proven that lysis of hepatocytes, an increase in the populations of tissue macrophages and blood monocytes, an increase in titers of native and denatured DNA in blood serum and antibodies to it; dysfunction of the nervous system, disorder of cognitive functions. Against this background, the effectiveness of the drug is limited (repeated courses of treatment are often necessary). According to the test results, we revealed the ineffectiveness of the drug in relation to helminthic invasion in 22% of cases of opisthorchiasis infection. At the same time, biltricide caused a sharp decrease in the normal parameters of CTI on the meridians of the small intestine, liver, nervous degeneration in all examined patients and in 16% of cases on the meridians of epithelial degeneration and the large intestine. In the region, they are trying to use registered herbal preparations for the treatment of opisthorchiasis: ecorsol, populin, beetroot and aspen bark and marsh hodgepodge that are part of them. According to testing, their effectiveness is not the same in patients, and therefore it is difficult to standardize the method of treatment. the bark of aspen and the hill hodgepodge that are part of them. According to testing, their effectiveness is not the same in patients, and therefore it is difficult to standardize the method of treatment. the bark of aspen and the hill hodgepodge that are part of them. According to testing, their effectiveness is not the same in patients, and therefore it is difficult to standardize the method of treatment.

Recently, cases of deliberate refusal of patients from standardized treatment of opisthorchiasis with chemotherapy or herbal medicine have become more frequent due to the high toxicity and, often, allergenicity of the latter, as well as the far from 100% effectiveness of their use. Patients choose treatment resonant frequencies as an alternative to ineffective and dangerous methods. We have treated 10 patients with frequencies according to programs F394 and F395. In all cases, patients were necessarily informed about the standards of treatment and were recruited into the group only when they categorically and consciously rejected the accepted standards. The treatment was carried out after preliminary drainage preparation of the biliary tract in courses of 7-10 sessions lasting 1 hour. At the end of the course, patients were tested for opisthorchiasis, and they were recommended to undergo scatological examination after standard training. In all cases, the patients noted an improvement in their general condition, the disappearance of concomitant symptoms; during clinical and manual examination, the size of the liver returned to normal. Opisthorchiasis after treatment was not revealed in two patients during coprological examination. In one of the patients, with a subjective improvement in his condition, a positive test for opisthorchiasis remains. In the rest of the patients, opisthorchiasis was not tested at the end of treatment. None of the subjects underwent drug therapy. Currently, we continue to dynamically monitor patients and await the completion of the scatological examination of the subjects (since the choice of the timing of the examination remains with the patient).

Despite the modestness of our forecasts, observations led to the following conclusions:

1. Electro-acupuncture diagnostics seems to be promising in screening studies for helminthiasis, including opisthorchiasis.
2. Higher detection of helminthiasis by electropuncture methods diagnostics forces a more thorough approach to the analysis of laboratory

clinical data, and, with concomitant clinical manifestations, requires persistent behavior of the doctor and patient in the process of verifying the diagnosis.

3. Frequency therapy programs F394 and F395 give a positive result in the treatment of opisthorchiasis.

M.V. Goryacheva, T.Yu. Travnikova Prospective directions of diagnosis and treatment of opisthorchiasis // XII