



THE ROLE OF MULTISPIRAL COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF EXINOCOCCOSIS, WHICH IS FOUND IN VARIOUS ORGANS

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ABSTRACT

The problem of diagnosing and treating exinococcosis remains relevant and has a social character. In recent decades, there has been an increase in the number of people with liver exinococcosis. In the Republic of Uzbekistan, 2,300 diagnosed patients are registered per year, there is an increasing trend of incidence of exinococcosis. X-ray diagnostic data of 79 patients with exinococcosis were analyzed. During the examination of 201 patients, various localized suspected patients were analyzed. The number of patients is many organ damage, 19 liver damage and 14 lungs, 12 - kidney and abdominal cavity, 19 - pancreas and spleen. The incidence rate of women is 2 times higher than the incidence rate of more men because they have more frequent contact with pets, homespherma. Among the different age groups of exinococcosis, the spread of taxminane was the same.

Introduction. It is also endemic to Uzbekistan among the countries of Central Asia. The disease is most common in provinces where livestock farming has developed. About 4,000 jarrokhlik practices related to exinokokkoz are held annually in Uzbekistan. Exinococcal disease still remains an urgent problem in medicine. Parasitologists around the world consider exinococcosis a global problem due to the expansion of the areas where this disease is spread. Endemic regions are the North Caucasus, the Baikal region, the northern regions of eastern Siberia, Central Asia. In Germany, France, Austria, Switzerland, up to 1.4 cases per 100,000 inhabitants are recorded annually [9,11]. Early diagnosis of exinococcosis is often a difficult task, since due to the lack of clear signs of the disease, especially in the early period of its development, the cyst is located at the bottom of the organ. Often, patients seek medical attention when the parasitic cyst is significantly enlarged or there are complications such as its proliferation, transition to the biliary tract, abdominal and pleural cavities. The only reliable way to diagnose exinococcosis over the past 50 years has remained Katzoni's skin allergic examination [16,11]. However, these studies have led to the development and widespread introduction into practice of serological tests such as latex agglutination reactions, indirect hemagglutination, and enzyme immunoferment. The positive side of these

reactions is sufficient specificity (65 to 98%), safety for subjects, the ability to re-test those operated on to control antibody titers. The likelihood of using immunological reactions to diagnose a number of helminths depends on the presence of specific antibodies in the blood serum of the stage properties determined by numerous studies. Until recently, one of the most common reactions for the diagnosis of exinococcosis was an allergic test of intradermal Katzoni, proposed in 1912. Long-term observations and literature data have shown that the Katzoni reaction in exinococcosis is characterized by relative specificity and sensitivity [86.B.168-266]. Exinococcus is a parasitic disease caused by the tapeworm *Echinococcus granulosus* or *Echinococcus multilocularis*. *Echinococcus granulosus* mainly forms single-chamber cysts in the liver and lungs. *Echinococcus multilocularis* often leads to the appearance of multi-chamber cysts with the ability to germinate into adjacent tissues. Ultrasonographic studies have the ability to carry out three-dimensional reconstruction of a high-resolution, color Doppler map and ultrasound image, making it possible to identify the cyst itself and determine its characteristic features. With hypoxogenic or anoxogenic formation, the exinococcal cyst is defined by the multi-layered structure of the wall, with the chitin membrane as a hyperoxogenic structure, often with a hypoxogenic layer between the germinative and cuticular layers. On the inner surface of the chitin shell, several hyperoxogenic appendages are often detected. The fibrosis Capsule looks like a hyperoxogenic ring and is separated from the chitin membrane by a hypoxogenic layer that is a lymphatic cleft. Ultrasound examination is one of the most promising methods for diagnosing liver exinococcosis, which in most cases makes it possible to make a diagnosis. However, incorrect negative results of serological reactions and difficulties in differential diagnosis with small cysts and their pseudotumor forms using ultrasound often lead to delayed diagnosis, which leads to incorrect treatment tactics. Computed tomography (CT) is recommended for differential diagnosis between parasitic and nonparasitic cysts. In the presence of giant exinococcal cysts and several lesions, it is difficult to interpret the results of ultrasound. In these cases, ultrasound should be combined with CT [5, 3].

Material and methods. CT data from 20 patients with hepatic exinococcosis were analyzed, in 4 of which they were combined with lung damage. Most - 13 patients - were diagnosed with the disease during screening ultrasound, in which a cyst formation was found in the liver. In 3 patients, a study was conducted on "abdominal enlargement", pain under the right rib (2 patients), eosinophilia, subfebrile condition of uncertain etiology (1 patient). In the study of MSKT Images, The Shape of the cyst, external and internal contours, the thickness and density of the cyst wall, its composition and the sedimentary sex of the calcium salt were evaluated. On computer tomograms, the following signs of exinococcal cysts were identified: thickening of the cyst wall, uneven contours, stratification of parasitic membranes, heterogeneity of the composition, the presence of daughter cysts, peripheral hypodense edge. The density of the structure of cysts varied from 9 to 42 units. H, increased in the final stages of exinococcal disease. The girl's cysts were less dense than the mother's cyst. The solid (dead) exinococcus variant in the ultrasound image (3 patients) was accompanied by an increase in the density in the composition of the parasitic cyst to 36-42 H.

Results and consultation. X-ray diagnostic data of 79 patients with exinococcosis were analyzed. During the examination of 201 patients, various localized suspected patients were analyzed. The number of patients is many organ damage, 19 liver damage and 14 lungs, 12 -

kidney and abdominal cavity, 19 - pancreas and spleen. The incidence rate of women is 2 times higher than the incidence rate of more men because they have more frequent contact with pets, homespherma. Among the different age groups of exinococcosis, the spread oftaxminane was the same.

"Abdominal growth", abdominal pain, abnormal stools, shortness of breath, dry cough, weakness, low - grade fever, eosinophilia-the most common symptoms of exinococcosis occurred due to the localization of the disease and the growth of the parasite, pressure.

In surrounding organs and tissues. 19 (24.05%) patients had complaints, mostly patients in the early stages of development small cysts. Radiation inspection (ultrasound,X-ray) was of a planned nature or was carried out. The diagnosis was confirmed by a morphological - operative method. 58 (73.41%) patient intervention. 21 (26.59%) patients are confirmed on the basis of diagnosed characteristic ultrasound,X-ray, computed tomographic picture macrostructural changes and dynamic monitoring, serological reactions. Studies on computed tomography have been carried out on the device.Siemens" Somatom CR " step tomography," Asteion " computer tomography of Toshiba for spiral.

Reconstruction indicator-5 mm or 4 mm.Contrast spiral computed tomography technique one injection of 300 mg iodine / ml of the 100 mg Omnipac drug was administered, or an Ultravist 300-300 mg iodine / ml in a cubital catheter in a ratio of 2.5-3 ml / SEC. Three scans were carried out: the first was then to start injecting a contrast agent with a delay of 20-30 seconds - to obtain an arterial phase, the second - with a delay of 60-70 seconds - to obtain a venous phase, and the third with a delay of 120 seconds - to shift the parenchymal phase.Obtained metric and densitometric analysis images. The density of organs and tissues was determined in Hounsfield units(Unit HU). In addition to analyzing cross-sectional scanners, we used construction.Multi-plan and three-dimensional redevelopment. Total liver size, cyst size, and intact liver parenchyma size are sequential scans calculated using the Roi Volume program.Objectification of the evaluation of computed tomography data the decision matrix principle was used in the evaluation of indicators informativeness - predictive tests (false negative, true-positive, true - negative, false positive fractions). The informativeness of these signs was assessed - sensitivity, specificity, diagnostic accuracy, positive forecasting and negative tests. it has been assumed that another diagnosis will be made, and as a result, patients have the second right-negative (RO).

Computer data from 19 patients with exinococcosis were analyzed.Liver, in 4 of them they are combined with lung damage.Screening ultrasound, in which the liver determined the formation of a cyst. 3 patients conducted a study."abdominal enlargement", pain in the right hypochondrium (2 patients), eosinophilia, subfebrile condition of indeterminate etiology (1 patient). Analysis of Multispiral computer tomograms made it possible to determine the localization.parasitic cysts in the liver according to the segmental structure, the ratio of parasitic focus to parenchyma, capsule, liver doors, large vessels, inferior vena cava, adjacent organs. When reading, computer tomographic images were evaluated for shape, exterior and.Internal contours, thickness and density of the wall of the cyst, signs of deposition of substances in its composition, calcium salts. On computer tomograms, the following signs of an exinococcal cyst were identified:thickening of the cyst wall, uneven contours, parasitism stratification of membranes, heterogeneity in the composition, the presence of daughter cysts, perifocal hypodenserim. The density of the contents of the cysts varied from 9 to 42 HU.

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