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**ECHINOCOCCOSIS/HIDATIDOSIS TO ANIMALS AND HUMANS IN
THE REPUBLIC OF MOLDOVA**

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Echinococcosis, a parasitic disease in animals and humans, it has been known for millennia. During the archeological excavations in Jerusalem, in 1991, in one of the

graves outside the city David, dating from the reign of King Herod (40-4 BC), a human skeleton was discovered, in the abdominal cavity of which two calcified cysts were found. In a later study it was confirmed that they are Echinococcus granulosus cysts (J. Zias. Death and Disease in Ancient Israel. Biblical Archeologist), 1991, 54, 147-159).

In the Republic of Moldova, echinococcosis is one of the most common parasitosis in both animals and humans, has profound socio-economic implications and presents a priority health problem.

Data on the spread of the invasion of echinococcosis in animals and humans in the Republic of Moldova have been published repeatedly by various scientists. Thus, Сопельченко, Згардан, 1960; Спасский, Андрейко, 1962, indicated the high degree of animal infestation at the slaughterhouse (cattle - 60.6 %; sheep – 98 %, pigs – 66.8 %). In 1962, the decision no. 269 of 4 June "On the measures to eliminate echinococcosis and cenurosis in animals in the kolkhozes and sovkhoses of the republic." As a result of the application of these measures, there has been a decrease in the extent of echinococcosis in cattle to 18-19% (Кутявин, Спасский, 1976), fact attributed to the process of intensification of measures to combat and prophylaxis of this disease in the livestock sector, as well as the construction of industrial farms (Помирко Т. и др., 1983).

But, unfortunately, in the last two decades, there is a marked increase of echinococcosis dynamics in all animal species and remains the focus and concern of parasitologists, of veterinarians and human doctor.

In the last three decades, in connection with the ownership of land by the population, reorganization of zoo technical units, formation of multiple small and medium farms, the dislocation of a large number of animals from complexes to private households has led to a radical change in parasitic fauna. The ratio between the number of animals in the private sector and the public one increased considerably: in the year 1990 the number of cattle in the private sector constituted 16.2 % of the total cattle herd, and in the year 2020 – 84.3 %. This ratio is generally maintained in pigs, sheep and goats.

Of particular interest are, in comparison, the results of parasitological research on the level of echinococcal infestation of adult cattle (4-6 years) and bulls (23-25 months) in different periods of time and in households with different maintenance technologies.

The results of parasitological research in households with various animal maintenance technologies, conducted during 1981-1982 showed that adult cattle were infected with echinococci in 56.9 % of cases, and bulls – in 15.7 % of cases.

Parasitological research conducted during the period 1986-1987 showed that the extent of the invasion with echinococci of adult cattle was 55.8 % of cases, and bulls - 16.8 % of cases.

Parasitological research conducted during the years 2001-2002, after the relocation of a large number of animals from complexes and farms in private households, adult cattle were infested with echinococci in 78.0 % of cases, or with 21.6 % more much as during the years 1981-1982 and 1986-1987, and bulls - in 35.2 % of cases were, respectively, 18.9 % more.

Parasitological research conducted over different periods of time has shown that

the degree of infestation of canine youth from city Chisinau with *Echinococcus granulosus* was 3.3 % in the urban sector and 6.3 % in the rural sector, and of adult stray dogs - of 14.3 % in the urban sector and of 42.7 % in the rural one (Rusu Șt., Chihai O., Anghel T., 2010).

Echinococcosis is one of the most dangerous parasitic diseases, often encountered in the practice of a surgeon in a variety of clinical manifestations. According to the results of the analysis of morbidity due to hydatidosis in humans in the Republic of Moldova, during the years 1980-2019, 5461 diseases were registered, from 40 to 233 cases annually. Out of the total number of illnesses, relapses occurred in 5 % of cases. The hepatic localization of the hydatid cyst was registered in 61.3 % of cases, pulmonary - 28.4 %, renal - 1.0 %, splenic - 0.9 %, in other tissues and organs (bones, intestine, pancreas, encephalon, pericardium, ovaries) - in 2.1 % of cases (Lungu Vera, 2019).

In humans, the treatment of echinococcosis is more often performed surgically, frequently generating recurrences and disability. The situation in the agricultural sector is certain fi that about the high level of cases in humans occasionally operated for echinococcosis, as well as the existence of definitive hosts (dogs) with a high level of infestation.

Therefore, helminthoses also increase the receptivity of host organisms to various pathogens, reducing their protective capabilities. The prevention and control measures currently being undertaken are insufficient, and there is an urgent need to intensify them. In order to improve the situation created, it is necessary to strictly observe the sanitary-veterinary measures for combating and prophylaxis of echinococcosis by animal owners.

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