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P0863 Echinococcus granulosus in the south of Russia: epidemiological features

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Background: Human Echinococcosis is a widely distributed parasitic infection with formation of permanent endemic foci. Dry and hot climate in the South of Russia, a large number of livestock and dogs maintain current foci of disease. These areas are the habitat of all wild animals - definitive hosts of Echinococcosis (wolf, jackal, dog, etc.). High prevalence of echinococcosis in humans constantly is recorded in Karachay-Cherkessia and Kabardino-Balkaria, Astrakhan and Stavropol Territories. Human morbidity in these areas exceeds the average level in Russian Federation 2 times or even more. However, in the neighboring areas (Ingushetia, Chechnya, Rostov region), with the same conditions for the implementation of the full life cycle of parasite, the incidence of Echinococcosis is missing or significantly below average in Russian Federation.

Objectiv of the study is to determine the reasons of variability in the incidence of Echinococcosis population on the territories with similar climatic and household conditions in southern Russia.

Materials/methods: During the period from 2008 to 2016 we performed a retrospective analysis of 92 medical records of patients who were surgically treated for echinococcosis in the Republican hospital in Karachay-Cherkessia and 76 patients, operated on Echinococcosis in Regional hospitals #2 in the Rostov region. Also we analyzed 96 epidemiological survey of Echinococcosis cases in the Karachay-Cherkessia and 52 - in the Rostov region. 6210 blood serum of healthy inhabitants of Rostov and Astrakhan regions, Krasnodar Territory, Adygea and Karachay-Cherkessia has been studied by enzyme immunoassay (ELISA).

Results: Analysis of the medical records demonstrated that the number of patients received surgical treatment in hospitals of Rostov region in the period 2008-2016 exceeds the number officially registered. In Karachay-Cherkessia the number of officially reported cases more than number of patients surgery treated for Echinococcosis in the Republican hospital, because patients operated in other territories of southern Russia are also taken into account. The results of sero-epidemiological surveys showed that the percentage of seropositive persons among conditionally healthy population of the Rostov Region two times higher than in Karachay-Cherkessia (1.01% and 2.85% respectively).

Conclusions: The real prevalence of Echinococcosis in some territories of southern Russia higher than official statistics.