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ABOUT ECHINOCOCCOSIS OF ANIMALS IN UZBEKISTAN
(Review Article)

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Abstract:
This article presents the work of scientists in the field of parasitology, especially about the disease of echinococcosis of its development, as well as about the taxonomy of the parasite.

Keywords: Echinococcosis, unoccupied, stopped, intermediate host, bubble, parasite.

Introduction

Echinococcosis is a common parasitic disease and plays a crucial role in causing great economic damage to the livestock industry. In our lifestyle, science and practice, it has been found that with this disease, sheep, goats, cattle, pigs, and people are infected. This disease is characterized by a high risk of other parasitic diseases. An example is the fact that infected domestic animals become ineligible due to damage to the internal parenchymal organs (liver, lungs) and are not allowed for human consumption.

Echinococcosis has an ancient history. There are reports that several thousand years ago, when people were engaged in cattle breeding, animals infected with this disease were infected when they ate their products. Research by scientists in recent years has revealed that echinococcal bubbles are found in some wild predators, such as lions, chauffeurs, wolves, etc., were not morphologically different from those observed in humans.

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Information about the bubble form of echinococcosis has also been presented in research by ancient scientists. For example, Hippocrates observed echinococcal bubbles in humans, pigs, and cattle. It has been identified in humans as the water-filled liver. The death of infected organisms was thought to be caused by the bursting of the same bubbles and the scattering of liquid in it into the abdomen. Aristotle observed the bubbles in the lungs and liver of animals. Florentine, a writer who lived in the third century B.C.E., observed bubbles in the internal organs of pigs and sheep. However, there were no clues as to what the bubbles truly were, that they contained larvae.

According to G.I. Gorina (1930), a history of medicine experts, commented differently on the origin of echinococcal bubbles. Some called it a collection of vodyanka - yellow water, while others argued that humans and animals have the ability to develop blood, the expansion of lymph nodes, the stretching of thin mucus veils, the body's cells and tissues.

In the late 17th century, that is, in 1684, Francesco Redi was the first to prove that meningococcal bubbles were living organisms. In addition to confirming the evidence of the scientist in their experiments, R.S. Pallas (1766) and Guze Jal (1782) found that they were of a parasitic nature. Pallas found bud bubbles in the bubbles, and Guze identified hooks in their protoscolexes.

In 1801, S.A. Rudolph discovered that the viscerally granulose larvae period, named after Guze, belonged to the descendants of Echinococcus. He emphasized that this generation consists of 3 species. They were the first to be called Taenia visceralis socialis gronulosus.

Thus, it has been scientifically proven that the bubbles of echinococcus are living organisms and have a parasitic nature.

Bubbles are divided into three types, depending on the structure:

Echinococcus hominis,

Echinococcus veterinarian,

Echinococcus acephalocusticus.

The liquid inside the bubbles contains protoscolexes. Next is herminative and surrounded by external shells. There are two periods of parasite development, of which the larval period is parasitic in all agricultural animals and humans. Batsch (1786) scientifically proved based on his research that mature Echinococcus leads to a parasitic lifestyle in dogs. However, it remains unclear whether the

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echinococcal bubbles and mature Echinococcus found in animals and humans are the same species.

Later, in the middle of the 19th century, S.T. Saybold (1853) experimentally acquired the adult (imaginal) period of the parasite, infecting 12 dogs and 1 fox with echinococcal bubbles found in cattle and sheep. He confirmed on the basis of experience that the larval and imaginal periods of Echinococcus belong to a species, Echinococcus granulosus. The scientist's experience was repeated by F. Kuchenmaster (1853), who came to the same conclusion.

Based on this, K.I. Skryabin and R.S. Schuls (1929) considered the two scientists to be the founders of the study of Echinococcus granulosus and multicers multicers in determining the way parasites develop. These results were proven by several scientists in their experimental studies in subsequent years. In particular, E. Ostrovsky (1860) proved that humans are intermediate hosts. R. Yeukart found that in dogs, two species of echinococcus lead to parasitic life: Echinococcus granulosus and Echinococcus multilocularis.

Echinococcus develops through the main and intermediate hosts. Its main hosts are dogs, wolves and foxes. As the parasite develops in the dog's body. Its eggs go out through the dog feces and stick to its wool. Wool is a favorable environment for the survival and development of echinococcal eggs. Echinococcus is divided into mature and immature forms, similar to other parasites. Mature eggs of a mature parasite fall into the body of animals and humans in different ways when they fall into the external environment. These are cases when agricultural animals graze on pasture, eat vegetables that grow on the ground in humans without washing them, play with a dog, and experience other conditions that cause the body to develop echinococcosis.

Among the internal organs of infected animals, more damage is observed in the liver and lungs. The organs with echinococcal bubbles were atrophied, and their activity was disrupted. Because dogs eat more meat, the echinococcal parasite in their body, that is, in their intestines, matures relatively faster. The disease occurs mainly without clinical symptoms. In cases when the infected organism has many bubbles, the animal becomes skinny, breathing slowly worsens, and in cattle, the return of the clutch decreases. Animals are forcibly slaughtered. Treatment of animals and humans with echinococcosis is carried out only surgically. Animals infected with echinococcosis can be accurately diagnosed by imposing an allergic reaction subcutaneously by the Kazoni method.

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The damage caused by the disease has been studied by our country's scientists N.M. Matchanov, I.X. Scandinavia, and V.M.Sodikov. Sheep with echinococcosis were studied, and on average, each sheep lost 2.3 kg of meat, 0.3 kg of fat, 0.1 kg of liver, and 0.4 kg of lung mass. In the spring shear, 150 grams of wool and 90 grams of wool in the fall were taken less than for a healthy sheep. It has been observed that every 100 sick sows give 9 fewer head lambs than their healthy counterparts.

When V.M. Sodiqov and others comparatively studied the amount of karakul pelts taken from healthy sheep on a farm; 92.5% of the pelts from healthy hives were obtained, while the first class of pelts from the affected sheep was 68.5%.

Arrangements for the annual hygiene of dogs, the main hosts of the disease, in the fight against echinococcosis; The use of preimagonal, 8-time vomiting every 40-45 days will reduce dog damage from 32.1 percent to 1.8 percent next year (Aminjanov Sh.M. 2012). The resulting embryo was allowed to develop in nutrients and then inserted into her womb, where it implanted. In the remaining 4 cases, preimaginal measures are preimaginal hygiene, which is 45 days after without binding the dogs (Aminjanov Sh.M. 2018).

To prevent echinococcosis among domestic animals in the country, a vaccine was created by scientists M.A. Aminjanov and others at the Institute of Veterinary Research. This vaccine was called the "Vaccine Against Echinococcosis of Karakul Sheep" and was patented by IAP 06384 in 2020. The vaccine was tested, and its effectiveness was found to be 80-85%. Animals used by the vaccine have been observed to have lost cases of the disease.

The abstract. In front of scientists, it remains relevant to diagnose the disease in a new way by using new advanced technologies and technologies on innovative approaches to combating and preventing the disease.

It is a challenging process to develop a variety of methods of research to diagnose and prevent measures in accordance with modern requirements for the detection of disease.

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