SECTION XI.
VETERINARY SCIENCES

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BABESIOSIS OF DOGS

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Among the large number of invasive animal diseases, one of the most dangerous is babesiosis. Every year in Ukraine recorded more cases in diseases of dogs with the disease.

Piroplasmosis or babesiosis of dogs – Seasonal dog diseases caused by protozoan parasites of the genus blood of Babesia, carriers of which are ixodid ticks. In dogs, the causative agents of babesiosis are Babesia canis, Babesia gibsoni, Babesia conradae[1]. The main intermediate hosts of B. canis are dogs. After a tick bite, the pathogen enters the bloodstream, where it destroys red blood cells. There are profound changes in the blood - acidosis, hypoglycemia, hypoproteinemia, progressive hemolysis of erythrocytes. The number of red blood cells drops sharply and the hemoglobin of the blood decreases[2].

The most common babesiosis symptoms are hemoglobinuria, anemia of mucous membranes of the eyes and gums, which later become yellowish tint, increased body temperature of the animal (41-42 C), general intoxication and, as a consequence, refusal to feed, animals find it difficult to move, especially suffering hind limbs. When the parasite infects the most damaged parenchymal organs, namely the liver and kidneys.

To diagnose babesiosis , microscopic examination of capillary blood is used, due to which you can see the inclusion of parasites in erythrocytes and outside them, which indicates that the pathogen destroyed the erythrocyte and left it. General and biochemical blood tests are also important indicators in the diagnosis. In the general analysis of blood of sick animals pay attention to increase of ESR, leukocytosis and monocytosis, thrombocytopenia[1]. In the acute course of the disease there is an increase in the content of unconducted white ruby, increased activity of transferases, increased urea and creatinine [3].

To combat the causative agent of babesiosis in Ukraine such drugs as "Pyro-stop" and "Azidin-vet" are used. Also during treatment, measures are taken to relieve intoxication and symptoms of the disease.

A number of complications may occur during the treatment of piroplasmosis. Some of them require a blood transfusion. Indications for this are chronic anemia with hematocrit below 12-15%, thrombocytopenia, leukopenia and hypoproteinemia.

Unfortunately, there are currently no effective prophylactics against tick bites, there are only drugs that protect against its parasitism on the body of the animal.

The greatest activity of mites can be observed in spring (after snowfall and temperatures from 0°C and above), summer (after heavy rains), and autumn (before the first cold weather).

According to the registration of sick animals in the veterinary clinics "Velika Vedmeditsa" and "Red Fox" in Kyiv, the first reported cases babesiosis were under temperature conditions around 0°C, sunny, but wet weather.

Conclusion. Babesiosis of dogs is an urgent problem that needs to be studied more widely. In Ukraine, there is an urgent need to develop the latest diagnostic methods for the diagnosis, treatment and prevention of piroplasmosis. To improve the diagnosis of certain types of pathogen babesiosis should take into account all the symptoms of the animal and perform additional studies on the specific identification of the pathogen for the appointment of the appropriate protocol of care.

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