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EMERIOSIS OF RABBITS (LITERATURE ANALYSIS)

*Sh.I. Ergashov**Student - Samarkand State University of Veterinary Medicine, Livestock and Biotechnologies E-mail: ergashovshaxram@gmail.com**A.M.Eshqorayev**Assistant - Samarkand State University of Veterinary Medicine, Livestock and Biotechnologies E-mail: eskoraevaskad@gmail.com*

Annotation. This article presents literature information about Eimeria, a parasitic disease of rabbits, and recommendations for diagnosis and prevention of the spread of the disease.

Key words: Sporozoa, eimeria, coccidia, oocyst, invasion, diarrhea.

Аннотация. Ушбу мақолада қуёнларнинг паразитар касаллиги бўлган эймериоз ҳақида адабиёт маълумотлари келтирилган, касалликнинг тарқалиши диагностикаси олдини олиш бўйича тавсиялар баён қилинган.

Калит сўзлар: Спорозоа, эймериоз, кокцидия, ооцист, инвазия, диарея.

INTRODUCTION. One of the reforms implemented in livestock breeding in recent years is the development of private agrofarms. But in addition to all the opportunities created to increase the number of livestock and increase their productivity, there are also factors that prevent them. Among them are various parasitic diseases that are common among farm animals in all regions. These diseases cause some economic damage to farms. A decrease in the quantity and quality of meat, milk, fat, wool products in animals affected by the disease, damaged organs (liver, lungs, stomach, intestines, etc.) for meat products or in animals that are forced to be slaughtered, even the entire meat product becomes unusable, exposed to the disease. The costs of treatment for infected animals and the death of those that cannot be treated indicate the great economic damage caused by parasitic diseases to farms.

All of the above require agrofarm managers and veterinary specialists to thoroughly study parasitic diseases, to be able to protect all types of animals in livestock farms from parasitic diseases.

LITERATURE ANALYSIS AND METHODOLOGY. Rabbit eimeria is an acute and chronic protozoan disease of rabbits, caused by several types of eimeria parasitizing intestinal epithelial cells and liver.

Intestinal and hepatic forms of the disease differ depending on the habitat of coccidia.

Disease spread. Eimeriosis is widespread in all regions of our Republic, especially in rabbit farms of Samarkand, Kashkadarya, Bukhara, Khorezm, and Namangan regions, and it significantly hinders the development of the industry.

The structure of the pathogen. 8 types of *Eimeria* parasitize in the intestines of rabbits, but only 1 type of coccidia live in the bile ducts of the liver.

5 types of these coccidia are often found in rabbit farms of our country.

Eimeria stiedae - oocysts are oval or elliptical, yellowish-brown in color. The membrane is mucous and there is a micropyle at the narrowed pole. After sporulation, residual bodies are formed in the oocyst and sporopore. Sporulation lasts 3-4 days.

Eimeria perforans - oocysts are ellipsoidal or round (circular), with micropyle. Micropilps are not noticeable in small ones. The veil is colorless. Thickness 13.3-30.6: 10.6-17.3 μm . sporulation lasts 24-48 hours.

Eimeria media - oocysts are mostly oval, sometimes elliptical. The micropyle is thickened on the outside and is well felt. The skin is light-yellow or light-brown. After sporulation, residual bodies are formed in the spores. The size of the oocysts is 16.6-33, 3 x 13.3-21.3 μm . Sporulation lasts 3-4 days.

Eimeria magna - oocysts are oval, the micropyle is clearly visible. The membrane is brown, after sporulation residual bodies are formed in the spores. Size 26.6-41, 3 x 17.3-29.3 μm . Sporulation lasts 3-5 days.

Eimeria irrisidua - oocysts are ellipsoidal, expand to the poles, and micropyle is located in that part. Oocysts are light or dark brown in color. Residual bodies are formed in spores. The size is 25.3-47.8x15.9-27.9 μm . sporulation lasts up to 3-4 days.

Epizootology. Rabbit eimeria is an extremely common infestation that occurs in all countries of the globe. In rabbit farms, the disease has an extensiveness level of 70-100%.

Sick and recovered baby rabbits are the source of infection, and adult rabbits serve as carriers of coccidia. In oocyst-contaminated rabbit houses, cages, water, feed, equipment and litter are "facilitating" factors in the spread of infestation. Infestation can also be spread by workers' shoes, brooms, shovels, rodents, wild birds, and insects. Careful keeping of young rabbits, deterioration of the microclimate - environment in rabbit houses, keeping birds of different ages, poor quality of nutrition, cause a sharp decrease in the level of natural endurance (resistance) of the rabbit's body and make it susceptible to diseases.

Although the seasonality of the disease is manifested in spring and autumn, however, in some years, this feature is denied, and the invasion can occur in all seasons of the year.

Clinical signs of the disease. Depending on the location of eimeria in the animal body, 3 forms of rabbit eimeria are distinguished: 1. Intestinal, 2. Liver, 3. Mixed forms. In practice, the mixed form of invasion plays an important role. At the beginning

of the disease, the intestines of the rabbit are damaged, and then the liver is damaged, and as a result, the mixed form begins. After the latent period of infestation, the rabbits become loxased, lose their usual mobility, and lie on their stomachs on the ground. His appetite decreases and he stops eating.

Abdominal cavity swells and gives pain, stool becomes fluid, sometimes mixed with mucus and blood. Sick animals stop growing, lose weight, and the fur coat is wrinkled. Urinary excretion is accelerated (polyuria). Sometimes the secretion of saliva increases, the mucous membrane of the nose becomes catarrhally inflamed (rhinitis) and conjunctivitis develops. With the start of inflammatory processes in the liver, the body becomes sluggish, the rabbit becomes indifferent to the external environment and lies down for a long time. He loses his appetite, his abdomen is swollen, and he feels pain when pressing on his right side. The visible mucous membranes turn yellow, the muscles of the legs and neck become paralyzed and begin to tremble, and they die after 7-10 days.

The clinical symptoms of eimeria in rabbits are best felt when the rabbits are separated from their mothers and fed with normal food.

Pathologic changes. The rabbit's body is very thin. Visible mucous membranes are anemic, sometimes with a slippery color, the main changes are found in the intestines and liver. The blood vessels of the intestinal walls are full of blood. The mucosa of the duodenum and cecum is catarrhal. sometimes hemorrhagic or liphgeric inflammation. When the disease is chronic, the mucous membrane of the small intestine and cecum thickens, densely located nodules containing many coccidia are noted. Purulent lumps are found in some areas of the mucous membrane. When the liver is damaged, changes in it are characteristic, and its volume increases up to 4-7 times. The bile ducts expand, and its walls thicken due to connective tissue. On the surface and parenchyma (core) of the liver, there are nodules the size of a linseed (sometimes the size of a pea), which contain a yellowish cream-like substance. They are surrounded by connective tissue and contain many coccidia.

Make a diagnosis. The initial diagnosis is based on epizootological, clinical and paologoanotomic data. The final diagnosis is determined by microscopic examination of the rabbit dung sample by the Darling method.

Treatment, prevention and control measures. Sick rabbits are separated from healthy ones, kept in optimal conditions and fed on a diet rich in carbohydrates, prescribed necessary drugs.

Sulfadimezin and Norsulfazole per 1 kg of rabbit. 0.03–0.05 g per live weight. 0.5-1 percent solution is prescribed and drunk instead of water for 3-5 days.

Furazolidone - 4.0 mg, sulfadimezin - 150 mg, levomycetin - 40 mg 1 kg. it is mixed with feed based on live weight and made in a group.

Sulfadimezin for 3-5 days, antibiotic (oxytetracycline) for 3-5 days gives a good effect.

Also, the use of the new drugs stopcoksid, vazuril and introcox oral (2.5%) according to the instructions is highly effective.

Complex action when weaning young rabbits from their mother: 0.03 g/kg for 3–5 days. it is important to drink a 0.5 percent solution of sulfadimezin based on live weight, give antibiotics with feed for 3-5 days and repeat drinking a solution with sulfadimezin again.

To prevent disease, rabbits should be kept in cages with mesh floors, outdoors or in dry buildings. Changing the bedding every day and washing the manger and water bowls in boiling water are appropriate actions.

CONCLUSION. in order to prevent disease, rabbits should be kept in mesh cages
- sick rabbits are separated from healthy ones and kept under optimal conditions and must be fed on a diet rich in carbohydrates

- it is advisable to change the sheets every day and to wash the water bottles in boiling water

- literature data shows that eimeriosis is widespread among the invasive diseases of rabbits, taking into account the fact that the field is developing, it is of great importance for the study, practice and production of modern chemoprophylaxis and diagnosis of its spread.

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