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# The Role Of Anesthesia In The Prevention Of Cenurosis

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### **ABSTRACT**

The article presents the results of experiments conducted on the farms of "Olga" and "Uzbekistan" karakul companies in Nurabad district of Samarkand region. According to the results of the study, censorship among sheep was 6.05% in "Olga" and 4.01% in "Uzbekistan", and multiceptosis among dogs was 4.11% in "Olga" and "Uzbekistan" -2,8%, cenurosis among sheep by deworming dogs was reduced by 10%.

### **KEYWORDS**

Veterinary, parasite, helminth, oncosphere, egg, anesthesia, arecoline, protoscolex, invasion, larva, cestoda, cenurosis, zoonosis, multiseptosis, parasite, helminth, polytremic prophylaxis, praziquantel, piperazine, febantas, febantel, exacerbation, preparation, mebendazole, nitroscanate, fenbendazole, flubendazole, oxybendazole, tetramizole, ivermectin.

#### INTRODUCTION

Providing the population with high-quality, protein-rich products of animal origin (meat, milk, eggs, etc.) is one of the urgent tasks in solving the global food problem. Solving this problem poses serious challenges for livestock breeders, including veterinarians. This is prevented by various infectious and parasitic diseases. Such diseases include coenurosis, echinococcosis, cysticercosis (finnosis) caused by larval cestodes. Scientists have been conducting research on the treatment and prevention of these diseases for hundreds of years and, accordingly, a number of therapeutic and preventive measures have been developed. Cenurosis mainly causes great economic damage by infecting small horned animals under one year of age. That is, it has a negative impact on the development of the national economy. This economic damage is caused by the cost of veterinary and sanitary measures against the disease, a sharp decline in the productivity of infected animals and the death of infected animals. The disease is transmitted by predators mainly to dogs. Dogs are animals that learn quickly from humans. This is why dogs are called pets. Humans often used dogs as guardians, but due to the unique characteristics of dogs, they are now used for a variety of tasks. For example, at customs posts and border areas, drugs, as well as explosives, traces of criminals, military facilities are guarded, people guard the yard in their homes, and some people take care of dogs because of their passion for dog fighting. In addition to the advantages of keeping dogs, keeping them has disadvantages. Dogs carry and carry a number of parasitic and infectious pathogens on a regular basis. Dogs can often transmit parasitic eggs to humans when they are petted, but mainly when dogs excrete feces, they infect helminth eggs that they carry

with them to areas where greens, melons, fruits, vines, and agricultural crops are planted. When people consume products contaminated with helminth eggs, they are infected with parasitic eggs and subsequently migrate helminths. And according the developmental cycle, people develop symptoms of the disease. Hundreds of years ago, people realized that helminthiasis was transmitted from dogs to humans, and used methods to get rid of helminths in dogs, i.e., deworming the hair on horses' tails and tails, crushing people's hair, and injecting plants with certain anthelmintic properties. In recent years, as a result of the development of science, several hundred anthelmintics against helminthiasis in dogs have been discovered and methods of their application have been developed.

#### **MAIN PART**

There are differing opinions among scientists about dog deworming schemes. Some scientists recommend that the scheme and timing of deworming be determined by the laws of development of the parasite, some by the state of its spread, and still others by economic considerations. In any case, deworming requires the expulsion of parasitic worms from the dog's body. Cenurosis and multiceptosis are common in all CIS countries.

According to Akhmetbekov N.A. (2009), in the city of Shymkent, South Kazakhstan region of the Republic of Kazakhstan, dogs were infected with an average of 14.8% with multiceps, tenia gidatigena with 41.9% and echinococci with 3.8%. In Sayram district of the same region, the incidence of multiceps was 16.2%, tenia gidatigena - 42.2% and echinococci 5.4%.

Klimova D.X., Shemyakova S.A. (2008) have shown that febtal combo suspension is 100% effective in the treatment of dogs and cats with cestodosis and nematadosis (toxacarosis, toxascaridosis, teniidiosis, untsinarioz, dipilidiosis, mesocystoidosis). No adverse effects and post-drug complications were observed in the animals.

According to Mandjiev O.H., Mirzaev M.N. (2008) larval cestodes are widespread in the western regions of the Kalmyk Republic of the Russian Federation. Diseases, censorship, occur all year round. From 1961 to 1995, 552,405 sheep were infected by censorship, of which 84,700 died. In 1999-2004, 1324 sheep were censored. Sheep were affected by an average of 5.2-3.1 per cent in January and April and 32.8 per cent in October. In 1998-2003, inspections of slaughtered sheep at a local meat-packing plant revealed 9.9% of echinococcosis in 327 heads and 1414 heads of cysticercosis in 165% of 8458 sheep. During the helminthocaprological same period, examination of sheep moniziosis revealed that the intensity of the invasion was 0.9-14.6%.

According to K.M. Kazakbaev (2005), 18 species of helminths were found in dogs examined in the Jambul region of Kazakhstan. Of these, 1 species belongs to the trematode, 9 species to the cestode and 8 species to the nematode. Larval forms of 5 species of parasites have been recorded in farm animals. These were Echinococcus ganulosus - 36.9 percent, Cysticercus tenuicollis - 5.5 percent, Cycticercus ovis - 0.4, Coenurus skrjabini - 0.2 percent, and young animals with Coenurus cerebralis - 10 percent.

Leshev M.V. and G.S. Sivkov, A.A. Gorichkin (2010) tested Alben S, Azinox plus, Trontsil in order to cure deer-feeding dogs from cestodes in Yamalo-Nenets Autonomous Okrug.

According to the results of experiments - Alben S, preperat 5 kg of live weight - 1 tablet - 55.7%, 1.5 tablets - 79.3%, 2 tablets - 100%, - Azinox plus 1 tablet per 10 kg of live weight 79.3%, 1.5 tablets - 90.1%, 2 tablets - 100%, - Trontsil dogs 1 tablet per 10 kg live weight - 79.3% 1.5 tablets - 94.8%, 2 was 100 percent effective when given as a tablet.

According to A.B. Sergushin, G.S. Sivkov (2010), when 520 wild foxes from the Yamal-Nenets Autonomous Okrug were examined, it was found that there were 10 species of cestodes belonging to 3 families. The main ones were Teania parichimatoza - 43.65%, Teania krabbei - 40.19%, Teania hydatigena - 27.3%.

According to I.A. Arkhipov (2001) for the anesthesia of carnivorous animals are used Piperazine, Phenasal, Praziquantel, Pyrantel, Arekolin, Bunamidine, Mebendazole, Nitroscanate, Fenbendazole, Flubendazole, Oxybendazole, Febantel, Politverel, Tetramizol, Icetramel.

According to I.A. Subbotina, B.N. Bakyev (2018), in Turkmenistan, dogs are infected with echinococci by 28-57%, and by multiceps - by 13-23%.

According to O.N. Andreyev (2018), in the southeastern part of the Central Federal District of Russia, wild mammals are infected with various types of helminths by 37.5-50.0%. The total helminth infestation rate was 49.4%.

According to B.K. Laypanov (2018), deworming dogs 4 times a year does not fully provide protection against cestodosis.

**Cenurosis** is a helminthic disease of sheep, goats, cattle and other animals. it is the larval form of M. multiceps Coenurus cerebralus parasitizes the brain of sheep, in some cases

the spinal cord, and is characterized by nervous system dysfunction, dizziness, head resting on an object, paralysis of the neck and hind legs, weight loss, anemia.

The causative agent is the larvae of the helminth Coenurus cerebralus, belonging to the genus Plathelmintes, Cestoda class, Ciclophylidea family, Thaeniidae family, Multiceps multiceps genus.

The larvae are usually oval-shaped censor bladder, covered with a clear membrane with an average diameter of 8–10 cm, filled with fluid inside, several hundred white protoscolexes in the liquid, located in clusters.

Adult form The body (strobila) of multiceps multiceps is 100-110 cm long and 5-55 mm wide in a chain cestus consisting of 200-250 joints. The scolex of M. multiceps is in a noxious shape with a diameter of o.8 mm, the diameter of the underdeveloped trunk is 0.3 mm, located in two rows, armed with 22-23 loops. Suckers are 0.29-0.30 mm in diameter. The length of the neck is 2-3 mm. Well-defined genital openings appear at a distance of 47 cm from the head, or at 18-20 joints, and open on the right or left side of the joints, below the middle of the joint. Almost the full size of the hermaphrodite (bisexual) joints is occupied by the uterus, separated by 9-26 lateral horns on either side of its main middle horn. The male genitals are composed of about 200 sperm, collected near the veins located on the longitudinal sides of the joint. There are no sperm in the middle of the joint.

**Epizootology of the disease:** Cenurosis is one of the most common helminths in many countries around the world. The disease is mainly prevalent in areas where sheep breeding is developed and causes great economic damage. In the regions of the

country, the incidence of censorship in sheep ranges from 8-10% to 17-21%, and in some farms even higher. With cenurosis, sheep, at least goats, cattle, pigs, horses and other animals, even humans, become infected.

Biology of the pathogen. Multiceps multiceps parasitize in the anterior sections of the small intestine of the main host - carnivorous animals (dogs, wolves, foxes, jackals, etc.). They release their mature joints into the external environment with the feces of animals, and then the joints move and cling to the grass or fall into the water. During deflection, some Multiceps multiceps joints become attached to the hairs around the posterior exit hole (anus) of the main host. In such cases, the carnivorous animals become annoyed, rub their backs on everything, and spread the Multiceps multiceps eggs to the external environment.

The development of up to 300 helminths in a head dog infected with M. multiceps has been observed in scientific studies. Each cyst divides into 4-6 mature joints, which store up to 40-60 thousand helminth eggs per day. The joint ruptures and the eggs in it damage the pasture, bedding and water. Eggs are resistant to external influences and can be stored for a long time.

Eggs that enter the intermediate host with water and nutrients destroy their shells under the action of gastric juice, from which oncospheres come out, pierce the wall of the small intestine with their loops, pass into the blood vessels and are carried with the blood through the body, enter the brain or spinal cord and develop there. In the fluid inside these vesicles are protoscolexes of helminths. The biological development of the parasite is repeated when such a bladder (when the head of an infected sheep is given to a dog), i.e.

consumed by the main host (dog, wolf, fox, jackal and other carnivores).

Based on the above literature data, we planned to conduct this research.

## THE PURPOSE OF THE STUDY

To study the role of deworming dogs in censorship of sheep.

### **TASKS OF RESEARCH**

- Larval cestodes are the detection of the spread of cenurosis and other helminthiases.
- 2. Analysis of indicators of infection of dogs with multiceptoses.
- 3. To study the relationship between anesthesia in dogs in sheep with censorship.

# **RESEARCH MATERIALS AND METHODS**

The research was carried out in the Helminthozoonosis Laboratory of the Veterinary Research Institute, as well as on the prevalence of cenurosis in small ruminants and multiceptoses among dogs in "Olga" and

"Uzbekistan" karakul companies specializing in sheep breeding in Nurabad district of Samarkand region. For this purpose, the brains of slaughtered sheep at the slaughterhouses were examined by the method of dissection (macro examination), as well as on the basis of the records of the veterinarian on the farm. Deworming of dogs was carried out according to the method of M. Aminjanov (1987). A 0.01% aqueous solution of hydrogen bromide arecholine was used for anesthesia. The drug was given orally (per os) in the form of a solution to dogs in the amount of 5 mg per kg of live weight. The dogs were then released after excreting the helminths with their feces. Separated helminths were collected in separate containers. Dog litter was collected and burned along with parasite eggs.

The results of experiments on cenosis of sheep in the farms "Olga" and "Uzbekistan" in Nurabad district of Samarkand region are given in Table 1.

# **RESULTS OF SHEEP CENSORSHIP TESTING.**

Table 1

| Nº | Names      | Number of      | Number of sick | percent |  |
|----|------------|----------------|----------------|---------|--|
|    |            | sheep examined | sheep          |         |  |
| 1  | Olga       | 9214           | 558            | 6,05    |  |
| 2  | Uzbekistan | 8028           | 322            | 4,01    |  |
|    | Total      | 17242          | 880            | 5,1     |  |

According to the table, 558 (five hundred and fifty eight) heads of 9214 (nine thousand two hundred and fourteen) sheep, or 6.05%, were

inspected at the Olga karakul farm in Nurabad district, and 8028 (eight thousand twenty) sheep at the Uzbekistan karakul farm. eight)

322 (three hundred and twenty-two) heads of sheep, or 4.01 per cent, were found to be infected with censorship. The average incidence of censorship in sheep was 5.1%.

The results of the experiment show that in the farms "Olga" and "Uzbekistan" in Nurabad district, the incidence of censorship in sheep

was 14-16% in the years before the experiments, and after deworming in dogs it was found in 4-6% of sheep, ie on average 10% decreased.

The results of deworming of the examined dogs are given in Table  $N^{\circ}$  2.

CONSEQUENCES OF DEWORMING DOGS.

Table 2

| №  | Names      | Numbe  | Number   | percent | Found helminths |       |           |       |              |       |  |
|----|------------|--------|----------|---------|-----------------|-------|-----------|-------|--------------|-------|--|
|    |            | r of   | of       |         | E. granulosus   |       | М.        |       | T.hidatigena |       |  |
|    |            | dogs   | infected |         |                 |       | multiceps |       |              |       |  |
|    |            | examin | dogs     |         | Numb            | perce | Num       | perce | Numb         | perce |  |
|    |            | ed     |          |         | er              | nt    | ber       | nt    | er           | nt    |  |
| 1. | Olga       | 316    | 34       | 10,76   | 4               | 1,3   | 13        | 4,11  | 17           | 5,38  |  |
| 2. | Uzbekistan | 250    | 28       | 11,2    | 2               | 0,8   | 7         | 2,8   | 19           | 7,6   |  |
| 3. | Total:     | 566    | 62       | 10,95   | 6               | 1,06  | 20        | 3,53  | 36           | 6,36  |  |

Of the 566 dogs examined in Nurabad district, 62 (10.95%) were infested with helminths. Of these, 6 had echinococcus (1.06 percent), 20 had multiceps (3.53 percent), and 36 had T. gidatigena (6.36 percent) were found. Of the 316 head of dogs inspected at the "Olga" karakul farm, 34 (10.76%) were infested with helminths. Of these, 4 had echinococcus (1.3 percent), 13 had multiceps (4.11 percent), and 17 had T. gidatigena (5.38 percent) were found. Of the 250 dogs inspected at the Uzbek karakul farm, 28 (11.2%) were found to contain helminths. Of these, 2 had echinococcus (0.8 percent), 7 had multiceps (2.8 percent), and 19 had T. gidatigenes (7.6 percent) were found.

Studies have shown that anesthesia in dogs also reduces the incidence of multiseptic disease in dogs by 7-9%.

## CONCLUSION

- 1. In Nurabad district, the incidence of censorship in sheep averaged 5.1%.
- 2. In Nurabad district, helminth infestation of dogs was 10.95%. It was noted that the incidence of multiceps was on average 3.53%.
- 3. As a result of anesthesia in dogs, there was a 10 percent reduction in cenurosis infection among sheep.

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