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CHLAMYDIA SPP. KARAKUL SHEEP

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Abstract
The article describes the results of infectious pathology of chlamydia in ewes and lambs. The disease affects sheep and young animals. In adult sheep, the disease is accompanied by abortions, in lambs and young animals by enteritis, pneumonia, polyarthritis. Sometimes the disease is accompanied by mass abortions of queens, premature births and the birth of weak lambs, which die in the first days of life or remain embryos due to poor development. Chlamydia in aborted ewes and young animals was also detected by serological studies of blood serum, using RSC (hemagglutination reaction) and HAI (hemagglutination inhibition test).

Keywords: chlamydia, ewes, lambs, infectious diseases.

Introduction
According to the observations of scientists, in sheep breeding, abortions with resorption of the embryo, with the expulsion of the premature baby and the expulsion of the dead fetus are most common. The causes of these abortions are usually infectious (brucellosis, paratyphoid, vibriosis, listeriosis, leptospirosis), viral and invasive diseases, improper feeding of pregnant uteruses, various injuries of the abdominal wall and diseases or abnormal development of the reproductive system of the ewes. In all cases, abortion occurs as a result of a violation of the normal relationship between the fetus and the mother due to the abnormal condition of the fetus, its membranes, diseases of the female reproductive system, as well as other organs and the mother's body as a whole [3; 9; 12].
In the conditions of sheep farms, infectious abortions are especially dangerous, because they spread quickly and cause great damage. In many farms, brucellosis, paratyphoid, campylobacteriosis, leptospirosis, listeriosis of sheep are found, causing mass abortions and various obstetric and gynecological diseases (retention

of the afterbirth, inflammation of the uterus, etc.), leading to infertility. Many sheep die from these diseases [1; 5].

When studying the clinical and morphological features of the manifestation of chlamydia in sheep in its association with mycoplasmosis in farms of the Stavropol Territory and Kalmykia, he recorded mass abortions of queens, mainly in the second period of pregnancy. According to the author, from 5 to 20% of animals were aborted. The number of abortions directly depended on the number of positively reacting sheep in the farm [6].

Narymbetova U.M., Tolysbayev B.T. (2001) studied the infectious pathology of sheep in farms in Kazakhstan. It has been established that in recent years, salmonellosis, brucellosis and chlamydia are the most widespread infectious diseases of sheep, which pose a potential danger to human and animal health. Epizootological outbreaks of abortigenic infections of sheep often occur in an associative form. This leads to mass disease of animals (a large number of abortions), difficulties in diagnosis and treatment [7].

Shmanov K.S. et al. (2002) conducted research on epizootology, diagnosis and specific prevention of abortogenic infections of sheep in farms of the Republic of Kazakhstan. It has been established that infectious pathology of the reproductive organs of ewes is caused by pathogens such as campylobacter, chlamydia, and salmonella, manifested by embryonic mortality of the embryo, lack of offspring, mass early and late abortions, and infertility of breeding stock [11].

Partus is a physiological process as a result of which a mature fetus, fetal membranes, together with the fetal part of the placenta and amniotic fluid, are removed from the uterine cavity [2; 8; 10].

Normally, sheep give birth after the complete completion of pregnancy. The structure of the pelvis in sheep mainly ensures the ease of childbirth, so difficult childbirth is relatively rare in them. Difficult childbirth occurs either with too large fetuses, or with the wrong position of the lamb in the birth canal [4; 9].

Methods

The diagnosis of chlamydia was made on the basis of the analysis of clinical and epizootological data, the study of pathological anatomical changes, bacteriological

and virological studies using the diagnostic method developed in the laboratory by Sytdykov A.K., Abdusattarov A. and Narzieva D.D. (1982).

Chlamydia in aborted ewes and young animals was also detected by serological studies of blood serum, using RSC (hemagglutination reaction) and HAI (hemagglutination inhibition test).

Research results

According to the results of our research. The disease affects sheep and young animals. In adult sheep, the disease is accompanied by abortions, in lambs and young animals by enteritis, pneumonia, polyarthritis.

Sometimes the disease is accompanied by mass abortions of queens, premature births and the birth of weak lambs, which die in the first days of life or remain embryos due to poor development.

The largest number of abortions was observed during the onset of the disease during the first year, mainly in first-loopers, in which abortions were accompanied by retention of the afterbirth and other postpartum complications, including agalactia, as a result of which the uterus refused to allow lambs to suck the udder.

Chlamydia is characterized by a latent course of the disease, especially in producers. According to our research, abortions in sheep were observed 20-40 days before mass lambing, sometimes even earlier.

Characteristically, abortions that took place in February and early Match were not accompanied by signs of the disease, which made it difficult to find out the causes of their occurrence.

Before the beginning of abortions, at the end of February and the beginning of March, sheep were noted to be lethargic, depressed, restless, discharge of mucous membrane with an admixture of pus, alkaline reaction, odorless. After abortion, especially in first-cat women, there were retentions of the afterbirth, metritis and vaginitis. During autopsies of the corpses of aborted queens, characteristic changes were observed in the cautelidons, which were hyperemic, chocolate-colored, surrounded by a mucous-necrotic mass.

The results of the studies are shown in Table 1, which shows that in five farms, chlamydia were isolated from pathological material in 46 cases from 68 corpses of sheep and lambs.

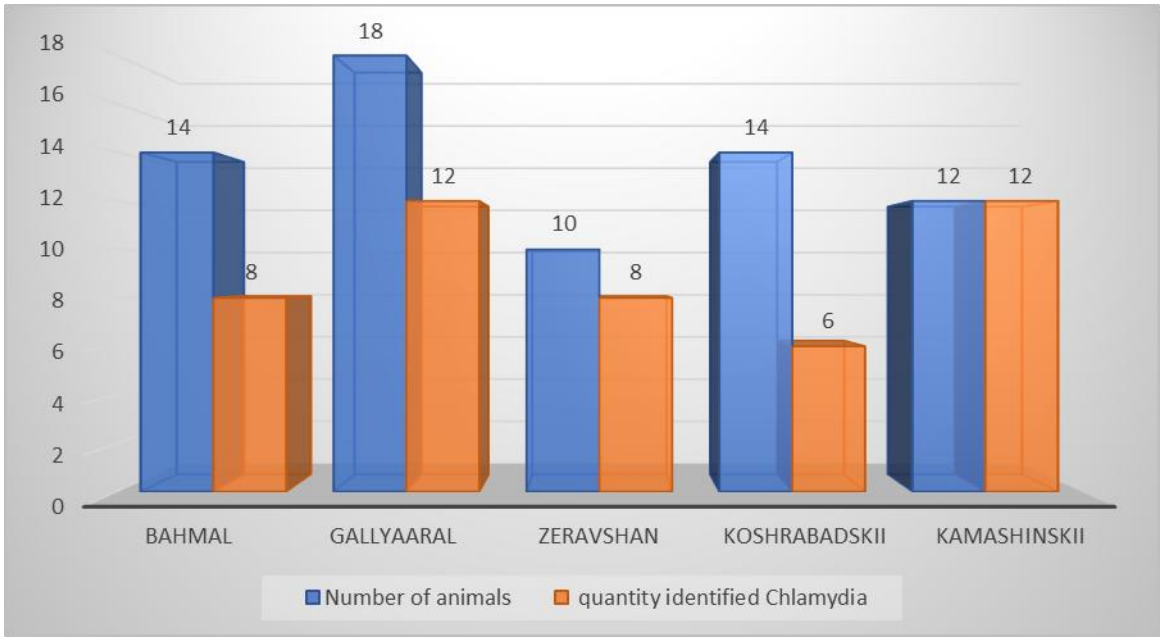
Table 1. Results of studies of pathological material from Karakul sheep for the presence of chlamydia

№	Name Farms	Inspired by research	Number of animals	Methods Research	Positively Reacted
1	Bahmal Bahmalskii	lungs, liver, heart serum, blood	14	Microscopy, sowing on PGR in the chest cavity of white mice HIT	18-1:16 before 1:256
2	Galaaral Galaaral	lungs, liver, heart serum, blood	18 82	Microscopy, sowing on PGR in the chest cavity of white mice HIT	13-1:16 before 1:128
3	Zeravshan Chikchinskii	lungs, liver, heart serum, blood	10 48	Microscopy, sowing on PGR in the chest cavity of white mice HIT	12-1:32 before 1:512
4	Koshrabadskii	lungs, liver, heart serum, blood	14 68	Microscopy, sowing on PGR in the chest cavity of white mice HIT	6-1:32 before 1:256
5	Kamashinskii	lungs, liver, heart serum, blood	12 70	Microscopy, sowing on PGR in the chest cavity of white mice HIT	16-1:16 before 1:256

In lambs, depression, decreased appetite, decreased fatness, discharge from the nasal orifices, cough, sometimes a wobbly gait were observed. The temperature is elevated.

During the autopsy of aborted fetuses and corpses of lambs that died in the first days of life, edema of the subcutaneous tissue, abdominal wall, dewlap and neck, mucous membrane of the nasal cavity was observed; in the thoracic and abdominal cavities, the presence of reddish fluid.

In older lambs, catarrhal gastroenteritis, focal pneumonia and pronounced liver dystrophy were also observed.



Rice. 2. The presence of chlamydia in the pathological material of Karakul sheep

In these farms, chlamydia was also established serologically. Of the 324 serum samples from sick and recovered sheep and older lambs, 65 reacted positively to chlamydia in ranges 1:16 to 1:512.

Conclusion

According to the results of our research. The disease affects sheep and young animals. In adult sheep, the disease is accompanied by abortions, in lambs and young animals by enteritis, pneumonia, polyarthritis.

Sometimes the disease is accompanied by mass abortions of queens, premature births and the birth of weak lambs, which die in the first days of life or remain embryos due to poor development. Chlamydia in aborted ewes and young animals was also detected by serological studies of blood serum, using PGR (hemagglutination reaction) and HIT (hemagglutination inhibition test).

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