

Symptoms and treatment of infectious pustulosis in mutton sheep

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Abstract: Mutton is rich in nutrition, deeply loved by consumers, and the market demand is large, which greatly promotes the development of sheep industry. In the sheep industry, the incidence of infectious impetigo is higher, which affects the growth and development of sheep. Diagnosis and treatment: Infectious impetigo is a disease with high incidence in the process of raising sheep. The prevention and control is not in place and the treatment can lead to the death of sheep. The outbreak of the epidemic can lead to the death of sheep, causing a large number of sheep disease, to prevent the tripartite infection. This paper analyzes the comprehensive treatment of infectious imulosis in sheep.

Infectious impetigo disease is also called sheep mouth sore, the pathogen is infectious impetigo disease virus, farmers should attach great importance to, early detection, early treatment, reduce the loss.

1. Popular characteristics

Sheep infectious impetigo can affect sheep of all breeds, age and sex, with a particularly high incidence in sheep from 3 to 6 months of age. The disease can occur throughout the year, with the incidence increased in spring and summer. Sick sheep and infected sheep are the main sources of transmission of the disease, but healthy sheep may also be infected with the virus or may be infected after direct contact with the sick sheep or its secretions and excreta. Infection may also occur after indirect contact. Contains contaminated feed, feed, feed, forage grass and so on I am sick. The mortality rate of simple sheep suppurative cystitis was low, but it was significantly higher at secondary infection.

2. Clinical symptoms

Sheep with infectious pustgo can be divided into three types according to the clinical location: the first is the lip type, in the corners of the mouth, the nose and the upper lip of small erythema. Yes, sick sheep gradually appear into papules, blisters, some become pustules, pustules rupture, brown, visible some yellow wart scab, 7~14 days later, scab completely disappeared, scab gradually fall off, scab off. The sick sheep gradually recovered, appeared scab and cracks, swelling and bending outward, affecting the normal feeding^[1]. If the secondary necrotizing bacteria infection, it

is easy to cause deep tissue necrosis, further aggravating the disease, followed by the hoof. Type, pustules appear on the head and fork of sick sheep, and secondary infection causes necrosis, arthritis and claudication. Finally, the vulva type, the vulvar labia ulcer, pustules and spots in the breast, and the scrotal sheath swelling. The affected place appears pustule, ulcer, scab, then appear scab and erythema, the condition is serious, make weak, even fatal. The first is the lips. Sheep show the following symptoms: early reduction of food infection, depression, swelling of the gums, small red spots near the lips, and then gradually develop into papules, nodules, and in severe cases, chickenpox, pustules. After the death of the second hoof, the cases are more common in sheep, generally with mixed symptoms, and a few sheep with a single disease. A few pustules are concentrated in the hoof of the sick sheep, cause purulent problems, prominent, cause secondary symptoms, make the sick sheep activity difficult, like to lie, do not like activity. Eat, while lying down, the hoof is pulled into the breast. Closer and closer^[2]. The third is the vulva type, which is very rare, mainly occurs in goats, causing swelling in and around the ewe vulva, which becomes more purulent in severe cases, with vaginal secretions secreted from the inside of the vagina. At the time of diagnosis, for the specific symptoms and developmental stages of the sick sheep, in addition to the initial diagnosis, there are also the penis and vaginal sheath of the sick sheep. The epidemic information released by the local epidemic prevention authorities will improve the accuracy. To confirm the diagnosis, a clinical examination is required. In general, a clinical examination is performed. Previously, the dead sheep were dissected and clinically examined. Papules, pustules and high fever of the dead sheep should be prepared as experimental materials, and the positive test results can be clearly diagnosed. Only after the diagnosis, can the treatment measures continue to be formulated according to the condition of the sheep. Simple diagnosis has many contents and involves a wide range. In order to ensure the accuracy of the diagnostic results, it is necessary to carry out interviews, laboratory tests, strict laboratory diagnosis, and determine the final results based on the conclusions of the sick sheep^[3].

3. Pathological changes

When dissecting the dead sheep carcass, it was found that the carcass was very thin, with black scabs such as lips, a large number of ulcer-like erosion blisters in the mouth, and blood under the skin, but the corners of the mouth, lips, tongue scabs, ulcers, ulcers, peritracheal bleeding, severe congestion, lung swelling, massive congestion, dark color, myocardial bleeding, epicardial spots, small intestinal wall mild bleeding and other lesions were not obvious.

4. Diagnostic points

In the clinical diagnosis of infectious sheep pus, the initial diagnosis can be made by combining the epidemic characteristics, clinical manifestations and anatomical changes, but a clear diagnosis is needed. At present, the experimental diagnosis of the infectious purulent sac of sheep mainly adopts two methods: one is to collect the diseased sheep tissue, such as blister skin; the other is to use sections for etiology detection, after the negative staining of sodium phosphotungstate showed the presence of ulcer virus particles. Or is an animal inoculation experiment. Sick tissue can also be collected from sick sheep, made into emulsion, and vaccinated to the lips of healthy sheep. Sheep, check for 12 hours, and then check for redness and swelling, foaming, 3 days after the inoculation site of purulent cells can be confirmed. Second, serological detection method can achieve rapid detection. Efficient and accurate diagnosis. Infectious fever in sheep is similar to foot and mouth disease in sheep, sheep pox, ulcerative dermatitis, necrotic bacteria and other clinical similarities, so it is easy to misdiagnose, and appropriate measures should be taken. The differential diagnosis to avoid one is sheep foot-and-mouth disease, oral mucosa blisters, rotten points, sick

sheep appear high fever, left ventricular wall, left ventricular wall appeared tabby symptoms^[4]. Secondary myocarditis can also occur, and the affected sheep have systemic lesions, increased acne, especially glabrous or sparse places, high fever, obvious systemic reaction. "Third, ulcerative dermatitis is a common disease in sheep. Over one year old, ulcerative dermatitis appears on the upper lip and face of sick sheep, damage between the crown and toes, necrotizing ulcer below the forehead, and finally necrotizing bacterial disease. Sick sheep are mainly manifested as tissue necrosis, without papules, scab or verrucous hyperplasia.

5. Treatment methods

5.1 Western medicine treatment

Once the sick sheep is found, the sick sheep should be screened, and the sick sheep and potentially sick sheep should be strictly isolated from the healthy sheep to prevent more serious cross-infection problems. We should isolate and do a good job of protection. The best treatment is early detection, early screening, early prevention, and early treatment to minimize the impact on the disease. The sheep houses and farms of sick sheep should be thoroughly disinfected twice a day for a week. After disinfection, the house should be evenly disinfected. Sprinkle with wood ash, especially in the sheep used to activities, relatively wet places, keep the environment dry and hygienic. First, for sheep with lip and genital diseases, the wound is cleaned with 0.2% potassium permanganate solution and then ointment is applied. Apply 5% oxytetracycline ointment or 2% phenol or 2% iodoglycerin once in the morning and evening to wounds, toes, wrists or injured joints. Antiviral drugs and antibacterial and anti-inflammatory drugs should be used together to prevent infection, such as dexamethasone injection for penicillin potassium is diluted, and then injected intramuscularly at 60000 IU / kg body weight for 3~5 consecutive days. The sick sheep were washed several times with 0.1%~0.3% Perilla water or 10% normal saline, and the inflamed sheep were discharged with ice boron powder, 5% iodine tincture or alcohol^[5]. 2-3 times a day, usually once in the morning and evening, continuous treatment for about a week, most people will recover. If so, broad-spectrum antibiotics should be used in time, such as sulfonamide injection mixed with baking soda and penicillin drugs, to ensure the timeliness and scientific quality of medication, and most of them can be treated as soon as possible. In addition, considering that the sick oral and external lip sheep are prone to ulceration after the disease, the food intake of the sick sheep is greatly reduced, or even directly starve to death, drinking water is very difficult, the sick sheep will die of hunger or water shortage, so farmers need to ensure that the daily feed of mutton sheep is easy to digest and rich in nutrition. Replacing them with high liquid feed can help ensure that sick sheep get adequate nutrition; drink water every day to avoid accidents.

5.2 TCM treatment

Traditional Chinese medicine is also a good choice. Although Western medicine is effective, it is expensive and cost-effective, and once the treatment is not clear, the disease may recur. TCM treatment is healthier and more effective, and it is easier to eradicate diseases when implemented in the form of internal treatment. The actual treatment of impetigo is not complicated, the main principle of TCM treatment is to eliminate the cause, focusing on clearing the heart, detoxification, clearing knots, swelling. Taking the treatment of mutton as an example, the prescription is as follows: the above-mentioned medicinal materials are divided into 3 grams of coptis, 9 grams of rhododendron, 9 grams of dumpling, 9 grams of forthia, 10 grams of scutellaria, applied to the lips of sheep, once in the morning and once in the evening, or even for 3 days. When the drug is ready, add water to boil, remove the residue, take egg white as the lead drug, and give the sick sheep 2-3

times a day.

5.3 Integrated Traditional Chinese and Western medicine treatment

The combined treatment of traditional Chinese and western medicine can not only kill viruses, but also greatly inhibit bacteria, greatly improve the immune level of sheep, and help to cure and improve the immune system. It is an excellent curing method. In the actual treatment, attention should be paid to ensure the nutritional supply of sick sheep, supplement certain vitamins, especially vitamin K and A, increase the protein ratio of sheep, and at the same time, Chinese and Western veterinary methods can be combined. Adjust the diet in time, so that the sick sheep can better fight against the disease. Number of daily doses and doses in sick sheep. The dosage should also be carefully recorded. The actual dose of sick sheep of different weight will also be different, so it is necessary to adjust scientifically and increase the dosage appropriately.

5.4 Case analysis

In May 2022, among more than 50 sheep raised by Mr. Liu's family in Sunwu County, Heihe City, 6 three-month-old lambs had pustules on the lips and decreased appetite. In the physical examination, the lips, corners of the mouth, nose skin appeared red papules, gradually become pustules, ulcers, scab, loss of appetite, chewing difficulties, mental state is not good. Sheep diagnosed with infectious impetigo were treated with the above methods of integrated Chinese and Western medicine. Wash the wound with potassium acid solution, apply an appropriate amount of 5% oxytetracyclin to dilute penicillin potassium and dexamethasone injection, inject the wound intramuscular according to the injection dose of 60000IU/kg body weight, and then use Huanglianjia Decoction to take coptis 3g, 9g flour bark, 9g red herb, 9g forsythia, 9g honeydew, 10g ginger, 10g scutellaria, 10g yellow juniper, 10g gardenia. Add the above herbs with appropriate amount of water, add, liquefy, slag removal, warm, once a day. After 3 days of comprehensive treatment, the symptoms of the sick sheep were relieved, and feeding began. After 2 days of continuous treatment, the sick sheep had completely recovered, and then relapsed, with no signs of recurrence after examination.

6. Preventive measures

6.1 Carefully introduce and strengthen quarantine to prevent the introduction of diseases; implement sheep immunization to improve sheep immunity

Farmers should follow the principle of self-propagation and self-sufficiency to avoid incoming diseases. Introduce breed from regular farms that have obtained business licenses and check livestock health certificates. Introduce sheep to avoid introducing sick sheep. The introduction of species from endemic areas and during the epidemic season, only if the health of the herds is guaranteed."The imported sheep should be isolated for one month, during the re-inspection and quarantine, no abnormal situation in groups, to prevent the introduction of infectious diseases, reduce the occurrence of infectious diseases. Vaccination is the most effective measure to prevent infectious pustugo, especially in endemic areas with infectious pustugo, and farmers should actively carry out vaccination activities. In general, the goat cryoplet vaccine should be inoculated once in spring and autumn, before inoculation, diluted with normal saline, shaken well, and injected at 0.2 mL of sheep oral mucosa. A clear, shiny small blister appeared at the injection site, indicating the efficacy of the vaccination. Pregnant ewes can be vaccinated 1 month before birth, and after birth, breastfeeding passively obtains immune antibodies to prevent the development of infectious

pustulosis.

6.2 Protect the skin and mucous membrane of sheep and reduce the chance of natural infection; strengthen feeding management and improve resistance

It is necessary to do a good job in the raising and management of sheep, especially to protect the skin and mucous membrane of sheep, to reduce damage and avoid virus invasion. It is necessary to improve the awareness of prevention, feed sheep with high palatability, avoid feeding hard and sharp forage grass, and take measures such as adding appropriate vitamins, trace elements and minerals to the feed to do a good job of disinfecting the feeding environment and killing viruses, so as to create a healthy environment and ensure health. The growth and development of sheep can reduce the occurrence of infectious abscesses and other diseases. In order to improve sheep resistance, breeders need to strengthen breeding management. Starting from the feed management link, breeders should strengthen nutritional supplements, regularly add vitamins, trace elements, minerals, herbs to the feed, improve the nutritional balance of the diet, to ensure the various nutrients required for sheep growth, improve disease resistance. Avoid cold and heat stress, sheep pens should be well lit, well ventilated, and do a good job of cold protection. Breeders should properly control breeding density to avoid overcrowding. In order to develop good eating habits and prevent sheep from overeating, breeders should regularly and quantitatively feed, strengthen feed storage and management, and prevent sheep from eating mold and threatening their health.

6.3 Pay attention to cleaning and disinfection, create a healthy and comfortable environment, and prevent the spread of the epidemic

Good sanitation, cleaning and disinfection are very important to ensure the healthy growth of the sheep. Therefore, it is necessary to clean the walls and floors with water, accumulate feces and fermentation, and use them for agricultural production to reduce resource waste. Formulate solid and comprehensive disinfection programs and plans, the sheep houses, walls, ground, drainage ditches, doors and other places should be regularly and properly disinfected, disinfectants should be used in combination with local conditions. Houses and playground can be disinfected with 4% sodium hydroxide, inlet and outlet can be disinfected with 36% peracetic acid, walls and floors can be disinfected with 11% bleach, feces can be disinfected with biological heat to kill eggs, sewage as chemicals into the material pool, can be disinfected by adding bleach. In order to effectively kill the pathogenic microorganisms in the environment and create a healthy and comfortable growth environment for the sheep, the frequency of disinfection is usually once every two weeks, and the high incidence period should be controlled at once a day. The feeders should pay close attention to the health status of the sheep. If abnormal, they should be isolated and diagnosed in time. Confirmed sheep should be treated symptomatic, and risky ones should be vaccinated urgently to reduce morbidity."It must be thoroughly disinfected, and breeders must also take appropriate protective measures to avoid infection. Treatment and recovered sheep should be fed palatable and easily digestible feeds to accelerate recovery and reduce losses.

7. Conclusion

In conclusion, the high incidence of sheep imimstsheep seriously hinders the healthy development of sheep industry. The epidemiological characteristics, clinical manifestations, autopsy changes and diagnostic points of infectious impetigo in sheep are analyzed. It is hoped to provide reference for clinical diagnosis and treatment by combining the preventive measures of Chinese and Western veterinarians, improve the cure rate of infectious impetigo and improve the health of sheep

raising industry. Infectious pustulosis is a common disease in sheep, but its incidence is relatively high. In recent years, the incidence is still rising, leading to the frequent serious epidemics and deaths in the sheep industry, and comprehensive prevention and control measures are feasible. The reasonable combination of traditional Chinese and western medicine means that sick sheep can use traditional Chinese medicine to treat the combination of traditional Chinese and western medicine. From the inside out, attention should be paid to various preventive measures in advance. Considering the details and prevention levels of breeding, we believe that the chance of disease can be greatly reduced to improve the breeding efficiency of sheep.

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