Swine influenza prevention and treatment measures

Tian Yubin

Animal Husbandry and Veterinary Station Wenfeng Town Longxi County Dingxi City Gansu Province, Dingxi City Gansu Province, China

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Abstract: Swine influenza is one of the sources of swine frequent infection. It has a wide range of effects and fast propagation speed. Once spread, swine flu will bring heavy losses to farms. This article will focus on the characteristics, pathogen and epidemic characteristics of swine flu, and propose effective treatment and prevention measures to reduce the risk of swine flu infection.

1. Introduction

Swine influenza is caused by influenza A virus and is an acute, contagious and group respiratory disease. There are no signs of the flu. Once the swine is infected with the flu, it will produce symptoms such as occurrence, asthma and dyspnea, and the symptoms are repeated. The growth rate of sick pigs will be slow, and the consumption of feed is usually several times, which will bring serious losses to farms. In addition, the flu is not seasonal. It can occur all the year round. The spread of the flu is not limited to pigs. Poultry is also possible. However, it usually distributes in a regional way. When the weather is cold or hot, it will increase the incidence. Therefore, breeders should correctly grasp the characteristics of swine flu and make corresponding preventive measures so as to avoid heavy economic costs due to inadequate prevention or treatment.

2. Basic overview of swine flu

2.1. Etiology

Swine influenza is a kind of virus. It belongs to the 90.0nm, which is usually a influenza A virus. The virus particles are spherical, and the diameter parameter is about the envelope structure. In addition, a large number of protuberant glycoproteins were found in the envelope structure and arranged in a radial manner in the interior of the virus particles. The inner diameter of the nucleocapsid was about 10.0 nm, and it was spiral. In addition, the swine influenza virus has sensitive characteristics and produces sensitive reactions to organic solutions such as acetone and ether. Thermal sensitivity is the main factor, which can be destroyed in the environment of 55 C for about half an hour.

2.2. Epidemiology

Swine flu is not seasonal, and may be infected every quarter. But winter and spring communication is a high incidence period of swine flu. If pigs are transported for a long time, their immune function will be reduced, and it will also be easily infected with swine flu. Any pig has the chance to have swine flu. Influenza virus occurs in the respiratory tract of pigs. As pigs sneeze and cough out, if pigs are exposed to too dense and poorly ventilated environment, they will infect other pigs, which can be regarded as air borne and spread widely.

2.3. Clinical symptoms

Under normal circumstances, the incubation period of swine flu will not be too long, the longest is only a few days, short for a few hours, the natural state of the number of days usually flat at 3~4d, artificial infection conditions will accelerate the time of illness, and a wide range of influence. If pigs are infected with swine flu, the most obvious feature is that the body temperature will increase obviously. The temperature will often be at 40 ~42 C, the mental state will also decrease obviously,

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the breathing will become rapid and the walking will be slow. Besides, once the swine is infected with influenza, the white discharge and blood streaks will appear in the nostrils and around the corner of the eye. If pigs are infected with the flu for a short time and there are no other complications during the illness, they will be able to recover in about a week.

2.4. Pathological changes

After dissecting the diseased pigs, it was found that severe edema appeared in the nasal cavity, trachea and throat of the sick pigs. The lesion areas were mostly concentrated on the lung and trachea. The tissue in the lesion area presented a red purple induration, and part of the lung lobe became abnormal. If it was a single swine flu, it could be found clearly by observing, but if it was fine. Bacterial diseases are difficult to distinguish accurately with the naked eye, and they are easy to bury potential safety hazards [2].

3. Diagnosis of swine flu

3.1. Preliminary diagnosis

In the process of diagnosis of swine influenza, we should combine the changes of the disease and combine with the relevant clinical features to carry out the identification work through virus isolation test. We can also choose the serum to diagnose, and further improve the accuracy of the diagnosis from Er er. If no other complications are found, and only viral pneumonia is shown in the end result, it is necessary to do a good job in pig lung treatment. If the lung lesions show obvious purple, and there is a clear boundary with the normal organs, and accompanied by edema between lobules, and once complications occur, the lymph nodes of pigs will become swollen by excessive congestion and the stomach will also be infected. And swine flu also increases the chance of bacterial infection. Because of the large number of bacteria, the infection caused by different bacteria also has obvious difference [3].

3.2. Laboratory diagnosis

In laboratory diagnosis, we should do a good job in the detection of antigens, including immunoenzymatic histochemistry and antigen capture. * The detection of swine influenza virus should be done separately. This method is mostly based on the detection of hemagglutinability. It is possible to determine whether there is a hemagglutinating virus through a lot of analysis. We can further determine the [4] of the virus by using the agar diffusion method.

4. Preventive measures

Prevention of swine influenza is fundamental. Only when pigs are not infected with virus can they prevent the loss of farms. If the disease occurs, it will spread over a short period of time, which will have a serious impact on the immune function and health of the pig itself. The specific preventive measures can be carried out in the following aspects: first, we should do a good job in breeding management, regularly clean up and clean up the pig shed, ensure that pigs can be cultured in a clean environment, and ensure that the ventilation in the pig shed is smooth. In the cold and humid weather, we should keep warm in the shed. Secondly, we must ensure the balanced nutrition of pig feed and improve the diet. Pig's own resistance; again, we should observe pig farms more often and find out pig's abnormal behavior in time. If we find the flu in the pig shed, we should isolate the sick pigs immediately and check them, identify the types of disease, and strengthen the inspection and quarantine. For some large-scale farms, they will introduce a large number of piglets, but because the piglets have not yet grown up, their own resistance. Weak, the risk of influenza infection is also greater, if the incubation period of pigs are inadvertently introduced, it will endanger the pig farms. Therefore, before the introduction of pig pups, the corresponding inspection work should be done, and observed in the isolation area and put into the pig shed without any abnormalities. Finally, the health care work for pigs should be strengthened. If the season of swine flu is frequent, the health care drugs should be put into pig feed to enhance the immunity of pigs

[5].

5. Therapeutic Measures

The treatment of swine influenza should be done in two aspects: on the one hand, early detection and early treatment, and no delay; on the other hand, it is better to have a single dose of medication in order to improve the therapeutic effect. Recommendations for treatment of swine flu: (1) try to use new drugs as far as possible, new drugs do not represent new development, but rather few drugs used in farms. (2) not only to irrigate sick pigs, they should be added to pig feed, and other pigs that are found to be abnormal should also be taken to prevent them. (3) as far as possible, antibiotics should be selected in combination with antiviral drugs. (4) confirm whether there is any complication in the pig, and take the corresponding treatment if accompanied by other symptoms. In terms of medication, the first step is to reduce the temperature. Once swine is infected with influenza, the most direct complication is temperature rise. Therefore, cooling should be done. If the body temperature of pigs is below 20 degrees, then fluorine can be injected to reduce fever. The amount of injection should be controlled. The amount of adult pigs should be 10 to 20mL, and the cubs should be reduced by half. If the body temperature of pigs has exceeded 40 degrees Celsius, and the situation is more and more serious, they can be sprayed with alcohol to help them to cool down. Two, it is urgent to use drugs. If pigs are seriously ill, they will be unable to support them. If you have your own body, you can choose to use intravenous injection for treatment. Intravenous injection usually includes Bupleurum Chinese, Shuanghuanglian or Flucone in 500 mL glucose, and the injection is completed once.

6. Summary

To sum up, once swine flu is contracted, the pig population will bring huge economic losses to the breeding workers, and will also affect the health of pigs. In order to reduce this loss and ensure the healthy development of farms, farmers should pay attention to the prevention and control of swine flu, always pay attention to the health status of pigs, and have a certain pre consciousness, timely detect abnormal pig and take treatment as early as possible, from the two aspects of prevention and treatment respectively, so as to achieve effective prevention and control of swine flu, so as to ensure the survival of pig farmers. Economic benefit

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