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Common Rabbit Diseases

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Abstract

In India, the rabbit farming is very important for poor people of rural areas to generate the income for their livelihood. Rabbit is kept for meat as well as fur production and mostly backyard rabbit farming preferred by people. Rabbit is easy to handle, less space required, less feed intake and short gestation period so these reason for rabbit farming. Beside this, most of toxicological test of drug and biological test was done in rabbit as laboratory animals. Hence, some common disease occurring in domestic rabbit, so that the know diseases of rabbit.

Introduction

In present days, the rabbit farming is very fastest growing industry it's played very important role. Rabbit are mainly kept for meat, fur, and as a pet animal and in some laboratories for experimental purpose. Beside this, the any defect in the meat and fur quality, the disease of rabbit is one of the important causes; it also reduced the economical value of fur and meat in market. Disease caused by various agents such as bacteria, virus, fungi and parasites.

Bacterial Diseases

1. Pasteurellosis

Pasteurellosis is the one of the major disease of domestic rabbits. It is a highly contagious, persistent infection of rabbits world-wide. It is caused due to *Pasteurella multocida*. It is characterized by snuffles, pneumonia, orchitis, subcutaneous abscesses, conjunctivitis and septicemia in infected rabbits.

Way of Transmission: Transmission occurs by direct contact, aerosol infection, venereal, haematogenous route.

- **Snuffles:** This is one of the most common manifestations of pasteurellosis. Main clinical sign are mucopurulent nasal exudates deposited around the nostrils and sneezing and coughing. Exudates on the medial aspect of the front paws are frequently noted as the animal attempts to rub the nostrils clear of the obstruction.

- **Enzootic Pneumonia:** affected rabbit (young rabbit) found dead without showing any clinical sign, beside this, anorexia and depression might be commonly seen in the anterior and ventral areas of the lungs.

- **Otitis media:** Otitis media is also a result of *P. multocida* as the bacteria ascends the Eustachian tube to colonize the middle ear. Nervous signs and incoordination are observed if the bacteria extend to the meninges. Creamy white exudates in middle ear is found either uni- or bilaterally.

Treatment: Drug of choice Enrofloxacin @ 10 mg/kg daily orally. Drinking water @ 50–100 mg/liter. In Severe cases,

Procaine penicillin @ 20,000–60,000 IU - 5 days IM.

2. Bordetellosis

Main cause of Bordetellosis is *Bordetella bronchoseptica*. Main route of transmission include aerosol and direct contact. Clinical sign are somewhat similar to snuffles. The characteristic lesion is erythematous nasal mucosa with adherent exudates.

3. Colibacillosis

It is caused by *Escherichia coli*. The most common *E. coli* serovar found in rabbits is enteropathogenic *Escherichia coli* (EPEC), which causes watery diarrhea that can be mucoid or bloody, along with dehydration and lethargy.

4. Tyzzer's Disease

It is caused due to *Clostridium piliforme*. Transmission occurs due to ingestion of spore. Clinical sign include acute profuse watery diarrhea and perineum soiled with faeces & death within 48-72 hrs.

5. Pododermatitis (Sore hock)

It is caused due to *Staphylococcus aureus*. In sore hock there will be Ulcerated infected area of skin on the caudal portion of tarsus and metatarsus.

6. Venereal Spirochetosis

It is caused due to *Treponema cuniculi*. It is also known as Rabbit Syphilis, Vent Disease, and Cuniculosis. Transmission is through direct contact during mating & doe to her kits at parturition and lactation. Crusty lesion are found on genitalia but also appear on lips, nose, eyelids, & perineum.

7. Salmonellosis

Salmonella enterica serovars are responsible for Salmonellosis in rabbits. Salmonellae are transmitted by ingestion or direct contact with contaminated feces, food. Disease characterized by anorexia, dehydration, diarrhea (hemorrhagic), death and abortions.

8. Tularemia

Etiology of Tularemia is *Francisella tularensis*. Squirrel flea, deerfly, mosquitoes, lice and wood ticks which are blood sucking arthropods are the mechanical vector for Tularemia. Depression, anorexia, ataxia and death are associated with this disease. Congested lungs, splenomegaly, multiple pinpoint white foci on the liver and spleen are characteristic lesions.

Viral Diseases

1. Myxomatosis

It is caused due to Leporipoxvirus group. It is transmitted through arthropod vectors (mosquitoes, fleas, flies). It is characterized by puffy eyelids, a purulent conjunctivitis and lethargy. Subcutaneous (under the skin) swelling extends around the eyes, ears, and genital region.

2. Oral Papillomatosis

It is caused by Papovavirus (oral papillomatosis) and spread by direct contact with infected oral secretions. This is a benign disease characterized by numerous whitish growths on the underside of the tongue, oral cavity epithelium or gingiva.

3. Rabbit Fibroma Virus

Causative agent- A group of member Papovavirus and transmitted by arthropod vector. Horny warts are found on the eyelids and ears.

Parasitic Diseases

1. Diseases Caused by Protozoa (Coccidiosis)

- **Hepatic Coccidiosis:** It is caused by *Eimeria* spp, particularly *Eimeria stiedae*. Spread through faeco-oral route through ingestion of sporulated oocysts. Clinical sign include Ascites, Jaundice, diarrhoea, enlarged liver, Anorexia. On necropsy, they have seen hepatomegaly with numerous yellow lesion containing exudates.

- **Intestinal Coccidiosis:** It is caused by *Eimeria magna* and *Eimeria irresidua* species. It is characterized by reduced weight gain; diarrhea ranging from mucoid to watery to hemorrhagic, polydipsia and sometimes acute death are seen. One may see multiple white patches or ulcers on mucosal surface of the small or large intestine.

2. Diseases Caused by Cestodes

The rabbit is the intermediate host in the life cycle of the dog tapeworm, *Taenia pisiformis*. The problem is most encountered in wild rabbits but domestic rabbits that come in contact with dog feces containing the eggs of the parasite can also perpetuate the cycle. The stage found in rabbits is a cysticercus. The tapeworm *Taenia serialis* also uses the rabbit as its intermediate host but its coenurus cysts are larger (40 to 50 mm in diameter) and are usually found in the subcutaneous connective tissue.

3. Diseases Caused by Mites

- *Psoroptes cuniculi* (ear mite): Presence of Yellowish grey crusts in the ear is characteristic feature.
- *Cheyletiella parasitovorax* (fur mite): It is a commonest skin condition in rabbit. Caused due to non burrowing mite i.e. *Cheyletiella parasitovorax*. Partial alopecia along with Seborrhoeic lesion on the neck or dorsum is seen.

4. Diseases Caused By Fungi

Trichophyton mentagrophytes is an opportunistic, ubiquitous fungal soil organism. There is high incidence of the carrier state, with low incidence of disease. A crusty, pruritic, patchy alopecia on the head that spreads to the paws and other parts of the body is typical. Secondary bacterial infections are common.

Conclusion

Rabbits are prone to various diseases hence it is necessary to strictly follow the biosecurity in the farm. Prevention of these diseases in rabbit to increase the maximum profit of people and reduce the treatment cost. Housed should be rodent proof, fly and insect proof and supply clean water properly.

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