

Equine Influenza & Equine Infectious Anemia

By

Prof.D.Methaq A.Abdalsamad

- **Equine influenza**

- It is a highly contagious upper respiratory tract infection caused by strains of the influenza virus type A. influenza A infections often occur as outbreaks that rapidly spread through susceptible horse populations . Horses become infected by inhaling the influenza A virus that is shed by infected, coughing horses or via equipment such as feed buckets, .The virus then replicates in the lining (epithelial cells) of the upper respiratory tract ,that Causing increased production of a watery discharge as well as swelling and inflammation of the respiratory tract.

- **Clinical findings of Influenza**

- Outbreaks of equine influenza are characterised by a sudden onset and rapid spread of disease. Clinically, the disease is characterized by fever (101-106°F), after an incubation period of 2-3 days. The dominant sign is cough, which is dry in the beginning and moist later and lasts for 1-3 weeks. During the early stage of the disease there is watery nasal discharge, there is no marked swelling of the submaxillary lymph nodes but they may be painful on palpation in the early stages of the disease. Abdominal lung sounds are characterized by crackles, wheezes and increased intensity of breath sounds. There is depression, anorexia and reluctance to move.

- Complications are usually associated with secondary bacterial infection that results in a mucopurulent nasal discharge, persistent fever and markedly abnormal lung sounds. Icterus, incoordination . Colic and edema of the legs and scrotum have also been observed with influenza infection. Young foals lacking adequate maternal antibodies are at risk of developing a rapidly fatal viral pneumonia. Death has been reported as caused by secondary bacterial pneumonia and pleuritis.

- In some horses a secondary bacterial infection can develop, resulting in pneumonia. The nasal discharge in these horses usually changes from serous to mucoid (green, yellow, and thick), signifying a secondary bacterial pneumonia on the heels of the influenza, which can be fatal if untreated. It is important to remember that the severity of clinical signs is highly variable depending on the immune status of the horse. Sometimes horses can be infected and contagious without showing any clinical signs of infection.

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- Post Mortem Lesion
- 1. Sinusitis : extension of rhinitis

- 2. Exudates tend to found in sinuses
- 3. Laryngitis
- 4. In sever cases pneumonia
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- **Equine Infectious Anemia**

- Equine infectious anemia (EIA) is a retroviral disease of equidae that Equine infectious anemia is caused by equine infectious anemia virus (EIAV), a lentivirus in the family Retroviridae .

- **Clinical sign:**

- Equine infectious anemia virus is reported to infect all members of the Equidae.

The incubation period is a week to 45 days or longer. The clinical signs of acute EIA are often nonspecific. In some cases in horses, the only sign is a fever. More severely affected horses can become weak, and depressed, with additional signs that may include jaundice, tachypnea, tachycardia, ventral pitting edema, petechiae on the mucus membranes, epistaxis or blood-stained feces. Anemia can occur, although it is more likely to be severe in chronically infected animals.

- P. M. lesions

- The spleen, liver and abdominal lymph nodes may be enlarged, and the mucous membranes can be pale. In chronic cases, emaciation may also be noted. Edema is often found in the limbs and along the ventral abdominal wall. Petechiae may be observed on internal organs, including the spleen and kidney. Mucosal and visceral hemorrhages and blood vessel thrombosis have also been reported.

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