

EQUINE RHINOPNEUMONITIS (Equine Herpes Virus 1)

References:

<http://www.merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/121302.htm>

<http://vanwert.osu.edu/ag/The%20Equine%20Herpes%20Virus.pdf>

- A viral infection that causes an acute respiratory disease with fever. Also characterized by runny nose & cough. Outbreaks of the respiratory disease occur annually among foals in areas with large horse populations, but sporadically, elsewhere.
- Mares may abort several weeks to months after the clinical disease or even a subclinical (asymptomatic) infection
- Infrequently, neurologic disease can result.
- Multiple strains of the virus exist & this may be the cause for outbreaks of respiratory disease vs. abortion vs. neurologic disease
- Transmission occurs by direct or indirect contact with infective nasal discharge, aborted fetuses, placentas, or placental fluids.
- Clinical signs (may develop any or all)
 - 102-107 fever that lasts 1-7 days (diphasic, meaning it peaks, subsides, then peaks again)
 - congestion & cough
 - serious nasal & eye discharge
 - tiredness
 - lack of appetite
 - sore throat
 - sometimes swelling of lymph nodes around jaw & throat
 - constipation followed by diarrhea
 - Infection may be mild or inapparent in horses with some immunity
 - Neurologic symptoms: Can appear about 7 days after the beginning of the respiratory symptoms. Herpes viral lesions appear on the tissue of the nervous system. Symptoms vary depending on where the lesions are.
 - Mild incoordination to severe paralysis with recumbency, loss of bladder & tail function, loss of sensation in hindlimbs
 - The neurologic form appears from time to time & is contained & usually spreads no further
- Treatment: No specific treatment. Rest during acute stage with fever of respiratory disease. Fever reducing medication if fever 105 or greater. Antibiotic therapy at first sign of pus-like nasal discharge or lung involvement (bronchitis). If horses with the neurologic form of the disease are nonrecumbent or recumbent only 2-3 days, the prognosis is usually favorable. Intensive nursing care is needed to avoid lung congestion, pneumonia, ruptured bladder, or bowel problems.
- Control & Prevention:

- Most horses carry the virus as a latent infection thru out their lives (no symptoms, not contagious). Very occasionally stress or corticosteroid administration can cause the virus to become active.
- A horse with an active infection is considered contagious
- Vaccination is only effective against the strain(s) causing the respiratory disease NOT the neurologic strain. Vaccination during neurologic disease can actually make the condition worse because it further stresses the animal's immune system.

EQUINE INFLUENZA

References:

<http://www.merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/121304.htm&word=equine%2cinfluenza>

<http://www.usyd.edu.au/su/rirdc/articles/disease/flu.htm>

http://www.ivis.org/special_books/Lekeux/bell/chapter_frm.asp?LA=1#Influenza

- Acute, highly contagious viral respiratory disease (orthomyxovirus)
- It is not known if a carrier state exists. Transmission occurs by the respiratory route thru contact with infective respiratory secretions
- Clinical symptoms: occurrence of a rapidly spreading respiratory infection in a group of horses characterized by rapid onset, high fever, depression, weakness, and widespread coughing is usually sufficient to make a presumptive diagnosis of equine influenza.
 - May be mild to inapparent infection to severe disease that is rarely fatal except in the very young, old, or already debilitated. *Donkeys are particularly prone to show severe clinical symptoms & have a higher mortality rate.*
 - Onset is abrupt with fever up to 107.5 that usually lasts less than 3 days in uncomplicated infections
 - Dry, harsh, nonproductive cough that develops early in the disease & may persist for weeks
 - Nasal discharge starts out scant & watery but usually becomes profuse and thick later especially if a 2ndard strep infection sets in

- Depression, anorexia, & weakness are frequent
 - Discharge from the tear ducts, enlarged lymph nodes, swelling, stiffness, laminitis, dyspnea (shortness of breath, labored breathing) & pneumonia are sometimes present
 - Mildly affected horses recover uneventfully in 2-3 weeks while severely affected animals may take up to 6 months to recover
 - Restricting exercise, controlling dust, improved ventilation, & good stable hygiene all contribute to improved recovery
- Treatment & control: Prevention by vaccination every 3-6 months with the current vaccines