

Equine Veterinary Associates Client Information on “Strangles”

Etiology: Caused by infection with the gram-positive bacteria *streptococcus equi*
-Only causes disease in equine (horses, mules, donkeys, ponies)

Transmission: Direct contact with the mucopurulent discharge of an infected horse, from the horse itself or on buckets, feeders, waterers, stalls, pastures, etc.
-The organism does not generally survive in the environment for a long period of time, and can be killed by disinfectants such as phenols, povidone-iodine, or chlorhexidine.
-*Streptococcus equi* can survive in pus or discharge for weeks to months.
-It is highly contagious but has a very low death rate (0-10%).
-Infection is most common severe in young animals (1-5 years of age).
-An outbreak can occur by the introduction of a horse that is incubating the disease or shedding the bacteria after recovery.

Disease Development: *Strep equi* enters the nose or mouth and attaches to tonsil and lymph node cells, and then moves on to the lymphatic system.
-Bacteria multiply in the lymph nodes, causing abscesses
-The lymph nodes may swell to the point of putting pressure on the airway or esophagus, hence the name “strangles”
-Usually only affects submandibular and retropharyngeal lymph nodes, and the upper respiratory tract, but may spread to other areas by the lymphatic system or bloodstream
-Bacterial shedding begins 4-7 days after infection and usually lasts 3-6 weeks.

Clinical Signs: seen anytime between 3 & 14 days after exposure
-Fever (temp. over 102 degrees F) lethargy/depression, mucopurulent discharge (thick, white or yellow), cough, decreased appetite, difficulty swallowing, respiratory noise, extending head and neck, swelling/tenderness under jaw
-Abscessation of lymph nodes, usually rupturing in 7-14 days
-Horses showing clinical signs should be isolated (see prevention)

Diagnosis: Based on obvious clinical signs and history of potential exposure
-Culture of strep equi from swollen lymph nodes (open abscesses and nasal discharge are often contaminated with other bacteria)

Treatment: Depends on the stage of the disease
-“Uncomplicated” cases are allowed to run their course, with the use of anti-inflammatories (Bute or Banamine) to control fever, and hot packing of the lymph nodes to encourage rupture and drainage. Treatment with antibiotics at this stage will only slow abscess maturation and delay recovery.
-“Complicated” cases are those having trouble breathing or eating, maintaining a high fever (temp over 104 degrees F) or with severe depression and loss of

appetite; these require hospitalization and supportive care, antibiotics, lancing of lymph nodes, flushing of guttural pouches and possibly a temporary tracheostomy

After Affects: Most horses recover quickly after abscesses rupture and drain, with an average 23 day course of the disease

-20% of cases develop other complications such as lymphangitis/cellulitis of the head or neck, laryngeal nerve paralysis, guttural pouch infection, thorax or abdominal lymph node infection, pneumonia, or “perpura hemorrhagica,” a vasculitis of the lower legs and ventral abdomen

Prevention: Vaccination is very effective at preventing or reducing the severity of clinical

signs

-Our vet clinic gives the intranasal Strangles vaccine. Horses should initially be vaccinated twice, 2-3 weeks apart, then once or twice a year based on potential exposure

-Recovered horses have some “natural immunity” for about a year

-Isolate new, incoming horses for 14-21 days before exposing them to other horses. Monitor their temperature and observe for signs

-Isolate horses showing clinical signs. Clean and disinfect all surfaces that could be contaminated with discharge (buckets, feeders, stall rake, etc.) Remember that caretakers can spread the disease from horse to horse on their shoes or clothing or hands.