COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES
PUBLIC HEALTH - DISEASE CONTROL PROGRAMS
VETERINARY PUBLIC HEALTH AND RABIES CONTROL

Equine Strangles

Strangles is among the oldest, most important, diseases of equines. The name comes from the strangled breathing sounds the horse makes as a result of the enlarged, neck lymph nodes and infected guttural pouches. Strangles can affect horses, donkeys and mules of all ages, but usually those younger than two years of age. Foals younger than four months are usually protected by passive immunity through the colostrums in their mother's milk.

Transmission

Strangles is a highly contagious, upper respiratory infection caused by a bacterium, *Streptococcus equi*. The disease is spread via nasal secretions (sneezing, coughing, nose-to-nose contact) and pus from draining abscesses. Flies and contaminated equipment, such as water buckets or troughs, feed, stalls, fences, tack, and pitchforks, can also transmit bacteria. A person handling an infected horse can carry the organism on clothing, boots, or unwashed hands. *S. equi* bacteria can survive for weeks in water troughs, but dies quickly in pasture and soil. The bacterium can also remain viable in frozen discharges. Approximately 20 percent of horses shed the bacteria for a month after all clinical signs are gone.

One of the more difficult-to-identify complications is called "bastard strangles" which occurs when the infection spreads internally. This form may be suspected when there is an on-going problem with unthriftiness, continued weight loss, poor performance, and listlessness that cannot be explained. Check with your veterinarian.

Factors contributing to strangles outbreaks include:
- Crowded conditions
- Inadequate housing
- Poor sanitation
- Inadequate nutrition
- Stress from lengthy transportation
- New animal additions

Incubation Period

The incubation period can be as short as four days to five days or as long as two weeks after exposure. Incubation depends on climatic conditions and overcrowding of animals. Incubating or recovered (but shedding) equines attending shows and sales, are frequent sources of infection.

Clinical Signs

Initial signs are usually: mild lethargy or depression, slight cough, fever of 102 F to 103 F, clear, watery nasal discharge that quickly changes to thick and yellow, trouble swallowing, loss of appetite, and enlarged lymph nodes in the lower jaw. Occasionally, a horse may stand with its neck extended because of pain in the throat area.

As the swelling progresses the infection usually abscesses, then drains of the highly infectious pus within one week to two weeks after initial clinical signs. Without complications, recovery begins.

Older animals with some immunity may exhibit a mild form of the disease, with only a cough, mild fever and nasal discharge.

Diagnosis

Diagnosis of strangles is accomplished through a culture of; nasal swabs, nasal washes or pus from the abscesses. Nasal washes are more sensitive in detecting small numbers of organisms. Culture of nasal swabs may not detect organisms hiding in the guttural pouch of an apparently normal horse recovering from strangles. Blood tests are not useful in detecting infection, except for possibly bastard strangles.

Treatment

Horses should be isolated to stop the spread of strangles. Consult with your veterinarian concerning the best treatment for your horse. An animal with an unknown health history should be isolated from normal horses for a month, which is the usual time required for full recovery.

Treatment focuses on supportive care of the animal:
•Keep the horse warm and dry
•Provide soft food
•Monitor horse's temperature
•Apply hot compresses to abscessed lymph nodes to promote rupture and drainage and
•Flush draining tracks with dilute povidone-iodine solution (Betadine) or similar agent.

Various antibiotics have been used to treat strangles, penicillin is often used. Check with your veterinarian.

Control and Prevention

Strangles outbreaks are more frequent when a new animal, incubating the disease or recovering and still shedding the organism, is introduced. Practical biosecurity measures are the best means of prevention:

•Quarantine new horse arrivals
•Avoid mingling with other horses at shows and other events
•Avoid sharing water buckets and equipment
•Vaccinate to reduce the severity and spread of strangles.
•Provide clean, dry housing and
•Practice good sanitation.

It is good common sense to isolate any newcomers to a farm for two weeks, just in case they may be carrying a bacterial infection or virus to which the resident horses have not previously been exposed. Horses incubating common communicable diseases usually become ill within two weeks.

In the face of an outbreak, it has been demonstrated that vaccinating non-sick animals can decrease the illness by half. Check with your veterinarian as to what vaccine he or she recommends.