



Massey University

Veterinary Teaching Hospital

STRANGLES

What is strangles?

Strangles is an infectious disease caused by a bacterium called *Streptococcus equi* subspecies *equi*. It is highly contagious and the infection can be spread by horse-to-horse contact or via humans, tack, feed utensils and other items which may contact infected horses.

What should I look for?

The characteristic initial signs include sudden onset of fever (high temperature) and loss of appetite. The horse may have difficulty swallowing. This is usually followed by swelling of the lymph nodes (glands) under the jaw and in the throat and the horse may hold his head low with his nose poked forwards to relieve discomfort and to aid respiration. There is usually a thin watery nasal discharge which soon becomes thick and yellow. One or more abscesses form in the inflamed lymph nodes. These tend to rupture either to the outside or into the back of the throat and discharge thick yellow pus. Horses usually recover fully after natural rupture of the abscesses. You should seek veterinary help without delay.

Which horses can become affected?

Strangles can occur in horses of any age but younger horses are more often infected. After infection, most horses are immune to re-infection for at least a few years. Old or debilitated horses are at increased risk of infection or re-infection.

Can it be treated?

The bacteria which cause strangles can be killed by many antibiotics including penicillin but antibiotic treatment is not always beneficial and can also be harmful at certain stages of the disease. Anti-inflammatory medication often makes affected horses feel much better.

Recommended treatments include application of hot towels or poultices to the swollen glands to encourage abscesses to burst or to grow to a size and maturity that allows them to be safely and successfully lanced. Once open, the abscess cavities should be flushed with dilute povidone-iodine solutions and allowed to heal naturally.

Can the disease be prevented?

It is most important to understand the highly infectious nature of this organism and to all that can be done to isolate cases and to prevent further spread to other horses, both on and off the immediate premises. Your veterinary surgeon will help you set up a management protocol appropriate to your own location and circumstances.

Vaccines against strangles have been available for many years in some countries but have not been very effective and are often associated with unpleasant side effects. A new vaccine has now become licensed for use in UK and, although not 100% protective, does offer significant defence against strangles infection.

Prevention of the disease or its spread primarily depends upon good management. New horses should be isolated for 2-3 weeks and their temperatures checked regularly. Any horse which shows suspicious signs of illness (high temperature, nasal discharge, difficulty in swallowing, swollen throat or glands) should be isolated until strangles is confirmed or ruled out by veterinary examinations and laboratory investigations. Any horse which has strangles should be immediately isolated from all other horses. It should have its own water and feed mangers, grooming kit

and tack and no equipment used for the affected horse should be allowed near other horses. One person should look after the affected horse(s) and avoid contact with all other horses. All equipment, stables, fences, trailers, etc. should be thoroughly disinfected using an approved disinfectant (eg. Virkon).

Unfortunately, some horses become symptomless persistent carriers of *Streptococcus equi*, most commonly in their guttural pouches, and can infect horses intermittently although showing no signs of infection themselves. This is probably the most important cause of infection recurring at intervals of several months, after apparent clearance. Part of the clearance process for recovered cases should therefore be the collection of deep nasopharyngeal swab and guttural pouch wash samples for laboratory investigations.

Are there other or long term complications of the disease?

Strangles can take an unusual course with abscesses forming deep in the body. This is often termed 'bastard strangles' and can be very difficult to treat successfully. Affected horses may show signs of colic or abscesses might discharge from many internal sites. Cases lose weight and often require euthanasia on humane grounds with colic, respiratory distress or other complicating illnesses associated with multifocal organ damage.

Occasionally a horse which recovers from strangles will develop a condition known as purpura haemorrhagica. This is due to an unusual immune reaction to the streptococcal bacteria and results in widespread damage to blood vessels, resulting in swellings of the legs and head and bruise-like patches in the mouth. Your veterinary surgeon should be called immediately if you suspect this life-threatening condition.

Code of Practice - Control of Strangles Infections

Since 1978, the Horserace Betting Levy Board has annually updated and produced its highly successful Code of Practice for the control of equine venereal diseases and now includes guidelines on strangles. This contains detailed advice and recommendations on the disease and its effects, diagnosis, control and prevention. Your veterinary surgeon will have a copy of the Code and copies may be obtained via the Thoroughbred Breeders Association or the British Horse Society. Although a voluntary Code it has become the industry standard for the benefit of all and all horse breeders should read it and follow its advice.