

Strangles

Strangles is one of the most common equine respiratory infections and the most common bacterial infection of horses. It is caused by a bacterium *Streptococcus Equi* subsp. *Equi* and is highly contagious. Strangles can in very rare cases be fatal but generally most horses will make a full recovery. The primary reason for concern is how quickly it can be spread within the horse population and also that some recovered horses will become 'carriers' and therefore able to spread the disease to others even though they themselves appear clinically healthy. The carrier status will be discussed more later.

Symptoms of Strangles

- High temperature
- Depression
- Off food
- Swelling/ abscessation of lymph nodes under the chin
- Nasal discharge- usually thick and pus-like

Occasionally, a horse may present with 'atypical strangles' where a fever is present but no other clinical signs.

Up to ten percent of horses infected with strangles may develop abscesses in other areas of the body, this is commonly known as 'bastard strangles'. A further complication is purpura haemorrhagica where complexes of the bacterium and antibody joined together are laid down in the walls of blood vessels making them leaky. Small pinpoint bleeds are often seen on mucous membranes and there is fluid accumulation, often on the limbs and head. If extreme, the fluid accumulation can cause circulatory failure and death.

Whilst we can be suspicious of strangles from the above clinical signs, it is necessary to test the horse, usually by taking swabs from the naso-pharynx (back of the throat) and sending these for culture. A blood test is also available but this does not test for the bacteria itself and instead tests for antibodies to the bacteria. Therefore this test cannot tell if the horse is infected at the moment but instead lets us know if they have been exposed to the bacteria in the past six months with the exception of the preceding two weeks.

Transmission

Spread is usually via direct contact (i.e. horse touching horse) or indirect contact where an infected horse has shed the bacterium onto tack, feed buckets, or hands or clothing. The bacterium enters the horses respiratory tract and then passes into the lymph nodes and guttural pouches. The incubation period is usually between three and fourteen days.

The bacterium can live in water for at least four weeks and on wood and pasture for up to eight weeks.

Treatment

For the most part, treatment is supportive therapy such as anti-inflammatories to reduce the fever and make the horse feel a bit better. In certain cases, we may elect to use antibiotics also. Abscesses in lymph nodes can be hot packed to encourage them to burst and occasionally we will lance abscesses. Following lancing or bursting, we may suggest flushing of the abscesses with anti-septics such as diluted hibiscrub.

Prevention

- Horses coming into a yard should be quarantined for two weeks before being allowed to have contact with any other horses. Some yards are now opting to have a blood sample for strangles following this two week period.
- Minimise contact with horses of unknown disease status- for example restrict contact with other horses at shows etc.

If Strangles is diagnosed:

- Horses should be separated into three groups: Ill horses, horses that are showing no signs but have been in contact with the ill horses, and those which have not been in contact. Hygiene and disinfection between these groups is extremely important. Any horse which becomes sick has to move into the ill group.
- No horses to move on or off the yard.
- All healthy horses should be monitored closely for any signs of becoming unwell- one of the best ways of doing this is to check temperatures once or twice daily.
- Anyone with regular contact with horses from outside the yard should stay away as much as possible.

Getting the 'All-Clear'

Of course, following an outbreak, everyone wants to get back to normal and getting out to shows as soon as possible. However, testing cannot begin until thirty days after the last horse on the yard has stopped showing any signs of disease. Testing any sooner is likely to yield positive results, meaning tests will have to be repeated and therefore further costs will be incurred.

As it is possible for horses that have been infected with strangles to look normal but still be shedding the bacterium (carriers), all horses have to be tested. All ill horses must receive either three consecutive negative swabs or a one off guttural pouch wash via endoscope to prove that they are no longer infected and therefore not carriers. We would advise the endoscope guttural pouch wash as it is a more sensitive technique and also allows us to visualise the pouches to see if any pus is still present there. If the above strategy of splitting the horses into three groups has been employed then, if healthy horses have been isolated from the ill ones then these healthy horses can have a blood test to detect whether or not they have been exposed to strangles and therefore do not require scoping and guttural pouch washes. However, if any of these horses have a positive blood sample result, scoping will be required. If isolation has not been possible then all horses in the yard will need to undergo this procedure.