

Strangles

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Strangles is a widespread, highly infectious disease of horses caused by the bacteria streptococcus equi. It affects horses of all ages and types, although those with a lowered immune system (for example, the young, old or sick) are at more risk. The disease is spread by physical transference of bacteria from an infected to a non-infected horse. Due to its infectious nature, the disease can spread rapidly through a population of horses if strict biosecurity measures are not imposed.

Clinical signs

These typically appear three to seven days after exposure, but it can be up to 14 days, or in rare cases even longer.

Clinical signs associated with strangles:

- Nasal discharge (usually thick yellow or green)
- Loss of appetite
- Difficulty swallowing
- Depression and dullness
- Development of a cough
- Fever
- Swollen lymph nodes under jaw or down neck
- Rupture of lymph node abscesses

Typical clinical signs are summarised above, however in rare cases there can be complications resulting in a much more serious form of disease:

- The abscesses can become so large that they press on the airway and affect breathing (hence the term 'strangles')
- Abscesses can develop in other organs, for example brain,

lungs, or intestines, resulting in potentially fatal organ failure. This is known as 'bastard strangles'

- Purpura haemorrhagica can develop, in which there is potentially fatal bleeding into the skin, gums, or other organs such as lungs.

Spread

The disease is spread when bacteria are transferred between horses. Often, this is direct contact between horses, but it can also be transferred via a fomite - objects such as water buckets, mucking out equipment, human hands and clothing and so on. The bacteria are often shed via nasal discharge or draining abscesses, but can also be shed in the first few days before clinical signs have appeared. Horses recovering from disease can continue to shed bacteria for up to six weeks. There is also a form of the disease known as 'atypical strangles' in which horses show only very mild clinical signs but are still infectious.



Nasal discharge typical of a strangles infection



Lymph node enlargement

Treatment

In most cases treatment is aimed at keeping the horse comfortable using anti-inflammatory medication - the disease tends to be self-limiting and usually lasts three to four weeks. More severe cases may take longer to resolve, and may require more supportive therapy.

Carriers

Following infection, approximately 10% of horses become chronic carriers. In these horses, clinical signs resolve but some bacteria remain in the guttural pouches, usually inside chondroids (balls of dried pus). These bacteria will be shed periodically without any clinical signs, and can infect in-contact horses.

Guttural pouch endoscopy is used to identify carriers, and it is recommended that all infected horses undergo this procedure 30 days after resolution of clinical signs to determine if they have become carriers. Chondroids can be visualised and removed and, along with a flush of the pouch, can be sent for testing for bacterial DNA. Carriers are treated with antibiotics instilled directly into the guttural pouch, followed by repeated flushes until the pouch is confirmed clear.

Diagnosis

Strangles can be diagnosed by swabbing the back of the horse's nasal cavity if there is nasal discharge, or by swabbing a draining abscess. Alternatively, a blood sample can assess the level of antibodies in the bloodstream, but this must be interpreted with caution as a high level of antibodies does not always mean active disease. For this reason, it is often necessary to take two blood samples, two weeks apart.

Biosecurity measures

In many areas, it is commonplace to take a blood sample before moving a horse from one yard to another in order to identify potential carriers, or those with an active infection but no current clinical signs.

When an outbreak is confirmed, the yard vet will be able to advise on a biosecurity protocol to limit spread within the yard, and it is strongly recommended to notify neighbouring premises. The speed and success of resolving cases often hinges on the strict management of isolation, quarantine, movement restrictions, and disinfection.



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