



Waterlane
EQUINE VETS

FACTSHEETS

Strangles

Equine Strangles is caused by a highly contagious bacterium called *Streptococcus equi* (*S. equi*) that infects the upper respiratory tract. In severe cases the condition can cause the airways to narrow making it difficult to breathe, hence the name “strangles”. It is spread by both direct (nose to nose) and indirect (tack, blankets, your hands, etc) contact and can affect any horse regardless of breed, sex, or age.

Clinical Signs

Clinical signs can vary in severity and be any of the following:

- ❖ Depression
- ❖ Loss of Appetite
- ❖ Fever
- ❖ Cough
- ❖ Nasal Discharge
- ❖ Enlargement of lymph nodes under the jaw/head/neck
- ❖ Abscessation of lymph nodes under jaw/head/neck

A horse with atypical strangles will display little, mild & intermittent, or no clinical signs. It is important to remember that even when displaying no outward signs, an infected horse is still shedding the disease.

How to Test

If you are suspicious that your horse may have strangles, your vet can carry out one of these tests:

1. **Blood test (Serology and PCR)** - The blood test identifies if your horse has any presence of antibodies to two different antigens (the parts of the bacterium that causes an immune response - in this case Type A and Type C) as well as being able to detect bacterial DNA (by PCR analysis). These results are quick but can be inconclusive and may require a second test in 14 days to clarify. It also takes a horse 2 weeks to create an immune response against strangles and therefore may miss horses in the early stages of disease which would again require a second test 2 weeks later to be confident the horse is free of disease.
2. **Nasopharyngeal Swab** - A swab is taken to see if any bacteria grows on a culture. This process does take longer than blood tests but is very sensitive - meaning those that come back positive most likely have disease. However, there is also a chance that there was not enough bacteria on the swab to culture a positive result.



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3. **Guttural Pouch Endoscopy and Lavage** - This is the gold standard for diagnosis of strangles. It requires an endoscope to go into the guttural pouch to look for any visual signs of bacteria and to also flush the guttural pouch for culturing. This is usually done after positive or inconclusive results from the above two tests.

Prevention

To prevent an outbreak, yard owners should implement a quarantine and biosecurity plan to screen new horses entering the yard. This can be done by having a designated stable away from the main yard where the new horse(s) can stay for 21-28 days. The yard manager can also require the horse to have a negative strangles serology at the end of being quarantined or a paired serology (one when entering quarantine and a second between days 14-21). All quarantined horses should have their own designated yard equipment (buckets, wheelbarrow, pitchfork), antiseptic dip for staff's boots upon entering and leaving, and overalls to be worn while in the quarantine area. All of the equipment, and the stall, should be washed with antiseptic after each horse to prevent the spreading of any disease to the next entry.

Why Is Strangles Bad?

Besides the fact that it is very contagious and the horse will be in some degree of pain from the illness, the more threatening part of Strangles is the possibility of any one of the three sequelae. Although the majority recover with no further issues, a few will result in one of the following:

1. **Guttural Pouch Empyema and Chondroids** - The most common sequelae (around 10% of all strangles cases) are persistently infected individuals where a collection of pus has established itself in the guttural pouch. This allows the horse to consistently shed the bacterium even though there are no more outward signs. Mild cases can be treated with antibiotics and guttural pouch flushing but sometimes the pus can form hard "stones" called Chondroids that may require surgery to remove.
2. **Bastard Strangles** - This is a potentially fatal condition that occurs in a very small number of cases (around 1%). The infection is no longer isolated to the upper airway and spreads to lymph nodes and organs around the body.
3. **Purpura Haemorrhagica** - Another rare outcome which occurs 2-4 weeks after the initial bout of strangles. This is an immune mediated vasculitis that shows up as oedema around the legs and abdomen which can be extremely sore. Severe cases may have areas of affected skin slough off as well as cause internal bleeding and can be fatal.

Treatment

The treatment for strangles varies depending on severity of disease and is mostly supportive - anti-inflammatories and hot packing/lancing abscesses. Endoscopic guttural pouch lavage may also be necessary in most cases to prevent the horse from becoming persistently infected. Before releasing a horse from isolation, it is ideal that it be quarantined for at least a month as well as have 3 consecutive weekly nasopharyngeal swabs come back negative. It is always best to consult with a veterinarian to decide what is the most suitable treatment route for your horse.