

Cambridge Equine Hospital

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Strangles

Strangles is a respiratory infection of horses and ponies caused by the bacterium *Streptococcus equi subspecies equi*. It is one of the most common equine respiratory infections and is highly contagious.

Clinical Signs

- High temperature (often 39-40°C). This is usually the first clinical sign to occur.
- Depression/inappetance.
- Nasal discharge, usually watery and rapidly becoming thick pus.
- Swollen glands under the jaw and throat region, which may form abscesses and then burst
- Cough and difficulty swallowing.
- Difficulty in breathing with abnormal respiratory noise, horses may breathe with their heads extended.
- Young horses and elderly horses may be affected first and show more severe clinical signs
- Atypical strangles presents as mild “flu-like” symptoms.

Diagnosis

A presumptive diagnosis is made in horses with high fevers, abscess formation, and the rapid spread of infection between in-contact animals. The diagnosis is confirmed by testing swabs from the horse's nasal cavity or by directly swabbing a draining abscess. An airway examination with an endoscopy camera may be recommended to collect samples from the guttural pouch, particularly to detect a carrier animal.

The Spread of Disease & Contamination in the Environment

Strangles spreads principally by direct or indirect contact from horse to horse ie. rubbing noses, sharing drinking troughs, clothes, buckets, and other contaminated kit. Therefore, strict hygiene and isolation of all infected horses is of utmost importance:

- Monitor the rectal temperature twice daily of in-contact animals.
- Isolate horses in direct contact with an infected horse.
- Use disinfectant foot dips (Virkon or Trigene) and gloves when handling horses.
- Only use designated personnel and equipment for infected horses.
- No in-contact animals should leave the yard, until confirmation of freedom of disease.
- Warn horse owners using fields adjacent to the premises to keep their distance.
- Warn vets, farriers, dentists, feed merchants etc. before they visit the yard.

Treatment of Individual Horses

Treatment is good supportive, nursing care including:

- Feed soft, wet feed and good quality hay on the floor to encourage drainage of nasal discharge.
- Anti-inflammatory medication to reduce fever and sore inflamed throat.
- Hot-packing developing abscesses to encourage them to soften and burst.
- Daily flushing of burst abscesses with dilute antiseptic solution.

Antibiotics are generally not used for many reasons:

- Antibiotics may delay maturation of the abscess and prolong the course of disease.
- No development of immunity - your horse will still be at risk of developing infection in the future.

- Disease often recurs once antibiotics stop.
- Antibiotics are occasionally used in young or elderly horses. Your vet will advise you of this.

Complications

Complications are unusual, but can be serious or even life threatening. These include:

- **Respiratory distress** and difficulty swallowing.
- **Bastard strangles** - a rare complication where horses develop abscesses internally.
- **Purpura hemorrhagica** - a rare complication of the immune system occurring ~4-5 weeks after a strangles infection. Signs include red spots (haemorrhages) on the gums and lips, oedema (swelling) of the limbs and head, fever, depression, stiffness and serous ooze through the skin.
- **Carrier** - Up to 10% of recovered horses may become carriers if the bacterium persists in the guttural pouches. Carriers look outwardly healthy but may be able to pass on strangles infection to other horses. Consequently, new or recurrent outbreaks are likely unless diagnostic procedures are performed to identify and treat the carrier.

Vaccination

Vaccination is available as part of a strangles management programme but is not a substitute for good stable management. The vaccine is licensed for reduction of clinical signs and incidence of lymph node abscessation, but not for the prevention of clinical disease. Please discuss the vaccine with your vet.

Prevention

Preventative strategies to stop introduction of strangles to a yard include:

- New horses entering the yard should be kept in isolation initially. If a horse has not developed a fever or shown any signs of ill health for 3-4 weeks, it should be safe to introduce to the herd. However, a horse may be a silent 'carrier' and bring strangles into a yard without showing any signs.
- A blood test can be used to distinguish those horses that have been exposed to *S. equi* during a strangles outbreak or to screen horses prior to movement, competition or sales. A positive test results could indicate:
 - Exposure to strangles and incubation of the disease.
 - Acute phase strangles and the horse may show clinical signs.
 - Infection in the past 6 months, with or without clinical signs, followed by full recovery.
 - Infection with strangles in the past, with or without clinical signs, resulting in immunity to the disease in the face of recent exposure.
 - Past infection with strangles which has resulted in the horse becoming a carrier.
- If you suspect a horse on your yard has strangles, contact your vet immediately. All other horses are at risk - confirmed cases and in-contacts should be isolated, and the yard closed to prevent further spread. No movement on or off the yard should be adhered to, particularly as you would want other yards to avoid spreading the disease to you.
- Strangles is not a notifiable disease and there is no legal notification requirement for strangles. Guidelines for strangles are published annually in the HBLB Codes of practice: <http://codes.hblb.org.uk/index.php/page/99>
- **For further information:** www.equine-strangles.co.uk

If you have any concerns that your horse may be displaying any signs consistent with strangles, or may have been exposed to an infected horse, do not hesitate to contact us for advice. Please contact us on:

01223 760535, or email cambridgeequine@vet.cam.ac.uk
