

Strangles

Strangles is a bacterial respiratory infection caused by the bacterium *Streptococcus equi* (*S. equi*). It is one of the most contagious diseases of horses and can be transmitted via fomites as well as direct contact with infected horses. It can also remain in the environment on fences and gate posts for up to 3 days depending upon the temperature and humidity.

Clinical signs

- The incubation period of *S. equi* is 3–14 days and normally the first sign of infection is fever (a raised temperature $>38.5^{\circ}\text{C}$)
- Within 1-2 days of the initial fever the horse will develop thick yellow coloured nasal discharge
- Lethargy and depression
- Inappetence
- Enlargement of submandibular lymph nodes
- Difficulty swallowing
- Inspiratory respiratory noise



In some horses the disease can progress to “bastard strangles” which is internal abscessation of other lymph nodes in the body such as in the abdomen and thorax and is often fatal for the horse.

Diagnosis

Normally nasopharyngeal swabs are taken and bacterial culture and/or PCR performed to detect the presence of the bacteria. Most of the time these swabs can pick up the bacteria however these swabs do not directly sample the infected lymph nodes and so some cases require endoscopic examination of the upper respiratory tract and sampling of the guttural pouches which overlay the retropharyngeal lymph nodes. The lymph nodes abscessate and rupture into the guttural pouches and so guttural pouch lavage can be performed for diagnosis.

Treatment

- TLC! Horses need to be kept in warm, dry and dust-free environment. Offer warm soaked feeds as some horses find forage too coarse to eat and difficult to chew and swallow.

- Application of hot compresses frequently to the sites of lymphadenopathy to hasten abscess maturation and rupture. Once the ruptured the abscesses should be flushed with dilute (3%–5%) povidone-iodine solution for several days until there is no longer discharge.
- NSAID medication will be prescribed by your vet which will reduce pain and fever and may improve appetite.
- Antibiotic therapy is controversial as it prolongs the course of disease by delaying abscess maturation. Antibiotics are indicated in severe cases where the horse has difficulty breathing, swallowing, has a persistent fever or is very lethargic and inappetent.

Biosecurity and quarantine:

- All infected horses need to be physically separated from other horses and placed in quarantine. Ideally separate people should be caring for horses in quarantine and they must wear personal protective clothing to avoid spreading the infection to other horses.
- Rectal temperatures of all horses known to have been in contact with an infected horse should be obtained twice daily and horses developing fever should be placed in quarantine.
- Stables, feeding buckets and contaminated equipment should be cleaned every day and disinfected with a suitable product such as Virkon known to kill *S. equi*.
- Important to note- flies can transmit the infection therefore efforts should be made to control the fly population during an outbreak.
- Horses generally become free from infection between 6-10 weeks following initial exposure. Before being released from quarantine it is vital to establish they are free from infection and three negative nasopharyngeal swabs at 7 day intervals should be obtained before release from quarantine.
- For some horse's infection can persist for months to years, these horses are known as chronic carriers and often do not show any clinical signs. It is imperative to identify these individuals so they can have intensive treatment to resolve the infection and prevent other horses becoming infected. Endoscopy and guttural pouch lavage is used to identify persistent carriers.