Loch Leven EQUINE PRACTICE

Strangles

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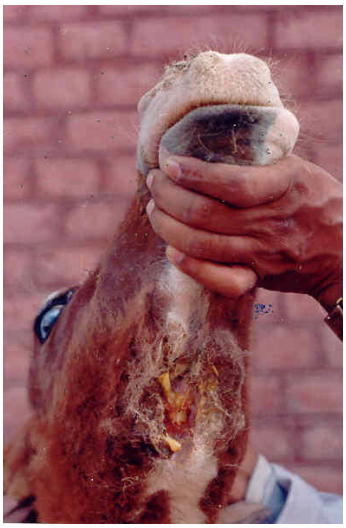
Strangles is a disease caused by bacteria known as *Streptococcus equi equi*. It is endemic in the UK and is highly infectious to all equidae. It is spread between horses that are in direct contact with each other, but also via indirect contact on clothing, feed and water buckets, and tack.

Clinical Signs



Normally horses will become ill, lose their appetite and then develop a high temperature. After this most will then develop a nasal discharge and swelling of the glands at the back of the head and under the jaw. These swollen glands can then form into abscesses which will often rupture, discharging pus in to the surrounding environment. Some horses may show difficulty breathing due to these swollen glands and make a snoring noise-hence strangles. Unfortunately not all horses will show these classical signs which can make spotting the disease much more difficult, but are still as infectious!

There are other forms of the disease that can develop. These are:

1. Guttural pouch empyema / chondroids
2. Bastard strangles
3. Purpura haemorrhagica

The horse has large outpouchings of the tube that links the throat to the ear (Eustachian tube) known as the gutteral pouches. When a horse becomes infected with Strep equi, the bacteria can get into these pouches usually through abscesses rupturing into the pouches and cause infection inside them. This is known as guttural pouch empyema. This is usually diagnosed using an endoscope and requires intensive medical treatment and sometimes surgery to cure the problem.

Bastard strangles occurs in approximately 10% of cases. The bacteria normally infect the throat region and the associated lymph nodes, but sometimes manage to reach other parts of the body causing internal abscesses. These will tend to leak pus internally, which unfortunately is almost always fatal.

Purpura haemorrhagica is a very rare complication of Strep equi infection and may occur in 1-2% of infected horses. This happens when the body has a particular response to the bacterial infection and causes inflammation of the blood vessels (vasculitis). Horses tend to present with swollen limbs, swelling underneath their abdomens, swelling of the head and most appear ill. Many cases will respond to steroids alongside antibiotic therapy.

A significant complication of Strep equi infection is that approximately 10% of horses will become chronic subclinical carriers, usually carrying the bacteria in their guttural pouches. These horses pose a significant threat to non-immune horses and tend to be the source of many of the infections on yards.

Treatment

This is an area that always causes debate. Any affected horses should be isolated and given anti-inflammatories to help bring down their temperature and make the horse feel better. Studies indicate that antibiotics should only really be used in very acute cases where the temperature has become raised and before there is gland enlargement. This can resolve these clinical cases. However, once the glands become swollen up it is recommended that antibiotics are avoided and that abscesses should be encouraged to drain either by using hotpacks or by the vet directly lancing the abscess. Once the abscesses have ruptured they should be flushed daily with dilute disinfectants e.g. hibiscrub or iodine. Feed should be placed at floor level to encourage nasal discharge drainage. Unfortunately, the vaccine for strangles has recently been taken off the market for the indefinite future until the company can resolve some problems they have been experiencing with the bacterial levels in the vaccine.

Management of a yard outbreak

All infected animals and in contacts should be isolated, ideally as a separate group. In- contact horses should have their temperature monitored twice daily. The affected group should be dealt with last whilst wearing protective clothing and should have foot dips outside their stables. Separate equipment should be used for the affected horses. Ideally in-contacts should be screened either with 3 naso-pharyngeal swabs or guttural pouch washes, all of which should be negative before release from isolation. Clinical cases should also have the appropriate screening done before they can be classified as free from infection. If this method is not adopted, then strict isolation for six weeks after resolution of clinical signs should prevent new horses becoming infected but will not identify if there are chronic sub-clinical carriers in the group.

Prevention

All new animals entering a yard should be placed in isolation and monitored for clinical signs, including measuring rectal temperature twice daily, for at least 2 weeks. In certain situations e.g. if the horse has come from a known strangles yard or region, it may be prudent to carry out 3 nasopharyngeal swabs over this 2 week period before introducing the horse into the main herd. There is now a live attenuated vaccine available which is administered in to the top lip, with the initial course being 2 doses 2 weeks apart and then 3-6 monthly boosters depending on the risk on the yard. The Horserace Betting Levy Board also produces a code of practice on strangles and its management. Go to www.equine-strangles.co.uk for more information.