



Maidstone Veterinary Clinic

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HORSE VACCINATION

TETANUS (Lock jaw)

Tetanus is a disease that can affect all animals and is caused by a bacterium called Clostridia tetani. The horse is the one species of animal that is most susceptible to this disease and infection with tetanus usually results in death.

The organism lives in the environment, the spores produced by the bacteria are very resistant and can survive for years in the soil. The bacteria can be found in the dung of several types of animals. Infection usually gains entry into the body by a penetrating wound (some which are so small they are not even noticed) and the spores can lay dormant in the tissue until the oxygen levels are low enough to allow germination and multiplication of the organism.

The greater the tissue damage and the more dead material there is, the bigger the chance of tetanus developing.

Clinical Signs.

The organism produces a powerful neurotoxin that migrates up the nerves and gets into the central nervous system. This can take weeks to months after the injury, depending on the location of the original injury site. Once it reaches the brain tissue the toxin will result in an increase in spastic muscle contraction. This is eventually fatal as the muscles controlling breathing become affected.

The following signs relate to spastic muscle stiffness; muscle tremors, inability to chew and restriction of jaw movement, the tail becomes elevated and held to one side, unsteady gait, nostrils dilated and ears pricked. The third eyelid will often flick across the eyeball, especially if the horse is startled.

Eventually all the muscles remain permanently contracted including those involved in breathing and the animal will die. In untreated cases this may take between 5 and 10 days. In most cases the animal is euthanased on humane grounds once the disease is diagnosed as response to treatment is extremely poor and recovery may take many months of intensive nursing.

Prevention

The best way of preventing your horse from getting tetanus is by ensuring it is properly vaccinated. This involves a course of injections of tetanus **toxoid** to stimulate the horse to produce its own immunity against the disease:

- 1st injection.
- Booster injection - 4 to 6 weeks later, protection is gained 14 days after this injection.
- Booster injection - 1 year later.
- Boosters every 5 years.

In the situation where the horse has suffered a wound already or surgery has been performed, e.g. gelding, then the horse may be given a tetanus **antitoxin**. This gives immediate protection against tetanus, but only for a short time - often about 2 weeks.

Good care of wounds is also helpful in trying to prevent the bacteria/spores getting into the horses system. This involves adequate cleansing of the wounds and antibiotic treatment if required.

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STRANGLES

Strangles is an infectious bacterial disease of the upper respiratory system of horses and donkeys. It is caused by a bacteria Streptococcus equi and is transmitted by inhalation and possible ingestion of infective material.

The incubation period is 3 to 14 days and the horse becomes lethargic, has a depressed appetite and a high temperature > 40° C. The horse then develops a profuse purulent (yellow) discharge from both the nostrils and eyes. The organism locates itself in the lymph nodes in the neck and these become enlarged and painful and can abscess and discharge infective pus, usually 7 - 14 days after the onset of symptoms. The animal can often develop a productive cough, pneumonia and infection to other sites may be a complication.

In the early stages of the disease the symptoms can be confused with pneumonitis “cold” caused by the Equine Herpes Virus and diagnosis of strangles should be made on the basis of culturing the Strep. equi bacteria from a nasal swab.

Treatment

A course of antibiotic injections given until the temperature remains normal is successful in most cases. Abscesses will need drainage. Most animals will recover, but horses that contract even a mild case of strangles must be isolated and removed from training or heavy work for up to 3 months! Persistently high temperatures, anorexia and weight loss will indicate a systemic infection (bastard strangles). This and purpura haemorrhagica (a clotting disease) both carry a poor prognosis.

Vaccination

Strangles vaccine should not be given to horses showing signs of the disease.

The vaccine does not guarantee immunity from the disease and can it be used in pregnant mares.

The opinion is that strangles is contracted by vaccinated horses is less severe and recovery is quicker.

We recommend that owners who attend regular shows and events (especially to which horses from the northern areas of the island come) to vaccinate their horses.

Vaccination involves a course of injections of Strep. equi bacterial extract to stimulate the horse to produce its own immunity against the disease:

- 1st injection.
- 2nd injection 2 weeks later .
- 3rd injection 2 weeks later, protection is gained 14 days after this injection.
- Booster injection annually to maintain protection.

Horses should be rested for 2 days after the vaccination to ensure a good response to the vaccine. Some may be ‘sore and unwell’ for a few days and will not perform at their best in a competition.

EQUINE HERPES VIRUS (Rhinopneumonitis)

This virus causes the ‘cold/runny nose syndrome’ in horses. If infection occurs during pregnancy it can also be responsible for abortions or birth of weak and dying foals.

There will be a marked loss of performance with the animal and considerable down time before the horse will be back to full work.

Prevention can be achieved by vaccination of your horse and giving a booster 4 to 6 weeks later. The primary course should not coincide with a course of Strangles/Tetanus vaccinations as there may be cross reactions and thus incomplete protection against both diseases may occur.

Continual protection is maintained by annual boosters.

Our clinic will send out reminders for annual boosters (providing your address is correct).