Understanding your horse’s strangles blood test result

Whilst a seemingly non-invasive and quick approach to diagnosis, the strangles blood test does not always give a definitive answer. Confirming the presence of antibodies induced by Streptococcus equi equi bacteria (the causative agent), this assures an exposure to strangles within the last 6 months; it is not necessarily indicative of a current infection. Consequently, follow up investigation is always recommended for positive blood tests regardless of the result owing to a weak 90.9% sensitivity of disease detection via blood test. The steps taken following blood tests vary according to test outcome as well as owner’s preference. But what method achieves the most definitive confirmation of a strangles diagnosis?

If the blood test is positive, your vet will advise isolation and a guttural pouch lavage. The guttural pouch is a cavity within the horse’s head that can harbour and hide bacteria; this means that horses may carry strangles bacteria without showing disease signs. A guttural pouch lavage is the most effective way of diagnosing the presence of strangles bacteria. Here, a saline solution is passed through the nostril and into the guttural pouch cavity via an endoscope. As a result, this allows potential bacteria from the cavity to be identified and can confirm or deny a strangles infection.

If the blood test is negative, your vet will still advise 2-3 weeks isolation before introduction to new herd and recommend a repeat blood test in two weeks. Strangles can take up to two weeks succeeding infection to induce antibody production. Therefore, if your horse had been infected by strangles in the few days preceding the first blood test, the test will still show as negative. A second blood test post two weeks isolation helps to provide confirmation as to whether your horse carries Streptococcus equi equi bacteria.

If your test shows as negative however your horse is showing clinical signs of strangles, your vet will recommend a guttural pouch lavage (as described earlier). Clinical signs include: high temperature, loss of appetite, yellowish nostril discharge, enlarged glands in head and neck, coughing and difficulty swallowing. It could be the case that your horse is simply carrying bacteria within the guttural pouch that are ‘hiding’ in the cavity from an immune response.

Written by Georgia Nunn, a recent 3rd year vet student from the University of Glasgow.

Coming soon to our website:
A series of articles on colic, our newletters and other useful resources will soon be arriving on our website and should prove useful to everyone. Some of these articles are from the React to Colic scheme from the university of Nottingham and the British Horse Society, of which we are a member practice. If there are any further conditions you would be interested in a fact file for, let us know and we’ll get them uploaded for you. Watch this space!

Please remember that we have a strict payment at the time of treatment policy for all work carried out on a zone visit.
**New Vet:**

Our new vet Phillipa Daniel will be starting with us during August—she’s written a little piece about herself so you can get to know her: “Hi I’m Philippa. Born and bred in Northumberland, trained at Nottingham Vet School graduating in July 2017. I worked as a mixed vet in North Yorkshire for nearly 2 years (very James Herriot!), now returning to Northumberland to join Alnorthumbria. I am interested in all aspects of equine medicine, especially imaging and diagnostics, as well as enjoying small animal practice, particularly the surgical side. In my free time I will usually be walking my dogs, playing netball, cycling or heading to a beach!”

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**Burgham International Horse Trials 2019:**

This July saw four of our vets present for a very successful few days at Burgham International Horse Trials. Lesley was present as the FEI delegate vet, while Max, Euan and Ewan were all present on various days as FEI treating vets. Congratulations to all of the competitors at Burgham, and to the entire organising committee who put on a great event which was well attended by local riders as well as top riders from further afield!

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**Equine influenza update:**

This year over 150 outbreaks have already been diagnosed and the diagnosis of positive cases is continuing. July 2019 outbreaks are shown in the map to the right. The outbreaks have had a far-reaching effect on the UK horse racing industry, leading to the cancellation of racing for 6 days after flu was diagnosed in horses on an active racing yard. The outbreaks have been widespread showing how easily the disease can be transmitted. Most cases have occurred in unvaccinated horses, who have shown marked clinical signs, and sadly two horses have died. Some vaccinated horses have also tested positive for flu, but it is very important to remember that these horses have experienced only mild or absent disease signs.

To reduce the risk of your horse developing the severe clinical signs associated with flu it is very important to vaccinate according to your vet’s advice. It is also important to vaccinate to reduce the chance of your horse spreading disease to other horses. A primary course of 3 vaccinations is required, followed by regular booster vaccinations to maintain immunity.

Between the second and third vaccinations the antibodies (which help to protect your horse from flu) fall below the necessary level, leaving your horse susceptible to infection in the period known as the immunity gap (see graph below). The third vaccination increases the level of antibodies above the necessary level, thus ensuring your horse remains protected. Two vaccinations simply aren’t enough. Following the primary course regular boosters are required to maintain this protective level of immunity.