

# WENSUM VALLEY VETS NEWSLETTER

### **Practice News**



Small Holders' Club

We are pleased to announce that we will be running a "Small Holders' Club" for keepers of sheep, goats, pigs, chicken, ducks and other small farm animals. We know that many horse owners are also keepers of other animals, and may be interested! Please call or email to express an interest and be added to the contact list.



The Royal Norfolk Show

Dave had a very busy June, as the head vet at the Royal Norfolk Show, he was responsible for welfare, first aid and disease risk management, whilst there he bumped into lots of clients enjoying the event and competing!



# **Equine Liver Problems**

The liver is essential in the accumulation, metabolism and distribution of nutrients within the body. Most nutrients absorbed from the gut pass via in the blood stream directly to the liver where they can be metabolised, repackaged and then sent to a location where they are needed. Liver problems are relatively common in horses, however it can often prove difficult to pinpoint the cause, due to their complex, and sometimes long term, nature.

## Possible Causes of Liver Problems

**Toxins** – Plants (e.g. ragwort), Mycotoxins (harmful substances that produced from moulds on crops), Chemicals, Drugs (such as very long term use)

**Infections** – Viral hepatitis (e.g. Equine herpes virus, Equine parvovirus hepatitis, Equine hepacivirus), Parasitic (Liver fluke, worms), Bacterial infections







### Sandringham Driving Trials

You might have seen our vet Lauren at the Sandringham Driving Trials in June, where she provided care and health assessment to horses following driven obstacles, during a particularly hot weekend. Happily, all horses remained fit and well.

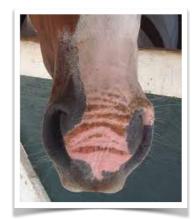
**Inflammatory** – Chronic (long term) hepatitis, Secondary (caused by) to gastrointestinal disease

**Other** – Neoplasia (rare), Hyperlipaemia (a problem with fat metabolism)

### Clinical Signs

When liver problems start, their clinical signs can be very subtle and

non-specific. As they progress horses start to show signs of weight loss, lethargy/tiredness, reduced appetite/ anorexia, colic, jaundice and photosensitisation (sunburn related to liver toxins). In more advanced cases of liver disease and liver failure, hepatic encephalopathy can be seen with signs such as, extreme lethargy, balance problems and laryngeal paralysis (abnormal breathing noises).



### Diagnosis

A blood test can be used to diagnose and screen for liver disease by assessing liver enzymes which show the levels of inflammation in the liver and how well it is functioning. Once a liver problem has been identified on this blood test it is sometimes necessary to test other horses in the same environment, such as field companions, to rule out a group problem. Where a group of horses are affected with increased liver enzymes and markers of poor liver function, it suggests exposure to an environmental toxin (such as ragwort or mycotoxins) or an infectious agent.

Hepatic ultrasound can be used in individual cases of liver disease, to assess the size of the liver, and look for masses or dilated bile ducts, however, these changes can be both subtle and non-specific, so in most horses, no specific abnormalities are found by liver ultrasound.

To identify a more precise cause, a liver biopsy might be needed, this can be done at our clinic using ultrasound guidance to take a small sample of liver tissue. This is sent to a laboratory for histology (under a microscope), which in some cases will find a specific cause but will provide useful information about the disease process and severity of the liver problem. Having this information helps us to formulate a treatment plan specific to them, and means we can discuss the likely prognosis with you.

Thorough examination of the pasture can also be useful to identify plants present or look for sources of heavy metals which can lead to liver disease. Feed and forage testing for mycotoxins are also available when multiple horses in the same environment are affected.

### **Treatment**

Treatment of liver disease in horses depends on the cause, but usually involves anti-inflammatories and liver supporting supplements to aid in recovery. In cases of infection, antibiotics may be used to help clear this. Monitoring during the treatment period helps to asses progress and ensure treatment is working correctly, this usually involves taking blood samples periodically to monitor liver enzymes.