Be alert for signs of Equine Atypical Myopathy this autumn

Equine Atypical Myopathy, also known as Seasonal Pasture Myopathy in the US, is a highly fatal muscle disease caused by ingestion of Sycamore seeds which occurs in European countries including the UK and Ireland. Survival rate is around 30-40 % and is highly dependent on fast diagnosis and treatment. Incidences tend to occur repeatedly in the autumn and in the spring following large autumnal outbreaks. It is thought that horses are more vulnerable when they are on poor grazing and receiving no supplementary hay or feed. In these situations, horses are more likely to eat Sycamore seeds or leaves however there have also been cases where horses were grazed on pasture with ample grass so this factor is inconclusive.

Regular checks of grazing horses should be made throughout the day, especially during the Atypical Myopathy high risk autumn period.

Sycamore seeds, commonly called helicopter seeds, and saplings contain the toxin hypoglycin-A which has been linked with Atypical Myopathy and causes destruction of the respiratory, cardiac and postural muscles of affected horses. Symptoms will include sweating, weakness, fatigue, muscle stiffness and trembling, lethargy and pain and the horse may lie down more often than usual and may not be able to get back up again. The mucus membranes will be dark red in colour and the urine will also appear darker and more concentrated. However affected horses do *not* lose their appetite and continue to eat even when they are extremely ill.

Signs of Atypical Myopathy include:

- Shivering
- Sweating
- Collapse
- Fatigue

- Colic-like symptoms
- Dark red mucus membranes
- Increased Heart and Respiration rate

Although this disease is commonly fatal, horses that are able to stand throughout the illness and who have a resting heart rate less than 60 beats per minute (bpm) have a greater chance of survival.

Prevention

Most cases of Atypical Myopathy relate to leisure horses that are kept at grass due to their increased opportunities to ingest the toxin compared to horses that are stabled or that have limited grazing time. The onset of the disease is usually rapid with some horses being found dead without showing any symptoms of the disease. Regular checks of grazing horses should be made throughout the day, especially during the high risk autumn and spring periods. Strong winds can also increase the number of seeds blown from trees and can lead to seeds landing in pastures even where there are no Sycamore trees present, requiring owners to check both horses and pastures.

Preventative measures include:

- Removing the Sycamore trees altogether
- Picking up Sycamore seeds
- Fencing off areas where Sycamore seeds have fallen from trees
- Regularly inspecting fields to ensure seeds have not blown in from Sycamore trees nearby
- Supplying extra forage (hay or haylage) especially where pasture is poor
- Reducing stocking density so there is plenty of palatable grazing for every horse
- Turning out horses for only short periods rather than extended periods of the day (ideally less than 6 hours)

Horses that are diagnosed early can be treated with painkillers, intravenous fluids and intensive care and those who survive will normally make a full recovery.

Testing

There can be varying levels of the toxin in different seeds from the same sycamore tree and horses in the same group will not all be affected which makes it very difficult to implement preventative management factors. The Royal Veterinary College, (RVC), London, are now providing a service which allows horse owners to test seeds, seedlings and leaves on a property, for the toxin which can cause Atypical Myopathy. In addition, vets can now also send blood or urine samples to the RVC from horses they suspect to have Atypical Myopathy or at risk companions.