



## **ATYPICAL MYOPATHY FACTSHEET**

Atypical Myopathy (AM) is a severe, non-exercise related, muscle disease of grazing horses and donkeys. It has a very high mortality rate. The first large outbreak occurred in Germany in 1995, prior to this only sporadic cases were seen. Over the last ten years there have been an increasing number of cases in Europe including the UK.

Cases tend to occur in autumn but can also occur in spring. The weather conditions play a big part in this. Stormy winds, thunderstorms and a lack of sun contribute to the occurrence of AM but cases tend to cease after a heavy frost.

AM can affect any age and type of horse, although it has a higher incidence in horses less than three years of age.

Researchers have spent a lot of time looking into the cause of this distressing condition and it has been found to be caused by Hypoglycin A, a chemical found in the seeds (also known as helicopters) of Sycamore Maple (*Acer pseudoplatanus*) trees. The toxin is also found in seedlings and leaves. The concentration of Hypoglycin A is extremely variable in the sycamore seeds and it can differ even amongst seeds from the same tree.

AM affects postural, respiratory (breathing) and cardiac (heart) muscles. Early diagnosis is made based on the grazing history, presenting signs including dark red-brown urine and a blood test to measure muscle enzymes.

Treatment requires intensive care. There is no drug that reverses the effect of the Hypoglycin A. Treatment is aimed at supporting the horse, whilst avoiding stress and physical effort. The chances of survival are low, only approximately 30-40% make it. Those that do survive can go on to lead a normal life, providing there are no complications. If a case is confirmed it is ideal to closely monitor and test all other horses and donkeys that have been grazing on the same pasture. **IF YOU SUSPECT ATYPICAL MYOPATHY YOU MUST PHONE YOUR VET WITHOUT DELAY.**

Prevention is better than cure! Avoiding access to the sycamore tree and its seeds is key. Remember the seeds are designed to disperse by wind so may travel quite a distance. Providing additional food such as hay or hard feed during the risk periods may help by reducing interest in eating the seeds. There are still a lot of unanswered questions regarding this disease

## Symptoms

- Stiffness
- Reluctance to move
- Weakness
- Depression
- Recumbency (lying down)
- Muscle tremors
- Sweating
- Breathing difficulties
- Red-brown urine (see picture)
- Can be confused with colic, laminitis or azoturia

## What causes it?

- Seeds (helicopters) from Sycamore trees. Usually in autumn and spring

## Prevention

- Avoid access to Sycamore tree and seeds, particularly in autumn. If possible you may consider picking up the seeds or fencing off the areas surrounding the trees.
- Provide additional food in risk periods and reduce stocking density to ensure adequate grazing for all horses.
- Consider stabling in risk periods.



## Testing

- The Royal Veterinary College now offers testing of seeds, seedlings and leaves for the Hypoglycin A toxin.
- We can also run blood tests in suspected cases for the Hypoglycin A toxin. We would recommend any field mates are also tested to check for exposure.

**ANY CONCERNS CALL YOUR VET WITHOUT DELAY**