



## **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 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. This is where it differs from other myopathies, such as azoturia, in that it does not selectively affect locomotory muscles. Early diagnosis is made based on the presenting signs including dark red-brown urine and a blood test to measure muscle enzymes, which can be followed up with a muscle biopsy.

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 25% make it. If the horse spends most of the time lying down, sweats up, stops eating, has a high heart rate or has breathing difficulties, they have a poor prognosis. Those that do survive can go on to lead a normal life, providing there are no complications. If a case is confirmed it is important to relocate all other horses and donkeys that have been grazing on the same pasture, ideally they should be stabled.

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 (*Acer Pseudoplatanus*) trees. Usually in autumn and spring

### **Prevention**

- Avoid access to Sycamore tree and seeds, particularly in autumn
- Provide additional food in risk periods
- Consider stabling in risk periods



**ANY CONCERNS CALL YOUR VET WITHOUT DELAY**

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