

Atypical Myopathy

What it is, how to recognise it and how to treat it

What is atypical myopathy?

Atypical myopathy is a serious disease of the muscles which has been linked to horses eating sycamore seeds. Affected horses deteriorate rapidly, and the disease is fatal in 60-100% of cases. Cases are often linked to periods of bad weather and high winds or rain where sycamore seeds are dislodged and horses are already stressed.

A sycamore tree showing the seeds

Photo from BEVA



What are the signs of atypical myopathy?

- Weight shifting
- Reluctance to move
- Sweating
- Fast breathing
- Muscle soreness and stiffness
- Weakness progressing to recumbency
- Dark red/brown urine
- Sudden death

How do we diagnose atypical myopathy?

We initially make a suspected diagnosis based on clinical signs your horse is showing. We can confirm the disease by measuring levels of muscle enzymes in the blood called AST and CK, which are released when muscle cells are damaged.

What causes atypical myopathy?

Atypical myopathy is caused by a toxin called hypoglycin A, which is found in sycamore seeds. It damages the muscle cells, preventing them from making energy and causing them to break down. The breakdown product (myoglobin) damages the kidneys and is passed in the urine, turning it a characteristic dark red/brown colour. If left untreated, horses become unable to move or breathe when the muscles are no longer able to contract.

How do we treat atypical myopathy?

Early recognition of clinical signs is key for a successful outcome. Intensive fluid therapy is needed with 24/7 care, which we usually recommend is carried out at a referral hospital. Anti-inflammatories, sedation and opioids for pain relief are all used in the treatment programme as well. If you are at all worried that your horse is starting to show clinical signs then you must speak to a vet immediately.

How can I prevent atypical myopathy?

Current research links the disease to horses eating the seeds from the sycamore tree. If you have these trees on your pasture it is advisable to keep your horses away from them, either by fencing them off or avoiding those fields all together. If the weather is stormy or there are high winds it may be advisable to avoid turning your horses out on pasture near sycamore trees altogether. Always make sure there is plenty of hay or haylage available when your horses are turned out on sparse pasture, so they are less likely to eat the seeds. Youngsters are also more prone to the disease than older horses so more care should be taken when choosing paddocks for younger horses.

If you are worried that your horse or pony may have atypical myopathy, please give us a call at the Centre on 01977 652280 as this is an emergency and they require urgent veterinary care