

## Warning of atypical myopathy cases this spring



**Atypical myopathy**, also known as **seasonal pasture myopathy (SPM)** or **hypoglycin-associated myopathy**, is a highly fatal toxic rhabdomyolysis. It affects grazing horses in the UK and Northern Europe that eat the seeds from trees in the *Acer* family, including sycamore and box elder (both pictured above) which contain the toxin hypoglycin A.

The clinical signs are due to the effects on muscles and include pain, muscle weakness, stiffness, tremors, recumbancy, myoglobinuria, dyspnoea and respiratory failure.

According to the British Equine Veterinary Association (BEVA), there were five times more cases in Autumn 2014 than 2013 which has prompted **concern that there will be a corresponding rise in Spring cases this year** as the seedlings grow.

The prognosis is grave with 75-95% of affected animals dying within 72 hours (worse if dyspnoea or myocardial involvement is present), making **rapid diagnosis essential to increase the chances of survival**. This is based on history and clinical signs as well as blood (markedly increased CK) and urine analysis.

Treatment consists of close monitoring and the supportive treatment of the involved organ systems. Since the toxin directly targets aerobic energy metabolism by causing multiple acyl-CoA dehydrogenase deficiency (MADD), **therapy should be targeted at promoting glucose metabolism and providing fluid diuresis**.

**Preventative advice for horse owners** includes checking spring pastures for seeds prior to turnout (seeds can be present even in the absence of trees due to the spread by wind), providing supplementary food to discourage browsing on seeds and fencing off affected areas.

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