



Poisoning in the horse: particular risks, approaches to diagnosis, and treatment options

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Poisoning in the horse is a relatively uncommon occurrence, but when it occurs the impact can be serious. The uncommon nature of poisoning often causes it to be a relatively neglected area of expertise among general practitioners, and it often occupies low rankings, with non-specific etiology, on lists of differential diagnoses. This neglect can ultimately increase the negative consequences of poisoning when it occurs. We will attempt to improve practically relevant knowledge in these presentations by drawing attention to toxicological risks that are of importance in horses, and problems that are gaining importance.

The first lecture will focus on plant poisonings in the horse. As relatively non-selective herbivores that graze in pastures containing variable plant communities, horses are often exposed to potentially poisonous plants. The factors that determine whether poisoning will occur are often linked to management practices and weather conditions. Trends towards the use of natural hay, more freedom of movement, and the potential effects of climate change may increase the risk of plant poisoning. We will discuss several plants that are relevant to horses, with an emphasis on northwestern Europe.

The second lecture will focus on toxicological problems in the horse related to metals and metalloids. Several metals and metalloids are essential nutrients and are therefore included in rations to reduce the likelihood that deficiencies will occur. However, these elements usually follow a hermetic dose-response curve, where both underexposure and overexposure are associated with negative health outcomes. Furthermore, the safety margin of metals and metalloids is often relatively narrow and overdoses leading to poisoning can easily occur due to ration formulation or mixing errors. We will discuss metals and metalloids that are important in this regard.