

Accidental lasalocid intoxication on a farm with eighty-one horses

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Aims: Ionophores are known to be very toxic to horses. Our aim is to describe short-term and long-term effects of accidental lasalocid intoxication in horses. **Methods:** On a farm with eighty-one horses, fourteen horses showed clinical signs and two died shortly after a new batch of concentrates had been fed. Seven horses were presented at the department. Clinical exam, serum biochemistry and cardiac examination were performed. Six horses died. The remaining seventy-two horses on the farm underwent echocardiography, electrocardiography at rest and during exercise and plasma cardiac troponin I determination. Toxicological analyses were performed. **Results:** Initial clinical signs in fourteen horses at the farm were anorexia, lethargy and profuse sweating. Seven horses presented at the clinic showed signs of weakness, cardiac arrhythmias (n=7) and myocardial contractile dysfunction (n=5; fractional shortening 5-24%; decreased radial, circumferential and longitudinal strain). Cardiac troponin I ranged between 1.39 and 816 ng/ml (median 88 ng/ml). Despite antiarrhythmic treatment, one horse died of ventricular fibrillation 24 hours after presentation. Six weeks after the initial signs, mild to severe ataxia and paresis were found in 4 horses due to delayed neuropathy, which gradually normalised after three and nine months in two horses. Also in asymptomatic horses, increased cardiac troponin I and arrhythmias were found (0.11-2.01 ng/ml). Toxicology of two livers showed 0.5 ppb lasalocid in both. The initial feed on the farm was no longer available for analysis. **Conclusion:** Lasalocid intoxication did lead to acute signs of cardiomyopathy with arrhythmias, severe contractile dysfunction and death. At a later stage, neuropathy did lead to ataxia or decubitus, requiring euthanasia in some cases. Long-term cardiac and neurological signs were found. **Practical significance:** Although very uncommon, lasalocid intoxication should be included as a differential diagnosis for unexplained anorexia, depression, cardiomyopathy and ataxia.