TWO OUTBREAKS OF MONENSIN POISONING IN SHEEP IN THE FEDERAL DISTRICT, BRAZIL


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Monensin is an ionophore antibiotic used in ruminant feed to control coccidiosis, avoid bloating and stimulate weight gain. However, poisoning can occur by excessive consumption. This paper aims to report two outbreaks of monensin poisoning in sheep diagnosed at the Veterinary Hospital of the University of Brasilia, Brazil. The first outbreak occurred in 30 crossbred lambs of both sexes, with two months of age, while the second occurred in 46 sheep of different ages, both sexes, of Santa Inês, Dorper and crossbred. In this latter case because it is not a homogeneous group there was a greater involvement of the dominant animals, the Dorper and crossbred. Clinical signs consisted of salivation, ataxia, diarrhea, apathy, myoglobinuria and hyperpyrexia. In the first outbreak the dose poisoning of monensin was 750mg/Kg concentrate. From the 30 lambs only two lambs responded to treatment, which consisted of parenteral fluid therapy with saline 0.9% NaCl, vitamin E IM and activated charcoal orally. In the second outbreak the toxic dose of monensin was 960mg/Kg concentrate and all the 46 sheep died. The autopsy examination revealed areas of pale and edema in the liver, kidneys, heart and skeletal muscles. At histopathology was observed mainly skeletal muscle necrosis, pulmonary edema and cardiac congestion and areas of degeneration of fibers. In both cases the laboratory tests revealed increased levels of the enzymes CPK and AST. The diagnosis in both cases was achieved due to the history of use of monensin, added to clinical and autopsy findings. These two outbreaks are related to errors in formulating the ration. The monensin dose should not exceed 60mg/kg concentrate for sheep, being distributed homogeneously. It is noteworthy that not all animals died soon after ingestion of monensin, revealing a chronic form, which had duration up to five days.

Keywords: Ionophore, antibiotics, toxic