

Cerebellar syndrome in calf: case report

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Abstract

Cattle's nervous system disorders represents a great economic loss worldwide. Congenital malformations can be related with infectious diseases, hereditary defects, plant toxins, nutritional deficiencies or teratogenic agents. Congenital sickness in calves could manifest few months after birth and their pathogenesis is not understood yet. Neurological disorders are characterized by wide-based stance, ataxia, incoordination, hypermetria, opisthotonus, seizure, stiffness, inability to coordinate normal movements and stance, death can usually occur. It was attended at the Universidade Norte do Paraná (UNOPAR) Veterinary Hospital, Campus Araçongas – PR, on July 2016, a newborn male halfbreed calf. The owner reported that the animal ingested the colostrum, although seems to had some kind of disorder. At the clinical exam the clinical signs were apathy, recumbency and opisthotonus. The physiological parameters were normal, nevertheless when the animal was forced to stand up, it was observed wide-based stance, and inability to coordinate normal movements and stance, in addition it also presented cortical blindness. Artificial feeding was instituted providing 4l per day, as also oral supplementation with vitamin B complex. Through laboratorial exams it was found increased levels of creatine phosphokinase (CPK), caused by muscle injuring in consequence of recumbency. In the course of days the calf denied the feeding and had a worsening of clinical condition, dying 20 days after been hospitalized. At necropsy no macroscopic changes were evident, however, samples of different tissues were collected for histopathological examination and isolation of the etiopathological agent. Many are the causes of cerebellar syndromes in calves, among them, hypoplasia, abiotrophy and lysosomal storage disease. The calf of this report presented clinical signs of cerebellar syndrome, however without macroscopic alterations. Macroscopic lesions are not always observed and sometimes only the histological evaluation could reveal the disease. The clinical signs are suggestive of cerebellar hypoplasia. Due to similar clinical presentation, other disorders should also be considered for differential diagnosis.