ATYPICAL CASE OF LYMPHOSARCOMA CAUSING SPINAL CORD COMPRESSION IN THE SACRAL REGION OF A THREE MONTHS OLD CALF

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Introduction: Bovine lymphosarcomas have often been characterized in two types: enzootic bovine lymphosarcoma (EBL) and sporadic bovine lymphosarcoma (SBL). EBL is caused by bovine leukemia virus (BLV). On the other hand, the etiology of the SBL is uncertain.

Objective: To report an atypical case of SBL causing spinal cord compression in a calf too young.

Case report: A three months old male Girolando calf was attended at the Veterinary Teaching Hospital of the Universidade Estadual de Londrina, Paraná State, Brazil, showing recumbency due to sudden onset of paraparesis. The clinical examination revealed heart rate (100/min), respiratory rate (60/min), rectal temperature (38.9°C), ruminal motility (5/5min) and capillary refill time (2 sec) within normal limits, and pink colored mucous membranes. THE CALF was in sternal recumbency, but alert and preserved appetite. Examination of the nervous system demonstrated typical signals of cauda equina syndrome with: gradual reduction to total absence of cutaneous reflexes from the first sacral vertebra to the coccygeal vertebra, absent tail tone, perineal anaesthesia, relaxation of anal sphincter, rectum partially prolapsed and paresis of hind limbs with absent patellar and flexor reflexes. Samples of blood and cerebral spinal fluid were collected and send to routine exams, that showed normal values. Futhermore, AGID to detect serum antibodies against BLV tested negative. Due to the lack of response to treatment with dexamethasone, the animal was submitted to euthanasia and postmorten examination, which identified one infiltrative and compressive mass with diffuse growth in vertebral canal at S1-S2 level. Fine needle aspiration cytology of the mass demonstrated predominance of immature lymphocytes with features of malignant cells, typical of lymphosarcoma. Infiltrate of neoplastic cells was observed in the site of spinal cord compression, as well as in the liver. Marked B cells (CD70-Dako®) was revealed by immunohistochemical test. Generalized lymphadenopathy, a common finding in SBL, was not present in this case.

Discussion: Although atypical cases of lymphosarcoma causing spinal cord compression have been described, they are unknown in animals so young.

Conclusions: The unusual presentation of this case diverge of clinical signs seen in SBL, confirming that spinal cord compression can be an atypical form of sporadic lymphosarcoma (leukemia juvenile) in young calves.

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