JUVENILE MULTICENTRIC BOVINE LEUKOSIS IN A HEIFER FROM THE PARá STATE, BRAZIL

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The objective of this work is to describe clinical-pathological signs of juvenile multicentric sporadic leukosis in a Nelore female calf with 35 years of age, from Santa Izabel municipal district, Pará state, Brazil. The animal was admitted at the Federal University of Pará Veterinary Diagnostic Center in September of 2009. A clinical exam was performed and blood was collected by venopunction with anticoagulant for hemogram. Due to poor prognosis, euthanasia was indicated. At necropsy, fragments of several organs were collected and conserved in 10% formaldehyde. The material was submitted to the Animal Sanity Project Anatomy Sector of the Federal Rural University of Rio de Janeiro for histopathology exam. The clinical exam showed anorexy, pale mucosae, regular NUTRITIONal status, increased rectal temperature, difficulty breathing, bradicardia, long periods in sternal decubitus and all palpable superficial lymph nodes increased in size. The leucogram revealed a severe leukocitosis by lymphocytosis. At necropsy, parotideal, retropharingeal, prescapular, precrural, mesenteric, iliac and mammary lymph nodes were visibly increased in size, with the cut surface either reddish, with no distinction between medullary and cortical regions, or yellowish-white intercalated with others of red color. The liver was twice its normal size with pale areas. In the histological exam, proliferation of neoplastic cells, similar to lymphocytes, were verified in the kidney and spleen. Neoplastic cells in the spleen and kidney were mantled shaped. These cells were small with round or oval nucleus, with dense cromatin and scarce and somewhat limited eosinophilic cytoplasm. In the spleen, proliferation was diffuse and neoplastic cells obliterate the splenic parenchyma. In the kidney, neoplastic proliferation was presented in the shape of multifocal nodules, predominantly in the vessels proximity, at the cortical region. In some areas there was compression of the adjacent renal parenchyma with decreased number of tubules. There was still mild to moderate quantity of hyalin and granular cylinders in the tubules. Clinical-pathologic findings allowed the diagnosis of juvenil multicentric leukosis.