PARATUBERCULOSIS IN WATER BUFFALOS (BUBALLUS BUBALIS) IN MARANHÃO STATE, BRAZIL

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The objective of this work is to describe the epidemiology and clinical-pathologic condition of natural paratuberculosis cases in WATER BUFFALOS from Maranhão state, Brazil. Epidemiological data and clinical signs of the disease were obtained from the owner and through visits to a bubaline farm in Maranhão state, where the disease occurred. Euthanasia and necropsy of two buffaloes with clinical signs of the disease were performed. Fragments of several organs were collected, fixed in formaldehyde 10% and processed at the Histopathology Laboratory of the Animal Sanity Project Pathological Anatomy Sector (EMBRAPA/UFRRJ). The samples were routinely included in paraffin, cut in 5µ thickness and colored with hematoxilin-eosin (HE) and Ziehl-Neelsen. There were 1100 WATER BUFFALOS in the visited property. According to the owner's report, identification of bubalines with chronic, profuse, watery and blackish diarrhea was frequent, sometimes stream diarrhea, resistant to antimicrobial treatment. The two animals euthanized and necropsied were Murrah females, approximately seven years old, with history of progressive emaciation, profuse diarrhea and non responsive to treatment. In the clinical exam, the animals showed pale ocular and oral mucosae, apathy, poor NUTRITIONal status, little content in the rumen with weak movements and loose feces. At necropsy, lesions were restricted to the small intestine with evident thickening of the mucosa in all course observed, developing transversal folds, similar to cerebral circumvolutions. The intestinal contents were watery and brown colored. There was enlargement of all mesenteric lymph nodes chain, with prominent and dilated lymphatic vessels. In the histopathological exam, some areas of the small intestines mucosa showed destruction of intestinal villosities and diffuse accumulation of mononuclear inflammatory infiltrate with several Langhans giant cells, groups of epithelioid macrophages and some eosinophils. The Ziehl-Neelsen coloration revealed, in the intestinal mucosa, several alcohol-acid resistant bacillus. In the liver there were mononuclear cells inflammatory infiltrate foci of aleatoric distribution. The lymph node showed moderate congestion in the medullary. Other organs showed no alterations. Based on the epidemiology, clinical exam, necropsy and histopathology, the Paratuberculosis diagnosis was established.

Keywords: Paratuberculosis, buffaloes, Maranhão, Brazil.