TITLE: INFECTION IN NONHUMAN PRIMATE (*Mico melanurus*) BY *Pasteurella canis*: CASE REPORT.

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ABSTRACT: *Pasteurella canis* is an opportunistic bacterium that cause serious diseases in several domestic, wild and human species, however there aren't reports of this infection in nonhuman primates. A free-ranging wild animal, *Mico melanurus,* was referred to the Veterinary Hospital of the Federal University of Mato Grosso (UFMT), with a dog bite history, evolving to death after three days of hospitalization. The animal was necropsied and organ fragments were collected. Posteriorly, these were processed for histology and sent to the Laboratory of Microbiology and Molecular Biology. At necropsy, presence of lesions were observed in the lung, with gray nodules (diameter 0,3cm) and well delimited. In histology, neutrophilic infiltrate and liquefactive necrosis involved by fibrous capsule were observed in the pulmonary parenchyma. Basophilic coccobacilli bacteria myriads were observed in the nodular, bronchioles, alveoli and pleura regions. Liver and kidney had mild multifocal lymphoplasmacytic infiltrate, as well as moderate leukocytosis in the brain, characterizing sepsis. Bacterial isolation was performed from the lung fragment, being observed growth of gray, mucoid and non-hemolytic colonies. Microscopically, they were characterized as Gram-negative coccobacilli and, after biochemical evaluation, the diagnostic suspected was *Pasteurella* sp. For confirmation of the isolated species, the samples were submitted for extraction of genetic material according to the phenol/chloroform method and then submitted to Polymerase Chain Reaction (PCR) for the 16S rRNA gene. The PCR product (1424pb) was purified and sequenced. The sequence was deposited in GenBank (acess number: MH923010) and compared using the BLAST program, obtaining 99% identity with *P. canis*. Human reports by infection of *P. canis* are usually associated with biting and scratching by dogs and cats, since it is part of the microbiota of the oral cavity of these animals. So, inflammation in the tissues adjacent and abscess in respiratory tract were described in humans, that it were similar finding in this report. Based on the pathological, microbiological and molecular analyses, it was observed the susceptibility *of M. melanurus* to *P. canis* infection, emphasizing the importance of antropy and synanthropy for the occurrence of pasteurellosis in nonhuman primates, especially when inserted in urban environments.

Keywords: pasteurellosis, monkey, anthropozoonosis, Callitrichidae.

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