EFFICACY OF ENROFLOXACIN (KINETOMAX\textsuperscript{R}) IN THE TREATMENT OF BOVINE ANAPLASMOSIS

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Anaplasmosis is endemic in Brazil, leading to important economic impact. The main drugs used in its treatment are riquetsiosiatics. The aim of this study was the evaluation of enrofloxacin in the treatment of bovine anaplasmosis. Four groups of six Holstein calves each were used. At 90 days of age, animals were inoculated with 10\textsuperscript{7} parasitized erythrocytes intravenously (UFMG2, pathogenic sample of A. marginale). Animals were raised and kept in tie stall, free of ticks and flies. The treatment schedules were performed by intramuscular injection when the PCV of each individual diminished 30\% of its baseline, determined prior to inoculation. The day of treatment was considered as day zero. Group 1 (G1) received 7.5 mg/kg bw of enrofloxacin, in a single dose, while group 2 (G2) received 7.5 mg/kg bw of enrofloxacin, twice in a three days interval. Animals of group 3 (G3) were treated with 20 mg/kg bw of tetracycline, in a single dose and calves of group 4 (G4) were used as control, as they received 1 ml/10 kg bw of saline, single dose. Daily complete physical examinations, as well as blood smears for parasitaemia and packed cell volume (PVC) determination were performed. The incubation period was 20 days in average and all animals showed classic clinical signs of anaplasmosis. On day 3 after saline treatment, animals from G4 showed severe anemia (PCV < 10\%), were removed from the experiment and received specific treatment. On day 0, calves from groups 1, 2 and 3 had a PCV of 18.3, 20.7 and 22.8\% and ascending parasitaemia, with 17, 23 and 12\% in average respectively. From day 2, animals treated with enrofloxacin (G1 and 2) showed a significant reduction of parasitemia (p < 0,05) when compared with those treated with tetracycline (G3). The parasitaemia in these animals groups remained stable at low levels from the third day until the end of the experiment. By the other hand, in G3 animals, parasitaemia decreasing started on the third day after treatment, showing slow decrease until stabilization on day 9. The average PCV in groups G1 and G2 increased and stabilized after at the seventh and eighth days after treatment respectively, while in G3 group the PCV stabilization was achieved at thirteen days after treatment. Both drugs were effective in the treatment of anaplasmosis, but enrofloxacin showed rickettside effect, providing faster reduction of parasitemia and PCV recuperation (p< 0,05), when compared to tetracycline.

Keywords: Anaplasmosis, enrofloxacin.