EFFECT OF SALINOMYCIN ON THE PREVENTION OF EXPERIMENTAL RUMINAL LACTIC ACIDOSIS IN SHEEP

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This work had as objective to study the effectiveness of salinomycin against the lactic acidosis induced in sheep, by analyzing its effects on the clinical picture, the physicol-chemical characteristics of the ruminal fluid. Fourteen cross breed, Santa Inês sheep, weighing 30 Kg were used. They were rumen-fistulated and subdivided in two groups of 7 animals, one was the control and the other one received the drug in the diet at a concentration of 30 mg/Kg day of food for 30 days. The clinical and laboratory values, ruminal fluid, were established. At the end of this adaptation period, the two groups were challenged in a process of lactic acidosis induced with sucrose, at a dose of 10 g/Kg body weight. The clinical and laboratory observations were accomplished at intervals of 4h, 8h, 12h, 16h, 24h, 32h e 48h. Control and treated sheep became ruminally acidotic within eight hours after induction and clinical manifestations associated with a progressive reduction in pH values of rumen fluid, more expressive at 8 hours PI, yielding values of 6.06 and 6.07 respectively, significant difference (P < 0.05) compared to base line. Another alterations of ruminal fluid characteristics happened in this period with varied intensity between the studied groups. In the animals that received salinomycin the magnitude of the process was minimized and the time of clinical recovery was abbreviated, in relation to the control group.

Keywords: Lactic acidosis, ionophores, ruminants