EVALUATION OF TWO THERAPEUTIC PROTOCOLS AGAINST CALF PNEUMONIA WITH TWO DIFFERENT NON-STEROIDAL ANTI-INFLAMMATORY DRUGS - A FIELD STUDY

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Introduction: Calf pneumonia is one of the most common neonatal diseases in cattle. Routine therapy for acute calf pneumonia includes antibiotics and anti-inflammatory drugs.

Objectives: The aim of the study was to compare the clinical efficacy of two non-steroidal anti-inflammatory drugs with different pharmacodynamic and pharmacokinetic characteristics and to evaluate the efficacy of a single intravenous treatment with a high dose of marbofloxacine in calves with acute pneumonia in a field study.

Material and methods: Hundred-and-seventeen calves with pneumonia were included in the study. Fifty-nine calves were treated once with an intravenous injection of marbofloxacine (8 mg/kg) and flunixin meglumine (2.2 mg/kg) and 58 calves received marbofloxacine (8 mg/kg) and tolfenamic acid (2 mg/kg). Body temperature, respiratory rate, nasal and ocular discharge, coughing, findings at lung auscultation, appetite, total clinical score and body weight were included in the assessment of the calves on day 0. Follow-up included three examinations at days 2, 10 and 20.

Results: No statistically significant differences were found for values of temperature, respiratory rate, clinical score, appetite and daily weight gain. An overall clinical cure of 59% was achieved, i.e. 69 of 117 calves required only one treatment, with no statistically significant difference between both groups.

Conclusions: These results indicate that the healing process in calf pneumonia is not influenced by the choice of the anti-inflammatory drug under field conditions. In contrast the high percentage of calves which required additional treatment demonstrates insufficient clinical efficacy of treatment with a single intravenous high dose of marbofloxacine.