

EFFICACY OF AMOXICILLIN/COLISTIN IN GASTRO-INTESTINAL E. COLI INFECTIONS COMPLICATED WITH STREPTOCOCCUS SUIS IN WEANED PIGLETS

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Introduction

With increasing frequency edema disease/colibacillosis complex in piglets is complicated by Streptococcus suis type II infections. In case of neurological disorders clinical discrimination of these infections is hardly possible. Oral treatment of Streptococcus infection with only amoxicillin may induce selective pressure on the enteric flora. Co-administration of colistin prevents this feature. In this clinical field study the efficacy was tested of an amoxicillin-colistin combination (1) in weaned piglets. The study was conducted in the Netherlands in accordance with the principles of GCPV.

Materials and methods

The study was designed as an open, randomised, controlled, multicentred, clinical field study. It was conducted at 5 farms, recruited on the basis of recent clinical history of edema disease/colibacillosis complex either with or without Streptococcus suis type II infections. During 5 consecutive days 268 pigs in 27 pens received the medication via the drinking water at a dosage of 40 mg amoxicillin and 6,25 mg colistin sulphate per kg body weight per 24 hours. 269 pigs in 27 pens were included as negative control group. Body weight, growth rate and food conversion were used as main parameters to assess efficacy.

Results

No adverse drug reactions occurred. Diarrhoea and neurological disorders occurred more in non-medicated pens than in medicated pens. The medicated animals showed a significant higher body weight. The growth rate in the medicated pens in compare with the non-medicated pens was significant higher: 77.4 % during medication and 62.8 % during post medication period. During medication food conversion in the medicated pens was significant lower (26.6 %).

Discussion

From the significant differences in body weight, growth rate and food conversion it was concluded that the amoxicillin/colistin combination was effective. This conclusion was supported by the incidence of clinical disorders and the results of bacteriological examinations.

(1): Amoxy-Col wsp – Dopharma

Summary of oral presentation:

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