



BACTERIAL DISEASES

BBD-066

COMPARISON OF EFFICIENCY OF AMMINOSIDINE AND ENROFLOXACIN TREATMENT PROGRAMS FOR CONTROL OF NEONATAL DIARRHOEA

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Introduction

Antibiotics are still an important tool for treatment of certain acute bacterial diseases in swine and early effective approach is necessary in order to minimize economical losses and mortality. Aim of the presented study was to compare the effect of amminosidine in comparison with enrofloxacin to control neonatal diarrhea on enzootically affected farm.

Material and Method

The study was performed on one farm with a total capacity of 4.000 sows in Italy, involved 40 randomly selected litters from different parity sows, showing clinical signs of diarrhea 48 hours after farrowing. Sensitivity to both selected antibiotics were confirmed by examination of strains of *E. coli* isolated from previous cases. Two groups were established as group A (enrofloxacin) and group B (amminosidine), both consisted from 20 litters. All piglets were individually injected according to manufacture recommendation. Weight at birth and at weaning were collected, as well as number of piglets requiring additional treatment. A fecal score was evaluated in all litters (0=traces of diarrhea; 1=mild; 2=evident).

Results

All variables did not differ between the groups in following order- A and B, respectively. Weight at birth: 1.47 vs. 1.38 (P=0.370), weight at weaning 5.64 vs. 5.23 (P=0.247), number of weaned piglets per litter 9.7 vs. 9.8 (P=0.846), fecal scores 0.9 vs. 1.05 (P=0.418) and number of relapses 6/20 vs. 4/20 (P=0.832). Considering costs of the treatment of each litter (12 piglets/litter and 2.5 kg/piglet) was similar for both groups (0,89 vs. 0,9 €).

Discussion and Conclusion

Both treatments were effective for control of neonatal diarrhea. Taken into consideration of limited treatment options available, voluntary ban of use of fluoroquinolones in many important swine producing countries due to the highest priority status for human medicine, aminoglycosides (amminosidine) seems to be appropriate alternative for therapy of acute cases beside vaccination.