

TITLE

INFLUENCE OF A COMBINED COLI/CLOSTRIDIUM VACCINATION OF SOWS ON THE ANTIBIOTIC USE IN PIGLETS DURING THE FARROWING - AND NURSERY PHASE

Elise Vandekerckhove¹, Ilse Declerck¹

¹ *Boehringer Ingelheim*

CONTENT

?Background & Objectives

Clostridium perfringens type C and *E. coli* play an important role in the prevalence of diarrhea during the farrowing and nursery phase respectively, resulting in growth retardation, mortality and an increase of antimicrobial treatments in piglets. European recommendations concerning the reduction of therapeutic use of ZnO and colistin highlight the need for alternative control acts. Several vaccines are available administered to vaccinate pregnant sows, resulting in an elevated colostral protection of their offspring. In this field study a combined *E. coli*/C. *perfringens* vaccine was administered to vaccinate all pregnant sows and gilts present on a farm in order to evaluate the influence on birth weight, weight at weaning, % mortality and the use of antibiotics during 12 months, in comparison with the data obtained during 12 months before vaccination was implemented.

?Material & Methods

Data were obtained from a closed farm with a history of neonatal diarrhea. Pregnant sows and gilts were intramuscularly vaccinated with 2 ml of Entericolix, a registered inactivation bacterial vaccine. All piglets were individually weighted at birth and at weaning. If diarrhea was present, a swab was taken before any antimicrobial treatment took place and analyzed. Data on average numbers of live born piglets, number of mummies and number of weaned piglets per sow were obtained. Statistical analyses were performed to define if there was a significant improvement after the implementation of sow vaccination.

?Results

Preliminary data show that vaccination results in a significant improvement of weight at weaning ($P < 0.0001$), a decrease of mortality ($P < 0.05$) and less antibiotic use.

?Discussion & Conclusion

Administration of Entericolix to pregnant sows protects their offspring during the first weeks after birth, results in higher survival rates and weight at weaning and thus providing an alternative for antibiotic use for the control of diarrhea in piglets.