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TITLE

EVALUATION OF THE EFFICACY OF A PRE-FARROWING TREATMENT WITH AIVLOSIN® ORAL POWDER TO PREVENT VERTICAL TRANSMISSION OF MYCOPLASMA HYOPNEUMONIAE

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CONTENT

Objective

It is widely accepted that sows, mainly first and second parity, play a major role in the transmission of *Mycoplasma hyopneumoniae* (M. hyo) to piglets. This trial's objective was to evaluate pre-farrowing sow treatment with Aivlosin® 42.5 mg/g Oral Powder for Pigs (ECO Animal Health, Ltd.) on vertical transmission of M. hyo.

Material and methods

The trial was conducted on an 850-sow farrow-to-finish unit with a history of M. hyo. Thirty-three pregnant, first and second parity sows were separated into two groups:

1: Aivlosin® 42.5 mg/g Oral Powder, top-dressed onto feed (intended to deliver 2.125mg tylvalosin/kg BW) per day for 7 days pre-farrowing (17 sows)

2: Control: no medication (16 sows)

Oropharyngeal swabs were collected from each sow seven days pre-farrowing, immediately after farrowing and at weaning for rtPCR of M. hyo.

Cross-fostering of piglets was minimised and only allowed within each treatment group.

Nasal swabs from piglets were collected at weaning for rtPCR of M. hyo. Swabs were pooled into 5-6 piglets per litter; if positive, each swab was analysed individually.

Results

Aivlosin®-treated sows had M. hyo prevalence of 21.43% at farrowing and 14.29% at weaning. The untreated sows had M. hyo prevalence of 18.75% at both farrowing and weaning.

At weaning, M. hyo prevalence in piglets from Aivlosin®-treated sows was 16.67% while in piglets from untreated sows 36.48%. This difference was statistically significant using the Chi-square test ($p < 0.001$).

Conclusion

This trial demonstrates that Aivlosin® Oral Powder pre-farrowing reduced M. hyo prevalence in sows at farrowing and weaning compared to untreated controls. The M. hyo prevalence in the offspring of the Aivlosin®-treated sows was reduced by more than 50% at weaning compared to the untreated control sows, suggesting reduced vertical transmission of M. hyo.

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