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TITLE
TOLFENAMIC ACID (TOLFINE®, VETOQUINOL) INCREASES THE WEIGHT GAIN OF PIGLETS BORN FROM GILTS

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CONTENT
Background and Objectives:
Tolfenamic acid (4%, Tolfine®, Vetoquinol) is a non-steroidal anti-inflammatory drug, that could help ease the pain and discomfort (e.g., nipple soreness) after farrowing. The objective of this field trial was to evaluate its effect in sows and gilts.

Material & Methods:
Tested animals were randomly assigned to one of two groups: 1) Tolfine®, 70 sows, 33 gilts, all receiving one IM injection (1 mL/20 kg BW) post-farrowing, 2) control, 62 sows, 16 gilts, no anti-inflammatory treatment. The response variables were rectal temperature (RT), litter size (LS) during the first three days postpartum, piglet weight gain from birth to weaning (WG), and mean litter weight at weaning (LW). Variables were tested for homogeneity of variances and normality. RT and LS were analyzed using a Generalized Estimation Equation model, and WG and LW were analyzed using ANOVA and the covariates initial weight and litter size, respectively.

Results:
RT: the animals on Tolfine® had a lower (P = 0.007) RT than the control animals (39.3 vs 39.7C) and sows had a lower (P = 0.04) RT than gilts (39.4 vs 39.5). LS: the effects of day (P = 0.000) and parity x day interaction (P = 0.044) were significant. WG: the treatment x parity interaction was significant (P = 0.041). Piglets from the Tolfine®-treated gilts gained more weight than the piglets from the control gilts: 5.21 vs 4.93 kg (P = 0.026). LW: sows had heavier (P = 0.000) litters than gilts (83.23 vs 76.08 kg).

Discussion & Conclusion:
Farrowing causes stress and pain. However, Tolfine®-treated gilts benefited the most, piglet weight gain was improved (294 g/d) compared to "control" gilt piglets. These results potentially due to less nipple soreness and Tolfine®’s anti-pyretic effects, likely improving feed intake. Tolfine® had a positive effect on gilt well-being and piglet performance.