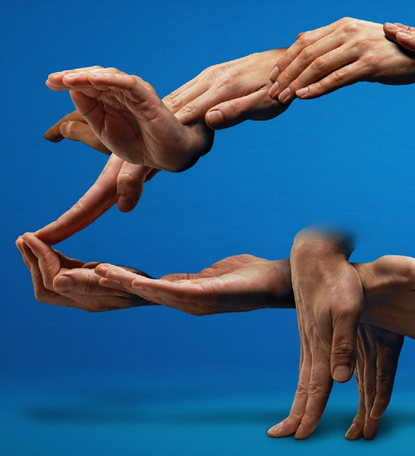
Farrowing liveweight and ADGW in litters from sows treated with Metacam®



D. Guiñez[1], C Gutierrez[2,3], V. Grosse-Liesner[4], C Roudergue[3], A. Ruiz[1,2]
[1]Facultad de Ciencias Veterinarias, Universidad de Concepción, Chile; [2]Doctorado en Ciencias Agropecuarias, Escuela de Postgrado, Universidad de Concepción, Chile;
[3]Boehringer Ingelheim Animal Health GmbH; [4]Private Consultant
danielaguinez@udec.cl

INTRODUCTION

Farrowing is a critical period for the sow in which painful, inflammatory and infectious processes along with other systemic events cause post-partum stress and may trigger Postpartum Dysgalactia Syndrome (PPDS) which manifests itself either in clinical or subclinical presentation, both with negative impact on the sow and its litter regarding the growth development of suckling pigs. NSAIDs are a pharmacological group widely used in veterinary medicine due to their anti-inflammatory, analgesic and antipyretic properties. Among these Metacam® with its active ingredient meloxicam – a COX-2 selective inhibitor - applied at the end of farrowing has proven to be effective and safe on PPDS control[1], improvement of sow welfare and behavior[2], and overall milk and colostrum intake for piglets during the first days of life[3]. The objective of this study was to determine under field conditions the effect of meloxicam in litters from sows of a farm with subclinical PPDS in terms of productive performance of their litters liveweight and ADGW at weaning.

MATERIALS AND METHODS

The study took place on a multi-site intensive farm and it considered a total number of 265 sows and 3,077 piglets. Sows were divided into two experimental groups, Group A (n = 127 sows) was treated with Metacam® 5 ml IM and Group B (n = 138 sows) was injected with saline solution 5 ml IM to serve as non-treated control group. One hour after farrowing each piglet was individually identified with numbered ear tags and cross fostering was restricted to first 24 hours within litters from a same treatment group. A research coordinator monitored the experience from farrowing to weaning. The experimental was the litter. A lineal general univariate model was used to assess statistical differences between groups for liveweight at weaning and ADGW during the farrowing period.

RESULTS

Piglets in the Metacam® group presented a bigger liveweight at weaning with 0,28 kg of advantage compared to non-treated animals (Table 1).

Table 1: Liveweight LS Mean at weaning (kg).

	Metacam®	Control
LS Mean	5.23[a]	4.95[b]
Standard error	0.64	0.64
n	1504	1573

a,b: Different letters indicate a statistically significant difference (p < 0.05).

ADGW across the whole farrowing period was superior in the Metacam® group with 13 g daily advantage over the non-treated animals (Table 2).

Table 2: Farrowing ADGW (kg) LS Mean.

	Metacam®	Control
LS Mean	0.242[a]	0.229[b]
Standard error	0.03	0.03
n	1504	1573

a,b: Different letters indicate a statistically significant difference (p < 0.05).

DISCUSSION AND CONCLUSION

This farm did not have clinical PPDS cases but was interested in assessing the potential of improving productive performance by using meloxicam after farrowing as a standard operation procedure in order to control subclinical cases of PPDS.

The litters from sows treated with Metacam® had a better growth performance from birth to weaning (21 days average). These results are in line with previous research[4,5] and further confirm the value of controlling lactation disorders during the first critical hours for piglets colostrum and milk intake.

REFERENCES

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