

THE PRESENCE OF OLDER PIG REDUCES AGONISTIC BEHAVIOUR IN WEANED PIGLETS

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INTRODUCTION

Abrupt changes in the diet, maternal separation, novel environment and mixing of litters are some of the stressors faced by weaned piglets. We investigated whether the presence of an older pig in the nursery pen, after weaning, would reduce agonistic interactions.

MATERIALS AND METHODS

Ninety-six 21 days old piglets were weaned and housed into 4 pens, of which 2 had an older pig (OP) and 2 in conventional settings (CS). Mixing of litters occurred at 05:00 AM of D1. Lesions were counted, on photographs taken on days D1, D2, D3 and D4 of all animals. Piglets were videoed on days D1, D2, D3 and D4 after weaning. We recorded all agonistic interactions that occurred from 05:00 AM to 09:00 AM as it was noticed as the moment of heights activity of piglets (the animals were not kept in artificial light regime and dawned around 05:30). Additional data collection occurred from 09:00 AM until the next day at 05:00 AM, 10 minutes in every hour. Frequency and duration of vocalization were recorded from 48 piglets during the restraint to obtain photographs. Saliva samples were collected for cortisol measures on days D2 and D3.

ANALYSIS

Data were analysed using PROC MIXED of SAS 9.3. The design was in a factorial 4 x 2 x 2 or 2 x 2 x 2, with two treatments (presence or absence of OP) in four or two days (D1, D2, D3 and D4 or D2 and D3) and for two different sexes.

RESULTS AND DISCUSSION

The OP decreased frequency of aggressive interactions and the percentage of total time spent in fights. Piglets weaned in the presence of an OP showed less lesions on day D1 and D2 post weaning. The duration of vocalization was shorter in OP weaned piglets on D1, D2 and D4. There was no difference on cortisol concentration.

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CONCLUSION

We demonstrated that an older pig reduces aggressiveness of piglets at weaning. This result shows possible management strategies to improve the welfare of piglets during weaning.

KEY WORDS: Animal welfare, older conspecific, aggressive behaviour, stress reduction, social buffer

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