



Risk factors for tail lesions in undocked fattening pigs reared on Swiss farms

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Key words

Fattening pig, tail lesions, tail-biting, prevalence, risk factors, animal welfare

Aim of the study

The aims of this study were to describe the prevalence and incidence of tail lesions in undocked pigs on an individual animal level during the fattening period, to elucidate potential risk factors associated with tail lesions, and to describe the stockpersons' attitudes towards tail biting on Swiss farms.

Material and methods

Thirty-eight farms were examined three times during the fattening period (beginning, mid-point, end). During each farm visit, tail lesions were scored on 30-126 individually marked pigs per farm (total: 2209 pigs), information on potential risk factors for tail lesions was recorded, and a standardized interview with the farmer was conducted to explore his or her opinion on tail biting. Potential risk factors were defined by indices when adequate (indoor climate index, enrichment index, disease index, water supply index) and their influence on the occurrence of tail lesions was analyzed using mixed effects logistic regression models.

Results and significance

On the day of arrival at the fattening unit, 11.7% of all pigs had tail lesions, whereas 23.7% and 36.6% of all pigs had tail lesions at the end of the first half and at the end of the whole fattening period. For each point in time, the majority of lesions were of score one (i.e. 75-99% of the tail was intact). Farm-specific prevalence of tail lesions was highly variable, with median values increasing from 4% (first farm visit) to 32% (last farm visit). During the first and the second half of the fattening period, on average 14.1 and 15.4 pigs, respectively, out of 100 developed new or aggravated tail lesions. The risk for new or aggravated tail lesions increased with higher scores for a "disease index" and with increasing group size, and it decreased with higher space allowances and with restrictive compared with ad libitum feeding. The prevalence of tail lesions on arrival was not associated with the incidence of tail lesions in the first and the second half of the fattening period, neither at farm level nor at pen level. In the interviews, farmers expressed their interest in getting professional advice on how to reduce tail biting on their farms.

In conclusion, our study identified several risk factors for tail lesions in undocked fattening pigs indicating that the incidence of tail lesions could be reduced by improving animal health and housing conditions.

Publications, posters and presentations

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