

HHM-PP-27

CORRELATION BETWEEN EXTERNAL AND INTERNAL CLAW LESIONS IN SOWS

E. Okholm Nielsen ¹, L.U. Hansen ¹, S. Haugegaard ², M. Andreasen ¹, C. Vestergaard ³

¹SEGES Innovation P/S, Meldahlsvej 3, 1613 Copenhagen V, Denmark

²Danish Agriculture and Food Council, Kjellerup, Denmark

³SEGES Innovation P/S, Agro Food Park 15, 8200 Aarhus N, Denmark

Background and Objectives

Claw and leg problems are among the most common reasons for sow euthanasia. Previous studies report that 80-99 % of sows exhibit at least one claw damage, predominantly affecting the outer claws, with hind legs being most vulnerable. This study focused on hind legs to investigate the correlation between external and internal claw lesions in euthanized or spontaneously dead sows.

Material and Methods

A total of 513 hind legs were collected from 306 herds at the main rendering plant in Denmark. Of these, 258 legs were from euthanized sows and 255 from sows that died spontaneously. Pathological examinations were carried out at the Veterinary Laboratory Kjellerup, Denmark. External were recorded and analyzed to assess statistical correlations.

Results

Euthanized sows had significantly more external and internal claw lesions compared to sows that died spontaneously ($p=0.017$). There were significantly more lesions in the outer claw than in the inner claw. Several external claw lesions were significantly correlated; for example, sows with uneven sized claws also had overgrown claws ($r=0.56$) and heel horn growth ($r=0.24$). Internal lesions such as arthritis and bone marrow inflammation showed strong intercorrelations (r up to 0.76). When wounds were observed on the sow's skin near the dewclaw, coronary band or pastern, or when the claw wall was detached, inflammation was often present in the underlying tissue, joints and bones.

Discussion and Conclusion

Results show a clear correlation between external claw lesions and internal claw lesions in sows. The wall and sole of the claw provide protection, but damages to the dewclaw, pastern and coronary bands seem to increase the risk of internal infections. Future studies should focus on preventing and treating skin injuries and claw lesions, as well as managing overgrown claws and dewclaws through trimming.