

Prevalence of vaginal discharge in Danish sow herds



Kristian D. Krogh^{1,2}, Ken Steen Pedersen³, Jens Peter Nielsen¹, Marianne Kaiser³, Helle Stege¹

¹HERD - Centre of Herd-oriented Education, Research and Development, Institut for Produktionsdyr og Heste, Københavns Universitet, Grønnegårdsvej 2, 1870 Frederiksberg C, Denmark.

²LVK, Fynsvej 8, 9500 Hobro, Denmark.

³Pig Research Centre, Danish Agriculture & Food Council, Vinkelvej 11, 8620 Kjellerup, Denmark.



SPECIFIC AIM

The aim of this study was to estimate the prevalence of vaginal discharge among lactation sows, in a sample of Danish sow herds.

Vaginal discharge in the in lactation period

INTRODUCTION

Vaginal discharge is often observed in sows suffering from the Mastitis, Metritis and Agalactia (MMA) complex. In a study in 31 US sows herds the overall prevalence of MMA was 6.9%, and all sows with MMA presented vaginal discharge (Backstrom et. al. 1984). MMA is known to decrease the milk production of the sow, and may also increase reproductions problems in the following reproduction cycle (Hoy, 2004). Treatment of vaginal discharge and other urogenital diseases is among the most common causes of antibiotic, usage for sows in Denmark. However, the actual occurrence of vaginal discharge in Danish sow herds is unknown and therefore the aim of this study was to examine lactating sows and estimate the prevalence.



MATERIALS AND METHODS

The study design was cross-sectional. The herds were recruited from northern Denmark; the herds had to have more than 20 sows per farrowing group and keep reliable productivity recordings. Organic and outdoor herds were excluded. In each herd, 20 sows one to four days after farrowing (grp1) and 20 sows close to weaning (grp2) were randomly selected and clinically examined once by the same person. The sows were scored using a clinical scale with:

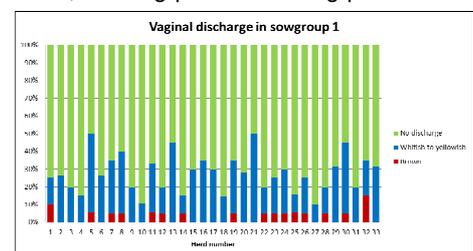
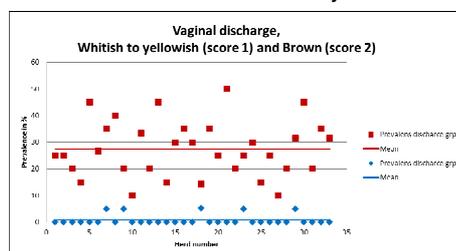
- Score 0: No discharge
- Score 1: Discharge, white to yellow
- Score 2: Discharge, brownish

If the discharge were judged to be lochial discharge, the sow were getting score 0. Statistical analysis of differences in discharge between the two groups of sows was performed using Fisher's Exact test.

RESULTS In total, 1310 sows from 33 herds were examined from May 2011 to March 2013, 652 in grp1 and 658 in grp2.

	Group 1 (after farrowing)	Group 2 (before weaning)
Sows with score 0	467 72,4% [68,7-75,8]	646 99,2% [98,1-99,7]
Sows with score 1	159 24,7% [21,4-28,2]	5 0,8% [0,3-1,9]
Sows with score 2	19 2,9% [1,8-4,6]	0
Data missing	7	7

Table 1: Overall prevalence of vaginal discharge.



The vaginal discharge scores were significantly different between the two groups, $p < 0,001$.

DICUSSION

The study showed a higher prevalence of vaginal discharge just after farrowing, compared with later in lactation, with a large variation in within-herd prevalence. The prevalence of brownish discharge was lower than that of white to yellow discharge. Other studies have showed an association between vaginal discharge and MMA. The relationship between vaginal discharge and the health/productivity of the sow is under investigation.

CONCLUSION

The prevalence of vaginal discharge in this study was 27,7% just after farrowing and 0,8% before weaning.

Backstrom, L., Morkoc, A.C., Connor, J., Larson, R. & Price, W. (1984): Clinical-Study of Mastitis-Metritis-Agalactia in Sows in Illinois. Journal of the American Veterinary Medical Association. Vol. 185:1, pp. 70-73.
Hoy, S. (2004): Nine years of data in MMA. Pig Progress. Vol. 20:4, pp. 14.

Acknowledgement We thank the participating farmers, LVK, LandboNord and AgriNord for support to find host herds. VSP and LVK for the financial support of the project.