

BACTERIURIA IN SOWS IS ASSOCIATED WITH AN INCREASED RISK OF STILLBIRTHS

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Introduction

Previous research showed that urinary tract infections (UTI) in sows are associated with poor reproductive performance. Parameters such as farrow rate, risk of rebreed, and weaned piglets per litter has been associated with the presence of bacteriuria. However, no recent related studies exist and the current prevalence of UTI in Danish sows is unknown. Therefore, this study established the prevalence of bacteriuria in reproductive active and clinically healthy sows in four herds followed by an evaluation of the importance of bacteriuria for the reproductive performance. The hypothesis was: bacteriuria decreases sows' reproductive performance.

Material & Methods

The four included herds were selected based on a history of reproductive problems related to primarily decreased farrow rate and increased rebreed percentage. Urine samples were collected from sows when housed in either the pregnancy unit, the farrow unit, or the service unit. Urine culture was performed on each sample. In the period after urine sampling to the next farrowing, reproductive performance parameters were collected. Statistical analyses were made separately for sows in the pregnancy unit, the farrow unit, and the service unit.

Results

The overall prevalence of bacteriuria was 26.3% among 1,267 sows. An increase in the risk of stillbirths was observed among sows having bacteriuria in the farrow unit pre-farrowing with an odds ratio of 1.27 [1.04;1.54], when calculated by logistic regression. Analyses of the other parameters: farrow rate, risk of rebreed, weaning-to-pregnancy interval, and litter size did not show any significant association with bacteriuria in any of the three farm units.

Conclusion & Discussion

The study illustrates that bacteriuria was widespread in the four herds, similarly in herds of many stillborn piglets it could be valuable to optimize the health of the urinary tract by e.g. securing sufficient and good quality water supply.