VVD-PP-27

TITLE

INTRODUCTION OF PCV2-VACCINATION IN A SOW FARM AND EFFECTS ON VIRUS LOAD IN BLOOD AND SALIVA SAMPLES

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CONTENT

Background and Objectives
Due to good herd health in a herd of 600 SPF sows porcine Circovirus Type2 (PCV2) vaccination was deferred. Four years later and after diagnosis of porcine Circovirus disease (PCVD), intradermal vaccination was started with Porcilis® PCV ID. Aim of the study was to test the feasibility of single saliva samples (SSS) for the monitoring of virus circulation and to evaluate the differences in PCV2 virus load between different sample types from vaccinated and unvaccinated animals.
Material and Methods
For diagnostic and monitoring purposes blood and saliva samples from 20 animals of different age groups were collected before and after introduction of vaccination. SSS were individually collected from the same animals that had been bled and chewing ropes (CR) were used in parallel in the same pens. All samples were examined by quantitative Polymerase Chain Reaction (qPCR) in the Institut fuer Innovative Veterinaerdiagnostik mbH (IVD), Seelze, Germany.
Results
Virus load in SSS laid in similar proportions as in the according CR. Saliva samples tested positive earlier, longer and higher than the blood samples. Before vaccination viremia was detectable from a peak of 5,02 log PCV2 GE mean at 10 weeks of age and dropped in the fattening groups. SSS tested positive in 95% of weaners already and virus load dropped slower than in blood samples after the 10-weeks-peak. Samples from vaccinated groups had statistically significant lower virus loads in nearly all sample types and age groups compared to unvaccinated groups.
Discussion and Conclusion
SSS are easy to take and can replace chewing ropes in younger animals. According to other publications virus load in saliva is higher and longer detectable than in bloods so it is a practicable approach for monitoring of virus circulation. Vaccination is an effective tool to reduce virus load in blood and saliva samples.