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THE USE OF PROCESSING FLUIDS COMPARED TO SERUM FOR DETERMINATION THE PRRS TYPE 1 STATUS OF NEONATAL PIGLETS ON A COMMERCIAL DUTCH FARM

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Introduction

For diagnosing early (vertical) PRRS-infections, a lot of piglets have to be bled. Bleeding new born piglets is stressful and time consuming which can only be done by well-trained people. Recent findings from the US indicate the possibility of using processing fluids (PF) for diagnosing early PRRS-type 2 infections. Objective of this study was to compare PRRS-type 1 detection by PCR in serum and PF of neonatal piglets during a field outbreak on a Dutch farm.

Materials and methods

In a 600 sow breeding farm with a recent PRRS-type 1 outbreak in the Netherlands the PRRS status of neonatal piglets was compared by using PF and serum. Per week batch 30 piglets were bled by vena puncture at 2-4 days of life. In the same batches PF were collected: after castration the testicles were put on a polyester 0.5 cm mesh grid using the drip as sample. All samples were analyzed by PCR for the presence of PRRS-virus. Serum was tested pooled by 5 samples, PF was tested as one sample per week batch. When positive, the ORF5 sequence was analyzed.

Results

In 4 out of 4 weekly batches, serum was positive for PRRS type 1 (Ct 31.0-36.2). In 3 out of 4 weekly batches, PRRS type 1 could be detected in PF (Ct 31.4-34.3). ORF5 sequence results will be presented at the ESPHM symposium.

Conclusion/discussion

The use of PF for detecting PRRS in neonatal piglets is proven possible for PRRS-type 1 strains. However, not all PF samples were positive when serum was. The collection of PF by stockmen was easy and time efficient. In addition less PCR testing was used. With the use of PF, weekly farrowing batches can be monitored for PRRS status, saving time and money due to lesser amounts of PCR testing.