



VIRAL DISEASES

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DIAGNOSTIC IN PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS INFECTIONS - A CASE REPORT

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Introduction

Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) is distributed worldwide. Both types PRRSV-1 and PRRSV-2 are endemic in Germany, where clinical outbreaks are usually caused by PRRSV-1. The present case report describes diagnostic challenges at a PRRSV infected farm.

Material and Methods

At the present pig-producing farm with 450 sows the whole breeding stock was routinely vaccinated against Erysipelas, Porcine Parvovirus and PRRSV-1. For 2 years recurring reproductive disorders were noticed. Symptoms included abortions, an increased number of dead or weak born piglets, a high mortality in suckling piglets and an increased percentage of sows returning to oestrus. Live born piglets showed pale skin and a reduced general behaviour. Weaning pigs were suffering from wasting, diarrhoea but mainly coughing. The mortality rate increased and lameness with joint swelling was found in several pigs. For further investigations blood samples of sows and pigs were analysed for the presence of PRRSV specific antibodies and RNA. Moreover a post-mortem investigation was performed on three weaning pigs.

Results

In all dissected pigs a catarrhal-purulent bronchopneumonia was observed. One pig showed a fibrinous polyserositis. In the bacteriological investigation of the lung *Bordetella bronchiseptica*, *Pasteurella multocida* and *Haemophilus parasius* were detected. A pooled lung sample of these pigs was positive for PRRSV-2 (ct 18.69). A high value of PRRSV-specific antibodies was detected in all age groups except of gilts and in 5/6 pool serum samples PRRS-2 RNA was detected.

Discussion and Conclusions

In the present case report a high amount of PRRSV-2 was detected in lungs of weaning pigs with bronchopneumonia. PRRSV might enhance the infection of bacterial secondary infections, e.g. *Bordetella bronchiseptica*. Due to these results sows and pigs were vaccinated with a PRRSV-2 vaccine. After changing the vaccination program, the health status of pigs and the reproductive performance of sows improved.