IMPROVEMENT OF REPRODUCTION PARAMETERS IN A GERMAN SOW HERDS AFTER VACCINATION WITH UNISTRAIN

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INTRODUCTION

Porcine reproductive and respiratory syndrome virus (PRRSV) infection is the leading cause of economic casualty in swine industry worldwide1,2. The virus can cause reproductive failure, respiratory disease, and growth retardation in pigs. Vaccination with modified live vaccines (MLV) is still the principal means used to control PRRSV infection. This report presents observations made with a new genotype 1 based MLV against PRRS (UNISTRAIN®) in Germany. The main aim was the evaluation of reproductive parameters after a change in the vaccine.

MATERIALS AND METHODS

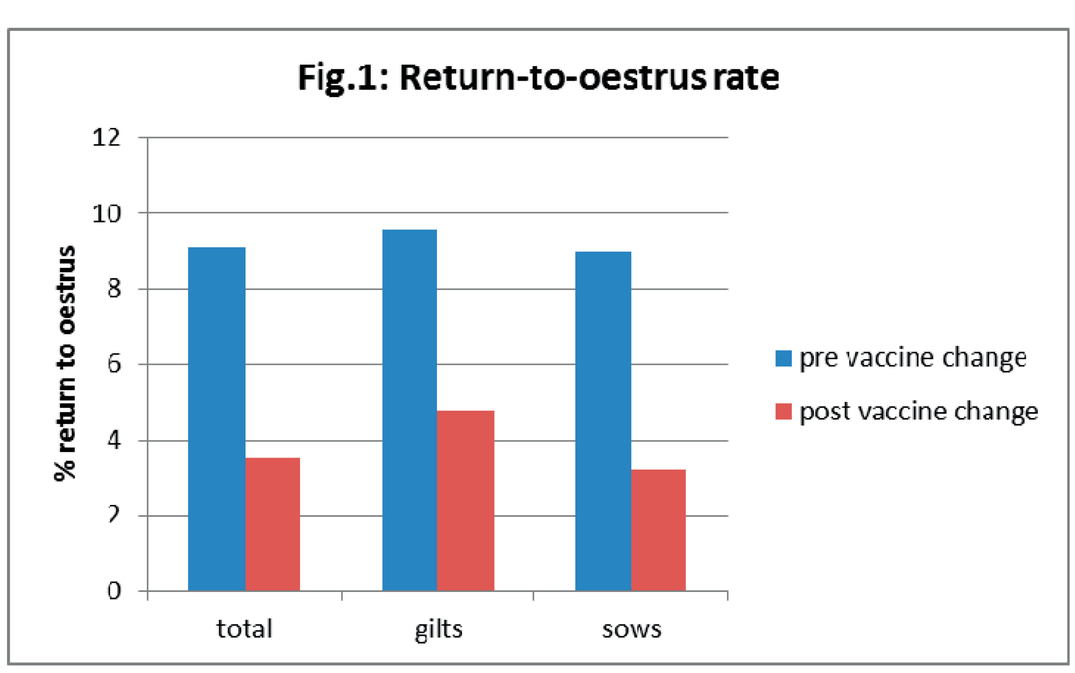
The observation was carried out on a farm located in the Northwest of Germany with a well-documented history of PRRS.
The farm was a one-site piglet producer site with 470 sows and nursery with a 2-week-production rhythm. In May 2013 the PRRS vaccination protocol in sows (piglets were not vaccinated) was changed from a 6/60 vaccination with a genotype 1-based MLV vaccine, to mass vaccination every four month with UNISTRAIN®.

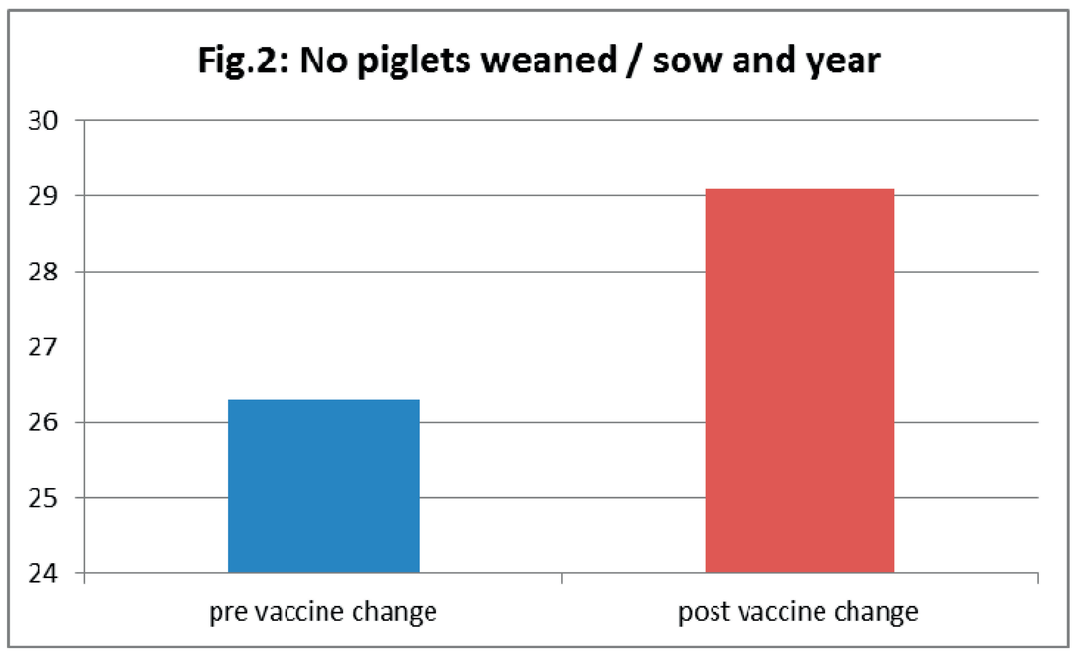
Farm was visited on a regular basis for clinical examination and blood sampling for PRRS monitoring. Aborted material, when available, was sent to the laboratory for routine examination, as well as for screening of PRRSV, PCV2 and SIV. Reproductive data was collected and checked during visits by the monitor.
Analysis of the collected data was done in January 2014, after 9 months of vaccination. The data was compared to the data of the last 12 months before vaccine change.

RESULTS

After 9 months of continuous vaccination with UNISTRAIN®, the reproductive data of the farm improved. In comparison to the 12-month period before vaccine change the return-to-estrus decreased in sows and also in gilts (Fig 1.). Number of weaned piglets/sow/year increased significantly from 26.3 to 29.1 (Fig. 2.). Also all other recorded data showed an improvement: Farrowing rate +1.7%, piglet mortality -4.3%; farrowings/sow/year +0.06; no. piglets born/sow/year +1.3 and no. piglets born alive /sow/year +1.3.
During 2013 a total of 13 abortions have been recorded, and aborted material has been tested. No PRRSV has been found so far.

Serology showed a stabilization of the entire herd. No virus was transmitted from sows to piglets. Virus circulation in the nursery could be found during the whole observation.





CONCLUSIONS AND DISCUSSION

After the change of vaccine the reproduction data of the farm improved. No side effects occurred and the production was successfully stabilized.
Nevertheless the transmission of PRRSV from sows to piglets couldn`t be found the nursery remained PRRSV positive and showed clinical signs of PRDC. A full clinical stabilisation would require a piglet vaccination.

REFERENCES

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