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TITLE

NO EFFECT OF A BIOCIDES ON THE PREVALENCE AND AMOUNT OF LA-MRSA IN A PIG FARM

Poul Baekbo¹, Helle Sommer¹, Karl Pedersen², Carmen Espinosa-Gongora²

¹ *SEGES Danish Pig Research Centre*

² *Technical University of Denmark*

CONTENT

Background and Objectives

Livestock associated MRSA (LA-MRSA) is wide spread in pig herds in most European countries. Most people working in positive pig farms will carry LA-MRSA in their noses. These farm workers may transmit this organism to other people outside the farm premises and thus jeopardize human health, especially in healthcare settings. The objective of this trial was to test if a new biocide (BiovirR) with a good in vitro killing effect on MRSA and used extensively in a pig farm could reduce the level of LA-MRSA on the pigs and in the farm environment.

Material and Methods

The trial was performed in a 700-sow farrow-to-wean unit with an AI-AO flow by room in farrowing crates and nurseries. Nine tests and 9 control groups were run parallel over time. In the test groups, the farrowing crates and the nurseries were disinfected between flows with the biocide, and twice a week for the entire production cycle the pigs (sows, piglets and weaners) in the two compartments were exposed to a mist of the biocide. The amount of MRSA in weaners and environment at the end of the nursery period was based on culturing MRSA from nasal swabs from 26 pigs (two per pen) and in air-samples. The productivity in the nurseries was registered.

Results

No significant effect of the biocide was found on the prevalence of positive pigs, or the level of MRSA in pigs (CFU/swab) or the environment. The productivity (ADG, mortality) was similar in the control and test groups.

Discussion and Conclusion

Even though pigs were exposed twice a week to a mist of an 'in-vitro efficient MRSA-elimination biocide', the level of MRSA in the pigs and in the environment, was not reduced. Once introduced, MRSA seems difficult to eradicate from a pig farm.