

SWINE HEALTH

Title: Demonstration of pathogenicity in CDCD pigs with a cytopathic agent isolated from farm with "Sow abortion and mortality syndrome"
NPB # 99-077

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Abstract:

A previously unidentified cytopathic agent along with PRRS virus was isolated from farms with history of severe abortion and sow mortality. Pathogenic role of the agent was not known in pigs. The objective was therefore to investigate clinical disease in cesarian derived colostrum deprived (CDCD) pigs following experimental inoculation with the agent. Molecular and serologic characteristics of the agent were also examined. The agent was serologically related with *Mycoplasma hyorhinis*, while the agent did not grow in any of mycoplasma media. Nucleotide sequence analyses showed 91.9% similarity with 16S rRNA of *M. hyorhinis*. In order to examine the agent in samples, PCR primers that can differentiate from *M. hyorhinis* were developed. Twenty CDCD and eight conventional 3-week old pigs were inoculated with the agent in different routes with or without presence of PRRS virus infection. None of the pigs showed clinical sign or gross pathological lesion, although evidence of the infection was detected by PCR. In conclusions, the agent is characterized as a variant of *M. hyorhinis* but not pathogenic to the pigs.

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