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TITLE

ETIOLOGICAL CAUSE TO PLEURITIS IN HEALTHY PIG HERDS WITH HIGH INCIDENCES OF PLEURITIS RECORDED AT SLAUGHTER

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CONTENT

Background

Apparently healthy herds may experience up to 50% pleuritis at slaughter.

Materials & methods

A farrow-to-finish herd with 500 sows; 36±8% pleuritis registered at slaughter. Ten pigs were sampled at transfer to a fattening unit plus 3, 6 and 9 weeks thereafter. Tracheal swabs were analysed by PCR. Serum samples analysed with ELISAs. Lung lesions were recorded at slaughter with extended lung inspection of 34 pigs.

Results

Healthy pigs with high DWG, but pleuritis in 50% of the pigs at slaughter. The extended inspection confirmed chronic lesions in the diaphragm lobes, but of low magnitude.

Tracheal swabs: Influenza-negative. *M hyopneumoniae* in one pig at the last sampling occasion. *M hyorhinis* repeatedly demonstrated but declined with time (90-70-80-60%). *Actinobacillus* in 50-0-90-70%, and *Pasteurella* in 10-0-80-70% of the samples.

Antibody-ELISAs: Negative to influenza, *M. hyopneumoniae*, and App3. *H parasuis*-antibodies remained at a constant level. All pigs were seropositive to App2 on arrival (A450=1,0), which decreased to 0,6 after three weeks, and remained at that level. All pigs were also seropositive to *Pasteurella* on arrival (A450=1,6), which decreased to 1,3 after 3 weeks but thereafter increased to 1,8.

Conclusion and discussion

Pigs probably had pleuritis already on arrival, when App frequently was found in trachea and all pigs were seropositive to App2. These pleuritis may healed somewhat as App-antibody levels decreased and App not was demonstrated in trachea week three. *Pasteurella* may have preserved pleuritis at the end of the rearing, since a simultaneous increase in tracheal presence of *Pasteurella* and of antibodies was observed week 6 and 9. Correspondingly, the tracheal presence of App increased week 6-9. However, serum-antibody concentrations did not increase, which made the true influence of App uncertain. No correlation to Influenza, *M hyopneumoniae*, App3 or *H parasuis* was seen.