

RES-OP-05

INCREASE IN IRREGULAR RETURN TO ESTRUS RATE IN SOWS AND SEVERE CONJUNCTIVITIS IN FATTENERS CAUSED BY *CHLAMYDIA SUIS* – A CASE REPORT

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Introduction

There are multiple reasons for increase in irregular return to estrus rate in sows, most of them of non-infectious origin. Chlamydia spp. infections are known to lead to infertility, but getting a clear diagnosis of a chlamydiosis is difficult, since pathophysiology is poorly understood.

Material and methods

In an Austrian farrow to finish farm, unsuspecting for PRRS, the irregular return to estrus rate in sows of all parities together with vaginal discharge markedly increased over the last year from 10 to 25%. Concurrently, a noteworthy number of fattening pigs developed severe conjunctivitis. Insemination procedure and time point were critically reviewed, backfat was measured. Serum of sows and fattening pigs was analyzed for PRRSV and *Chlamydia* antibodies. Conjunctival swab samples were taken in fattening pigs showing severe conjunctivitis. For diagnostics of infertility, cervical swab samples were taken as well as the genital tract of an infertile sow at slaughterhouse.

Results

Insemination time and method, as well as semen quality and storage, seemed to be correct. Conjunctival swabs were highly positively tested for *C. suis* using culture and PCR, while the cervical swabs were negative for *Chlamydia* spp. Nevertheless the genital tract was positive for *Chlamydia suis*. Most of sterile sows as well as the fatteners showed high levels of *C. suis* antibodies in *C. suis* specific ELISA. No other relevant agents were detected. Doxycycline therapy was successful.

Discussion and conclusion

This case report highlights the difficulties of diagnosing genital chlamydiosis in alive sows: Chlamydia spp. were not detectable in cervix of sterile alive sows, but at the genital tract after

slaughtering. Therefore, negative findings do not necessarily prove the absence of the agent. It seems like *C.suis* is able to cause different clinical signs in one farm at different age/production groups.