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Efficacy evaluation of Draxxin in an acute outbreak of *Actinobacillus pleuropneumoniae* type 2 among weaner pigs in Denmark.

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Introduction

Draxxin (Pfizer Ltd) - is a new macrolide antimicrobial agent with approved indications in pigs for the treatment of swine respiratory disease (SRD) associated with *Mycoplasma hyopneumoniae*, *Pasteurella multocida* and *Actinobacillus pleuropneumoniae* (Ap) sensitive to tulathromycin (1,2).

It is formulated for parenteral injection as a single dose to provide a full course of therapy (1,2).

Materials and Methods

A Danish 1200 (SPF with M.hyo) sow herd -part of a multisite system - was acutely infected in May 2005 with Ap2. Symptoms in the pregnant sows were fever and anorexia.

The Ap2 infection spread to the weaner pigs at site 2, which became overcrowded . Therefore 2 weeks production -1100 pig in total - of weaner pigs were brought to a remote, back-up weaning facility, with no pigs for 3 months.

These pigs were intensely monitored.

Nine days after moving the last batch, symptoms of pneumonia were observed and treatment was initiated: flock-medication with Tiamuline in feed, Doxycyclinhyclat in water plus injections with Penicillin G.

In spite of the treatment pigs were lost at a rate of 1,6 pr day and it became obvious that this outbreak of Ap2 could not be controlled by in-feed/water medication Feed uptake had now dropped to about 45%.

Draxxin was available in Denmark on the 25th of May and friday the 27th , 1,100 weaner pigs were injected with 0,5 ml Draxxin each.

Results

Death losses and clinical signs of respiratory distress stopped immediately and lasted for 21 days after treatment.

Four days later, the pigs were above standard feed uptake.

21 days after the Draxxin treatment symptoms of an Ap2 infection was observed, but this time the infection responded to Doxycyclinhyclat in water and Amoxicillin L.A.

Discussion

As a consequence of these results, it was decided to make a complete change of the health program in the sow herd:

1: Piglets 10 days of age:

0,1 ml Draxxin, +1 ml PorcilisAPP (off label)
+ 2 ml Suvaxyn

2: Piglets 3 – 5 days before weaning:

2 ml PorcilisAPP (off label !) + 2 ml Suvaxyn.

3: Pigs the day before weaning: 0,2 ml Draxxin.

This off label use of Porcilis APP, has worked well in other Danish problem herds (3).

As a result of this treatment , mortality rates are down to 0,2% at site2. (5 dead pigs of 2400).

The sow herd is now back to normal production: 28 pigs weaned pr sow pr year and pigs 9,3 kilo at weaning age 32 days

80 maiden gilts in quarantine at site 1 were also infected with Ap2. They were injected with Draxxin 1 ml pr 40 kilo and recovered fully within 3 days.

In many Danish pig herds, chronically diseased pigs have disappeared after the introduction of Draxxin (4). They are injected as early as identified and sorted out to hospital pens and usually recover in 5 -10 days. Pigs not responding to treatment are euthanized.

A positive side effect seems to be good effect against infection with *L. intracellularis*(5).

References:

1:Tulathromycin Registration file FDA/CVM, 2005.

2: European Agency for the Evaluation of Medicinal Products. CVMP/968/03

3:Personal communication: Frede Keller, DVM.

4:Personal communication: Gorm Nybroe, DVM

5: Authors experience