

Field experiences with an oral ileitis vaccine in Spain

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Introduction

Ileitis is a very common disease, and its prevalence is very high on most of our farms. Ileitis vaccination is a new tool which can be used by practitioners in order to control both the disease and economic losses caused in the farm. The objective of this study was to compare performance results after vaccination in three different commercial farms controlled by our practice in Segovia area.

Materials and Methods

Case 1: High health nucleus farrow-to-finish farm of 800 sows with a 3 weeks rhythm. The animals were positive only to *Lawsonia intracellularis* and *Streptococcus suis*, and were negative to the other frequent pathogens in swine. They were *Lawsonia* positive since they arrived and enteric disorders related to ileitis were always present at fattening facilities confirmed by necropsy, faecal PCR and ELISA. However, there was an increase in mortality since October 2005, and a substantial decrease in animal growth. Piglets were vaccinated (Enterisol® Ileitis) by drench at 21 days of age since October 2005. The monitored parameters were average daily weight gain (ADWG), mortality rate, runts percentage and medication cost.

Case 2: Farrow-to-finish farm of 120 sows. On this farm the feed had never been medicated before ileitis appeared in the fattening place. However, the disease circulated continuously in dry sows, accounting for 2% of sow deaths. Vaccination of piglets at 21 days of age by drench started in January 2006. The monitored parameters were monthly enteric medication cost (including feed, water and injectable drugs) and mortality rate.

Case 3: Farrow-to-finish farm with 400 sows. Ileitis was present and swine dysentery (*Brachyspira hyodysenteriae*) had been diagnosed on this farm for some years. Initially our practice thought that vaccination might entail an added cost to medication expenses. Historically, the percentage of mortality between weaning and the slaughterhouse was very high, surpassing 25% in some months (October 2005 and January 2006). Vaccination of piglets at 21 days of age by drench on this farm began in February 2006. The monitored parameters were monthly enteric medication cost (including feed, water and injectable products) and mortality rate.

Results

Case 1: The results after vaccination on this farm were excellent (Table 1). Five months after the beginning of vaccination, data indicated a very substantial reduction on the percentage of both deaths (-67%) and runts (-97%). Medication cost dropped by 64%. Finally, the results indicated a

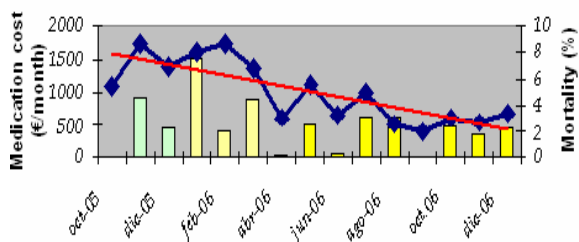
substantial improvement in growth (+12%). The economic return of ileitis vaccine was very positive.

Table 1. Relevant parameters in Case 1

	Control	Vaccine	Diff
# piglets tested	3,856	3,483	
Mortality (%)	9	3	-6
Runts (%)	15	0,5	-14.5
Medication (€/sow)	48	17.1	-30.9
ADWG 80-150 d (g/d)	887	998	+111

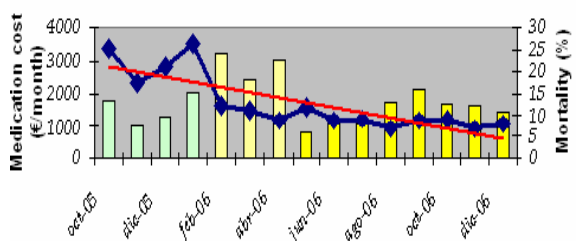
Case 2: Results were very satisfactory (Figure 1). After vaccination feed medication withdrawal was possible. Only some medications in water for sporadic *E. coli* diarrhoea outbreaks in fattening pigs and piglets were kept. By June 2006 there was a decrease in mortality and a return to regular consumption of medication (mainly due to the vaccine cost).

Figure 1. Medication cost (columns) and mortality (line) in Case 2.



Case 3: The results (Figure 2) indicated that medication cost decreased, even with the presence of chronic dysentery in the farm. Consumption of medication was higher before vaccination, and fell down as more animals were vaccinated. Mortality dropped very substantially, reaching 7% in August.

Figure 2. Medication cost (columns) and mortality (line) in Case 3.



Discussion

Our practice field experience indicated that satisfactory results were obtained with ileitis vaccination. After vaccination better growth, less mortality and a reduction of the enteric medication expenses were observed. As a consequence, the vaccine produced an economic benefit in these farms.