Efficiency of two vaccines against Aujeszky's disease (Pseudorabies)  
Influence of vaccination conditions and of the residual passive immunity  
on the protection of fattening pigs  

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The efficiency of live and inactivated virus vaccines against pseudorabies (PR) was  
compared in fattening pigs. Pigs from vaccinated or unvaccinated sows were vaccinated  
with one or the other vaccine and challenged at the end of the fattening period. In the  
first trial, piglets of different ages were vaccinated once. In the second trial, piglets were  
given twice, half a dose of the inactivated virus vaccine with or without passive immu- 
nity. All the pigs were infected with a virulent strain at the end of the fattening period.  
The particular form of pseudorabies observed in the fattening units was reproduced cxpe- 
perimentally. A marked difference appeared between the control group and the groups of  
pigs vaccinated once or twice with the live and the inactivated virus vaccines. However,  
a full protection of the pigs was not obtained. The inactivated virus vaccine provided the  
piglets with a strong passive immunity which interfered with the development of an  
active immunity. The colostral antibodies were not detected after 5 weeks in piglets born  
from sows vaccinated with the live strain, whereas they persisted after 10 weeks in those  
born from sows vaccinated with the inactivated virus vaccine. In all the cases, a double  
vaccination with half a dose induced a better immune response than with only one dose  
of the inactivated virus vaccine.

Piglet health and pathological picture of the respiratory system  
during the different rearing phases  

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Necroscopic examinations were made systematically in piglets randomly selected  
in conventional commercial units in Brittany (France). The piglets were taken to the  
laboratory on the day of weaning at the age of 4 weeks (group 1) or about 5 weeks  
later (group 2). The lesions were less frequent and less severe in group 1 than in group 2.  
The frequency of atrophy of the turbinates increased from 20 to 50 p. 100 between  
group 1 and 2, that of pneumonia from 10 to 24 p. 100 and that of pleuresy from less  
than 1 to 8 p. 100. These results were compared with the lesions observed on bacon  
pigs at the slaughterhouse. It appeared that the frequency of pulmonary lesions increased  
with age reaching 66 p. 100 for pneumonia and 17 p. 100 for pleuresy, while the  
number of cases of rhinitis was stable. These pulmonary lesions regressed in the adult  
sow to 17 and 12 p. 100, respectively for pneumonia and pleuresy, except in the case of  
severe lesions where after-effects could be observed. The pneumotrophic agents were  
widely spread in the herds. *Bordetella bronchiseptica* and *Pasteurella multocida* were  
detected in 50 p. 100 of the herds and *Haemophilus parasuis* in 65 p. 100 of them.  
These bacteria as well as *Mycoplasma hyopneumoniae* were found more frequently in  
the presence than in the absence of lesions. The pathological picture of nasal and pulmo- 
nary lesions showed different patterns of development.