

## AUJESZKY'S DISEASE: DESCRIPTION OF THE EVOLUTION OF AN OUTBREAK

## OF THE DISEASE AND RESULTS OF VACCINATION.

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INTRODUCTION.

Aujeszky's Disease (AD) in pigs has become in Spain, since it was first described in 1.934 by Steiner, C. and López, A. one of the most worrying diseases due to the losses produced in pregnant sows in the form of abortions and the death of new-born piglets.

This report describes the evolution of an outbreak of the disease in a selection farm with its clinical signs and results of vaccination.

The first signs of disease appeared on 25 August 1.981 when a sow aborted on the 98th day of pregnancy and another farrowed 6 live piglets - which showed signs of ataxy and convulsions - and 5 dead piglets.

On the following day three sows farrowed -- dead piglets and others with signs of ataxy and convulsions. Five of these piglets were sent to our pathology laboratory to confirm the prior AD diagnosis.

In the 5 autopsied piglets we found slight - macroscopic injuries fundamentally showing - with hyperemia and congestion of the meninges and slight petequias in the renal cortex and liver. The rest of the intestines appeared - normal.

Histologically the injuries consisted of non suppurative encephalitis with invasion of lymphocytes and necrosis with formation of intranuclear inclusion bodies in hepatocytes.

The diagnosis was carried out by subcutaneous inoculation of a rabbit in the inner face of the thigh with 1 ml. of a suspension of macerate of brain at 20% in a buffered solution. 98 hours after inoculation the rabbit showed signs anorexia and intense pruritus at the point of inoculation and died 12 hours later. The virus was isolated by tissue culture in primary monolayer of pig's kidney.

The vaccination protocole was established as follows: the 25 sows from the farm were isolated and distributed in 4 groups and vaccinated with inactivated vaccine with oily adjuvant, 1 group per week to avoid mating immediately after vaccination. The pregnant sows before 30 and after 60 days of pregnancy were vaccinated with live vaccine strain B-900 and those between 30 and 60 were vaccinated when they completed the second month of pregnancy. The nursing sows were also vaccinated with live vaccine. The suckling pigs were vaccinated with inactivated vaccine and once weaned the vaccine was repeated after 4 weeks.

Later only inactivated vaccine was used, since by the 60th day of pregnancy there were no problems of hypersensitiveness due to the oily excipient. The fattened pigs were also vaccinated with inactivated vaccine.

Evolution, until the return to normal of the

farm, was of 35 pigs affected out of a total of 320, with 7 abortions, 11 farrows with dead piglets and 116 piglets which died in maternity. Among fattened pigs there were only 8 -- deaths. The 4 farm dogs which usually ate piglets, also died with symptoms of the disease.

Later, 2 months after the process, a serological examination for AD was made using a test of serum-neutralisation with the following results:

Sow no.	antibodies titer	no Farrowe
1	1/8	0
2	1/4	0
3	1/4	0
4	1/8	1
5	1/8	1
6	1/8	1
7	1/16	2
8	1/4	2
9	1/16	2
10	1/16	3
11	1/16	3
12	1/16	3
13	1/16	4
14	1/16	4
15	1/8	4

Summary:

The effectiveness of the vaccination against AD is proved in the control of the disease - once it has appeared, returning to productive normality in 2-3 months.

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