

CONTROL OF ATROPHIC RHINITIS IN THE NETHERLANDS

I.J.H.P. Hardeman

Animal Health Service in the Northern Netherlands
Postbus 30013, 9400 RA Assen, The Netherlands.

When a diagnosis of atrophic rhinitis was established for the first time in the Netherlands in 1958, it was soon decided to control the disease by legal measures (v.d. Born 1958). The procedure adopted during the first years was stamping out, which was carried out by the Veterinary Service.

However, this method was not found to be sufficient to eradicate the disease, and therefore the system of total slaughter was discontinued and changed to one of partial stamping out. This did help to improve conditions on the farms involved but, rather than reducing the number of herds affected, the number of cases of atrophic rhinitis showed a marked increase, particularly in the seventies.

This resulted in delegation of control by the state (Veterinary Service) to the regional Animal Health Services on August 1st, 1980. (This is an organisation of agricultural industry in the Netherlands).

In controlling the disease, the Health Services differentiate between pig producing farms and specialized pigbreeding farms. On the pig producing farms, measures are adopted, which enable the pig farmer to cope with the disease.

These measures are concerned with:

1. Medication.

The most frequently used drug is Oxytetracycline (OTC). On 77 farms which were affected during the months August, September and October 1980, Oxytetracycline was used in 69 cases (89,6%): The drug is administered by medicated feed to sows and weaned piglets.

To suckling piglets OTC is administered by injections on 3, 6 and 12 days or by nasal spray with a 5% solution of OTC soluble powder in water once or twice a week. The results of this last method are at least equal to the method of injections.

The spraying method is cheaper but more laborious to the farmer.

2. Vaccination.

The results of vaccination can be very variable. When Bordetellae are involved as a causal agent, the results can be rather good but unfortunately Pasteurellae often take over, especially when the environmental circumstances are not improved.

3. Management.

This concerns facts as control, organisation, hygiene, etc. The management factors are discussed with the owner during the monthly visits, over the first 6 months of the AR situation.

4. Housing.

The owner is advised to improve the ventilation and if possible to reconstruct the farrowing department into separate units in which the "all in - all out" system can be carried out for sows and suckling piglets.

The Animal Health Service purchases affected pigs up to the age of twelve weeks during a period not exceeding twenty-four weeks at a price of 60 per cent of the market value. This is only done on the condition, that the measures recommended shall be put into practice.

During this period, intensive herd health programmes are also carried out by the Animal Health Services in co-operation with the local veterinarians.

The specialized pig-breeding farms are closely supervised by the Health Services which make monthly inspections.

Moreover, piglets in the 4 - 6 week range are examined every two months for the presence of Brachygnathia superior (BS) by measuring the craniocaudal distance between the upper and lower incisors. Until now, this BS measuring does not seem to be of great help in the early detection of an AR situation, because there is a great variation, depending for example of used races and the influence of the boar.

When the presence of atrophic rhinitis is suspected, but not clinical evident or the suspicion is based on tracing, post-mortem studies are done in at least ten slaughtered animals, 5 older and 5 younger than 4 months. When the findings are positive for atrophic rhinitis, health certificates are suspended for at least twelve months.

The pig breeder can take advantage of a purchasing arrangement in which the Health Service buys all animals in the 0 - 8 month range at 60 per cent (diseased) or 80 per cent (normal) of the value in use.

The owner can slaughter the remaining sows on his own expense and repopulate his farm with health-certificated animals. In that case his pig farm is certificated again within two months.

If he does not slaughter the remaining sows, the conditions are similar to those for pig producing farms and health certificates are suspended for at least twelve months as already mentioned.

Table I shows the situation on 175 pig producing farms, that were affected during the months August 1980 - January 1981, compared with the clinical situation six and twelve months later in weaned piglets.

Table I

A comparison of the AR situation on 175 pig producing farms after outbreak, 6 months and 12 months.

% clinical AR	start	6 months	12 months
0	-	106	116
1 - 10	97	45	39
11 - 20	43	6	-
21 - 30	14	2	1
31 - 40	6	-	-
41 - 50	9	1	-
50	6	1	-
Totally slaughtered	-	14	19
	175	175	175

Conclusion:

The in this paper described method to control AR can - at least at pig producing farms - help to improve the clinical situation of AR, however without eradication of the disease.

Reference: J.M. v.d. Born, Tijdschrift voor Diergeneeskunde (1958) 915 - 919.