PREVENTIG NEONATAL SCOURS IN PIGLETS USING AUTOVACCINE WITH ENTEROPATHOGENIC STRAINS.

ALVAREZ M.C.I. and GONZALEZ L.G.
FACULTAD DE ESTUDIOS SUPERIORES CUAUTITLAN.U. N. A. M.

Scours in piglets have special severity during the first week of life,occurring within a few hours or days after birth.

The presence of diarrhoea by infectious agents is closely related with the failure of maturity that show the digestive tract in order to develop an inmune response.

Due to the passive inmunity transfered by the sow through calostrum is very important because it is rich in IgA inmunoglobulin,mainly -- detected by inmunofluorescence.It has been shown that the inmunoglobulins do not admit adherence of the O.M.,to the epithelial cells in the mucosa,obstructing their colonization and protecting during the very first days, when the piglet is more prone to pathogenic agents.

It is feasible to increase in a specific way inmunoglobulin calostrum level vaccinating the sow,being the oral way mos efficient,if it is made with an 'autogenous'vaccine with live --- culture of each farm,otherwise it is possible to spread other pathogenic serotypes. For this purpose were carry out isolations of enteropathogenic agents from a Farm with 137 sows where scours incidence was very high. The isolations were made during five months with the following findings:

Table 1. Isolations of enteropathogenic strains from piglets scours.

Strains	No.entero pathogenic ITY	%	No. of strains without entero pathogenicity	%
E. coli	8	25.0	10	31.2
Klebsiella sp	6	18.7	14	12.5
Others	2	6.2	2	6.2

Later on,employing an autovaccine the scheme on table 2 was made. The following findings were obtained:

Table 2. Percentage of scours in piglets born to inmunized sows with 4 different vaccines.

Vaccines	No. Sows	Total of piglets born	No.of piglets with scours	%
1. E. coli	4	41	13	32
2. Klebsiella	4	31	44	52
3. Klebsiella + E. coli	4	31	4	13
4. Controls	4	24	12	50

X^2 $P \leq 0.005$ to Klebsiella and E. coli vaccine

Being the Klebsiella and E. coli vaccine the most efficient due to the fact that it's $X^2 = 9.07$ that corresponding a $P \leq 0.005$ with a highly significant difference in relation to the control group that was not innoculated.

CONCLUSION.

With the described findigs,there is strong evidence that E. coli is not the only agent involved in neonatal scours and that it is necessary to not discharge isolated strains of Klebsiella from scours until their entero-- pathogenic role is established. Because of -- this fact,Klebsiella could be the pathogenic agent and if not taken into account,could confuse the diagnoste and impede taking effective control measures.

Selected references:

1. Porter P.A.J. Blades W.D. Allen,Chidtow W. 1980. Live vs dead E.coli vaccines.Effects on inmunity health and production,Proc. Inter pig Vet Soc.Congress(Copenhagen, Denmark).
2. Husband A.J. and Bennell M.A. 1980.Intestinal Immunity in pigs. Pigs News and Information 1(3): 211-213
3. Garza R.J. y Olguín R.F. 1976.Inmunidad suplementaria en lechones. XII Convención de la A.M.V.E.C. León,Gto. México.