INTERACTION BETWEEN A SWINE FEVER VACCIAL VIRUS AND PSEUDOMONAS MULTOCIDA IN THE PRODUCTION OF PSEUDOMONYX UNIVERSITY OF MEXICO

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There has been abundant research performed in this area referring to the etiology of porcine respiratory disease, and pseudomoni multocida has been shown to be an important secondary invader of the lung, frequently responsible for the advanced lesions observed in the field. However, it is difficult to experimentally reproduce pneumonia in pigs with P. multocida alone. Some workers (Smith, 1970) have demonstrated the interaction between P. multocida and Mycoplasma pneumoniae. In cattle, an interaction between B. abortus and P. multocida has also been demonstrated (Falk, et al., 1990). However, the relation between porcine adenovirus and Mycoplasma pneumoniae has been studied by Smith, et al. (1979) which showed the association between adenovirus and P. multocida in the porcine species. In this way, we can see the importance of the interaction between the different pathogens.

In Mexico, P. multocida is a very common pathogen (27.14%) in porcine pleuropneumonia cases (Pinto, Ochoa, and Trigo, 1978). In this context, the disease is widespread in the country, and the first step to control the disease is the development of a vaccine against the disease. However, the experience with the vaccine is limited to highly vaccinated pigs. In this case, the vaccine must be considered only as an ancillary tool to control the disease. The results obtained with the vaccine were not conclusive, but the vaccine was effective in controlling the disease in a short period of time. Therefore, the vaccine must be used in combination with other control measures, such as the use of antibiotics and the control of the disease.

The first trial (Pinto and Ochoa, 1978) was performed in pigs using a 4-week-old porcine strain of P. multocida. The results were promising, but further studies are needed to confirm the effectiveness of the vaccine. The vaccine was developed based on the principle that the vaccine must be able to induce a strong immune response that can be detected by the animal and the vaccine must be able to provide long-lasting protection.

The vaccine was administered to the pigs in a single dose, and the results obtained were promising. The vaccine was effective in controlling the disease in a short period of time. Therefore, the vaccine must be used in combination with other control measures, such as the use of antibiotics and the control of the disease.

Conclusions:

Vaccination with a live attenuated vaccine based on the vaccine in the production of pseudomonic bacteria is important for the prevention of pseudomonic disease. The vaccine is effective in controlling the disease in a short period of time. Therefore, the vaccine must be used in combination with other control measures, such as the use of antibiotics and the control of the disease.

Selected references:


