To a swine practitioner, respiratory infections are among the most common and a problematic syndrome. Within this syndrome complex is mycoplasmal pneumonia of swine (MPS) which is regarded as the most common and widespread primary disease in swine-producing countries in the world. Contributory to the situation is the intensified production of swine industry which involves confinement rearing which provides a greater exposure potential of animals to the causative agent (Mycoplasma hyopneumoniae). Although greater efforts have been expended in the correction of the contributory factors of the disease, intensive production has partly offset these efforts and the consequential presence of mycoplasmal pneumonia in a herd has set limitations to the efficiency of swine production.

The Philippines shares with the rest of the swine-producing countries of the world the incidence of this disease. Although self-sufficient in its pork requirements for its population, the country must develop and increase pork production to support its increasing human population. Further development of the swine industry will depend much on the control of economically important diseases among which is mycoplasmal pneumonia.

The treatment of MPS may be done in three ways: periodic or continued group therapy, isolated group therapy, and individual therapy. The success of treatment depends largely on the efficacy of the drug being used, the health status of the animal and the environmental factors. Among the drugs recently introduced to treat MPS is tiamulin hydrogen fumarate. Laboratory and field experiments using this drug in its oral form have confirmed its efficacy in the treatment and control of MPS. Individual therapy using the parenteral form of the drug has not been annotated in veterinary medical literature.

This study was conducted to determine the effect of injectable tiamulin on MPS on a farm with a history of the disease. Clinical records and experience confirm the presence of the disease on the farm which appears with predictable occurrence in June-July and December-January of each year. This study was conducted during the latter season. The farm has a total population of 4,500 pigs and was engaged in a sow-farrowing and fattening operation involving Large White-Landrace breed. About 24% of the population was involved in an outbreak of mycoplasmal pneumonia mostly occurring in 10-16 week-old fatteners despite preventive levels of antibiotics in the feed. Response to the latter was generally not satisfactory probably due to a high infective pressure from the environment together with intensive production systems and climatic stresses.

Tiamulin was tested at 10 mg/kg and 25 mg/kg bodyweight injected intramuscularly daily for 5 days. Of this, 125 pigs per group were used as test animals. All were showing clinical signs typical of enzootic pneumonia in various degrees of severity. Treatment with tiamulin did significantly improve the health status of the pigs. Improvement was noted in all groups of pigs with 10 mg/kg bodyweight. All pigs with 25 mg/kg bodyweight were cured. Improvement was noted in all groups of pigs with 10 mg/kg bodyweight. All pigs with 25 mg/kg bodyweight were cured. Improvement was noted in all groups of pigs with 10 mg/kg bodyweight. All pigs with 25 mg/kg bodyweight were cured.

No mortality occurred during the course of treatment. The mortality rate was low. No adverse effects were observed, and a good clinical recovery was noted in all groups of pigs. The percentage of improvement varied from 90 to 100% in all groups of pigs. The results of this study confirm the efficacy of tiamulin in the treatment of mycoplasmal pneumonia in swine.

Selected references:

"Tiamulin by Injection for the Treatment of SWINE PNEUMONIA in the PHILIPPINES" O.M. Catmalan and R. Gandolfo, Animal Health Division, College of Agriculture, University of the Philippines, Los Banos, Laguna, Philippines 7200.

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