

# Nonclinical Listeriosis of the Chicken<sup>1</sup>

By F. M. Bolin<sup>2</sup> and Jenny Turn<sup>3</sup>

Listeriosis (listerellosis) is an infectious disease caused by the microorganism *Listeria monocytogenes*. This disease appears to be more prevalent in cattle and sheep than in other species but has been found in many other mammals and in the chicken and canary.

Biester and Schwarte (1) have summarized the literature on listeriosis of fowls reported prior to 1948. Recently, Bigland (2) has reported the isolation of the listeria organism from a chicken and a canary in Canada.

Listeriosis tends to recur on farms year after year even though at times the farms are depopulated of the species in which listeriosis had existed in clinical form. This applies particularly to feed lots where sheep or cattle are fed only during the winter months.

One of the problems in attempting to study the epidemiology of this disease has been to determine the source of infection in apparently sporadic outbreaks of the disease.

In a recent report from this laboratory (3) a case was given in which the listeria organism was isolated from a pig that had been poisoned by drinking lye water.

The present case is suggestive of a listeria infection, possibly as a secondary invader. The owner reported the loss of several bantams showing symptoms of the nervous form of Newcastle disease. The virus of Newcastle disease was isolated from the specimens submitted, but a culture of *Listeria monocytogenes* was also isolated from the same bird. The owner reported that there were no sheep on the premises, and that there had been no losses in the cattle herd.

The information obtained from these two cases may offer a possible explanation of apparent reservoirs of infection found on some premises. At present there is no satisfactory explanation as to how the organism gains entrance to susceptible hosts nor why it becomes pathogenic. It is advised that farmers experiencing losses from listeriosis make every effort to keep species separated.

A study of field cases of listeriosis in sheep furnishes information that indicates that the listeria may exist as an opportunist organism. Conditions adverse to the general well being of the host may act as an exciting cause in producing a clinical case of listeriosis. Such things as starvation, intense cold and changes of feed have appeared to act as predisposing factors in causing outbreaks of listeriosis.

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<sup>1</sup>A progress report of project R & MA 6—A Study of Ovine Listeriosis

<sup>2</sup>Veterinarian

<sup>3</sup>Technician