Ornithosis of Turkeys

TEXAS AGRICULTURAL EXTENSION SERVICE

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Outbreaks of a severe influenza-like disease among poultry plant workers in recent years have aroused increasing interest in ornithosis. This disease is not new. Until recently, it was thought to be of little importance in domestic fowls.

Psittacosis or parrot fever, as this disease is called when it affects birds of the parrot family, has plagued man for nearly a century. Strict regulations against importation of cage birds from areas known to be infected have checked the spread of the disease by this class of birds.

But recently wild water birds have been found to carry the disease. In fact, many types of birds carry the infection. Fortunately, though, the only ones likely to transmit it to man are our domestic fowl. Of these, the turkey has been the only one incriminated so far. Even in turkeys, the disease is a hazard only to the grower and to those who dress turkeys. Not a single case of ornithosis has been contracted from a dressed bird by a consumer.

How Ornithosis Spreads

Much research has been conducted to determine the manner in which this disease has spread from flock to flock. It has been proved definitely that the disease is not transmitted through the eggs of infected birds. Although the disease may spread a short distance by riding on particles of dust and moisture in the air, this does not account
for the spread over long distances between individual flocks.

Ornithosis can be spread from farm to farm by contaminated shoes, hands or clothing of visitors or workers on turkey farms. Evidence is strong that the disease spreads across the countryside mainly by wild water birds. Many of these birds, such as gulls and herons, are known to have the disease. In most instances, infected turkey flocks were ranging near ponds, streams or lakes which attract water birds.

SIGNS OF THE DISEASE

The signs that might indicate the presence of this disease in turkeys are:

The birds appear droopy and may assume a characteristic sitting position with the front of the breastbone being the only portion of the body in contact with the ground.

The birds frequently have loose, yellowish droppings and soiled vent feathers.

A marked decrease in feed consumption is evident, and the birds lose weight rapidly.

Only one or two birds may be ill at the beginning of the outbreak but the disease spreads through the flock if treatment is not begun. In poult's the death rate may be high - even up to 100 percent. In adult birds it is usually much lower and may range from one to 20 percent death loss.

Upon examination of the bird's internal organs:

The covering of the heart may contain white strands and an increased amount of clear to yellowish fluid. A cheesy
material may be found between the heart and its covering.

The air sacs may be cloudy or even covered with a heavy, cheesy coating.

The body cavity often contains foamy material or lumps of cheesy debris.

The liver may have a white plastic film over its surface. The liver itself may have a green discoloration due to a blockage of bile flow.

Although not always true, the spleen may be enlarged and may have a whitish, mottled appearance.

In poults, the lungs may show signs of pneumonia, but this condition is rare in adult birds.

**POSITIVE DIAGNOSIS**

Although the above signs may be indicative of ornithosis, a positive diagnosis can be made only in the laboratory by isolation and identification of the virus. This is true because many lesions of ornithosis also are common to infectious sinusitis, Newcastle disease, leucosis, pasteurellosis and aspergillosis.

**CONTROL OF ORNITHOSIS**

Research studies at the Texas Agricultural Experiment Station have produced an effective treatment for control of this disease. When the disease is diagnosed, the flock immediately should be put on an all-mash feed containing 200 grams of chlor-tetracycline per ton. This is fed continuously for 3 weeks. The birds must not eat any other feed during this period.

If the birds are to be cleared completely of infection, these instructions must be strictly followed. Then the birds may be allowed to go to market, as there is absolutely
no danger of consumers becoming infected by handling or eating them.

Flocks to be kept on the premises which have completed the 3-week treatment on the 200-gram-per-ton level of chlor-tetracycline should be maintained on a feed containing 100 grams of chlor-tetracycline per ton until they are marketed.

PROTECTION OF CLEAN FLOCKS

The 100-gram level also protects a clean flock which is exposed to the disease by contact with an infected neighboring flock, or by heavy contact with water birds. Turkeys should be ranged at least 150 yards from ponds, streams or lakes. Severe outbreaks of ornithosis can be prevented by obtaining a reliable diagnosis of illnesses occurring in the flock.

MARKET PROTECTION FOR TURKEYS

One outbreak of ornithosis in a turkey flock may severely affect the marketing of all turkeys. Therefore, a prompt diagnosis of ornithosis should be obtained and the flock should be placed on supervised therapy immediately. Now that an effective means of treating this disease in turkeys exists, flock infections are no longer a threat of serious loss to a producer, provided he follows the instructions in this leaflet.
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