

FOWL CHOLERA



This disease
is known to
occur in
Afghanistan.



1. Definition

Fowl cholera is a systemic bacterial disease affecting all poultry species, characterized by systemic illness, diarrhea, arthritis, and poor production.

2. Etiology

The causative agent is *Pasteurella multocida*. This organism is abundantly present within feces of infected birds and in carcasses of animals that have died of the disease and it can persist in the environment for months. Feces from infected birds may contaminate water supplies. In addition, other animals such as dogs, cats, and rodents, may harbor *Pasteurella multocida* and spread it to new locations. Also, humans may take it to new locations by contaminated clothing or shoes.

3. Transmission

The organism enters a susceptible bird through the oropharynx, i.e., the mouth or the respiratory tract.

4. Species affected

Many species of birds can suffer from fowl cholera. Both wild and domestic birds are affected by the disease.

5. Clinical signs

Incubation period is 2-10 days. Morbidity is often high. Disease is most common in adult birds. It may be peracute in which case the first sign of

the disease is death. In animals that survive longer, there is systemic illness, including inappetence, poor production, dyspnea, watery diarrhea, swollen joints. The comb and wattles may be swollen and cyanotic. Mortality is 5-30%.

6. Pathologic findings

In animals that die in the very acute stage, there may be no lesions. Those that survive longer can have evidence of systemic inflammation. Spleen is large and reactive, with numerous white (lymphoid) nodules visible on cut surface. There may be petechial hemorrhages scattered over mucosal and serosal surfaces. Liver is pale throughout. The cranial portion of the intestine (duodenum and jejunum) is reddened with fibrinocatarrhal contents. Joints cavities can contain caseous exudates. Similar caseous material may be found in the sinuses of the head, including the inner ear.

7. Diagnosis

The typical picture at the flock level - adult birds, systemic illness, pathologic lesions, can lead to a suspicion of fowl cholera. Confirmation of the diagnosis requires isolating the organism in the laboratory. Differential diagnoses include: fowl typhoid, highly pathogenic avian influenza, colibacillosis.

8. Treatment

Pasteurella multocida is susceptible to a variety of antibiotics and these will cure the infection temporarily. Unfortunately treatment with antibiotics can promote a carrier state and leave additional birds at risk. Also, birds can break out with the disease again at the end of the antibiotic treatment period. So, although antibiotics will work, if other measures are available, such as vaccination, this is preferable to using antibiotics to control the disease.

9. Prevention and Control

Bacterins are available but do not completely prevent infection. They should be used in combination with a strong program of sanitation that would include cleaning and disinfection after an outbreak, rodent control, provision of clean drinking water, and adequate disposal of dead birds.