

Coccidiosis in Poultry

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This is a protozoan disease of poultry with high morbidity and mortality rate approaching 80-100%. Coccidiosis in poultry is characterized by heavy mortality and bloody diarrhoea. The coccidiosis species which affect chicken belong to the genus *Eimeria* and in chickens these infect various sites in the intestine.

Outbreaks of coccidia are common in the age group of 3-6 weeks. The infectious course of this disease is rapid 4-8 days and is characterized by parasite replication in both cells with extensive damage to the mucosa of intestine.

Etiology

Eimeria Species mainly *E. necatrix* and *E. tenella* are the most pathogenic in chick

Symptom

Affected birds become dull, depressed with ruffled feathers. Loss of appetite and remain as gathering in the corner of the shed. Diarrhoea with mucous and blood containing stool. Retarded growth and emaciation.

Other signs include poor egg production, paleness of mucous membranes and loss of yellowish colour of shanks. Weight gain in birds due coccidia is also adversely affected. Those survive with coccidian infection, may recover in 10-14 days, however the lost performance may not be recovered.

Post Mortem Lesions

Yellow to grey nodules which or plaques in lungs, air sacs, trachea, nasal passages and peritoneal cavity. Sometimes lungs are diffusely grayish yellow. Conjunctivitis or keratitis may be present. Focal haemorrhages are found in mid intestine. Sub mucosal hemorrhages are also seen and intestine become in ballooning appearance.



Sometimes, a reaction of the intestinal lymphoid tissue is present. The content is mixed with fresh or Clotted blood and the mucous coat is mottled with multiple petechial or larger haemorrhages.

Diagnosis

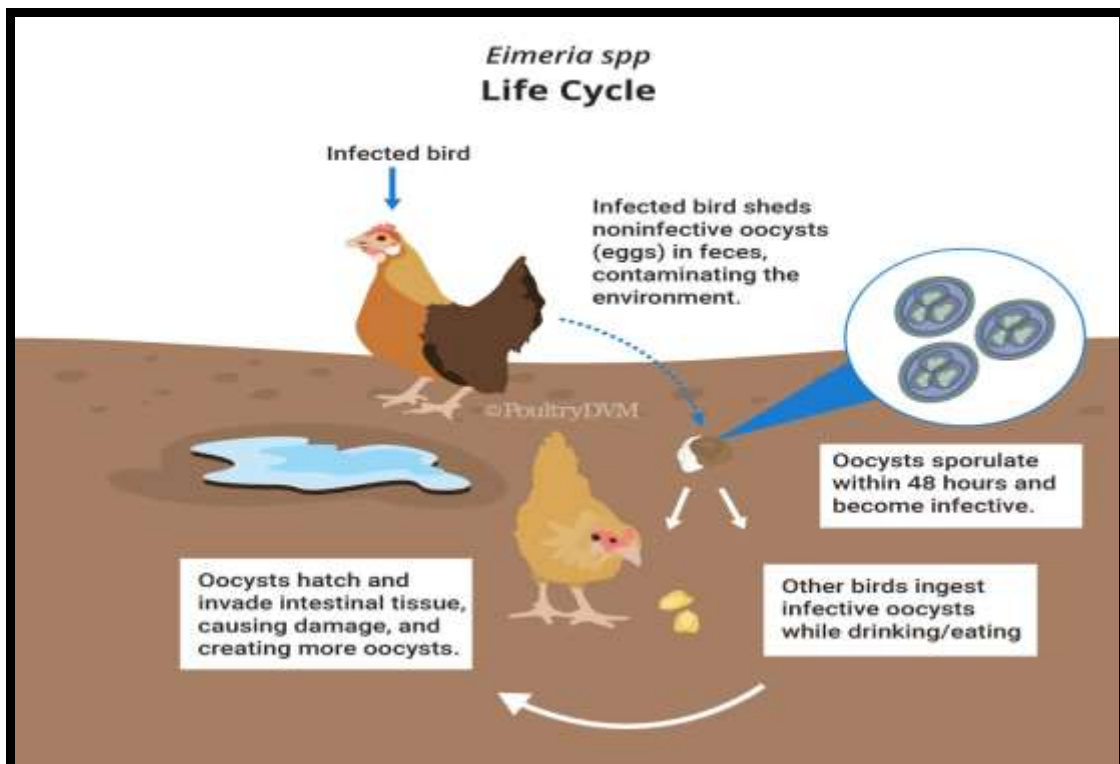
It is based on clinical and post mortem finding. Detection of oocysts in faeces or mucosal scrapings of the intestinal lesion help for confirmation of the disease.

Treatment

- 1) Drugs for treatment include amprolium, Sulfonamides, Sulfadimethoxine, Nitrofurazone, furazolidone, Decoquinate, Dinitolmide, diclazuril and toltrazuril
- 2) The birds should also be given vitamin A and K which may enhance recovery but are not given vitamin B-complex vitamins which may even aggravate the situation.
- 3) Medication through drinking water is convenient and can be rapidly given.

Prevention and Control Measure

- 1) Wearers and feeders should be designed in such a way so that entry of faeces them can be prevented.
- 2) Hygienic measures in the farm should be of high standard
- 3) Provide adequate feeding space.
- 4) Avoid overcrowding.
- 5) Use of anticoccidial drugs in the feed as preventive dose.
- 6) Provide adequate cross ventilation in the farm.
- 7) Litter management: Litter in the farm should remain dry and should not be muddy and dusty. To keep the litter with lower moisture level the litter must be turned regularly and during rainy season litter should be mixed with lime powder at the rate of 5-7 kg lime per 100 square ft. area. Since lime kills oocysts, parasite eggs, withdraws moisture and also kills bacteria.



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