

Aspergillosis in Poultry

Imran Ali

Asst.Professor

Veterinary Pathology


Bihar Veterinary College, Patna

Aspergillosis (Brooder pneumonia)

- Aspergillosis is fungal disease caused by *Aspergillus fumigatus*.
- Mainly affects the respiratory system. It may some times involve other viscera liver, mouth and throat.
- Young birds are most liable to an acute infection which kill them 3 to 6 days.

Route of Infection

- Inhalation of spores.
- Exposure to inclement weather, fault in feeding, close confinement in damp house and prolonged antibiotic therapy.
- The fungus may invade and enters the egg shell.

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- Aspergillosis is mostly found in chicks artificially hatched and raised in brooder this condition is known as brooder pneumonia.
 - Incubation Period 3to 6 days.

Pathogenesis

- In pathogenesis focal pneumonia, multiple necrosis and nodular formation which resembles tubercle.
- The bronchial wall has inflammatory thickening .
- The peribronchial and pulmonary capillaries show sero-fibrinous exudates.
- The organism are poorly stained by Haematoxylin and eosin method.
- Special stain like PAS, Bauer's silver methanamine, or Gridley's are required to bring them out clearly.

Symptoms

- The acute form of disease are
- dullness,
- anorexia,
- high Temperature,
- increased thirst, ruffled feather
- Droopy wings.
- The birds may show darkening of comb dyspnoea followed by sneezing diarrhoea and emaciation.
- The fungus some times invade the brain causing paralysis and convulsion.



Gross lesions

Lungs show almost uniform raised pin head size yellowish nodules.

Air sacs become thickened and cloudy.

Necrotic foci may occasionally be seen in liver.

Egg from sick birds show opaque non motile fungus containing spots in the enlarged air chambered.

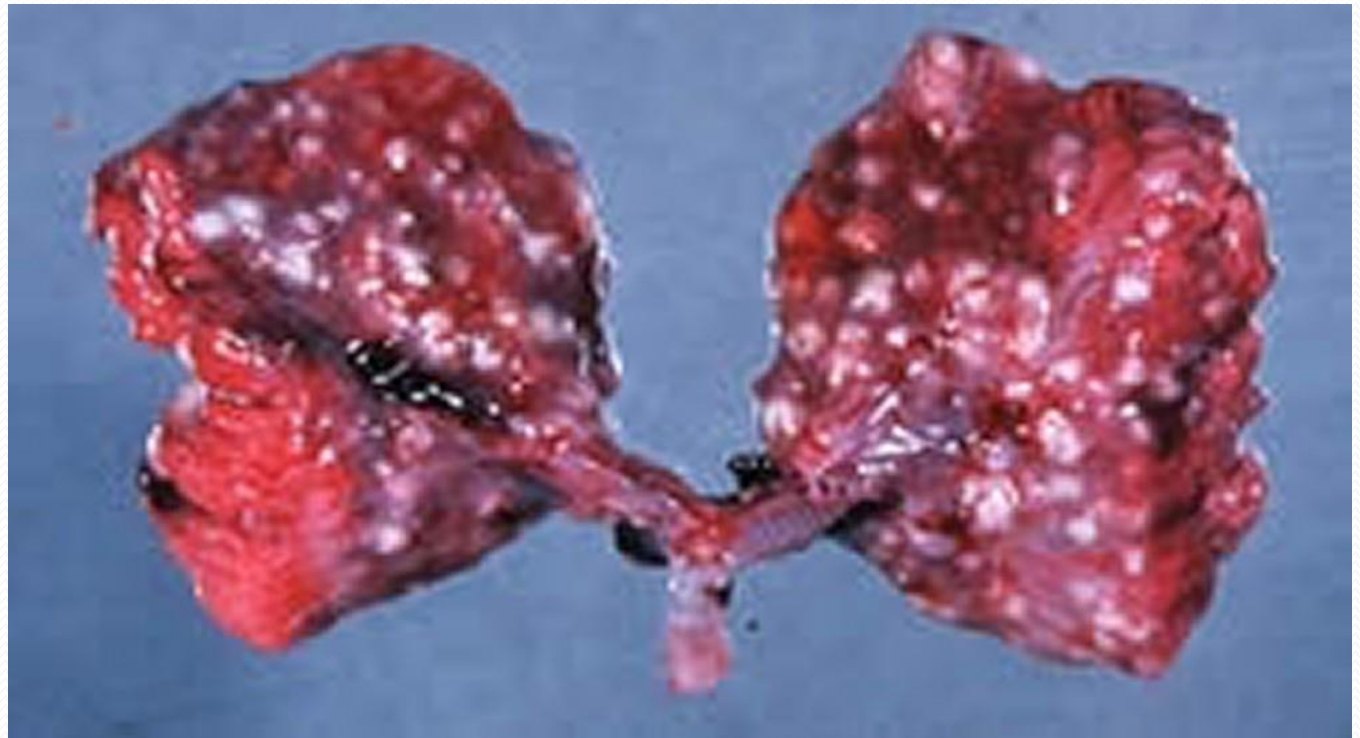
Diagnosis

- Symptoms.
- P.M examination.
- Isolation and identification of fungus.
- Histopathological examination.
- Immunological test.(CFT, immunodifusion test)

Prevention

Disease can be controlled and prevented by taking full care in management by avoidance of mouldy litter, daily cleaning and disinfection of utensils and proper fumigation of incubator.

Aspergillus granulomas lungs in chicken





Thanks