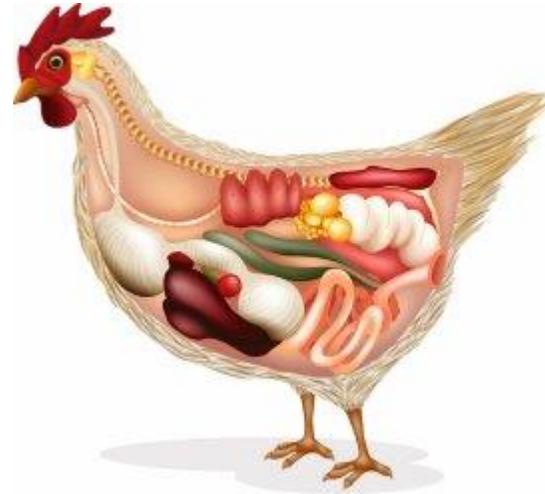


COLIBACILLOSIS

Course Title: VETERINARY PATHOLOGY (Paper-I)
UNIT No. : V (Avian Pathology)



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COLIBACILLOSIS

It occurs as an acute fatal septicaemia or subacute pericarditis and airsacculitis. It is a common systemic disease of economic importance in poultry and is seen worldwide.

Synonyms:

Coligranuloma, (Hjarre`s Diseases), Colisepticemia and Musy Chick Disease

Other Pathotypes:

Air sac disease, swollen head syndrome, venereal colibacillosis and coliform cellulitis, peritonitis, salphingitis, orchitis, osteomyelitis/synovitis, panophthalmitis, omphalitis/yolk sac infection and enteritis as there are different pathotypes.

Economic Importance: *It is considered as one of the major causes of morbidity and mortality, associated with heavy economic losses to the poultry industry by its association with various disease conditions, either as primary pathogen or as a secondary pathogen like Mycoplasma spp., and various fungi.*

COLIBACILLOSIS

Cause:

Bacterial infection with avian pathogenic Escherichia coli (APEC).

- ❖ E.coli bacteria are ubiquitous and various serotypes of E.coli are normal intestinal inhabitants. It is estimated that 10 -15% of the intestinal coliforms are potentially pathogenic.
- ❖ Infection can be primary or secondary after primary host defense damage (eg respiratory viral infections, Mycoplasma infections, parasites, wounds, nutrition).

Species affected:

Chickens and turkeys, most avian species are susceptible.

Risk Factor: *All age birds are susceptible to colibacillosis, but young birds are more frequently affected and severity of the disease is greater noticed in young birds.*

COLIBACILLOSIS

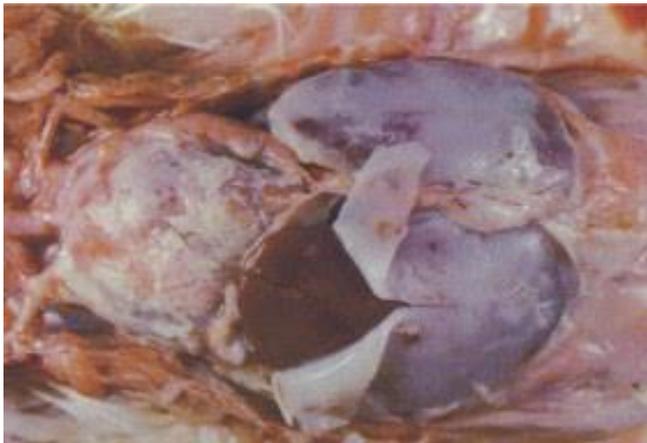
Clinical signs and lesions

Clinical signs vary depending on specific disease induced by E.coli.

- ✓ From very mild cellulitis to severe disease; lameness, retarded growth,
- ✓ increased mortality, reduced feed and water intake.
- ✓ Both morbidity and mortality are very variable

Lesions:

- ✓ **fibrinous** perihepatitis, pericarditis, congestion and regression of ovarian follicles with thickened tracheal and bronchial plug deposition.
- ✓ Colisepticaemia in combinations with polyserositis, salpingitis, steomyelitis/synovitis, enteritis, meningitis and in case of young birds with omphalitis.



Fibrinous hepatitis in broiler chicken



Omphalitis in broiler chicken

COLIBACILLOSIS

Diagnosis

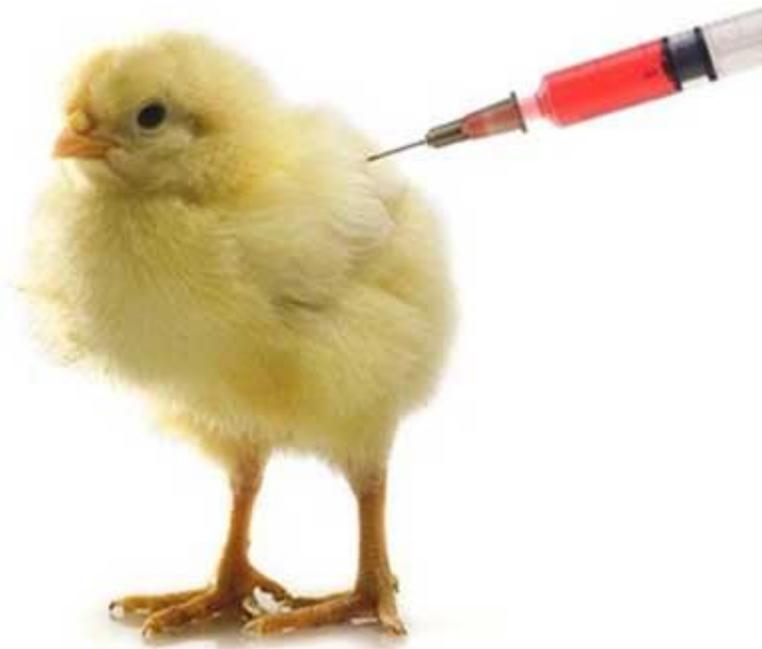
Clinical signs in combination with isolation and identification.

Treatment

Antibiotics based on antibiotic sensitivity test.

Control:

Hygiene management, hatching egg management and E.coli vaccination and Vaccination against primary causes like respiratory viruses, coccidiosis & IBD.



THANKS

References:

Book : Poultry Diseases: Diagnosis and Treatment by H. V. S. Chauhan

1. Pictures are taken from [www.google .com](http://www.google.com)