

Suez Canal University Faculty of Veterinary Medicine Department of Avian and Rabbit Medicine



Studies on chicken infectious anemia virus infection: an immunosuppressive disease of chickens

Thesis Presented By

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For the degree of

Doctor of Philosophy (Ph.D.) in Veterinary Medical Sciences Avian and Rabbit Diseases

(2019)

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Title	Studies on chicken infectious anemia virus infection: an immunosuppressive disease of chickens.
Department	Avian and Rabbit Medicine
Faculty	Veterinary Medicine
Location	Suez Canal University
Degree	Doctor of Philosophy (Ph.D.) in Veterinary Medical Sciences
Date	8 /10/2019
Language	English
	Prof. Dr. /Hanan Mohamed Fathy Abdien
Supervision	Prof. Dr. / Dalia Mansour Hamed
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Abstract

English Abstract

In last year's, the problems increase in poultry industry in Egypt due to spread of immunosuppressive diseases. The present study aimed to detect CIAV circulating in backyard and commercial flocks in Ismailia and Sharkia. The examined flocks showed uneven growth, anemic lesions, atrophied thymus, pale liver and pale bone, hemorrhages in muscles. Each flock thymus, liver, spleen and bone marrow polled, then directly examined for CIAV DNA by polymerase chain reaction by specific primers. PCR results were 52% and 50% in backyard and commercial flocks respectively. Molecular studied of nucleotides, VP1, VP2 and VP3 proteins showed some mutational changes in compered with reference strain. Changes detected in VP1 H 22 Q, VP2 A 153 V, T 180 S and VP3 R 118 C indicated low affinity of the obtained isolates to grow in cell line. Histopathological examined showed sever lymphocytic depletion in lymphoid organs, resulting in loss of normal architecture with present apoptic cells and eosinophilic intranuclear inclusion bodies.

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