

Prevalence of Infectious Bursal Disease (IBD) in Selected Commercial Broiler Farms in Hathazari, Chittagong



A Clinical Report Submitted By

MD. ABDUL KADER

Roll No: 13/28,

Reg No: 00951

Intern ID: 27

Session: 2012-2013

A Clinical report presented in partial fulfillment of the requirements for the degree of Doctor of Veterinary Medicine (DVM) under faculty of veterinary medicine.

**CHITTAGONG VETERINARY AND ANIMAL SCIENCES
UNIVERSITY, Khulshi, Chittagong-4225**

Prevalence of Infectious Bursal Disease (IBD) in Selected Commercial Broiler Farms in Hathazari, Chittagong



A Clinical report presented in partial fulfillment of the requirements for the degree of Doctor of Veterinary Medicine (DVM) under Faculty of Veterinary Medicine

Signature of Author

MD. ABDUL KADER

Roll. No: 13/28

Registration No: 00951

Internship ID: 27

Session: 2011-12

Signature of Supervisor

Dr. AMAM ZONAED SIDDIKI

Professor

Dept. of Pathology and parasitology

Chittagong Veterinary and Animal

Sciences University

Khulshi, Chittagong-4202

Table of contents

Chapter	Contents	Page No
	Abstract	v
Chapter 1	Introduction	1
Chapter 2	Methods and Materials	2-4
	2.1 Study area	2
	2.2 Study period	2
	2.3 Study design	2
	2.4 Data collection	2
	2.5 Statistical analysis	3
	2.6 Diagnosis of IBD by clinical and Post-mortem examination	3
Chapter 3	Results	3-9
	3.1 Diagnosis of IBD	4
	3.2 Overall prevalence of IBD in selected farms	5
	3.3 Prevalence of IBD infection in different age groups	5
	3.4 Prevalence of IBD infection according to vaccination status	5
	3.5 Prevalence of IBD infection according to bio-security status	5
	3.6 Prevalence of IBD infection in relation to study areas	5
Chapter 4	Discussion	10
	Conclusion	11
	Limitations and recommendations	11
	Acknowledgements	12
	References	13
	Biography	14

List of figures

Figure no.	Name of the figure	Page no.
1	Clinical signs and Post-mortem lesions for IBD	4
1(a)	Whitish and watery diarrhoea	4
1(b)	Swollen, gelatinous bursa	4
1(c)	Swollen, hemorrhagic bursa	4
1(d)	Swollen, hemorrhagic Bursal fold	4
1(e)	Swollen kidney	4
1(f)	Duodenum full with mucus	4

List of tables

Table no	Name of the table	Page no
1	Overall prevalence of <i>IBD</i> infection in broiler in Hathazari Upazilla	6
2	Prevalence of IBD infection in broiler at Hathazari Upazilla for different variables	7

List of Chart

Table no	Name of the chart	Page no
1	Frequency and percentage of prevalence of IBD infection in broiler in different unions of Hathazari Upazilla	6

Abstract

Sixty broiler chickens from sixty different small scale farms of Hathazari Upazilla under Chittagong district were studied for two month from 1st February to 29th of March 2018 to determine the prevalence of Infectious Bursal Disease (IBD). On the basis of clinical history and post-mortem lesions, the overall prevalence of IBD in Hathazari Upazilla was 23.33% where highest prevalence was observed in Katirhat area (40%). The major necropsy lesions were observed in the bursa of Fabricious which appeared inflamed, edematous, swollen, hemorrhagic and atrophied. Age related analysis revealed, the 20-35 days aged birds were highly susceptible to IBD (33.33%) followed by 10-19 days aged birds (15.79%) and 1-9 days aged birds (0.00%). Vaccination history medicates the effect of vaccination against IBD was useful as the prevalence of IBD in non-vaccinated and vaccinated birds were 80% and 4.44% respectively. Strong statistical correlation ($P=0.018$) was observed between insufficient bio-security and IBD infection in broiler farms. This preliminary study medicates the security of IBD in study areas requiring proper control and prevention steps.

Key words: Broiler , IBD, Prevalence, Hathazari Upazilla