**ANAPLASMOSIS IN GOAT AT DINAJPUR SADAR**



**A Clinical Report Submitted by**

**Roll No.: 07/01**

**Registration No.: 285**

**Internship ID.: E - 48**

**Session: 2006 - 2007**

**Clinical Report presented in partial fulfillment for the Degree of**

**Doctor of Veterinary Medicine (DVM)**

**Faculty of Veterinary Medicine**

**Chittagong Veterinary and Animal Sciences University**

**Khulshi, Chittagong-4202**

**March, 2014**

**ANAPLASMOSIS IN GOAT AT DINAJPUR SADAR**



A Clinical report Submitted as per approved style and contents

**………………………….. ……………………………**

Supervisor

Dr. Md. Shafiqul Islam

Lecturer

Department of Pathology and

Parasitology

Faculty of Veterinary Medicine

Chittagong Veterinary and

Animal Sciences University

Author

Name: Md. Hasan Mahmood

Roll No: 07/01

Reg. No: 285

Intern ID: E - 48

Session: 2006-2007

**March, 2014**

**CONTENTS**

|  |  |  |
| --- | --- | --- |
| **Title** |  | **Page** |
| **LIST OF TABLES** | i |
| **LIST OF ABBREVIATIONS AND SYMBOLS** | i |
| **ACKNOWLEDGEMENT** | ii |
| **ABSTRACT** | iii |
| **Chapter I** | **INTRUDUCTION** | 1-2 |
| **Chapter II**  | **REVIEW OF LITERATURE** | 3-8 |
|  | 2.1: Anaplasmosis2.2: Etiology of anaplasmosis2.3: Epidemiology of Anaplasmosis2.3.1: Geographical occurrence2.3.2: Mode of infection2.4: Risk factors2.4.1: Susceptible host2.4.2: Nutritional status2.4.3: Season2.5:Clinical signs of Anaplasmosis2.6:Post-mortem findings of Anaplasmosis2.7: Diagnosis of Anaplasmosis2.8: Treatment of Anaplasmosis2.9: Prevention and Control of Anaplasmosis |  |
| **Chapter III** |  **MATERIALS AND METHODS** | 9-11 |
|  | 3.1: Study area3.2: Study period3.3: Source of animal and data3.4: Survey design3.5: Examination of animals and sample collection3.6: Staining and examination of blood sample3.7: Measuring the prevalence3.8: Analysis of the data  |    |
| **Chapter IV** | **RESULTS AND DISCUSSION** | 10-14 |
|  | 4.1: Result4.1.1:Prevalence study4.1.2: Factors affecting the occurrence of diseases4.1.2.1: Types of animals4.1.2.2: Age4.1.2.3: Breed4.1.2.4: Tick4.2: Discussion4.3: Limitation of the study |  |
| **Chapter V** | **CONCLUSION** | 15 |
|  | **REFERENCES** | 16-20 |
|  | **ANNEX** | 21 |

**LIST OF TABLES**

|  |  |
| --- | --- |
| **Title of table** | **Page** |
| Summary estimates of blood parasites and tick among age group (N= 60) | 16 |
| Summary estimates of blood parasites and tick between sex group (N= 60) | 16 |
| Summary estimates of blood parasites and tick between breed group (N= 60) | 17 |

**LIST OF ABBREVIATIONS AND SYMBOLS**

|  |  |
| --- | --- |
| **<** | = Less than |
| **>** | = Grater than |
| **≤** | = Less than or equal |
| **≥** | = Greater than or equal |
| DLS | = Department of Livestock Services |
| GDP | = Gross Domestic Products |

**ACKNOWLEDGEMENT**

All praises are due to Almighty **ALLAH**, the creator & supreme authority of the universe; who enabled me to complete this work successfully.

The author would like to express his deep sense of gratitude and thanks to Professor **Dr. A. S. Mahfuzul Bari**, Vice Chancellor of Chittagong Veterinary and Animal Sciences University.

I take the opportunities to express my deepest sense of respect and heartfelt appreciation to Professor **Dr. Kabiul Islam Khan**, Dean, Doctor of Faculty of Medicine (DVM), Chittagong Veterinary and Animal Sciences University.

It is deemed as a proud privilege and extra terrestrial pleasure to express author ever indebtedness, deepest sense of gratitude, sincere appreciations, profound regards to reverend and beloved teacher and supervisor, **Dr.** **Md.** **Shafiqul Islam,** Lecturer, Department of Pathology & Parasitology, Chittagong Veterinary and Animal Sciences University; for his scholastic guidance and uncompromising principles, sympathetic supervision, valuable advice, constant inspiration, affectionate feeling, radical investigation and constructive criticism in all phases of this study and preparing the manuscript.

The author highly express his sincere gratitude and gratefulness to the internship coordinator, **Dr. Bibek Chandra Sutradhar,** Director of External Affairs, Chittagong Veterinary and Animal Sciences University, for his constant inspiration and cordial co operation and valuable suggestions for the completion of this study The author is ever indebted to his parents for their sacrifices, blessing and encouragement to get him in this position.

*The author*

*June 2013*

**ANAPLASMOSIS IN GOAT AT DINAJPUR SADAR**

**ABSTRACT**

The study was carried out for a period of 50 days from 15th May to 4th July, 2013 to measure the proportional prevalence of Anaplasmosis in goat in the area of Dinajpur Sadar region and to identify the risk factors associated with Anaplasmosis. A total of 60 Blood sample from different goats were included for laboratory examination and statistical analysis. For laboratory examination peripheral blood smears from ear vein were prepared from goat at District Veterinary Hospital, Dinajpur. Result revealed that the proportional prevalence of anaplasmosis at Sadar, Dinajpur was 8.33%. The proportional prevalence of anaplasmosis in male and female animals was 5.00% and 10.00% respectively. At the age of below 6 months of goats were more infected (26.67%) with *Anaplasma sp* than other groups. The prevalence of tick infestation was found in 43.33% goat. The study revealed that the occurrence of blood-parasite (anaplasmosis) infection in Black Bengal goats were higher (11.11%) than the Jamunapari goats (4.17%)

**Keywords:** Anaplasmosis, Goat, Age, Sex, Breed, Tick.