**STUDY ON INCIDENCE OF PPR IN BOALKHALI, CHITTAGONG.**



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**A Clinical Report submitted by**

**Examination Roll: 07/02**

**Reg. No: 286**

**Internship ID: A-01**

**Session: 2006-2007**

**This report is submitted for partial fulfillment of the Degree of**

**Doctor of Veterinary Medicine (DVM)**

**Chittagong Veterinary & Animal Sciences University**

**Khulshi, Chittagong-4202, Bangladesh.**

**June, 2013**

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**Submitted as per approved style and contents**

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**June, 2013**

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**ACKNOWLEDGEMENTS**

The author ever grateful and indebted to the almighty Allah without whose grace he would never been able to pursue his studies in the field of DVM.

The author express his gratitude and heart feel appreciation to her respective supervisor Dr. Md. Abul Quasem Professor, Department of Anatomy and Histology for his scholastic guidance, valuable suggestion and constant encouragement during the entire period of study work.

The author would like to express his deepest sense of respect and appreciation to Dr. Sumi Chowdhury Veterinary Surgeon of Upazilla Veterinary Hospital Boalkhali, Chittagong for her co-operation during study period.

The author extends his appreciation to the farmers for their patience in giving information.

The author would like to thanks to all of his friends, well-wishers and laboratory assistant for their help, encouragement and inspiration during the study period and for preparing the report.

The author express his gratitude to Dr. Mahmudul hasan milad, Associate Professor, Department of Physiology, Pharmacology and Biochemistry and Dr. Saiful Bari, Lecturer, Department of Dairy and Poultry Science.

**ABBREVIATIONS**

**BLRI =** Bangladesh Livestock Research Institute**.**

**CVASU =** Chittagong Veterinary and Animal Sciences University

**DLC =** Differential Leukocyte count.

**ESR =** Erythrocyte sedimentation rate.

**Hb =** Hemoglobin.

**PCV =** Packed cell Volume.

**PPR =** Peste des Petits ruminant**.**

**SAQTVH =** Shahedul Alam Quadery Teaching Veterinary Hospital**.**

**TEC =** Total Erythrocyte count.

**TLC =** Total Leukocyte count.

**ABSTRACT**

The present study aimed to know the clinical signs and postmortem findings of PPR of goats, to estimate the proportionate incidence of PPR of goats, to know the effect of PPR and to enlist the symptomatic treatment. In the first phase, 103 diseased goats were registered from different unions and areas of Boalkhali upazilla during the period of 16th July to 6th September, 2012.Black Bengal (59%) and young goats (43.85%) were recognized more susceptible to PPR. A structured record keeping sheet was used for registration of diseased data of goats with their demographic information (species, age, sex and breed), nature of feeding apart from owner. A descriptive analysis was carried out to express the result in frequency percentage and risk ratio. Approximately 5 ml of blood was collected aseptically from the jugular vein of each 10 PPR infected goats and 10 healthy goats in vial containing Na EDTA @ 2 mg/ ml in SAQTVH,CVASU. The Following haematological analysis were performed: Total erythrocyte count (TEC), total leukocyte count (TLC), differential leukocyte count (DLC), hemoglobin content (Hb), Packed cell volume (PCV) and erythrocyte sedimentation rate (ESR). All tested data were recorded in a data recording sheet and obtained data were imported in the Microsoft Excel-2007 and transferred into the statistical software STATA-11for analysis. A descriptive analysis was carried out for the obtained mean, standard deviation, minimum, maximum, of every hematological parameter. Following investigation and analysis the different hematological parameters that were found in healthy goat were TEC-12.15+1.37, TLC-7.51+1.423, Hb-10.3+1.67, PCV-30.37+5.27, ESR-0, Lymphocyte-60.2+3.614, Monocyte-2.9+0.994, Neutrophil-35.7+3.335, Eosinophil-4.2+1.75, Basophil- 0.5+0.53 and in case of PPR affected goat TEC-5.709+1.65, TLC-6.583+1.5, Hb-7.44+0.80, PCV-30+3.33, ESR-0.05+0.15, Lymphocyte-68+1.05, Monocyte-2.1+0.875, Neutrophil-25.9+1.97, Eosinophil-3.7+1.16, Basophil- 0.3+0.67. The values of all hematogical parameters were decreased in PPR affected goat as compared to healthy goats except lymphocyte counts. The study revealed that the lymphocyte counts was increased significantly in PPR affected goats and others hematological pictures were somehow changed. Total protein and Albumin value of the samples were observed well by Humalyzer machine.

The values of total protein 7.1+0.74 and albumin 42.77+3.375 in healthy goat.

The values of total protein 3.15+0.53 and albumin 16.88+3.27 in PPR affected goat. Biochemical parameters total protein and albumin reduced drastically. Physical examination findings are high temperature ranging from 104◦ -107 ◦ F, dehydrated animals examined by skin fold test, erosion in the gum and dental pad, gentle rubbing across the gum and palate with afinger yield foul smelling materials shreds of epithelial tissue,whistling sound detected on indirect auscultation from lung and trachea, the feces are initially soft and then watery, foul-smelling and may contain blood streaks and pieces of dead gut tissue. Drugs used to check viral infection, diarrhea, convulsion, inhibit release of histamine and maintain electrolyte balance. Sulfadimidine, Ceftriaxone, Oxytetracycline, Pheneramine meleate, ORS were prescribed respectively. Antibiotic is given to check secondary bacterial infection as PPR is as immunosuppressive disease. Antihistaminic drug was used to check the release of histamine and reduce allergic reactions of antibiotics. Oral Rehydrated solution was to maintain electrolyte balance. PPR affected animal should be kept far from healthy animals. Appropriate knowledge on the epidemiology of the virus and the disease has to be generated in order to develop a control strategy for Bangladesh. Awareness should be created among farmers about PPR by calling meeting & doing seminars.

**Key words:** Goat, PPR, Hematology.