Contents		
LIST OF TABLES		
LIST OF FIGURESii		
LIST OF ABBREVIATIONS AND SYMBOLS USEDiii		
ACKNOWLEDGEMENTS iv		
Abstractv		
CHAPTER I1		
Introduction1		
CHAPTER II		
Materials and Methods		
2.1. Case history and observation		
2.2. Haemato-biochemical study		
2.3. Restraining and anesthesia		
2.4. Surgical procedure		
2.5. Macroscopic and microscopic examination of worm		
CHAPTER III		
Results6		
CHAPTER IV		
Discussion		
CHAPTER V		
Conclusion		
CHAPTER VI		
References		
CHAPTER VII		
Brief biography of the student16		

LIST OF TABLES

Table 1: Hematological parameters analysis	
Table 2: Biochemical parameters analysis	.7

LIST OF FIGURES

Figure 1: Live eye worm in the eye of a goat (indicated by arrow)	4
Figure 2: Retrobulbar nerve block	4
Figure 3: Insertion of 18-gauge needle through limbus	4
Figure 4: Clearance of the cornea after 21 days of postoperative	6
Figure 5: Creamy white slender eye worm	8
Figure 6: Measurement of the worm	8
Figure 7: Prominent transverse striations under microscope	8
Figure 8: Presence of posterior papillae under microscope	8

LIST OF ABBREVIATIONS AND SYMBOLS USED

Abbreviations and Symbol	Elaboration
CVASU	Chittagong Veterinary & Animal Sciences University
SAQTVH	Sahidul Alam Quaderi Teaching Veterinary Hospital
EDTA	Ethylene Diamine Tetra Acetic Acid
Hb	Hemoglobin
ESR	Erythrocyte Sedimentation Rate
PCV	Packed Cell Volume
WBC	White Blood Cell
TEC	Total Erythrocyte Count
TLC	Total Leucocyte Count
DLC	Differential Leucocyte count
kg	Kilogram
NSAID	Non-Steroidal Anti-inflammatory Drugs
hrs	Hours
cumm	Cubic millimeter
cm	Centimeter
mg	Milligram
ml	Milliliter
dl	Deciliter
mm	Millimeter
%	Percent
/	Per

ACKNOWLEDGEMENTS

I would like to express my all sorts of praises and thanks to Almighty **ALLAH**, who teaches the use of the pen to man, who bestowed me with the potential and the ability for making a humble contribution / addition to the existing knowledge. Peace is upon His Holy Prophet **MUHAMMAD**, whose life and teachings are a beacon for the followers in every field of life.

It's my honour to express the heartiest gratitude and deep sense of obligation to my respectable and considerate supervisor **Dr. AMAM Zonaed Siddiki**, Professor, Department of Pathology and Parasitology, Faculty of Veterinary Medicine of Chittagong Veterinary and Animal Sciences University for his keen interest and propitious for the successful accomplishment of the present study.

I am also grateful to **Dr. Mohammad Alamgir Hossain,** Professor and Head, Department of Pathology and Parasitology, CVASU for giving me permission to use Parasitology laboratory for this work.

Special thanks to **DR. Mohammad Bayazid Bostami,** MS Student, Department of Medicine and Surgery, CVASU, for providing me valuable advice and information while starting the work.

Finally, I would like to thanks all my well-wishers specially **Director of Clinics and Surgery team, SAQTVH**, CVASU for their support during work.

The Author

Abstract

Thelaziasis is an infestation caused by the parasite *Thelazia spp.* which is transmitted by the intermediate host face fly (Musca autumnalis). A one-year-old male goat weighing 56 kg body weight was presented at the Sahidul Alam Quaderi Teaching Veterinary Hospital of CVASU with the history of corneal opacity, lacrimation, epiphora, partial blindness, blepharospasm, ocular discomfort and restlessness. During physical examination, one live adult worm was observed in the anterior chamber of right eye. Menace reflex for vision were partially positive. Other physical parameters like heart rate (82/min), respiratory rate (25/min), rectal temperature (102.4°F) and dehydration status were recorded. Further hematological and biochemical test of peripheral blood samples indicated slight elevation (14%) of eosinophil counts. Surgical removal of the worm was considered as the treatment option in this case. Sedation was achieved by injecting intravenously diazepam (@ 0.5 mg/kg body weight), while retrobulbar nerve was blocked by using 2% Lignocaine hydrochloride (Jasocaine[®]). In addition, propracaine hydrochloride (Procaine[®]) was used topically to control the eyeball movement. Following sedation, a sterile 10 ml syringe connected with 18-gauge needle was inserted through the limbus to aspirate the worm. With special maneuver, the worm was aspirated through the needle and syringe and later moved out along with the flow of aqueous humour. Following removal of eye worm, the animal was restrained for postoperative care. Further medication was prescribed that include Ivermectin (@ 0.2 mg/kg body weight subcutaneously) and topical application of civodex[®] eye drop (combination of ciprofloxacin and dexamethesone) for 10 days. Inaddition, antibiotic (streptopen[®]), antihistaminic (histavet[®]) and NSAID (dexavet[®]) were also prescribed for 7 days. The goat made a complete recovery with improved vision and relief from corneal opacity within 21 days following treatment. The study indicated a cost-effective and simple surgical intervention to treat ocular thelaziasis in goat with little complications and minimum post-operative care. To our knowledge, this might be the first case report of surgical management of ocular thelaziasis in goat in Bangladesh.

Key words: Thelaziasis, eye worm, fly, retrovulbar, limbus.