

A Case Study on Hypoglycaemic Shock in American Brahman Cattle



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Contents

Abstract	vii
Chapter 1	1-2
Introduction	1
Chapter 2	3-5
Materials and Methods	3
2.1 Case presentation	3
2.2 Case history	3
2.3 Management and feeding	3
2.4 Clinical examination	4
2.5 Laboratory examination of feed sample	4
2.6 Laboratory examination of blood sample	4
2.6.1 Blood collection	4
2.6.2 Hematological parameters	4
2.6.3 Serum biochemical parameters	4
2.7 Data analysis	5
Chapter 3	6-10
Results	6
3.1 Demographic information of cattle	6
3.2 Feed analysis	6
3.2.1 Proximate analysis of feed	6

3.2.2 Minerals of cattle feed	7
3.3 Hemato-biochemical parameters	8
3.3.1 Haematological parameters	8
3.3.2 Serum biochemical parameters	9
3.4 Treatment	10
Chapter 4	11-19
Discussion	11
Conclusion	13
Limitations	14
Reference	15
Acknowledgements	18
Biography	19

List of Tables

Table No	Title	Page
Table 1	Demographic information of cattle	6
Table 2	Proximate component of feed	6
Table 3	Minerals parameters of cattle feed	7
Table 4	Haematological parameters	8
Table 5	Serum biochemical paramters	9

List of Abbreviations

Abbreviation	Elaboration
%	Percentage
SD	Standard deviation
No.	Number
et al.	And his associate
e.g.,	Example
etc	Et cetera
SPSS	Statistical Package for Social Sciences
AOAC	Association of Official Agricultural Chemists
DLS	Department of Livestock Services
CVASU	Chattogram Veterinary and Animal Science University
ACI	Advanced Chemical Industries
BRAC	Bangladesh Rural Advancement Committee
AST	Aspartate Aminotransferase
ALT	Alanine Aminotransferase
BUN	Blood Urea Nitrogen
GGT	Gamma-glutamyl Transferase

Abstract

Beef cattle rearing is very popular all over the world to meet the demand for animal protein and the growth rate of beef breed increasing day by day. The main objective of this study was to assess the health status of an exotic American Brahman beef cattle breed. A case was attended to or call on by a veterinarian in a commercial beef cattle farm. This case history was that, 10 years old American Brahman cattle, weighing 938kg, presented with a primary complaint of weakness, off- feed and laminitis. The cow had a history of being imported from America to Bangladesh. Physical examination findings revealed severe dehydration, off-feed, laminitis. Clinical examination findings were rectal temperature 102°F, abnormal rapid breathing and increase heart rate. For proper diagnosis, haemato-biochemical tests of diseased cattle were done, and proximate components and mineral analysis of feed were also done. Blood samples from other four healthy Brahman cattle were also evaluated for comparison. Haematological parameters of diseased cattle revealed Hb 70g/L, PCV 24% and TLC $18.10 \times 10^3/\text{cumm}$. In biochemical examination of diseased cattle found calcium 7.3mg/dl, phosphorus 8.4 mg/dl, albumin 22.6g/L, AST 153.6 U/L, ALT 109.7 U/L, BUN 45.6 mg/dl, creatinine 4.7 mg/dl, total protein 117.1g/L and glucose 27.6 mg/dl. The haemato-biochemical parameters of healthy cattle were within normal range. Due to the severe dehydration and prolonged fasting in diseased cattle, blood glucose levels are drastically reduced. In conclusion, we may say that the diseased cattle had died due to hypoglycaemic shock.

Keywords: Brahman cattle, haematology, biochemical profile, hypoglycaemia, CVASU.