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 ABSTRACT

The aim of the study was to investigate the prevalence, risk factors and treatment assessment of ruminal acidosis in goats through the utilization of intra ruminal fluid analyses as diagnostic tools, which were registered in Upazila Veterinary Hospital at Rangunia, in Chittagong district in Bangladesh. The study was conducted from 1st March to 6th April 2017 and 5th July to 4th August 2017. Total 18 clinical cases were considered under this study. Diagnosis of the cases were performed by taking detail relevant history, observing clinical signs, detail clinical examination including color, odor and consistency of rumen fluid and rumen microflora movements. Confirmations of the cases were performed by measuring the rumen fluid pH. The study revealed that the overall prevalence of ruminal acidosis in ruminants were 4.33%. Among the clinical cases, sex wise prevalence of ruminal acidosis was 50% in both buck and doe. Breed wise prevalence were 55% in Non descriptive, 33% in Jamunapari and 12% in Bengle goats. In age group wise, prevalence were 17% in 6 Months, 50% in (1-2) year’s goat and 33% in above 2 year’s goats. The predisposing factor of ruminal acidosis was feeding of cooked rice in most cases. Others predisposing factor such as, easily digestible carbohydrates like- jackfruit residue, potato, bread, rice gruel are also found. The mean temperature, rumen motility per 5 minute and rumen fluid pH of the goat affected with ruminal acidosis were 103.01±1.14$℉$, $4\pm 2.2$ per 5 minutes and 4.9$\pm $0.6,.respectively. The most effective treatment and rapid improvement of those cases were observed when treated by systemic alkalizer (I/V-ly) along with fluid therapy in goat. This study recommends the farmer to abstain from feeding of large amount of easily digestible carbohydrates to ruminant at a time.

**Key words:** Acidosis, Prevalence, Risk factors, Treatment, Rumen fluid pH, Goat