

MANAGEMENT OF FROTHY BLOAT IN A GRAZING COW

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ABSTRACT

A five year old cow, belonging Base Farm, Kerala Veterinary and Animal Sciences University, Kolahalamedu was reported to have distended abdomen while grazing in pasture. The upper left flank of the cow was distended and the animal was getting up and lying down frequently. The cow had increased respiratory rate and the breathing was difficult. The gas accumulated in the rumen couldn't get relieved by passing a stomach tube. The condition was clinically diagnosed as frothy bloat (pasture bloat). Successful management of the case by adopting emergency measures to save the life of the animal is discussed in detail.

Keywords: Frothy bloat, cow, management

INTRODUCTION

Bloat is distension of rumen with gas (Howarth *et al.*, 1991), either as persistent foam mixed with rumen contents or as free gas (Hinchliff *et al.*, 2016). Foamy bloat or wet bloat is most commonly referred to as frothy bloat and also pasture bloat, which occurs in animals grazing lush pasture and legumes. When pasture is lush and young, the leaves contain high concentration of soluble proteins which predispose to formation of thick foams with tiny bubbles

that are impossible to belch up and the animals become bloated (Tagesu, 2018). Forage type, weather conditions, time of the day, mineral nutrition, animal factors and rumen conditions can influence the likely hood of pasture bloat.

CASE HISTORY AND OBSERVATION

Management practice of Base Farm Kolahalamedu includes permitting the cows to graze for six hours after the milking in the morning. One morning, a labourer on duty reported that a five years old milch cow was reluctant to graze after some time and was having distended abdomen. The condition was reported about two hours after the animal was left out for grazing. The animal was grazing away from the farm in a meadow without road access. While reaching near the animal, it was observed that the upper left flank of the cow was distended and the animal was getting up and lying down frequently. The cow had increased respiratory rate and the breathing was difficult. Attempt to relieve the gas using a stomach tube was also failed. The condition was clinically diagnosed as frothy bloat (pasture bloat).

TREATMENT AND DISCUSSION

Anti-bloat preparation Bloatosil[®] (100 ml) containing simethicone (10%

w/v) was drenched orally. A needle (16G) was inserted in the left paralumbar fossa at halfway between the last rib and hook bone, three inch below the edge of loin. Since the needle could not relieve the gas, a trocar fitted with a cannula was inserted. The trocar was removed from the cannula, however the initial gas release was later reduced due to blockage created by the foam. Meanwhile, the animal started defecating frequently, kicked the abdomen and rolled over the ground as an attempt to relieve the discomfort. Later the animal extended the head, protruded out the tongue and started hitting the head on the ground as if it is going to collapse. As a last resort, a surgical blade was used to open a three inch long slit in the left paralumbar fossa by incising the skin, muscles, peritoneum and the rumen. Slit was spread apart with fingers and one finger was inserted through the incision until the bloat was relieved. This was done to prevent the movement of rumen wall causing the opening in the rumen to shift away from the skin opening. Then the incised region of rumen was pulled out gently and rumen walls were anchored to the skin incision dorsally, ventrally, cranially and caudally by placing sutures between ruminal walls and skin. This was performed to prevent the leakage of rumen contents into peritoneal cavity. Anti-bloat preparation Bloatosil® (100 ml) containing simethicone (10% w/v) was administered intra-ruminally, an injection of ceftriaxone @ 10 mg/ kg was given intravenously and the animal was gently made to walk into the shed. The cow was made to take rest in the shed for a day and was offered paddy straw and water.

Even by next day, formation of foam

in the rumen did not subside completely. Therefore, rumenotomy was performed after sedation (xylazine @ 0.2 mg/kg) along with local analgesia (2% lignocaine) and the rumen content was removed and replaced with cut pieces of partially dried matured *Setaria* grass. Sutures were applied following standard procedures and post operatively ceftriaxone @ 10 mg/kg along with flunixin meglumine @ 1.1 mg/kg were administered intramuscularly for five days and the animal recovered fully.

SUMMARY

Successful emergency management of frothy bloat in a grazing cow is reported in this article.

REFERENCES

- Hinchcliff, K.W., Done, S.H. and Gruenberg, W. 2016. Diseases of the alimentary tract-ruminants. Ruminal tympany (bloat). In: *Veterinary Medicine: A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats*. 11th ed. Elsevier Health Sciences, pp. 473-482.
- Howarth, R.E., Chaplin, R.K., Cheng, K.J., Goplen, B.P., Hall, J.W. Hironaka, R., Majak, W. and Rodostits, O.M. 1991. *Bloat in cattle*. Agriculture Canada Publication, Ministry of Supply and Services, Canada, 34p.
- Tagesu, A. 2018. A study on the prevalence of bovine frothy bloat in and around Kabele Lencha, Tokke Kutaye District, Oromia Region. *Appro. Poult. Dairy Vet. Sci.* 2(3). DOI: 10.31031/APDV.2018.02.000537.