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## Phytobezoar induced ileus and its management in a jersey cross bred cow

### Mohanambal K, Nithishkumar C, Venkatesakumar E, Ravi R and Sasikala K

### Abstract

A four years old Jersey crossbred cattle was presented to large animal medicine unit of Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of not voiding dung and not taking feed with markedly distended abdomen for the past 6 days. The animal was fed with finger millet dry grass fodder for the past 20 days. Clinical examination revealed empty rectum with doughy rumen. Animal was treated with Intravenous crystalloids and Calcium borogluconate. Animal expelled a ball of phytobezoar (weighing 200g) with watery dung 35 hours after treatment. The animal improved uneventfully from ileus after treatment.

Keywords: Cattle, empty rectum, ileus, phytobezoar, calcium borogluconate

### Introduction

A phytobezoar is gastric concretions which are agglomeration of indigestible plant or feed material, vegetable fibers, with seeds and skins of fruits in the digestive system of ruminants. Wild ruminants and small ruminants like sheep and goat had mechanical intestinal obstruction due to bezoars are mostly aggregations of vegetable fibers, cereal awns and hairs impregnated with some phosphate salt are rolled and forming as balls which are approximately round and smooth (Gahlot *et al.*, 2006) <sup>[5]</sup>. Phytobezoars in the gastrointestinal tract were reported by Mealey *et al.*, (1995) <sup>[6]</sup> and Cummings *et al.*, (1997) <sup>[3]</sup> in horses, Radostits *et al.*, (2000) <sup>[8]</sup> in Cattle, Bath *et al.*, (1992) <sup>[2]</sup> in sheep and goats.

### **Materials and Methods**

A four year old Jersey crossbred cattle was presented to large animal medicine unit of Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with a history of not passing dung and not taking feed for the past six days. The animal was recently fed with finger millet dry grass fodder for the past 20 days. Clinical examination of the animal showed suspended rumination, severe dehydration with sunken eye balls, markedly distended abdomen with complete absence of rumen motility with pulse rate of 78/bpm, respiratory rate of 25/bpm and rectal temperature of 38.9°C. Rectal examination revealed distended rumen and scanty mucus coated dung. Ultrasonography revealed reduced intestinal motility with distended loops. Haemogram showed haemogloblin 14g/dl, packed cell volume 47.7%, red blood cells-5.87m/cmm, white blood cells 11,000/cmm. Serum Biochemistry revealed hypokalemia (3.2mEq/L), hypochloremia (85mmol/L) and hypocalcemia (7.6mg/dl).

### **Result and Discussion**

Animal was administered Intravenous with crystalloids i.e. Inj. Ringers Lactate (@ 20 ml/kg body weight) i/v, Inj. Dextrosenormal saline (@ 20 ml/kg body weight) i/v, inj. Calcium borogluconate 300 ml i/v, inj. B complex 10ml i/m and ginger, jaggery with rumenotoric bolus orally. The animal expelled kiwi fruit sized (200gm) (Fig 1) phytobezoar with copious watery dung 48 hours after treatment (Fig 2). The phytobezoar size might be variable, from marble size to grape fruit (Naveen Kumar *et al.*, 2016) <sup>[7]</sup>, even football size or bigger (Veeraiah *et al.*, 2008) <sup>[10]</sup>. Rumination and feed intake started immediately after expulsion of phytobezoar. Doustar (2012) <sup>[4]</sup> proved bezoars are poorly digested plant fibers. Sargison *et al.*, (1995) <sup>[9]</sup> stated, ruminants rarely having phytobezoar, incontrast Asma amer (2015) <sup>[1]</sup> recorded bezoars as most common foreign bodies in ruminants.



Fig 1: Kiwi fruit size (200gm) phytobezoar



Fig 2: Copious watery dung after treatment

### Conclusion

A phytobezoar induced ileus and its successful therapeutic management in a four year old Jersey cross bred cattle was placed on record.

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