PHYTOBEZOARS IN A HOG DEER (HYELAPHUS PORCINUS)

Vijay Kumar, Sameer Rastogi, A. Raj, P. Dhar

Dhauladhar Nature Park, Gopalpur, Kangra (HP)

Recevied 9-8-2011 Accepted 12-11-2011

Bezoar means a concretion found in the alimentary canal of an animal especially ruminants. There are different types of bezoar known as trichobezoar (hairball), trichophytobezoar (hair and vegetable fiber) and phytobezoar (plant fiber). Obstruction by these materials can lead to indigestion, absence of defecation, development of toxaemia and ultimately death. A number of abnormal objects such as wide range of foreign bodies including bezoars present in the gastro-intestinal tract of large and small ruminants (Martins, 2004 ; Remi-Adewunmi et al., (2004). Phytobezoars have been reported to be fatal in bullocks, small ruminants and wild animals (Veeraiah, 2008). The present communication reports a case of phytobezoar in the rumen of Hog deer in captivity leading to its death.

CASE HISTORY AND OBSERVATIONS A 12 years old male hog deer was found with vague symptoms of inappetance, weight loss, dehydration, rough hair coat and sunken eyes with mild defecation for the last 5 days. It was also kicking it's hind legs near the abdominal region. The animal was immobilized with ketamine-xylazine combination for gross examination. The mean rectal temperature, heart rate and respiration rate were found to be normal. Fecal samples were screened for endoparasites while blood was drawn from the animal for complete blood profile and also for presence of hemoprotozoan parasites. After the death of the animal post-mortem examination was conducted as per the standard protocol (John, 2009).

RESULTS AND DISCUSSION

Hematological examination revealed hemoglobin to be 9.5 g/dl, packed cell volume 32 % , total erythrocyte count 6.8 X 10^9/L, total leucocyte count 6.2 x10^9/L, differential leucocyte count N 46%, L 55 %, M 0%, E 1%, B 0 %. A decrease in Hb, PCV in the animal which could be due to dietary deficiency and foreign body. Based on the clinical findings, a definitive diagnosis could not be made and the animal was treated symptomatically for anaemia, colic and inappetance.

The blood of the animal was negative for any hemoprotozoan parasites while the fecal examination revealed mild infestation of strongyloides. The treatment of the animal was started with inj Dicyclomine (Spasmovet, Wokhardt Ltd) @ 3.5 ml I/M and Inj Imferon (Rallis India Ltd.) 2.5 ml I/M and Multivitamin (Tribivet, Intas Pharmaceuticals Ltd) on alternate days for 3 occasions and deworming was done with suspension Albendazole liquid (Albomar, Galaxo Inida) orally @ 7.5 mg/kg body weight. In spite of continuous treatment, the animal not

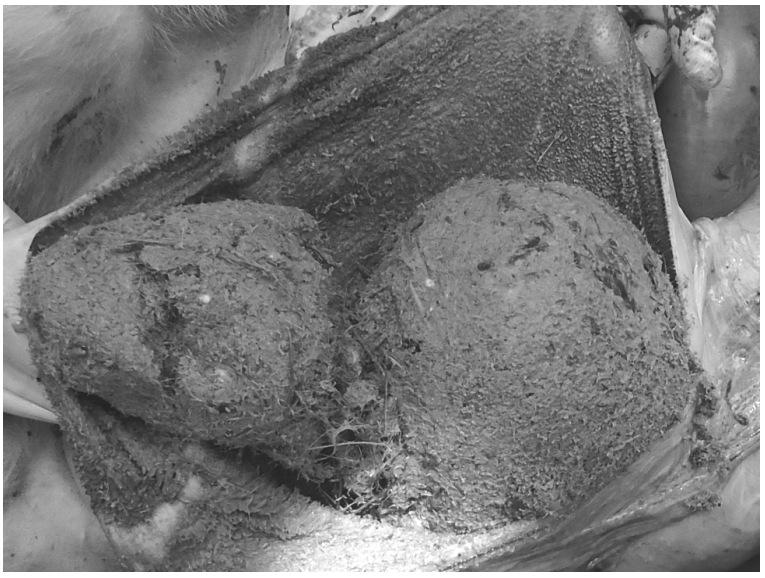

Photo: Phytobezoar in Rumen of Hog deer

responded to therapy and died after 5 days.

Postmortem examination of the animal showed no gross abnormality in any organ except slight congestion in lungs. However, when the rumen was opened, two large sized balls of about 30-35 cm in diameter (Fig.) and weighing about 2.6 kg were found occluding the rumeno- reticular openings of the rumen. The large sized balls were found to be made up of several entangled grass fibres, ingesta, salts and mineral deposits suggestive of a phytobezoar.

During post-mortem examination rumen was filled with ingesta and the phytobezoars occupied the maximum space in the rumen. This may have resulted in impaction of the rumen leading to inappetance further causing the deficiencies of various essential minerals and proteins in the body of the affected animal leading to weakness and death (Mittal, 2004).

The location of the phytobezoar in the rumen coupled with the clinical symptoms showed by the animal along with non responsiveness to treatment and absence of post mortem changes lead us to believe that the animal died due to impaction of rumen caused by a phytobezoar.

REFERENCES :

John, M.C., Manohar, B.M., Ramadass, P., Jayathangaraj, M.G. (2009). Central Zoo authority of India., 1 : pp 43.

Martins,A.M.C.R.P.F.,Leme, M.C.M., Portugal,M.A.S.C., Baldassi, L. and Margatho, L.F.F.(2004). Arquivos do Insti Biologico., **71**(1): 83-87.

Mittal,S.K., Shrivastav, A.B and Shrivastav, P.(2004). Zoo's Print Journal.,**19** (9) : 1618.

Remi-Adewunmi, B.D., Gwang, E.O. and Oswinowo, A.O. (2004). Nig.Vet. J., **25**: 32-38.

Veeraiah, G., Srinivas, M and Lakshmi Rani, N. (2008). Buff. bulletin., **27**(2) : 185-186

❑