RUMINAL IMPACTION DUE TO PLASTIC FOREIGN BODY IN GIR COW

D. N. Suthar and J.B. Patel

Veterinary Hospital
Shree Junadisa Mahajan Panjrapore
Junadisa (Gujarat)-385540

Surgical affections of the ruminant fore stomach due to ingested foreign bodies are the subject of attention almost all over the world and of major economic importance due to severe loss of production and production ability and sometimes death of the animal. Now a days problem of non-penetrating foreign body syndrome is increasing at alarming pace in urban areas where the animals are let loose for free grazing. It is characterized by accumulation of plastic, rexin, polythene bags, ropes and metal objects like nuts, bolts etc. in the rumen and reticulum of bovine (Dandge, 1993). The present paper report successful surgical management of case of ruminal impaction due to plastic foreign body in Gir cow.

CASE HISTORY AND CLINICAL EXAMINATION

A seven years old Gir cow was presented to Veterinary Hospital, Shree Junadisa Mahajan Panjrapore, Junadisa (Gujarat) provided through mobile ambulatory service from urban area (Deesa) with the history of complete anorexia and general depression for the last eight days. It was previously treated for indigestion and impaction by local veterinarian with routine medicinal treatment. On clinical examination of the patient revealed suspected ruminal motility, emaciation, animal passes scanty faeces and palpation of left paralumbar fossa fill hard impacted mass in rumen. Temperature, heart rate and respiration rate were within the normal range. The cow was let loose for free grazing in the city area during the entire day hrs routinely. On the basis of history and clinical examination tentatively diagnosed as a case of ruminal impaction and confirmative diagnosis carried out by the exploratory rumenotomy operation.

SURGICAL INTERVENTION

The rumenotomy operation was performed by standard technique described by Singh *et al.* (1993) under tranquilization (Siquil, Sarabhai) and paravertebral nerve block using 2 % lignocaine hydrochloride. (Xylocaine, Astrazeneca Pharma India Ltd- Banglore) The impacted mass (40 kg polythene bags) was taken out of the rumen. Inside the rumen huge entangled, tightly fixed plastic bags and other materials accumulated and due to churning movement causing ruminal impaction, hence the difficulties were found to remove complete plastic foreign body. After complete evacuation of these foreign body addition of rumen cud from healthy animals and two bolus of Ecotas (Intas Pharmaceutical, Pvt Ltd) orally twice a day for five days to revive the normal fermentation process in the rumen. Post-operative care included antiseptic dressing of wound with betadine and administration of antibiotic and anti-inflammatory drug for 5 days. The animal started taking feed on 3rd postoperative day. Normal defecation was seen 4th postoperative day. The sutures were removed on 10th postoperative day.

DISCUSSION

A case of ruminal impaction due to plastic foreign body in a Gir showed uneventful recovery and restoration of appetite after surgical intervention. Primary rumen impaction occurs in cattle's and buffaloes mostly with depraved appetite most of this animal eat plastics, ropes or leather piece, which make tight balls inside the rumen due to churning movement (Singh *et al*., 1993). Ramje *and Soni* (1981) reported mortality in cow due to mixed foreign bodies which included polythene bags, long canvas belts, military caps and bunch of thin nylon ropes. Diwan and Muley (1982) and Jadhav *et al*., (2004) recorded 10 kg and 37 kg of plastic foreign materials from the rumen and reticulum of cow, respectively. The symptoms of non-penetrating foreign body syndrome reported in the present case are also been reported by Dandge, (1993) and Jadhav *et al*., (2004). Gross examination of the rumen with plastic revealed areas of sloughing, hemorrhages, congestion and stunting of the ruminal papillae. Hence it is recommended to grazing animals should be kept away from urban garbage and dumping places, so clean up of the environment would substantially reduce the prevalence of plastic foreign body in cattle. Surgery is the only effective method of treatment of plastic foreign bodies but an early diagnosis is essential for a favourable outcome.

ACKNOWLEDGEMENT

Thanks are due to Trustee of Shree Junadisa Mahajan Panjapore- Junadisa for proving facilities to carry out this work.

REFERENCES

Dandge, B.P (1993)**.** Non-penetrating foreign body syndrome in bovine. Ph.D thesis submitted to Panjabrao Krishi Vidyapeeth, Akola.

Diwan, J.C. and Muley, B.A (1982). Papilloma of the rumen in a cow- A case report. Indian Vet. J. **58**: 568-569

Jadhav, R.V.; Dandge, B.P.; Mehesare, S.P.; Rohi, R.R. and Mode, S.G (2004). Non-penetrating foreign body syndrome in non descript cow. *Intas Polivet* **5**(1): 67-68.

Ramje, J.P. and Soni, J.I (1981). Unusual foreign bodies in bovine fore stomach- A case report. *Livestock Advisor*. **6** (9): 51-52.

Singh, J.; Singh, A.P. and Patil, D.B (1993). The Digestive system in Ruminant Surgery, R.P.S Tyagi and Jit Singh, first edn. CBS publishers and Distributors, New Delhi, India. Pp 199-203.

❑