

SUCCESSFUL MANAGEMENT OF ABOMASAL ULCERS IN COW- A CASE REPORT

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ABSTRACT

A three year old cross bred Jersey weighing around 250kg was presented to Large Animal Medicine Unit, VCC, RIVER with a case history of not taking feed and water since 1 week and passing blackish scanty dung for four days. Clinical examination showed alteration in the vital parameters. Bruxism (Grinding of teeth) and rumen is hard on palpation. Rumen extraction pump was passed, rumen liquor was collected and subjected for physical, chemical and microscopic examination revealed inactive rumen liquor. Based on the history, clinical signs and clinical examination the case was diagnosed as abomasal ulcer. The animal was treated with parenteral administration of intravenous fluids and antibiotics Inj. Ciprofloxacin @ 5mg/kg bodyweight and Inj. Pantoprazole @ 1mg/kg body weight for 7 days. Animal recovered uneventful within 2 weeks of treatment.

KEYWORDS: Abomasal ulcers, pantoprazole, cattle.

INTRODUCTION

Abomasal ulcers occurs due to stress, diets high in concentrates, concurrent postpartum disease (Displaced abomasum, metritis, mastitis and ketosis) and lymphosarcoma have all been common contributors (Louis, 2009). Abomasal ulcers occurs at cows 3 to 6 months after parturition (Marshall, 2009). Abomasal ulcers are the most common cause of proximal gastrointestinal hemorrhage in cattle. Abomasal ulcers may present subclinically, when the ulcer is small and has not penetrated the gastric mucosa, or may lead to hemorrhage and peritonitis in cattle. In calves, suckling frequency, route of milk administration (tube vs. suckling), composition of the milk replacer, nature of roughage diet and the presence of enteric bacteria, most notably *Clostridium perfringens* type A, *Campylobacter* spp. and *Helicobacter pylori* (Kenneth *et al.* 1990) have been investigated as possible contributors to abomasal ulcer. Common clinical signs recorded in cattle with abomasal ulcer includes sudden onset of anorexia, dark black dung, abdominal pain, tachycardia, dyspnea and bruxism (Smith *et al.* 1983). The drugs of choice for the treatment of abomasal ulcers are histamine type-2 receptors antagonists like ranitidine and cimetidine @ 10-50mg/kg body weight and proton pump inhibitors like omeprazole and pantoprazole @ 1mg/kg body weight (Olivarez *et al.* 2020). The present study describes about the clinical signs, special examination and therapeutic management of abomasal ulcer in a cattle.

MATERIALS AND METHODS

A three year old cross bred Jersey cow weighing around 250kg was presented to Large Animal Medicine Unit, Veterinary Clinical Complex, Rajiv Gandhi Institute of Veterinary Education and Research, Puducherry with the history of not taking feed and water for past one week and passing blackish scanty dung for four days. Clinical Examination showed dull, anorexia, melena, dehydrated, palpable prescapular lymph nodes, pale pink conjunctival mucus membrane, 101.9°F rectal temperature, rumination was absent, rumen motility was nil, hunched back, heart rate and respiration rate was 84 beats per minute and 22 breaths per minute respectively. Animal had continuous bruxism (Grinding of teeth) was noticed. On palpation of rumen showed hard in consistency. To assess the rumen, the rumen liquor was collected by using Rumen extraction pump (Easycare, AJ Enterprises, Chennai) was passed through the oral cavity. The collected rumen liquor was subjected to physical, chemical and microscopic examination. Physical examination of rumen liquor was dark green colour, foul odour, watery in consistency with a pH of 10. On STAT (sedimentation activity time) showed no separation of the feed particle after 8 minutes. To assess the chemical examination of rumen liquor, MBRT (Methylene Blue dye Reduction Test) was done and it revealed more than 15 minutes for discoloration of the dye. Microscopic examination of rumen liquor revealed nil rumen protozoan motility and increases iodophilic activity. The different examination of rumen fluid revealed inactive rumen liquor (Radostits *et al.* 2017).

RESULTS AND DISCUSSION

Abomasal ulcers was common problem recorded during summer month. The common clinical signs recorded in the present study were anorexia, melena, dehydrated, hunched back, increased heart and respiration rate, bruxism, hard consistency of rumen, nil rumen motility, the physical, chemical and microscopic examination of rumen liquor indicates inactive rumen liquor which is in accordance with Smith *et al.* 1983. Based on the history, clinical signs, clinical examination and rumen fluid examination, the case was diagnosed as abomasal ulcer. The dehydration of the animal was treated with parenteral administration of intravenous fluids. To prevent the secondary rumenitis the animal treated with antibiotics Inj. Ciprofloxacin @ 5mg/kg bodyweight intramuscular, Inj. Anistamin 10ml intramuscular and gastric mucus protectant Inj. Pantoprazole @ 1mg/kg body weight for 7days as per Olivarez *et al.* (2020) and Radostits *et al.* (2017). Suspension Laxabulk 100ml orally once was given evacuate the rumen content. The owner was advised for cud transfer to restore the rumen fauna and flora for activate the microbial digestion. After 3 days of treatment the animals showed slight improvement. Animal recovered uneventful within 2 weeks of treatment.

CONCLUSIONS

Abomasal ulcers is common disease in cattle with clinical signs are anorexia, melena, dehydration, bruxism (Grinding of teeth) with alteration in the vital parameters. Rumen liquor examination is an ideal tool for diagnosis of inactive rumen fluid. Treatment with ideal antibiotics and antacids will resolve the condition and gave good recovery rate. Cud transfer will play a vital role in restore the rumen function by introduction of healthy flora and fauna.

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