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Clinical Article

SUCCESSFUL SURGICAL MANAGEMENT OF LEFT ABOMASAL DISPLACEMENT IN A JERSEY BULL-A CASE REPORT

BODA SAIKUMAR*, POTHANA VARSHINI, A. KUMARESAN, S. KATHIRVEL, M. VIJAYA KUMAR and P. SANKAR
Department of Veterinary Surgery and Radiology,
Veterinary College and Research Institute, Namakkal- 637001
Tamil Nadu Veterinary and Animal Sciences University, India

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SUMMARY

A one-year-old, male Jersey cross-bredbull was presented to the Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with a history of hard and reduced faecal output with distension of left side of the abdomen. The animal was dull with mild dehydration, inappetence and normal vital parameters. On the basis of clinical examination and Liptak test the condition was tentatively diagnosed as left abomasal displacement and confirmed by abdominal ultrasonography. The condition was surgically managed by left flank laparorumenotomy and ventral abomasopexy. Postoperative management was done with intravenous fluids, antibiotics and probiotics for 7 days which resulted in uneventful recovery of animal.

Keywords: Bull, Laparorumenotomy, Left abomasal desplacement

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One of the most prevalent abdominal conditions in dairy cattle is abomasum displacement. The gas rises up in the abomasum, pulling it out of its natural location on the abdominal floor either between the left abdominal wall and rumen or between the right abdominal wall and intestines, which is how it develops (Zadnik *et al.*, 2001). Left displacement of abomasum (LDA) is more common in dairy cattle but rarely occurs in calves and bulls (Trent, 2004). Clinical signs include reduced milk production, not chewing cud, decreased faecal output of more dry or pasty stools, decreased faeces output, decreased appetite or off-feed (Tyagi and Singh, 2017). LDA is diagnosed by using simultaneous auscultation and percussion and confirmed by ultrasonography (Braun, 2003; Trent, 2004).

A one-year-old, male Jersey cross-bred bull was presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with a history of hard and reduced faecal output along with distension on left side of the abdomen. The animal was dull, with mild dehydration, inappetence and normal vital parameters. Initially, the animal was treated locally for abomasal ulceration for 16 days and no improvement was noticed.

Clinical examination revealed ping sound over an area of the 11th intercostal space to the upper portion of left paralumbar fossa, on auscultation. Ruminal motility was normal with neutral pH of ruminal fluid. Rectal examination revealed semi-solid pasty consistency of dung. The haemato-biochemical parameters were within range except a slight increase in leucocytes. Liptak test performed to differentiate between the ruminal and abomasal fluid revealed pH 2. The condition was tentatively diagnosed as left abomasal displacement and confirmed by ultrasonography (Fig. 1).

The displaced abomasum was surgically managed by left flank laparorumenotomy and ventral abomasopexy (Fig. 2). Left paralumbar fossa was aseptically prepared for surgery. Anaesthesia was achieved by left paravertebral nerve block with 2% Lignocaine hydrochloride and rumenotomy was performed for easy approach to the abomasopexy. Abomasum was decompressed and ventral abomasopexy was performed using non-absorbable suture material (Polyamide No. 2). The peritoneum, muscle layers and skin layer were sutured as per standard procedure. Post-operatively, the animal was managed with intravenous fluids, antibiotics, anti-inflammatory drugs and probiotics for 7 days which resulted in uneventful recovery of animal (Fig. 3).

In cases when the diagnosis of left abomasal displacement is not obvious, an ultrasonographic examination can be helpful. In LDA instances, the abomasum is seen between the rumen and abdominal wall (Braun, 2003). In the current study, auscultation pings, the Liptak test, and ultrasonography all supported the left abomasal displacement. For treating LDA, several surgical procedures have been documented, including the right paralumb aromentopexy, left paralumbar fossa abomasopexy, right paracostal abomasopexy, and right paramedian abomasopexy (Mulon and Desrochers, 2005). Among the various techniques, left flank abomasopexy represents the technique of choice as compared to other techniques (Steiner, 2006).

*Corresponding author: bodasaikumar777@gmail.com



Fig. 1-3. **(1)** Ultrasonographic examination-abomasum with hypoechogenic contents; **(2)** Abomasopexy; **(3)** Animal recovered on 7th post operative day

In the present case, left flank abomasopexy was performed and the animal showed uneventful recovery on the 7th post-operative day with no recurrence. Restrict the feeding of concentrate to prevent this type of abdominal affections. Early diagnosis with ultrasonography and prompt surgical intervention favours uneventful recovery.

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