

INTUSSUSCEPTION FOLLOWING SURGICAL CORRECTION OF GDV IN A GREAT DANE DOG

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Gastric dilation and volvulus syndrome (GDV) is characterized by gastric distension trapping ingesta, fluids and gas, subsequent twisting of distended stomach along its longitudinal axis at esophageal cardia and pylorus (Willard, 1995). Several complications of GDV like splenic necrosis, cardiac arrhythmias, reperfusion injury etc, are common (De Nova, 1996). The purpose of this communication is to discuss the surgical management and an unusual complication of intussusception after surgical correction of GDV in a Great Dane dog.

Case History and Observations

A male, Great Dane dog aged one and half years was referred to Small Animal Medical Unit, Veterinary College and Research Institute Hospital, Namakkal with the history of acute onset of retching with out vomiting, ptyalism, depression and abdominal distension. On physical examination the animal appeared dull with distended stomach and congested mucus membranes. The body temperature was elevated (41°C) with weak and rapid pulse (200/mt) and a prolonged capillary refilling time (10 sec). The complete blood count showed an increase in packed cell volume (54%), biochemical profile revealed mild azotemia (BUN - 65 mg/dl) and urinalysis was inconclusive. A right lateral radiograph

(Fig.) revealed dorsally displaced pylorus separated by a fold of soft tissue from the dilated stomach confirmed GDV (Barber and Mahaffey, 1994). The bowel was distended with gas and displaced caudally.

Treatment and Discussion

Fluid therapy was initiated with Ringers' lactate at the rate of 20 ml/kg B.W. over a period of 30 minutes and dexamethasone was administered at the dose rate of 1 mg/kg i.v. to prevent shock. As gastric decompression with a stomach tube failed, an emergency surgery was done. The animal was sedated with xylazine (0.55 mg/kg i.m.) and diazepam (0.5 mg/kg i.m.) and anaesthesia was then induced and maintained with ketamine (5.5 mg/kg). Under continuous ECG monitoring, a mid-ventral laparotomy was made and gastric decompression was done by gastrocentesis. The stomach was then detorted in counter clockwise direction by applying downward pressure on the right side of visible part of the stomach and gastropexy was done to fix the stomach to the right abdominal wall. Since the malpositioned spleen showed no signs of irreparable ischemic damage it was corrected and left in-situ and the abdomen was then closed following standard surgical procedures (De Nova, 1996).

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Fig. : Right lateral radiograph showing dorsally displaced pylorus separated by a fold of soft tissue from the dilated stomach

Post operatively the animal was maintained with Intravenous fluids, broad spectrum antibacterials and pentazocine 30 mg i.m. b.i.d. initially on first two days. The animal showed signs of improvement during first two days after surgery. The vital signs, complete blood count and serum biochemical values were within normal ranges.

On day 3 post surgery the animal started vomiting and on abdominal palpation a sausage shaped intestinal loop was palpable. A transverse abdominal scan revealed a mid jejunal intussusception showing echogenic multiple concentric ring sign with central anechoic area (Holt and Samuel, 1978). An immediate re-surgery was done on the affected part of the intestine. The abdomen was then closed following standard surgical procedures. The animal was then maintained with intravenous fluids, broad spectrum antibiotics and ranitidine for next 5 days. The animal recovered well and the sutures were removed after 10 days following second surgery. Though several complications reported of GDV were the occurrence of intussusception

following surgical correction of GDV is rare. In the present case the development of intussusception may be due the presence of bowel gas or due handling of viscera during surgery (Fossum, 1997).

Summary

Surgical management of intussusception and gastric dilation and volvulus syndrome in a Great Dane dog is presented and discussed.

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