

LEIOMYOSARCOMA OF ILEUM IN A LABRADOR DOG

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The tumours of the canine bowel are very rare and comprises only approximately one percent of the total neoplasms of gastrointestinal tract (Gore *et al*, 2006). The symptoms vary depending upon the site of tumour and range from vomiting, anorexia to diarrhoea, blood mixed or dark brown faeces, straining and chronic weight loss. The tumour may sometimes partially or completely obstruct the lumen resulting failure of the ingesta to pass through the alimentary canal resulting in chronic constipation. Such cases are difficult to diagnose even with the imaging tools such as contrast radiography unless they are developed to an advanced stage, hence it is important to diagnose small bowel tumors early to maximize the patient survival. The paper reports a case of leiomyosarcoma of ileum in a male Labrador dog.

Case History and Clinical findings

A Labrador male dog of about eleven years was reported with the history of frequent vomiting over a period of about two month, the frequency being increased in last fifteen days and weight loss. The dog was unable to pass stools for five days, but only scanty blood mixed discharge through the anus. Examination revealed that the dog had normal temperature, pulse and respiration rate, severe dehydration and cachexia. The palpation of abdomen revealed a soft, longitudinal sausage shaped mass in the mid abdomen. Plain radiograph of abdomen in lateral position revealed gas filled loops anterior to the suspected site of lump. The hematological parameters indicated leucocytosis with neutrophilia, anaemia (Hb 4.57 gram percent) whereas the biochemical studies showed increased Blood Urea Nitrogen and Creatinine values (BUN 102.20 mg/dl and S. creatinine 2.12 mg/dl).

The case was diagnosed to be intestinal obstruction and exploratory laparotomy was undertaken in view of complete intestinal obstruction.

Surgical intervention

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The animal was given symptomatic treatment on the first day with intravenous infusion, antibiotic and antacid drugs. Surgical intervention was scheduled on the next day. The dog was premedicated with Atropine sulphate and Betnesol 1 ml each and sedated with injection Diazepam @ 1 mg/kg body weight intravenously. The surgery was performed under dissociative anaesthesia using Ketamine hydrochloride @10 mg/kg body weight intravenously. The laparotomy was performed and the portion of the ileum with hard swelling was exteriorized. Palpation of the swelling revealed severely thickened intestinal wall. The longitudinal incision over the intestine revealed severely thickened intestinal wall for about five inches in length. The affected intestinal segment was dissected out by performing the enterectomy of the portion involved. The mesenteric lymph nodes were enlarged. The lymph nodes along with affected mesentery were also dissected out and the intestinal ends were apposed by end to end anastomosis of the healthy portion by placing double row of Lambert sutures. Patency of the intestine was confirmed and the abdominal incision was closed in routine manner. Post-operatively, the dog was maintained on intravenous infusions with DNS and Ringers lactate solutions and inj. Metronidazole 50 ml intravenously and inj. Ceftriaxone 500 mg intramuscularly was given twice a day for 5 days and inj. Diclofenac Sodium intramuscularly for 3 days. The dog was given intravenous fluid therapy for one week and thereafter owner was advised to feed the dog with soft semi-solid diet for next one week. The patient responded well to the treatment and was reported to be normal in a month.

Discussion

Although the cases of intestinal obstructions are common in dogs, mostly they are due to foreign bodies or due to intussusceptions and obstructions as a result of intestinal malignancies are rare. The signs in the dog with gastrointestinal tumours are often associated with neutrophilic leukocytosis, anaemia of varying

degree and normal and slightly increased BUN and creatinine content (Kolaja and Fairchild, 1973). Similar findings were seen in the present case. The other symptoms recorded were of typical intestinal obstruction.

Enterectomy for removal of the affected intestine along with affected mesentery and lymph nodes was performed as indicated. The histopathology of the dissected intestine indicated it to be leiomyosarcoma. Patnaik *et al* (1977) studied 119 dogs with gastrointestinal neoplasms and reported leiomyosarcoma to be the most common malignancy of small intestines. Martin and Gagnon (2006) reported surgical resection of a gastrointestinal stromal cell tumor by double enterectomy and partial pancreatectomy on a 13-year-old mixed breed dog.

The dog recovered uneventfully and had normal activities for the follow-up period of about four months.

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