

# SURGICAL MANAGEMENT OF INTESTINAL ADENOCARCINOMA IN A DOG – A CASE REPORT

**Ramesh Rathod, A. S. Patil, L. Ranganath and B. N. Nagaraja**  
Department of Veterinary Surgery and Radiology, Veterinary College, Bangalore-24.

Adenocarcinoma is a neoplasm affecting mammary glands and glandular tissue. It can also affect stomach and intestines. Female Dogs over 10 years are more susceptible. Intestinal neoplasm shows similar symptom as of inflammation or obstruction which makes early detection a difficult task. According to the reports, intestinal tumours is less than 10% in dogs of which lymphoma has been estimated at 29%, adenocarcinoma at 17%, leiomyosarcoma at 23% and small intestinal tumours over 1%. Adenocarcinoma, although they begin as benign tumours, over the years they can aggravate into malignant structures.

## Case History and Observations

A nine year old Female dog was presented to the Veterinary College Hospital, Bangalore with a history of anorexia, vomition, diarrhoea, weight loss, dyschezia and melena since 15 days and not responding to the medical treatment given by a local veterinarian. On physical examination animal had high fever, other parameters like heart rate, respiratory rate were within normal range. On abdominal palpation a hard mass was felt at cranial abdomen. Plain radiography of lateral abdomen revealed radiodense irregular mass

which was further confirmed by barium study. Hematological parameters revealed Leukocytosis, characterized by neutrophilia and lymphopenia. Therefore, it was decided for exploratory laparotomy.

## Treatment and discussion

Dog was prepared for aseptic surgery and premedicated with Atropine sulphate @ 0.045 mg/kg body weight subcutaneous, pre-emptive analgesia with pentazocin @ 1 mg/kg intramuscular, sedation with triflupromazine Hcl @ 1 mg/kg intravenous. After 10 minutes, anaesthesia was induced with 2.5% thiopental intravenously and maintained under halothane oxygen mixture. Coeliotomy was performed and upon exploration, intramural mass occluding the lumen was found at ascending part of colon (Fig.1). Extend of the involvement was delineated and Enterectomy and Enteroanastomosis was accomplished (Fig.2). Abdomen was lavaged with warm norma saline followed by closing with No.1 polyglactin 910 (Vicryl No. 1 Johnson and Johnson, Aurangabad) in simple interrupted pattern, subcutaneous tissue and skin were approximated as per standard procedure.

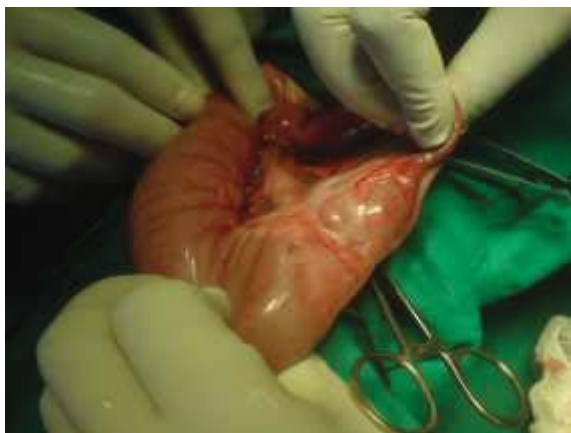


Fig. 1 – Intramural mass involving the colon



Fig. 2 - Enterectomy.

The excised mass upon examination, was hard with occlusion of intestinal lumen to the extent of 90%. The excised mass was preserved in neutral buffer solution and sent for

histopathology which was confirmed as Adenocarcinoma. Post-operatively, ceftriaxone (20mg/kg) was administered for 7 days systemically. The animal was maintained on

parental alimentation of ringers lactate 250 ml and Dextrose 5%, 250 ml daily twice along with Metranidazole 100 ml intravenous for three days. Animal was started with liquid diet on 4th post-operative day and solids on 7th post-operative day. Skin sutures were removed on 10th post-operative day and Animal recovered uneventfully.

Floek *et al.*, (2008) reported that Small intestinal adenocarcinoma may be amenable to surgery, but death from metastatic disease occurs within one year. Patnaik *et al.*, (1980) reported 31 cases of intestinal adenocarcinoma along with 4 cases of carcinoid in 35 dogs. Paoloni *et al.*, (2002) reported ultrasonographic and clinicopathological findings in 21 dogs with intestinal adenocarcinoma and stated that

most intestinal lesions were poorly echogenic and had an irregular lumen.

#### **Summary**

An unusual case of intestinal adenocarcinoma in dog and its successful management is reported.

#### **References**

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