

Splenic Hematoma in a Labrador Retriever – A Case Report

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ABSTRACT

A seven-year-old Female Labrador Retriever was presented to Department of Veterinary Surgery and Radiology, Veterinary College, Bangalore with a complaint of dull, depression, anorexia and lethargy. Clinical examination revealed anaemic, distended abdomen and splenomegaly was noticed upon palpation of the abdomen. Ultrasonography of abdomen revealed hypoechoic mass in the spleen. Based on clinical signs, physical examination and ultrasonographic findings, the condition was tentatively diagnosed as splenic mass. Hence decided to perform emergency total splenectomy and tissue was subjected for histopathological evaluation which was revealed as hematoma of spleen.

Keywords: Ultrasonography, Splenectomy, Splenic hematoma

INTRODUCTION

Splenic masses are frequently encountered in dogs. Lesions in the spleen may be the result of benign tumors i.e., lymphoid hyperplasia, hematoma, cyst, abscess, etc. or malignant i.e., hemangiosarcoma, metastatic sarcoma/carcinoma, malignant histiocytosis, lymphosarcoma, etc. (Day *et al.*, 1995). Canine splenic hematoma is difficult to distinguish from hemangiosarcoma on clinical presentation and grossly at the time of surgery. However, hemangiosarcoma represents an aggressive malignancy and a misdiagnosis of hematoma would go for indications for chemotherapy (Steve *et al.*, 2016).

One study led to the development of the so-called two-thirds rule approximately 2/3 of splenic masses will be malignant, and 2/3 of those will be hemangiosarcoma; the remaining 1/3 of splenic masses might be benign (Spangler and Kass, 1997). The most common benign splenic lesion reported in dogs is splenic hematoma (Wendelburg *et al.*, 2015).

CASE HISTORY AND OBSERVATION

A seven year old Female Labrador Retriever was presented to Department of Veterinary Surgery and Radiology, Veterinary College, Bangalore with a complaint of dull, depression, anorexia and lethargy. Clinical examination revealed anaemic, distended abdomen and splenomegaly was noticed upon palpation of the abdomen. Ultrasonography of abdomen revealed hypoechoic mass in the spleen.

Based on clinical signs, physical

examination and ultrasonographic findings, the condition was tentatively diagnosed as splenic mass. Hence, the dog was subjected for exploratory laparotomy.

TREATMENT AND DISCUSSION

Surgical site was prepared aseptically. Animal was premedicated with Atropine Sulphate @ 0.04mg/Kg. BW. S/C, and was xylazine @ 1mg/Kg. BW. I/M. After 10min, induction of anesthesia was performed by using propofol @ 4mg/Kg BW. I/V and later maintained with 1.5% Isoflurane inhalant anesthesia. A ventral midline abdominal incision was extended from xiphoid to a point caudal to umbilicus. Complete abdominal exploration was done and spleen was exteriorized to the surgical site. Large splenic mass was noticed. Hence, it was decided to perform splenectomy because of the large mass involving half of splenic parenchyma. All the splenic and gastropiploic arteries and veins were double ligated at hilus using chromic catgut no.1 and the vessels are transected. The linea alba was closed with polyglactin 910 by interrupted pattern, subcutaneous suturing was done by simple continuous pattern by using chromic catgut and skin was sutured by horizontal mattress suture pattern by using polyamide. The surgical wound was cleaned and antiseptic dressing was done. Post-operatively, a combination of Ceftriaxone and Tazobactam at the dose rate of 20mg/Kg. BW. was given for 7days and analgesic was prescribed for 3days.

Histopathological evaluation of splenic tissue revealed presence of infarcted areas with large areas of hemorrhage, white pulp expansion.

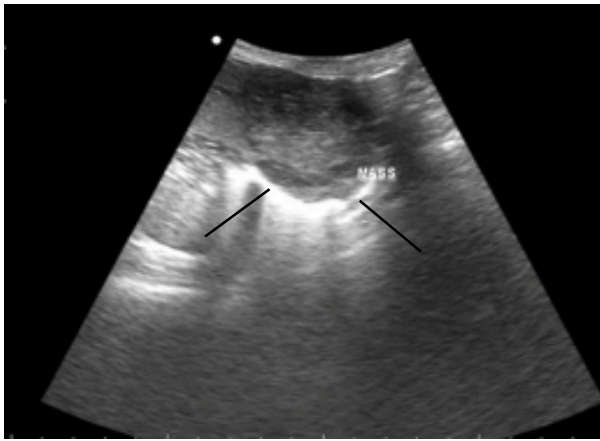
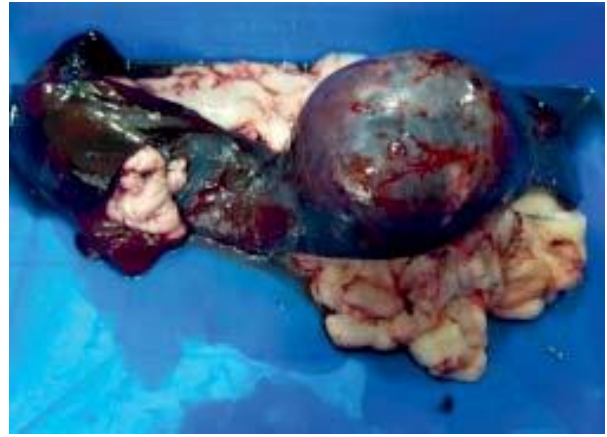


Fig. 1: Ultrasonography of spleen showing large hypoechoic structure



conditions is very different, prognosis is poor in

Fig. 4: Image of Spleen following complete splenectomy



Fig. 2: Surgical site for splenectomy

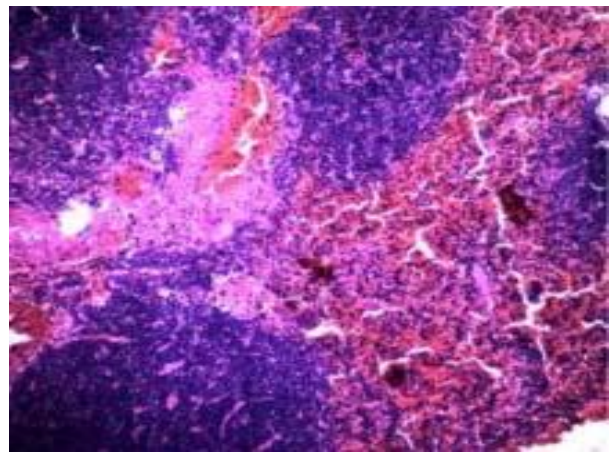


Fig. 5: Histopathological evaluation of splenic tissue showing areas of infarction with large areas of hemorrhage and white pulp expansion.



Fig. 3: Image showing large splenic mass

and sections were negative for granulomas or malignancy, indicative of splenic hematoma. Canine splenic hematoma and hemangiosarcoma is very difficult to differentiate at the time of surgery based on the clinical presentation and gross appearance. This is because a hematoma is a component of most of the splenic hemangiosarcomas. But, the prognosis of these two

canine splenic hemangiosarcoma due to early and aggressive metastasis (Aronsohn *et al.*, 2009). Total splenectomy is most commonly performed in some of the life threatening hemorrhagic conditions such as animals with splenic neoplasia, torsion (stomach or spleen), or severe trauma (Fossum and Elaine, 2013). In this case, the animal had a very large splenic hematoma. Hence, total splenectomy was performed. The spleen is not essential for life; in its absence, its major functions are taken over by the liver, lymph nodes, and bone marrow. Therefore, in cases of injury or disease, the spleen can be completely removed. The median survival time for canine splenic hematoma ranges from 0-3287 days, on an average it is 674days (Steve *et al.*, 2016). In this case follow up was done for 3 months and the animal recovered uneventfully.

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