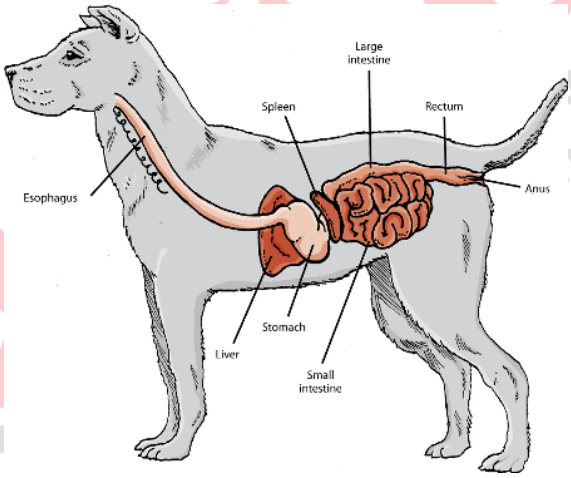
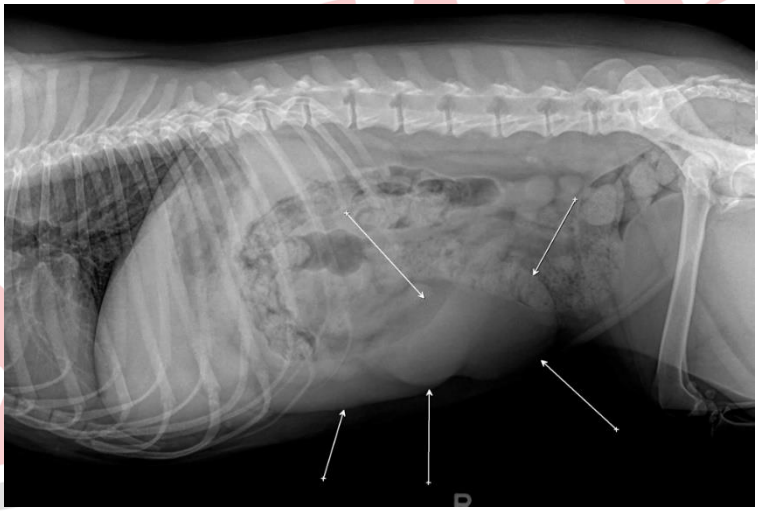
Splenic Tumors, Splenic Trauma, Splenic Torsion, Splenectomy	Splenic conditions can occur in dogs and cats. The spleen is an organ that is positioned below the stomach. The spleen is part of the lymphatic system and it functions to filter the blood and store blood. The spleen is susceptible to injury when abdominal trauma occurs to the pet. Uncommonly, a splenic torsion can occur whereby the spleen twists on itself preventing blood drainage and subsequent enlargement. Splenic torsion occurs most often with gastric dilatation-volvulus but can occur alone. Benign and malignant splenic tumors occur in dogs and cats. Splenic neoplasia accounts for approximately 33 to 66% of splenic tumors in dogs and approximately 37 to 73% of splenic tumors in cats. Splenic hematoma and splenic nodular hyperplasia are the most common benign lesions found in the spleen. Hemangiosarcoma is the most common malignant disease found in the spleen of dogs. Large breed dogs, German Shepherds, Labrador Retrievers, Labrador Retrievers, and Poodles appear to be at higher risk for hemangiosarcoma in the spleen. The most common malignant splenic disease in cats is lymphosarcoma and mast cell tumor.  Image demonstrating the anatomical orientation of the spleen in the abdomen of a dog. Signs and Symptoms: Clinical signs of splenic tumor may include: • Decreased appetite or anorexia • Vomiting • Weight loss • Lethargy • Weakness • Abdominal distension

- Collapse
- Pale mucous membranes/gums

A splenic mass that ruptures will cause internal bleeding. If this bleeding is severe and/or left untreated, it can lead to death. Pets with a ruptured splenic mass need emergency treatment.

Diagnosis: A physical examination will be performed. Pale mucous membrane color, tachycardia (fast heart rate), tachypnea (fast respiratory rate), mid abdominal mass, abdominal fluid wave, and weakness may be abnormal exam findings. A complete blood count, biochemistry profile, and clotting times are diagnostic blood tests that will be performed. Radiographs (X-rays) of the abdomen or abdominal ultrasound will be performed to identify a mass and presence of abdominal effusion (fluid in the abdomen). Thoracic radiographs will be performed to look for metastatic disease (spread) to the lungs. Abdominocentesis (passing a needle into the abdomen to remove a sample of fluid) will be performed if abdominal effusion is present.



Radiograph of a dog with a splenic mass. The arrows are pointing to the splenic mass.

Treatment: A pet that has a ruptured splenic mass will receive intravenous fluid therapy and a blood transfusion may also be necessary if the pet is anemic (lack of blood). An abdominal exploratory surgery for splenectomy (surgical removal of the spleen) is recommended for treatment of splenic masses. The spleen is submitted for biopsy for a final diagnosis. The liver is commonly biopsied at the time of abdominal exploratory surgery to evaluate for the presence of metastasis.

	Postoperative care: After surgery the pet will be given intravenous fluids, antibiotics, and pain medication. The pet's ECG (electrocardiogram) and blood pressure will be monitored. The pet will be monitored for anemia. Some pets will need blood transfusions postoperatively. Postoperative complications can include cardiac arrhythmias (irregular heart rhythm), internal abdominal hemorrhage (bleeding), and pancreatitis. The pet will be discharged with an antibiotic, pain medication, an Elizabethan collar to prevent licking at the surgical incision, and conservative short leash walk activity for 2-4 weeks. Prognosis: Splenic masses that are benign are cured with surgery. The prognosis for malignant splenic disease will be specific for the neoplasia that is diagnosed on biopsy. Survival time for dogs with hemangiosarcoma treated with splenectomy alone may have up to 1 to 3 months. Additional treatment with chemotherapy after splenectomy for hemangiosarcoma may increase survival time up to 6 to 8 months.