"What's Your Diagnosis?" Signalment: Species: Canine Breed: Labrador Retriever Sex: Male Intact Date of Birth: 12/01/97

Presenting Complaint:

墠 Cranial abdominal mass found on abdominal radiographs taken by referring DVM on 2/13/12

Physical Examination:

墠 Abdominal palpation revealed a large cranial abdominal mass

墠 Vital parameters within normal limits

墠 Grade II/VI left systolic heart murmur

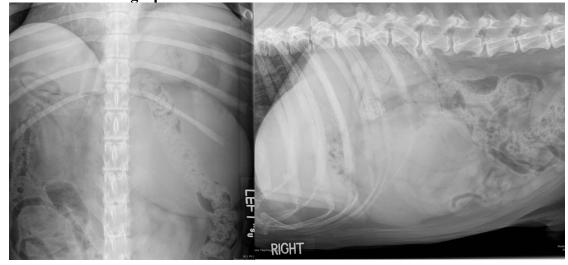
墠 No abnormalities noted on rectal palpation

Diagnostic Plan:

- 1. CBC/Serum Chemistry
- 2. Abdominal radiographs
- 3. Thoracic radiographs
- 4. Abdominal ultrasound
- 5. Fine needle aspirate of mass with cytologic evaluation
- 6. Histopathologic evaluation of mass

CBC/Serum Chemistry:

Mild inflammatory leukogram characterized by a mature neutrophilia and monocytosis; mild normocytic normochromic nonregenerative anemia; thrombocytosis; mastocytemia. Serum chemistry showed mild hyperglycemia most likely due to stress, mildly increased urea nitrogen, protein, and globulin What are your initial radiographic and ultrasonographic impressions



Abdominal Radiographs

Radiographic Findings:

Abdomen

Abdominal contour and serosal detail are unremarkable. A large (19cm x 16cm), well circumscribed, smoothly marginated mass of soft tissue opacity is located in the left cranioventral abdomen. There is rightward and caudal displacement of the small intestines due to the presence of the mass. The remainder of the gastrointestinal tract is unremarkable. The left kidney is also displaced caudally. A small round mineral opacity is noted within the caudal pole of the right kidney. The prostate is enlarged. Lumbar and lumbosacral spondylosis deformans is present.

Radiographic Impressions:

Abdomen

Large left cranioventral abdominal mass with organs of origin to include spleen, (pedunculated) liver, and mesentery. Differentials to include neoplasia, cyst, and hematoma. Right nephrolith/nephrocalcinosis. Prostatomegaly most consistent with benign prostatic hyperplasia. Other rule outs include: prostatitis, prostatic cyst, prostatic abscess, or neoplasia.

Thorax

Static soft tissue nodule, suspect pulmonary origin. Rule out granuloma. No evidence of metastatic disease. Mildly progressed shoulder osteoarthrosis and spondylosis deformans.

Abdominal Ultrasound



Ultrasonographic Findings:

The liver is hypoechoic with increased visualization of the portal vascular markings. A single small hepatic cyst was noted in the right dorsal liver. There is a large mildly inhomogeneous 12 cm mass associated within the splenic body/tail region. Multiple honeycomb appearing cystic structures were noted focally throughout the mass. A single large and a second small hyperechoic foci were noted within the mass of splenic origin. These exhibited shadowing. The kidneys, adrenal glands, urinary bladder, and intestinal tract were unremarkable. The testicles were similar in appearance with multiple ill-defined hypoechoic regions. The prostate was incompletely visualized but was normal in size and has a symmetrical ventral margin. Aspirates of the splenic mass were obtained without periprocedural complications.

Ultrasonographic Impressions:

Splenic mass with cysts and mineralization, rule out neoplasia or hematoma. Hepatic cyst. Hepatic appearance may be due to acute hepatitis or neoplastic infiltration.

Problems to Consider:

- 1. Splenic mass
- 2. Liver nodules

Cytology of FNA from splenic mass:

Microscopic Exam: The preparations have high nucleated cellularity, abundant erythrocytes and pale backgrounds. Cells are well preserved and consistent primarily of myeloid, erythroid, lymphoid and platelet precursors. Frequent well granulated mast cells are present both individually and admixed (rare small aggregate) with the clusters of splenic stromal cells. Clumps of hemosiderin are observed in the stromal cells.

Opinion: Extramedullary hematopoiesis of all lineages. The mast cell number appears to be increased that may be suggestive of mast cell hyperplasia or mast cell metastasis. Recommend excisional biopsy with histopathologic examination of the tissue to reveal tissue architecture and for definitive diagnosis.

Therapeutic Conclusions:

Further diagnostic and surgical therapeutic options were discussed with the owner: 1. Thoracic radiographs to rule out pulmonary metastasis (results shown above)

2. Splenectomy to remove splenic mass

3. Abdominal exploratory to check for metastasis of potential neoplasia

4. Histopathologic evaluation of splenic mass and biopsy samples of liver nodules to make definitive diagnosis

The owner elected to proceed with surgery to remove the splenic mass on 2/16/12. The patient had a splenectomy, liver biopsy, and abdominal exploratory performed. He recovered from anesthesia and surgery without complication. His incision healed well, and he was discharged on 2/22/12. The splenic mass and liver samples were submitted for histopathologic evaluation. Histopathology results of the splenic mass revealed evidence of a benign hematoma. Samples taken from the liver revealed vacuolar degeneration and minimal to mild lymphoplasmacytic hepatitis.

The histopathology results of the splenic mass revealed evidence of a hematoma with no evidence of neoplasia. Splenic hematomas are not uncommon in older dogs and are often an incidental finding. Surgical splenectomy is considered curative.

Although histopathology results showed evidence of a benign hematoma, a more malignant process, such as hemangiosarcoma, could not be completely ruled out as no diagnostic test is 100%. The patient's owner was instructed to continue to monitor him for signs of continued pathology and/or evidence of neoplasia.