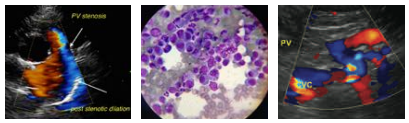
IMAGING PERFORMED BY

IntraPet.com



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DATE
2/22/22

PATIENT
Cali Sparks

SPECIES
Canine

BREED
Shih Tuz Mix

SEX
Spayed Female

AGE
11/23/17

WEIGHT
19 lbs

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Madonna VC

REFERRING VET
Dr. Brockett

INVOICE
96239

PRESENTING CLINICAL SIGNS

Presented with bleeding around incisor tooth.
Current Medications: Pet-tinic.
Lab Results: WBC 20.5, RBC 4.7, HCT 32. Lymphocytes 15,990, Ca 13, TP 9.5, Glob 7.2, ALT 1,000, PTT and Prothrombin WNL.
Radiographs: Increased size to spleen.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Decline.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.18 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.61 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.49 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.46 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively large in size. The spleen echotexture is heterogenous and severely mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. The reticulated pattern of the spleen is highly suggestive of lymphoma.

Liver

The liver is subjectively large in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous hypoechoic with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a prominent, mesenteric lymph node visualized and measured 0.89 x 1.19 cm. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, reticulated spleen with a severely mottled pattern. This is concerning for a possible neoplastic process. I recommend FNA.

- Large, heterogenous hypoechoic liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Prominent lymph node at the root of the mesentery. Possible differentials include inflammatory, infectious and neoplastic disease.

SECONDARY FINDINGS:

- Prominent mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The combination between the elevated lymphocyte count, high calcium, elevated globulins and reticulated spleen is very concerning for possible lymphoma/leukemia.

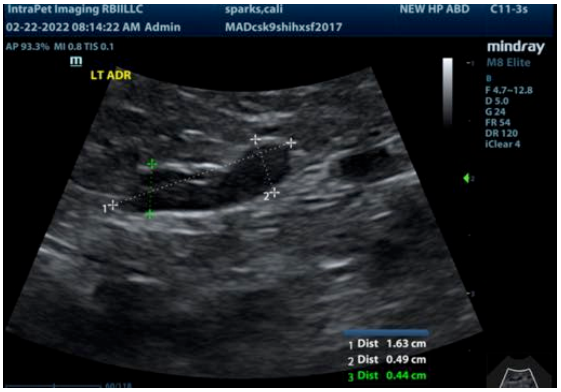
- Consider pathologist review of the CBC to evaluate for possible neoplastic lymphocytes.

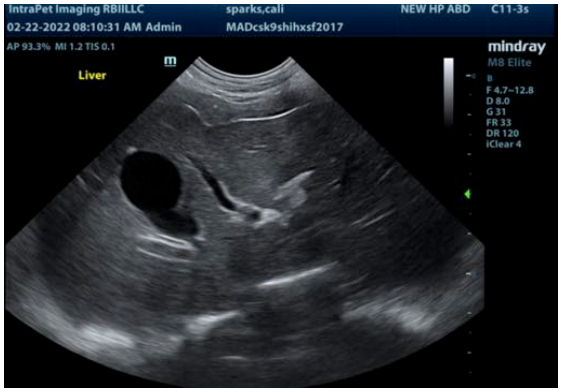
- Recommend three view thoracic radiographs to rule out concurrent thoracic disease/involvement.
- Recommend careful palpation of peripheral lymph nodes.
- Consider a protein electrophoresis to evaluate the elevated globulin levels.
- If clotting function appears normal then consider a FNA of the spleen.

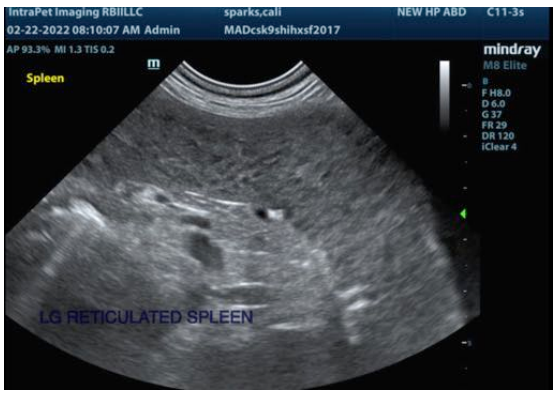
I was not able to open the blood work attachment, but if platelets are ok, clotting tendencies can occur with elevated globulin levels.

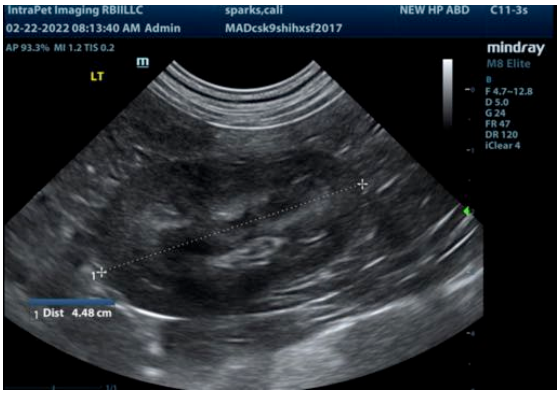
I recommend an ionized calcium, PTH and PTHRP level to evaluate the hypercalcemia.
Consider an FNA of the liver with a liver function test if aspiration of the spleen is not diagnostic.

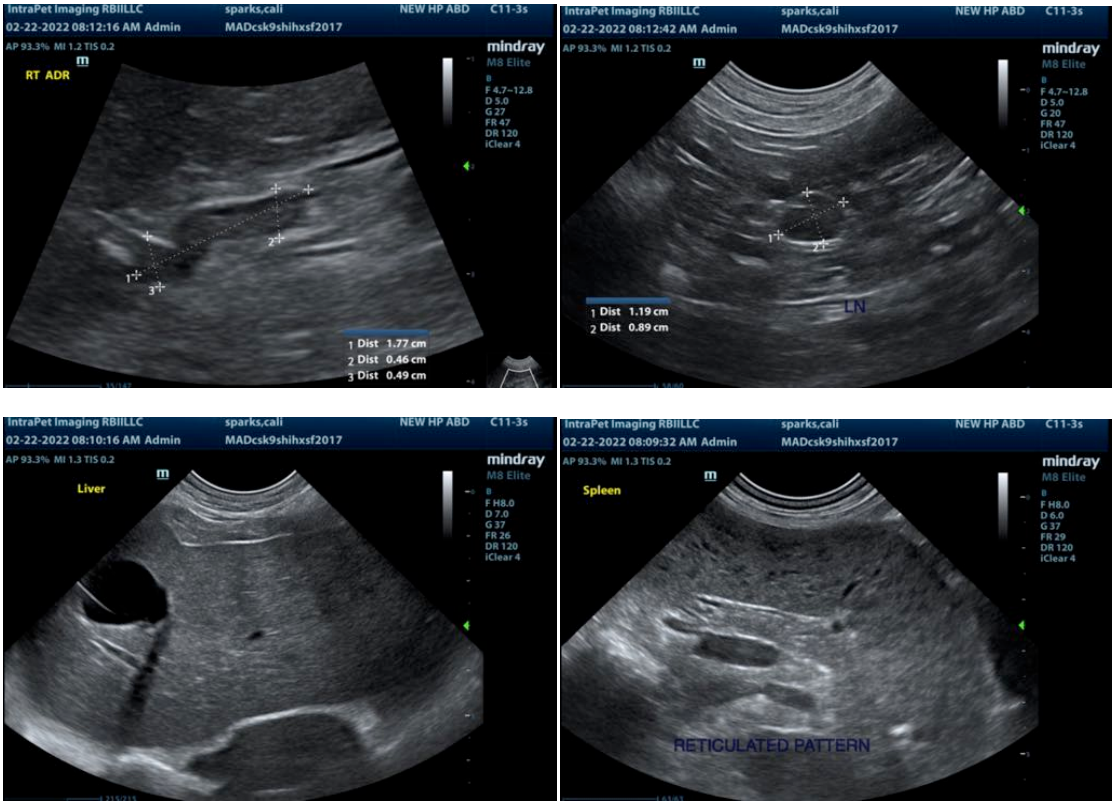
An alternate and much less likely differential would be Ehrlichia. Multiple myeloma can also be a concern.











The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com