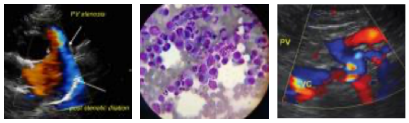
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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DATE

8.9.2023

PATIENT

Olivia Grace

SPECIES

Canine

BREED

Labrador Retr

SEX

Female Spayed

AGE

3/15/2014

WEIGHT

75.2. lbs

INTERPRETED BY

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

HOSPITAL NAME

Timonium AH

REFERRING VET

Dr. Lentz

INVOICE

14015

PRESENTING CLINICAL SIGNS

Lethargy and change in appetite. Found Leukocytosis. Nonresponsive to Enrofloxacin and Doxycycline.

Current Medications: Enrofloxacin 136mg 2 SID, Doxycycline 100mg 2 BID for 14 days, Entyce 30mg/mL 3mL SID.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, 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 2 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (7.19 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 (6.74 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 borderline enlarged (0.99 cm at the cranial pole / 1.13 cm at the caudal pole / 3.00 cm in length). It is observed in its normal position cranial to the left renal artery. It is mildly enlarged but generally normal in appearance. There is no evidence of vascular invasion visualized.

The right adrenal gland is normal/borderline enlarged in size (1.56 cm at the cranial pole / 0.83 cm at the caudal pole / 2.49 cm in length). 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 normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a slightly hypoechoic nodule visualized within the parenchyma (measuring 1.54 x 1.81 cm).

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. Much of the liver appears relatively normal with very mildly coarse echotexture. There is a focal area of liver which has a grouping of expansile irregular, hypoechoic nodules/masses, some of which have a target-like appearance (examples measuring 1.69 x 4.12 cm, 1.67 cm, 0.57 cm, 0.98 cm and 0.73 cm.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm 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 0.3-0.5 cm in wall thickness) and the jejunum measured as normal (0.36 cm) 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 normal and isoechoic to surrounding 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

Ringdown artifact is visualized at the level of the diaphragm, likely consistent with the pulmonary lesions visualized on radiographs.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Borderline enlarged adrenals. I suspect these are within normal limits for this larger dog. If signs of Cushing's disease are present, you could consider adrenal function testing.

- Hypoechoic nodule visualized within the spleen - There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Cluster of irregular hypoechoic nodules/masses visualized within the liver. The appearance of these nodules is concerning for a a neoplastic process based on the expansile appearance and that they are focal. Metastatic disease would be of primary concern, although primary hepatic neoplasia cannot be ruled out.

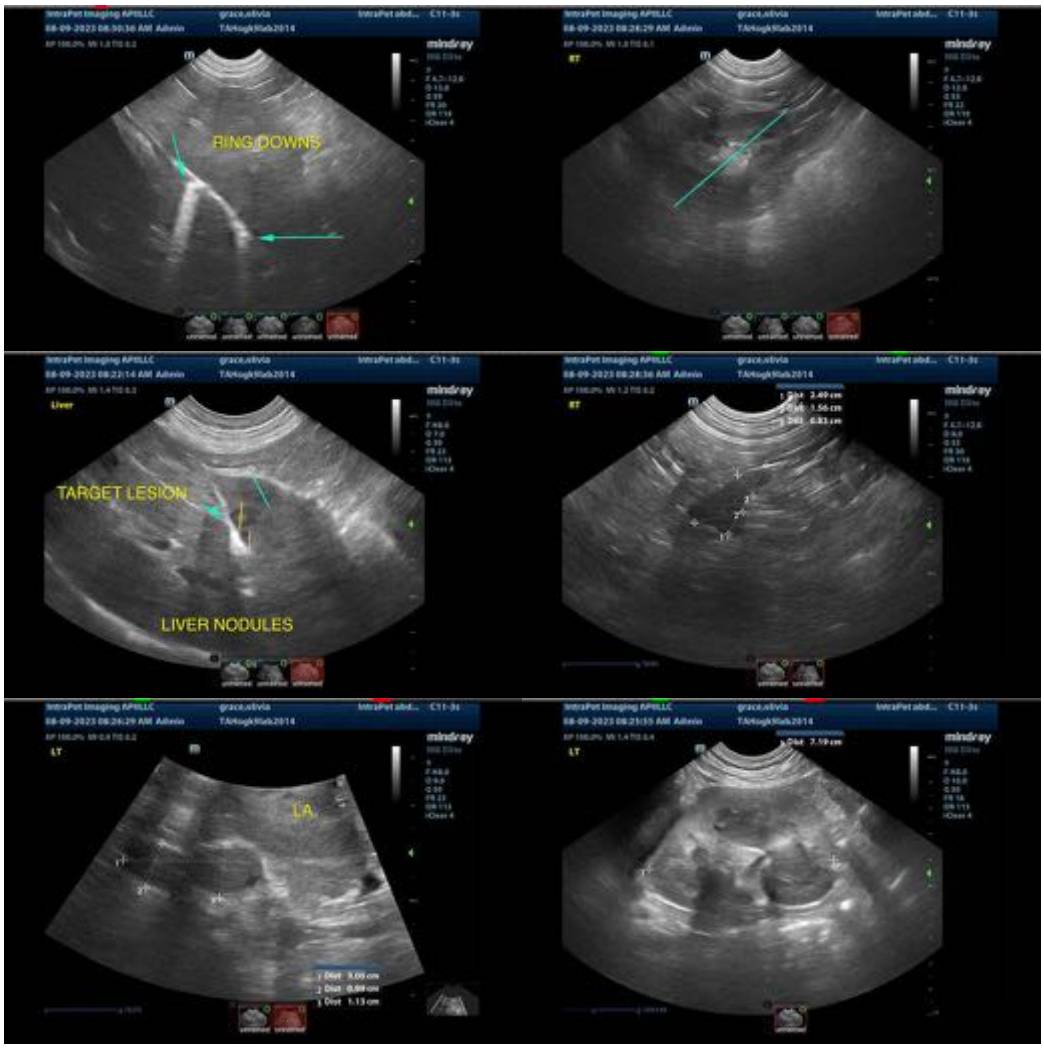
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a focal area of liver which has some irregular hypoechoic small masses/nodules. These are not dispersed throughout the hepatic parenchyma, but appear as a cluster, and appear expansile with some disruption to the hepatic margins. These findings increase the likelihood of a malignancy. Metastatic lesions would be most likely, although a primary neoplasic process cannot be ruled out. Unfortunately, the location of these lesions may not be in an area where a fine-needle aspirate is possible.

Additionally, there is a nodule in the spleen. This lesion has less of a concerning appearance, although this could represent a benign or neoplastic process. Consider a fine-needle aspirate of the spleen.

Ringdown artifacts are visualized at the level of the diaphragm. This likely is consistent with the pulmonary lesions visualized on the radiographs submitted.

As the concern for underlying neoplastic process is very high, consider possible boney lesions, oral lesions, a good rectal exam, etc.



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)
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