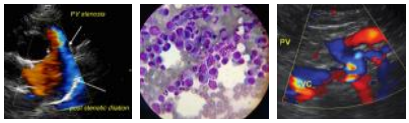
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

1/23/23

PATIENT

Nelson Woods

SPECIES

Canine

BREED

Mixed Breed

SEX

Neutered Male

AGE

4/17/13

WEIGHT

89.4 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Companion ACC

REFERRING VET

Dr. Johnston

INVOICE

20764

PRESENTING CLINICAL SIGNS

Decreased appetite, possible nausea.

Current Medications: None listed.
Lab Results: Ca 12.1 (8.4-11.8).
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Left kidney is normal is size (7.16 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (6.63 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. In the cranial pole of the right kidney, a 1.3 cm round iso- to hypoechoic nodule, resulting in slight capsular bulge is noted.

Adrenal Glands

Left adrenal gland is normal in size (3.49 cm long x 0.76 cm at cranial pole and 0.65 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.75 cm long x 0.67 cm at cranial pole and 0.66 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with slightly or undulating margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

Both mesenteric and medial iliac lymphadenopathy are noted. There is a scant amount of anechoic free fluid in the abdomen.

Other

In the cranial mediastinal area, there is a 3.2 cm x 4.5 cm homogenous hypo- to anechoic mass/lymph node. No apparent pleural or pericardial effusion are noted in these images.

ULTRASONOGRAPHIC FINDINGS

- A cystic cranial mediastinal mass, given this patients concurrent hypercalcemia is concerning for an enlarged cystic lymph node or possibly thymoma.
- Abdominal lymphadenopathy, given the concurrent pathology and hypercalcemia is also most concerning for infiltrative neoplasia such as lymphoma. Reactive lymph nodes can't be ruled out definitively without tissue sampling.
- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- Hypo- to anechoic right kidney nodule, could represent a benign complicated cyst or even abscess, however, an infiltrative neoplastic nodule with lymphoma being the top differential is considered probable given the concurrent pathology.

Secondary Findings

- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in

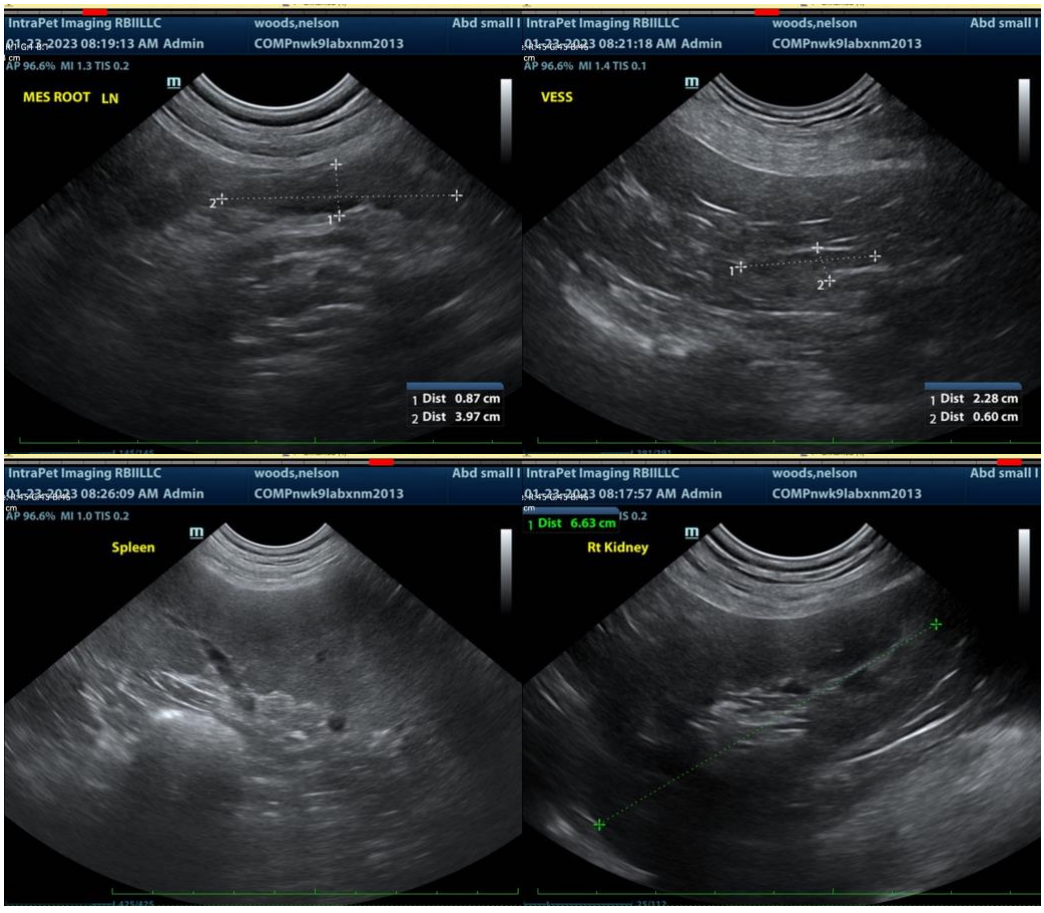
combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

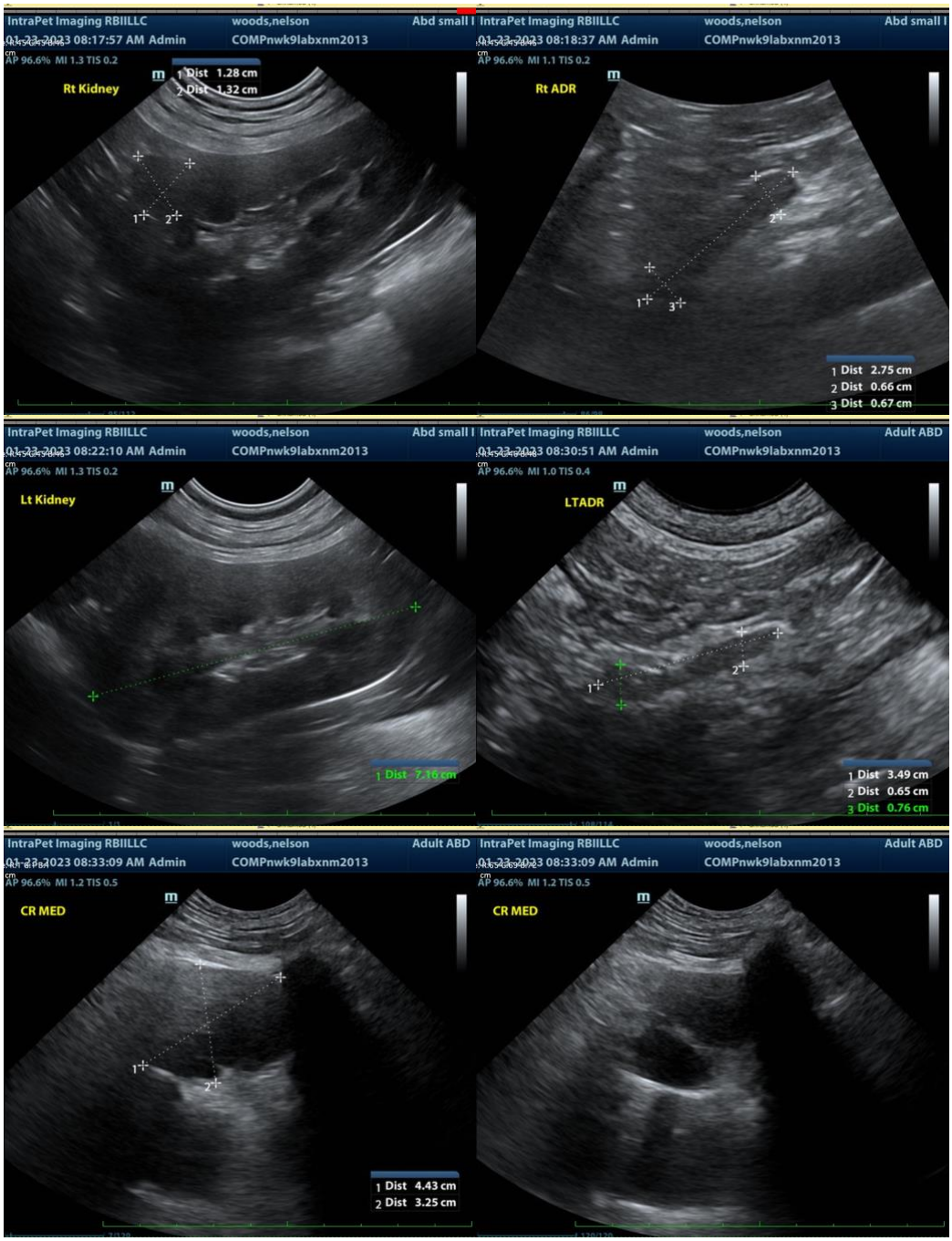
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patients hypercalcemia, which is suspected based on these images to be hypercalcemia of malignancy, confirmation is recommended in the form of a malignancy panel to include PTH PTHrP and ionized calcium.

If not recently evaluated, a thorough perianal and rectal exam is recommended to look for evidence of concurrent anal gland pathology, especially given the medial iliac lymphadenopathy.

A fine needle aspirate of the enlarged mesenteric lymph nodes +/- the spleen, +/- the right kidney nodule and the cranial mediastinal mass, are all options if patients coagulation status is appropriate, as is a means to determine a cytologic diagnosis if possible.




IntraPet Imaging RBIILLC
woods,nelson
Abd small I
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COMPnwk9labxnm2013
AP 96.6% MI 1.3 TIS 0.2
Rt Kidney
1 Dist 1.28 cm
2 Dist 1.32 cm
IntraPet Imaging RBIILLC
woods,nelson
Abd small I
01-23-2023 08:18:37 AM Admin
COMPnwk9labxnm2013
AP 96.6% MI 1.1 TIS 0.2
Rt ADR
1 Dist 2.75 cm
2 Dist 0.66 cm
3 Dist 0.67 cm
IntraPet Imaging RBIILLC
woods,nelson
Abd small I
01-23-2023 08:22:10 AM Admin
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Lt Kidney
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IntraPet Imaging RBIILLC
woods,nelson
Adult ABD
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AP 96.6% MI 1.0 TIS 0.4
LTADR
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2 Dist 0.65 cm
3 Dist 0.76 cm
IntraPet Imaging RBIILLC
woods,nelson
Adult ABD
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AP 96.6% MI 1.2 TIS 0.5
CR MED
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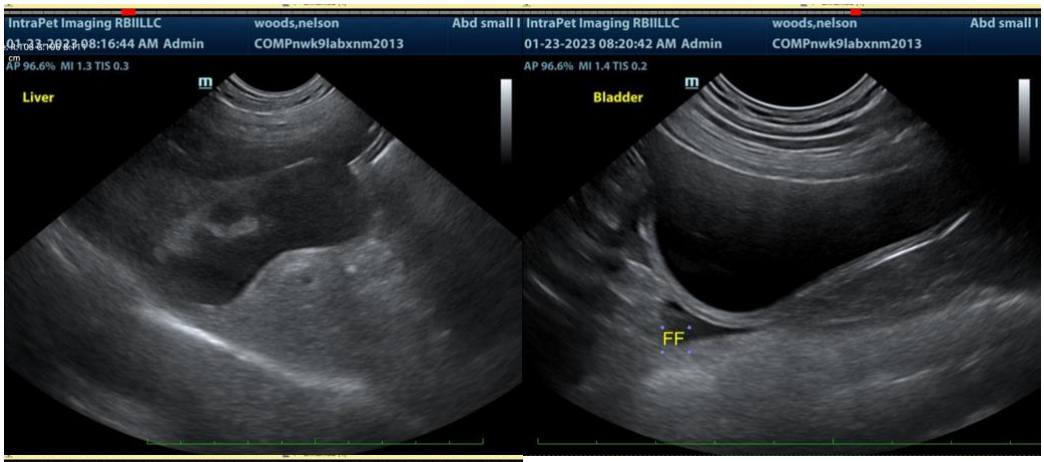
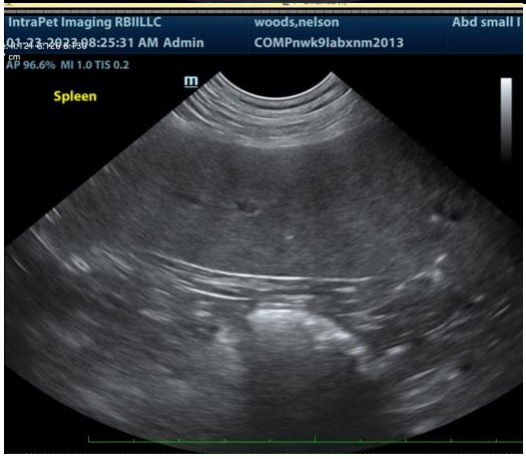
2 Dist 3.25 cm
IntraPet Imaging RBIILLC
woods,nelson
Adult ABD
01-23-2023 08:33:09 AM Admin
COMPnwk9labxnm2013
AP 96.6% MI 1.2 TIS 0.5
CR MED





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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com