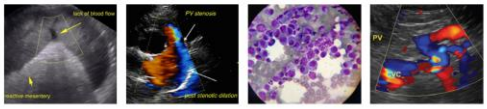
PAUS
Pet Animal Ultrasound Service



SonoPath
Clinical Sonography & Telecytology
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PATIENT
Nibbles Fox

SPECIES
Canine

BREED
Havanese

SEX
FS

AGE
15 yrs

WEIGHT
16 lbs.

INTERPRETED BY
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Norfold County VS

REFERRING VET
Amelia Ragon, DVM

INVOICE
14895

DATE
9-15-22

PRESENTING CLINICAL SIGNS

Presented for lower urinary signs. Soft tissue focal opacity seen a AFAST along body of bladder on 7/2022. Discussed with owner polyp vs. neoplasia. Owner elected to perform BRAF test which came back positive. Due to patient's age, owner has elected to monitor tumor and has decided against surgery vs. chemotherapy at this time. Historical grade II-III/VI left systolic murmur and stage 2 CKD. FNA of splenic mass taken at time of ultrasound.
Abnormal PE/Chem/CBC/UA Results: Creat 1.8, BUN 39

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

A sessile based, small, nonhomogeneous mass was present in the mid-dorsal urinary bladder wall extending mildly into the urinary bladder lumen measuring 1.3 cm x 0.94 cm. The mass was not in the area of the ureteral papilla. Doppler evaluation of the mass confirmed blood flow within the mass. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal.

Intermittent medial iliac lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). A solitary medial iliac lymph node exhibiting focal hypoechoic to nodular parenchyma was present. An example lymph node measured 1.7 cm x 0.35 cm with maintained width: length ratio (<0.5).

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint hyperechoic cortical foci, along with intermittent small cortical cysts and mild pyelectasia were present in both kidneys. The pinpoint hyperechoic cortical foci may indicate pinpoint areas of microinfarction, fibrosis, or mineralization. The left kidney measured 4.2 cm in length. The right kidney measured 4.8 cm in length.

Adrenal Glands

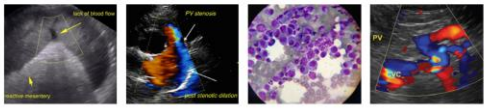
Both adrenal glands exhibited mild irregular capsule asymmetry and subtle nonhomogeneous parenchyma. The left adrenal gland measured 0.50 cm width at the caudal pole and 0.59 cm width at the cranial pole. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.44 cm width at the cranial pole.

Spleen

The spleen exhibited overall normal size with primarily maintained symmetrical capsule contour. Mildly expansive to irregular hypoechoic mass was present on the cranial spleen measuring 3.4 cm in diameter. Concurrent solitary discrete nondisruptive nodule was noted in the medial spleen adjacent to the hilus measuring 0.81 cm in diameter.

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were



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normal in appearance without signs of congestion. The gallbladder was non-distended in size containing mild, nondependent, mildly echogenic gallbladder debris. The gallbladder and peripheral gallbladder were sonographically normal. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild, variably hyperechoic to focally shadowing ingesta/ chyme.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No omental masses, omental lymphadenopathy, or peritoneal free fluid were noted.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Sessile based small dorsal urinary bladder mass - consistent with neoplastic criteria i.e., transitional cell carcinoma
- Mildly prominent to nodular medial iliac lymphadenopathy
- Bilateral chronic renal changes exhibiting mild pyelectasia, intermittent cortical cysts, and suspected pinpoint cortical microinfarction, fibrosis, or mineralization
- Mild expansive hypoechoic cranial splenic mass with concurrent separate discrete mid splenic nodule

Secondary Findings

- Mild nonhomogeneous to remodeled pancreas - likely patient variant and incidental
- Mild gallbladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although sampling is required for further definition, concern for neoplastic cranial splenic mass i.e., sarcoma, round cell neoplasia, or other, is warranted. Benign etiologies such as hyperplasia, hematopoiesis, infarct, hematoma, splenitis, etc., are also possible. Correlation with pending splenic FNA cytology is recommended.

Sonographic monitoring of the medial iliac lymph nodes for evidence of metastatic criteria going forward Is suggested. However, no overt evidence of regional lymphatic metastasis at this time. Piroxicam trial with close monitoring of renal parameters may be considered.

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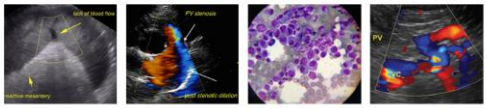

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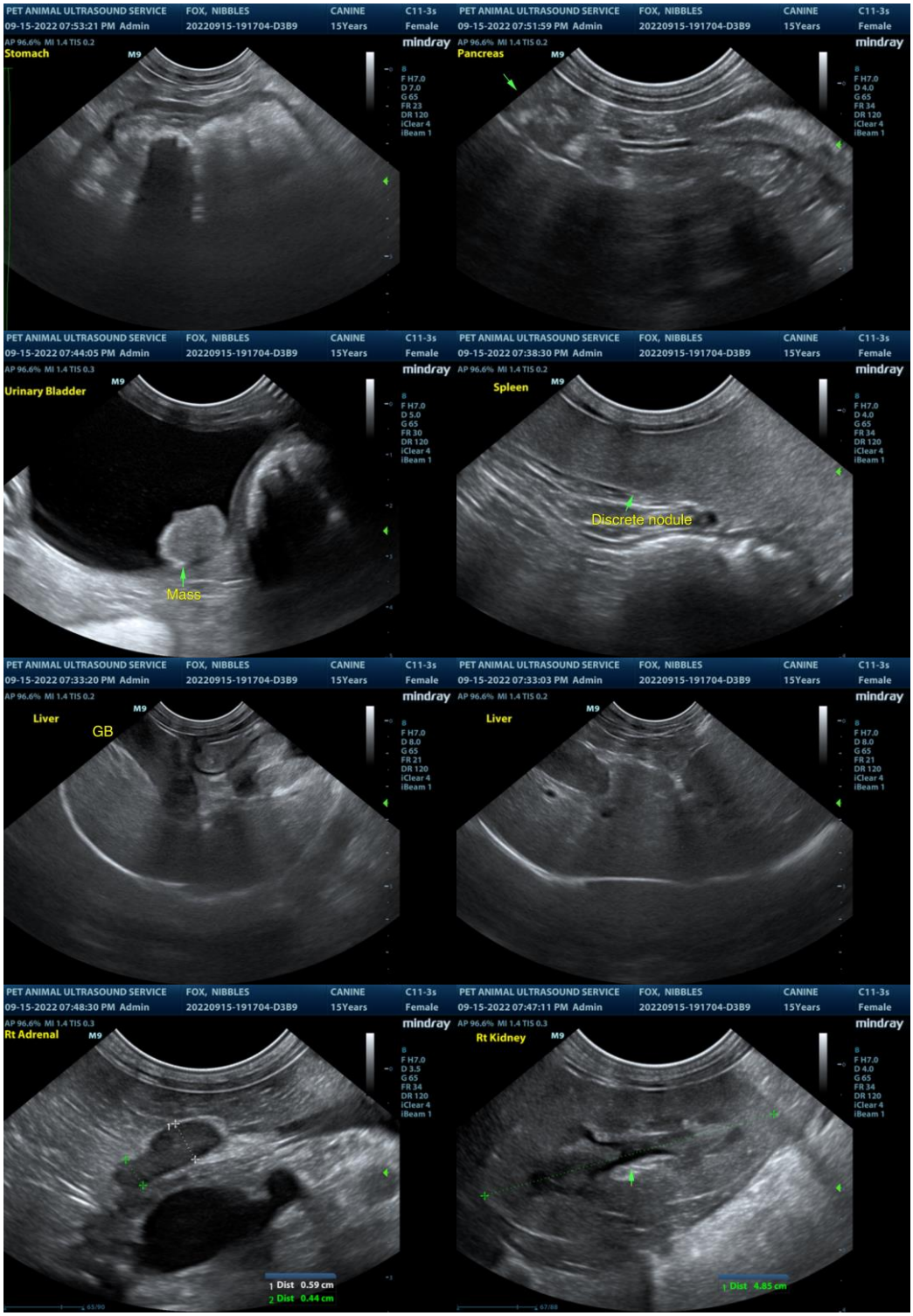

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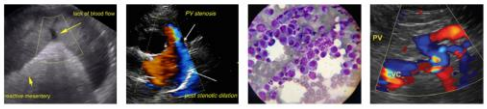

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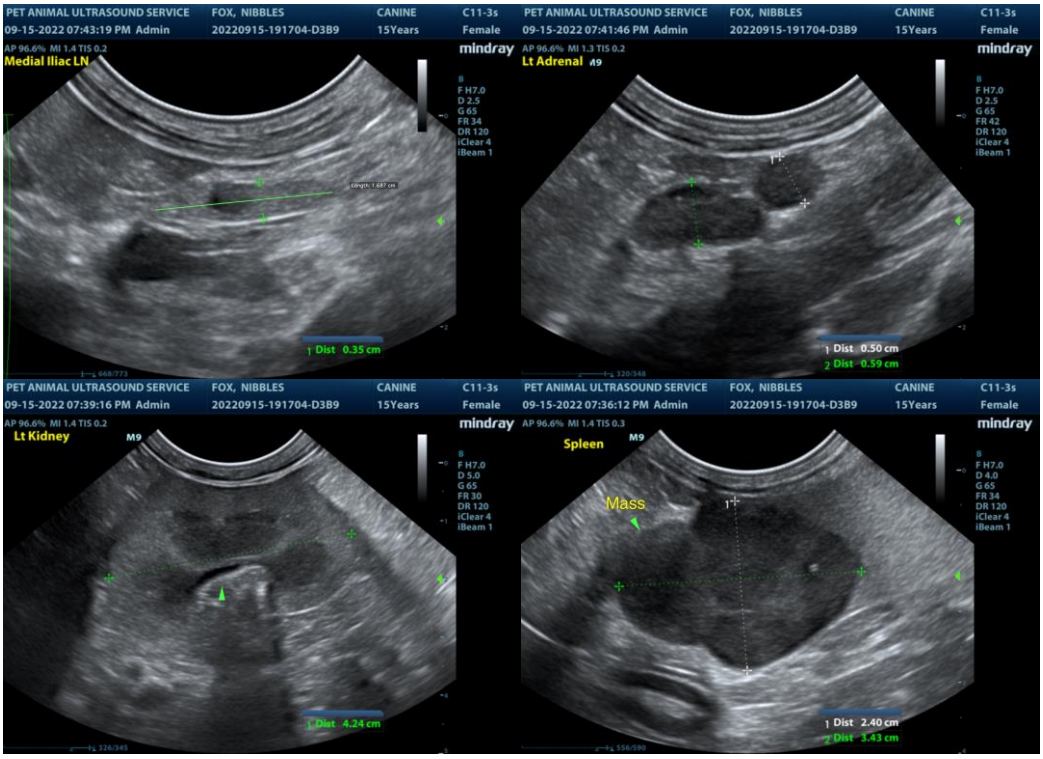

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com