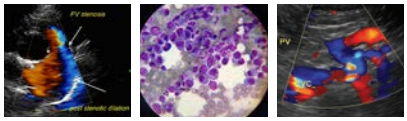
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE

5/24/22

PATIENT

Pudgie Sinclair

SPECIES

Canine

BREED

Shih Tzu

SEX

Male

AGE

5/26/14

WEIGHT

13.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Homeward Bound Mobile VS

REFERRING VET

Dr. Vance

INVOICE

37905

PRESENTING CLINICAL SIGNS

Hx of potential liver mass diagnosed at Falls Road this weekend.

Current Medications: None listed.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: IV Buprenex.
Stat Report: Not requested.

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 prostate is large in size (2.68 cm x 2.44 cm) but has a regular shape with smooth external margins. The parenchyma is hyperechoic and heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (4.37 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 (4.69 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 large in size measuring 1.22 cm at the cranial pole, 1.34 cm at the caudal pole, and 2.9 cm in length. It is observed in its normal position cranial to the left renal artery. It is abnormal in appearance in that it is hypoechoic with somewhat irregular margins and is somewhat rounded in appearance. There is no evidence of vascular invasion.

The right adrenal gland is large in size measuring 1.16 cm at the cranial pole, 0.97 cm at the caudal pole, and 2.72 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 somewhat irregular in appearance in that it is hypoechoic with irregular margins and rounded in appearance.

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. No focal parenchymal abnormalities are visualized.

Liver

The liver is large in size, and normal in 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. There are numerous ill-defined, isoechoic mass effects primarily visualized caudomedial/right-sided with mass lesions coalescing, measuring 4.1 cm, 2.85 cm, and possibly a very large, more caudal lesion measuring approximately 8.0 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder 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 mildly 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

There is a small amount of free abdominal fluid. There is a severe diffuse mesenteric lymphadenopathy with enlarged mesenteric lymph nodes clustered cranial to the left kidney, caudal to the stomach, and in the caudal abdomen and at the root of the mesentery. Examples of lymph node measurements include 1.7 cm x 3.39 cm and 1.5, 1.29 cm in width. Lymph nodes are rounded and hypoechoic. The omentum is generally of increased echogenicity.

Other

Both testicles are visualized and appear within normal limits.

Small volume pleural effusion is visualized cranial to the diaphragm.

A hypoechoic nodular mass effect is visualized in the cranial mediastinal region, measuring approximately 2.86 cm x 2.26 cm.

PRIMARY FINDINGS

- Large, hyperechoic, heterogeneous prostate – Prostatic changes are most consistent with benign prostatic hyperplasia. Other differentials include bacterial prostatitis and prostatic neoplasia. However, given the lack of lower urinary tract symptoms, these differentials are considered less likely in this patient.

- Bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

- Large, heterogeneous liver with large, ill-defined mass effects – 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. There are numerous ill-defined

mass effects visualized on the liver. These are somewhat isoechoic and could represent primary liver masses (benign or cancerous).

- Small volume pleural and peritoneal effusion.
- Severe diffuse mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.
- Hypoechoic nodular mediastinal mass – This could represent a benign or cancerous mediastinal mass lesion.

SECONDARY FINDINGS

- Mildly 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.

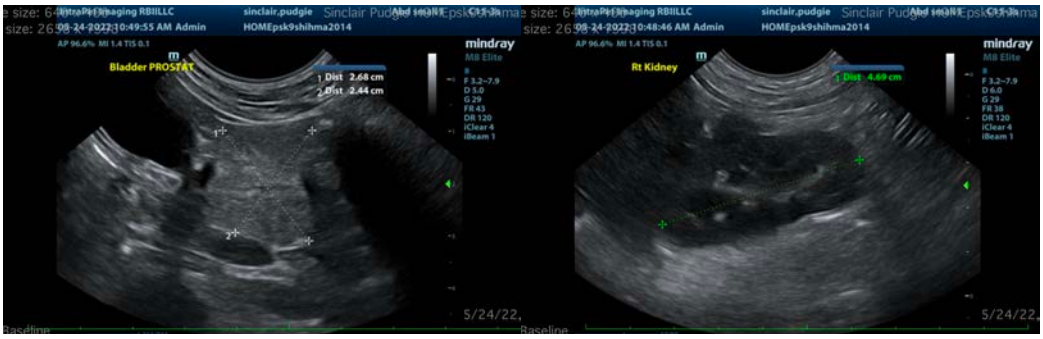
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

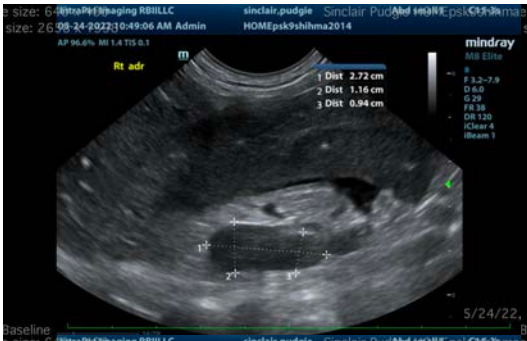
There is a severe diffuse mesenteric lymphadenopathy present, which is very concerning for a possible metastatic neoplastic process, although other possibilities exist. Recommend a fine needle aspirate of a mesenteric lymph node and the liver. Additionally, you could consider sampling of the pleural effusion or the cranial mediastinal mass. Primary differential would be round cell neoplasia, but there is also the possibility of multiple concurrent disease processes.

Both adrenal glands appear enlarged. This could be consistent with pituitary dependent hyperadrenocorticism or metastatic disease involving the adrenals.

The prostate is large and hyperechoic. The appearance of the prostate in this individual is most consistent with benign prostatic hypertrophy +/- prostatitis. Consider a urinalysis and culture.

If cytologic sampling is not sufficient for a diagnosis, then you could consider a CT scan of the thorax and abdomen to further evaluate the mediastinal mass and hepatic masses visualized. 3-view thoracic radiographs are recommended.

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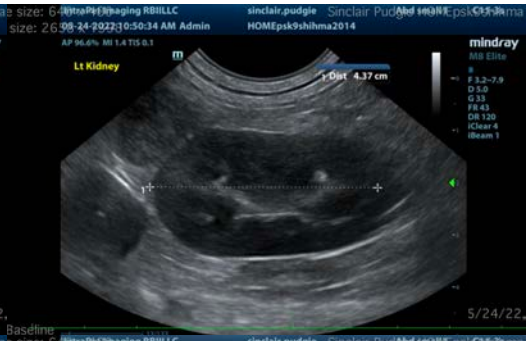
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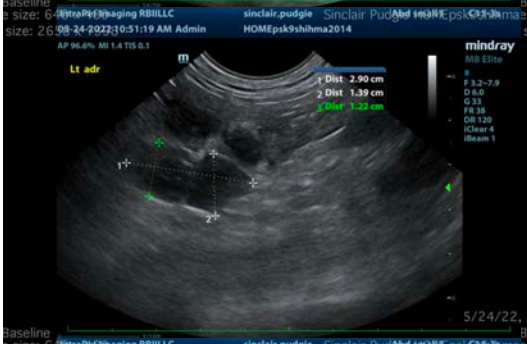
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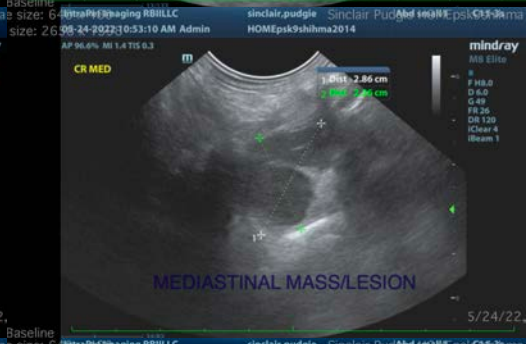
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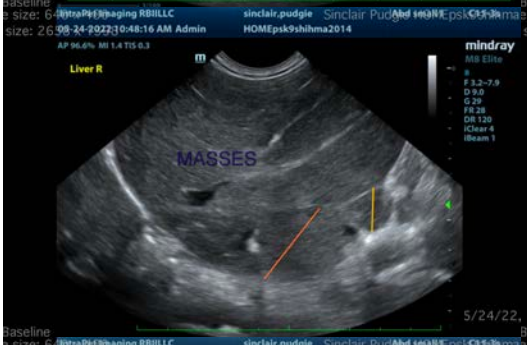
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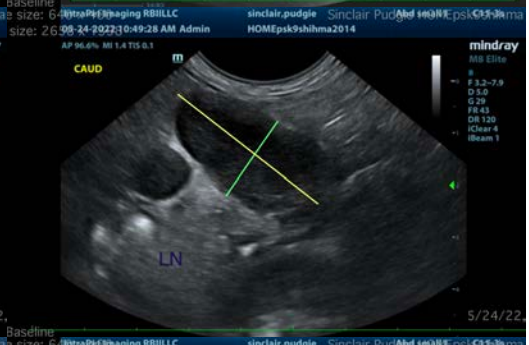
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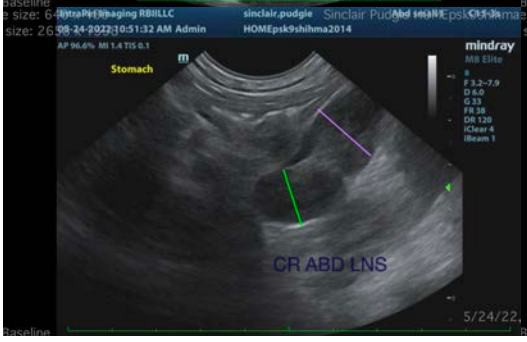
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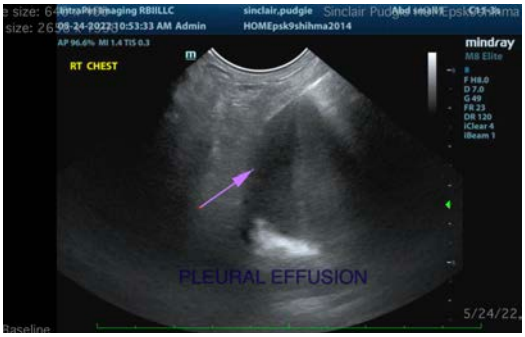

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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