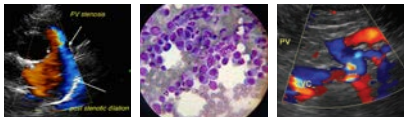
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

12/15/22

PATIENT

Bert Hendrickson

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

4/17/10

WEIGHT

9.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Abbey AH

REFERRING VET

Dr. Kluttz

INVOICE

43477

PRESENTING CLINICAL SIGNS

Previous Intrapet scan at Perry Hall Animal Hospital around 2013-2014, diagnosis of Addison's Disease. History of IVDD in T - L region of spine. History of recurrent pancreatitis. On 11/24/22 exam - patient was seen for ADR, shaking. Diagnosed with spinal discomfort in lateral spine and UTI. Treated both. Confirmed UTI cleared 12/5/22. Bert improved. On 12/12/22 exam - ADR - Shaking, vomited once, uncomfortable. Discomfort in caudal abdomen.

Current Medications: Cerenia, Prednisolone 0.25mg SID, Percorten injection every 28 days
Lab Results: NSF.
Date of Previous IntraPet Ultrasound: 2013-2014
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly 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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (4.33 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is large and irregular in shape, measuring 5.43 cm. It has decreased corticomedullary distinction with small cortical cysts and non-obstructive corticomedullary mineralizations. There is a large, hypoechoic, mixed echogenic, irregular mass effect visualized associated with the cranial pole of the right kidney, measuring 3.97 cm x 4.11 cm. A smaller hypoechoic nodule measures 1.4 cm in diameter, which is either a separate nodule or an extension of the larger mass effect. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is small, measuring 0.26 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 small, measuring 0.39 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 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 are multiple ill-defined hypoechoic to slightly mixed echogenic nodules within the splenic parenchyma. One of these measures 0.89 cm x 0.97 cm. Another measures 0.81 cm x 0.52 cm.

Liver
The liver is subjectively normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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. Duodenum wall measures 0.45 cm. Jejunum wall measures 0.37 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
A brief view of the heart was submitted. No significant pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

- Bilaterally small adrenal glands – This is consistent with the diagnosis of Addison's disease and chronic Prednisone supplementation.

- Large, irregular, hypoechoic, somewhat mixed echogenic mass effect in the cranial pole of the right kidney – Findings are concerning for a neoplastic process. A benign or metastatic lesion is possible. Recommend a blood pressure evaluation and fine needle aspirate of the renal mass.

- Multiple hypoechoic to mixed echogenic small splenic nodules – Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

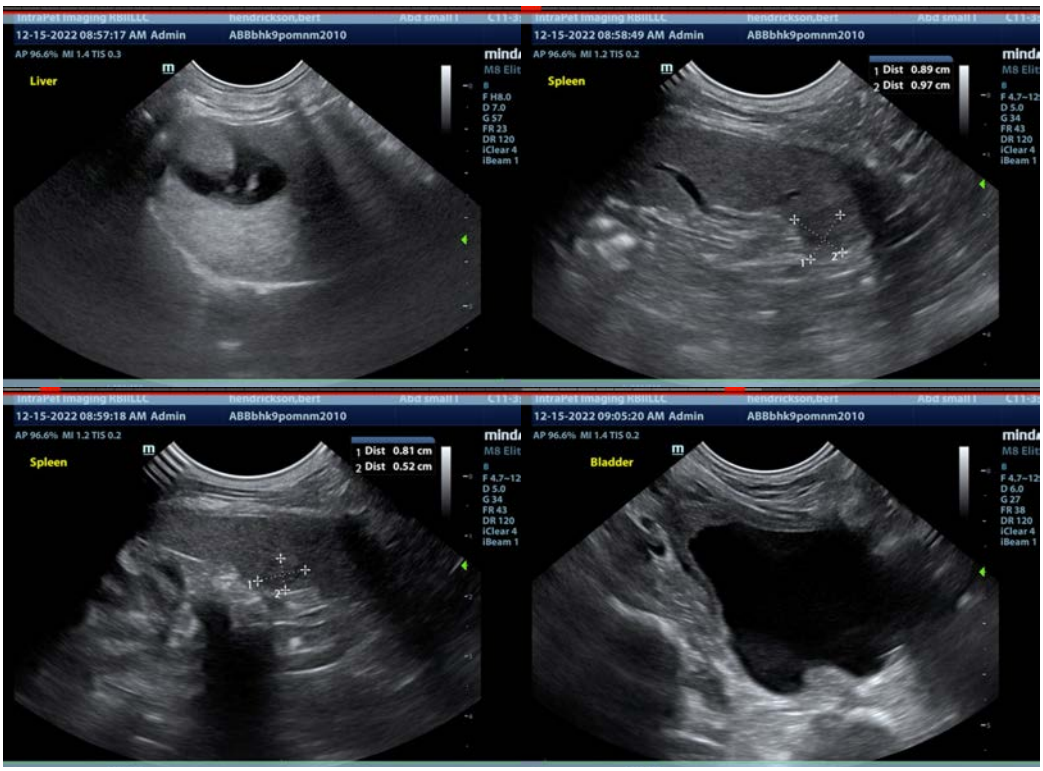
- Hyperechoic liver – The diffuse hepatic changes are non-specific and can be seen with vacuolar hepatopathy, reactive change, nodular hyperplasia or, less likely, inflammatory/immune-mediated disease, infiltrative neoplasia, or other hepatopathy. This is likely due to chronic steroid administration.

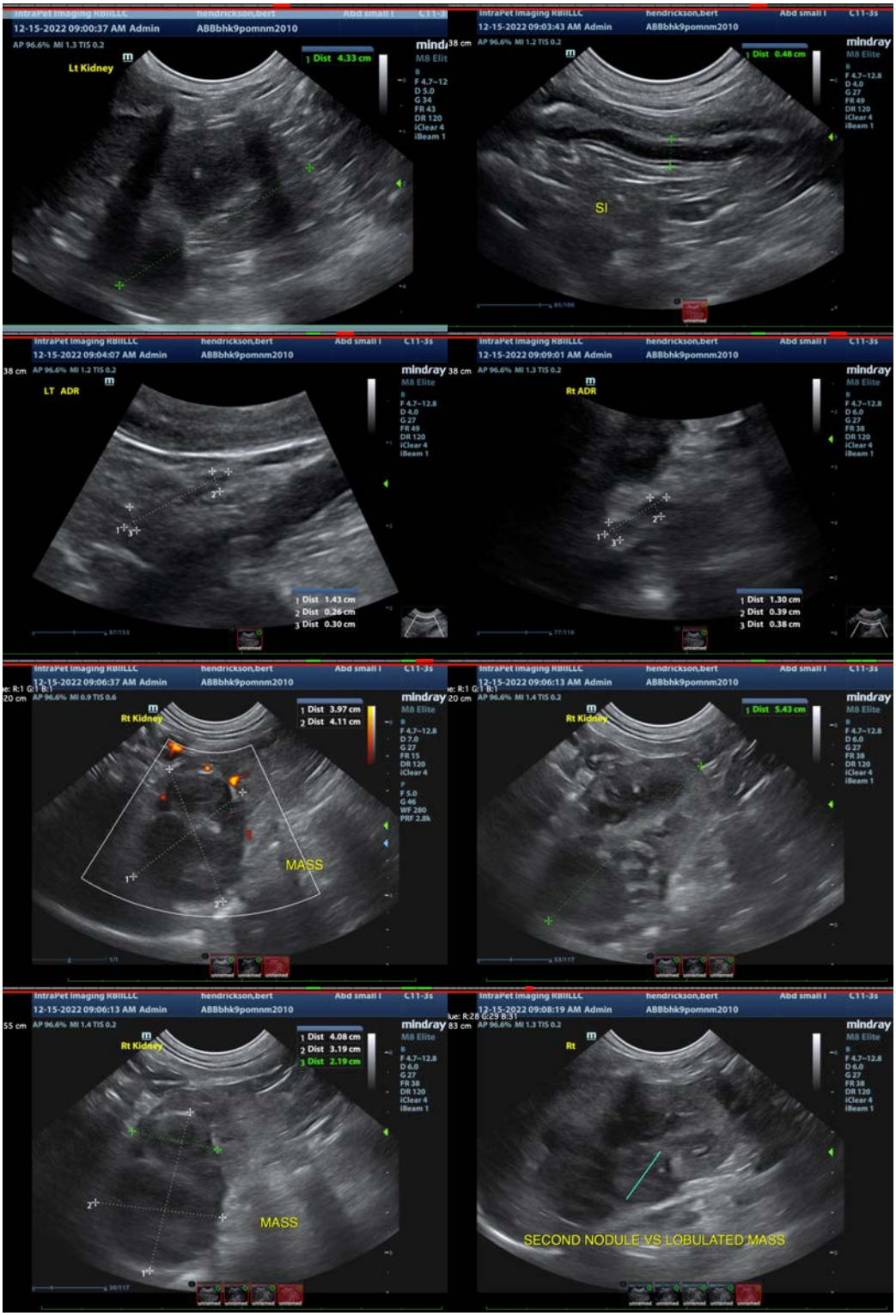
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mass effect associated with the right kidney. This does not appear to be obstructing urine flow, and it is likely that the right kidney is still functional. Recommend a blood pressure evaluation and a fine needle aspirate of the right renal mass as well as 3-view thoracic radiographs. The nodules visualized in the spleen could represent metastatic lesions or be unrelated and represent either a secondary cancerous process or could be benign lesions. If possible, fine needle aspirate of the spleen (ideally splenic nodules) could be helpful.

If there is no obvious evidence of metastasis and you can obtain a cytologic diagnosis based on a fine needle aspirate, consider consultation with a veterinary oncologist regarding prognosis and treatment options. If a cytologic diagnosis cannot be obtained, then consider referral to a veterinary surgeon, and ideally a preoperative CT scan to look for evidence of metastasis and surgical planning. Additionally, consider the renal function in the remaining kidney, as there are some age related changes visualized.

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Rt
SECOND NODULE VS LOBULATED MASS

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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