



**PATIENT PRESENTING CLINICAL SIGNS**

Oliver Martinez History: Hx of PU/PD, licking front paws, decreased energy, elevated liver values

**SPECIES** Abnormal PE/Chem/CBC/UA Results: ALKP 1343, ALT 271, AST 39,

**Canine ULTRASONOGRAPHIC EXAMINATION OF THE**

**Urinary System**

**BREED** The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX** Neutered Male The prostate is normal in size (0.77 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE** 10 Years 2 Months The left kidney presented normal size (5.14 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**WEIGHT** 25 Pounds The right kidney presented normal size (5.20 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**INTERPRETED BY Adrenal Glands**

Andrea Nicastro, DVM, Diplomat ACVIM (Small Animal Internal The left adrenal gland is mildly enlarged (0.79 cm at cranial pole) (0.81 cm at caudal pole) (2.30 cm in length); with a normal shape. The parenchyma is slightly heterogeneous with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature appear normal.

**IMAGING PERFORMED BY** The right adrenal gland is mildly enlarged (1.09 cm at cranial pole) (0.73 cm at caudal pole) (3.22 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Loetitia Saint-Jacques, RVT

**HOSPITAL NAME Spleen**

Fairgrounds AH The spleen is subjectively prominent in size (1.78 cm in width at the level of the hilus) with irregular peripheral contours. A 1.45 cm x 1.06 cm cavitated heterogeneous nodule is observed approximately mid spleen. In addition, a 2.24 cm x 1.34 cm slightly heterogeneous swelling/nodule is observed at the caudal pole. Ill-defined hyperechoic nodules are also seen. Splenic vasculature appears normal with no evidence of thrombosis.

**REFERRING VET**

Dr. Sarah Kalivoda

**INVOICE Liver**

13267 The liver is subjectively prominent in size with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and mostly homogeneous in appearance. A tiny cystic nodule is

**DATE**

12/30/21



**PATIENT**

Oliver Martinez

observed on the left side. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**SPECIES**

Canine

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic mostly gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal.

**BREED**

Boston Terrier

**Gastrointestinal**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

**SEX**

Neutered Male

**Pancreas**

**AGE**

10 Years 2 Months

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

**WEIGHT**

25 Pounds

**Free Abdomen**

There is no evidence of peritoneal effusion. The abdominal lymph nodes are normal/not visible.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal)

**Other**

A brief echocardiogram (no charge) reveals no evidence of pericardial effusion.

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques, RVT

**ULTRASONOGRAPHIC FINDINGS**

**HOSPITAL NAME**

Fairgrounds AH

**Primary Findings**

- The splenic nodules, particularly the cavitated lesion, are concerning for neoplasia. However, benign pathology cannot be completely excluded. The hyperechoic splenic nodules trend toward the benign (i.e., myelolipomas or foci of lymphoid hyperplasia).
- Mild bilateral adrenomegaly. This may be a normal variant for this patient or could be consistent with pituitary-dependent hyperadrenocorticism.

**REFERRING VET**

Dr. Sarah Kalivoda

**Secondary Findings**

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered unlikely.
- Gallbladder debris/sludge, non-mucocele

**INVOICE**

13267

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- Age-related pancreatic remodeling/fibrosis +/- low-grade inflammation, particularly if the patient is painful on abdominal palpation.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Given the splenic lesions, three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease.

**BREED**

Boston Terrier

- If an aggressive approach is desired, a splenectomy with submission of the spleen for histopathology can be considered. Otherwise, a recheck ultrasound is recommended in 4 weeks to assess for progression.

**SEX**

Neutered Male

- Regarding the patient's clinical signs, consider further testing for Cushing's disease (i.e., low dose dexamethasone suppression test or ACTH stimulation test). A urinalysis +/- UPC (if proteinuria is present) should also be considered, if not already performed.

**AGE**

10 Years 2 Months

**WEIGHT**

25 Pounds

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Loetitia Saint-Jacques, RVT

**HOSPITAL NAME**

Fairgrounds AH

**REFERRING VET**

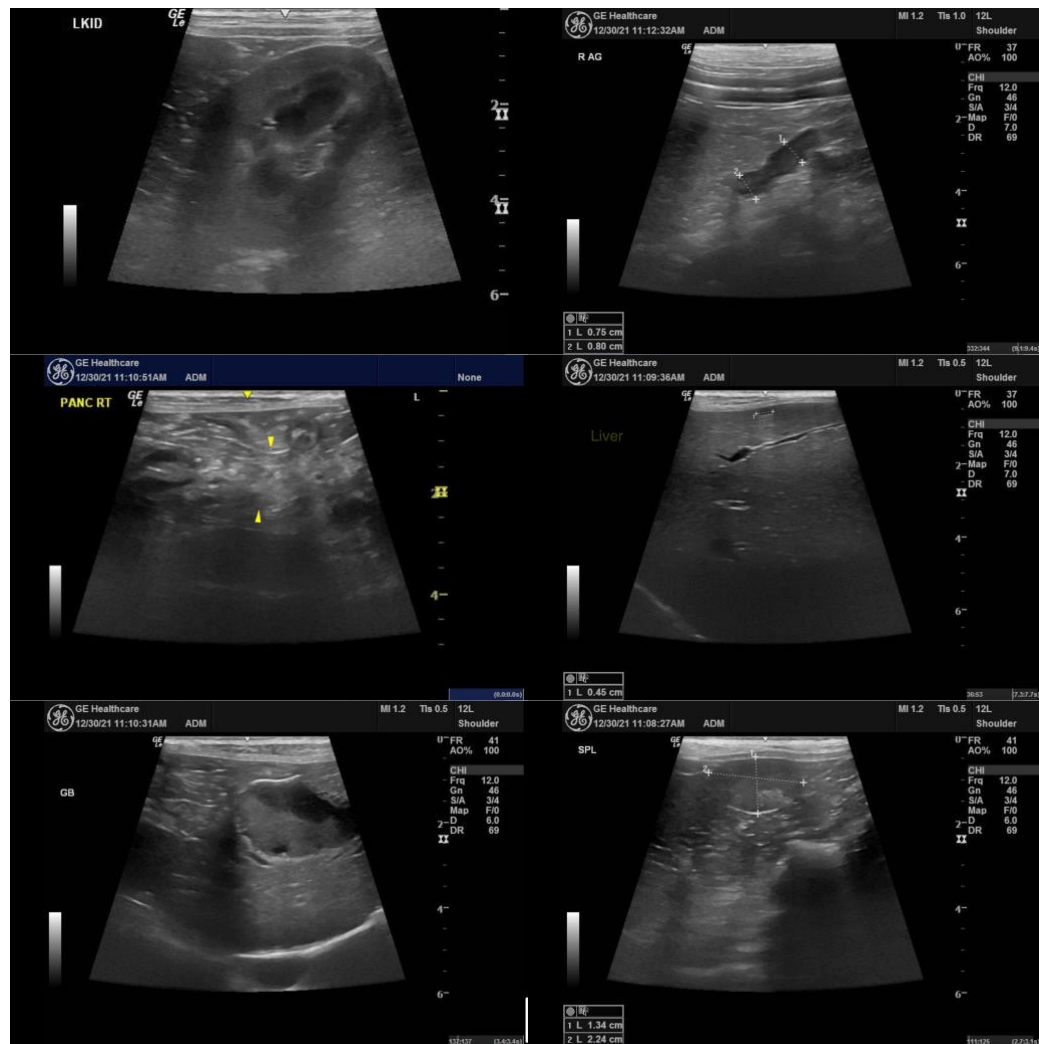
Dr. Sarah Kalivoda

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**PATIENT**

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**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

Neutered Male

**AGE**

10 Years 2 Months

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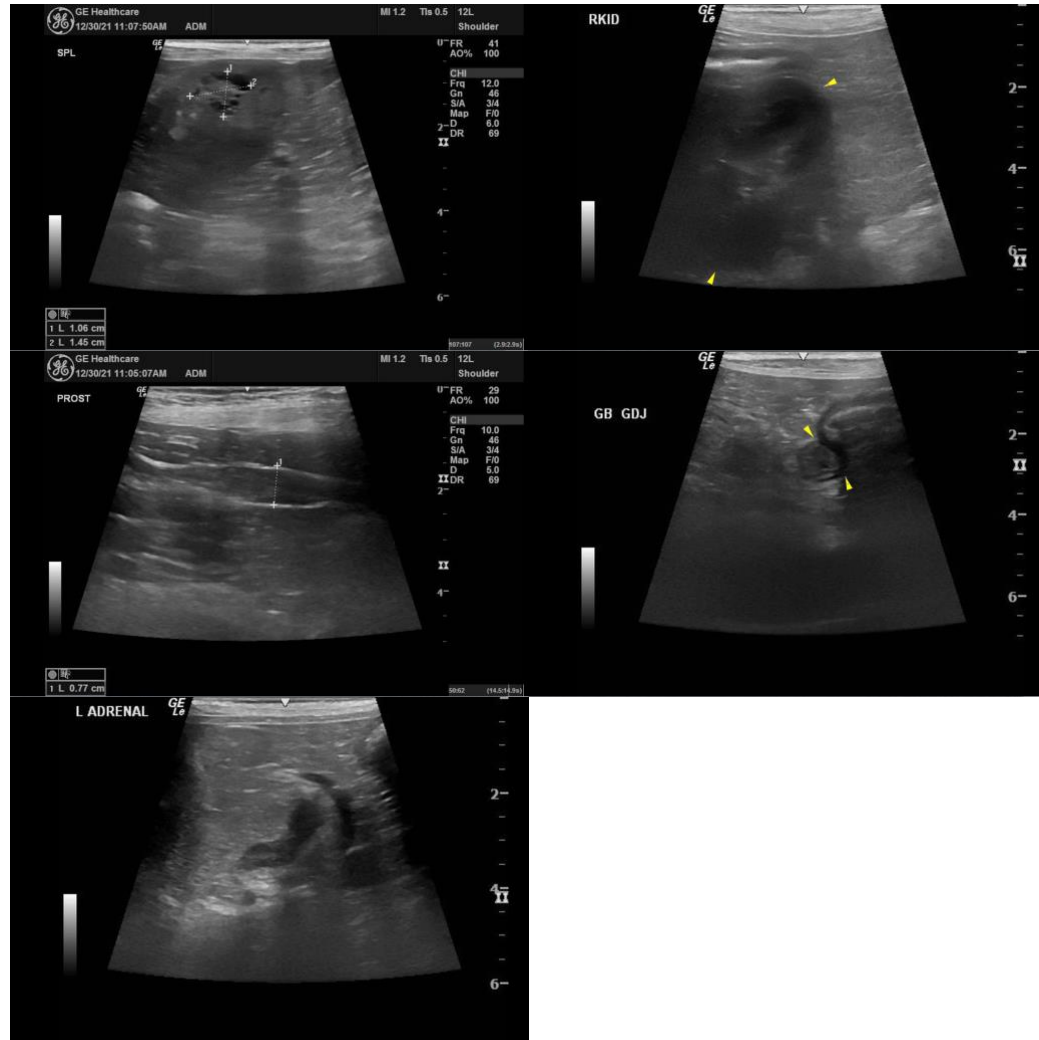
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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