

**DATE PRESENTING CLINICAL SIGNS**

12/13/22

Patient presents for evaluation of decreased appetite with no other clinical signs. Suspected behavioral (which could still be,) but we do have a one pound weight loss in one month. PE is otherwise WNL - see radiology report

PATIENT

Josie Sudano

Current Medications: None current.
Lab Results: WNL.

SPECIES

Canine

Radiographs: Report: Suspect enteritis due to nonspecific etiologies. Systemic disease such as pancreatitis can cause bowel atony resulting in a similar radiographic change. Suspect microhepatia. Given the young age of the patient a portosystemic shunt does need to be considered. This could be a normal patient variant. Given the decrease in right renal size it is suspected the pump appearance of the left kidney is

BREED

Shih Tzu

secondary to compensatory renal hypertrophy and there may be a congenital renal abnormality on the right causing the decrease in right renal size. Primary left kidney disease (i.e. hydronephrosis, pyelonephritis, perirenal pseudocyst or less likely juvenile renal lymphoma) cannot be ruled out.

SEX

Spayed Female

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Torbugesic.

Stat Report: Not requested.

AGE

12/9/21

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.

WEIGHT

14 Pounds

The left kidney is normal in size/borderline large at 4.64 cm. Overall echogenicity is normal with adequate 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.

INTERPRETED BY

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

The right kidney was not visualized on today's exam, suspect agenesis or very small/abnormal right kidney.

IMAGING PERFORMED BY

Stephanie Warga
RDMS, RVT

Adrenal Glands

The left adrenal gland is normal in size measuring 0.36 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.

HOSPITAL NAME

Perry Hall AH

The right adrenal gland is normal in size measuring 0.35 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.

REFERRING VET

Dr. Miller

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.

INVOICE

43416

Liver

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

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains mild fluid. 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. Jejunum wall measures 0.26 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.

ULTRASONOGRAPHIC FINDINGS

- Large left kidney and not visualized right kidney – suspect left renal hypertrophy. The right kidney is either small and irregular or possibly not present. Correlate with abdominal radiographs.
- Borderline small liver – I suspect this liver is within normal limits, as portal markings appear adequate, and the ratio between portal vein, aorta, and vena cava appear appropriate.
- Very mild fluid dilation of the stomach and small intestine – This is likely within normal limits but could represent mild stasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

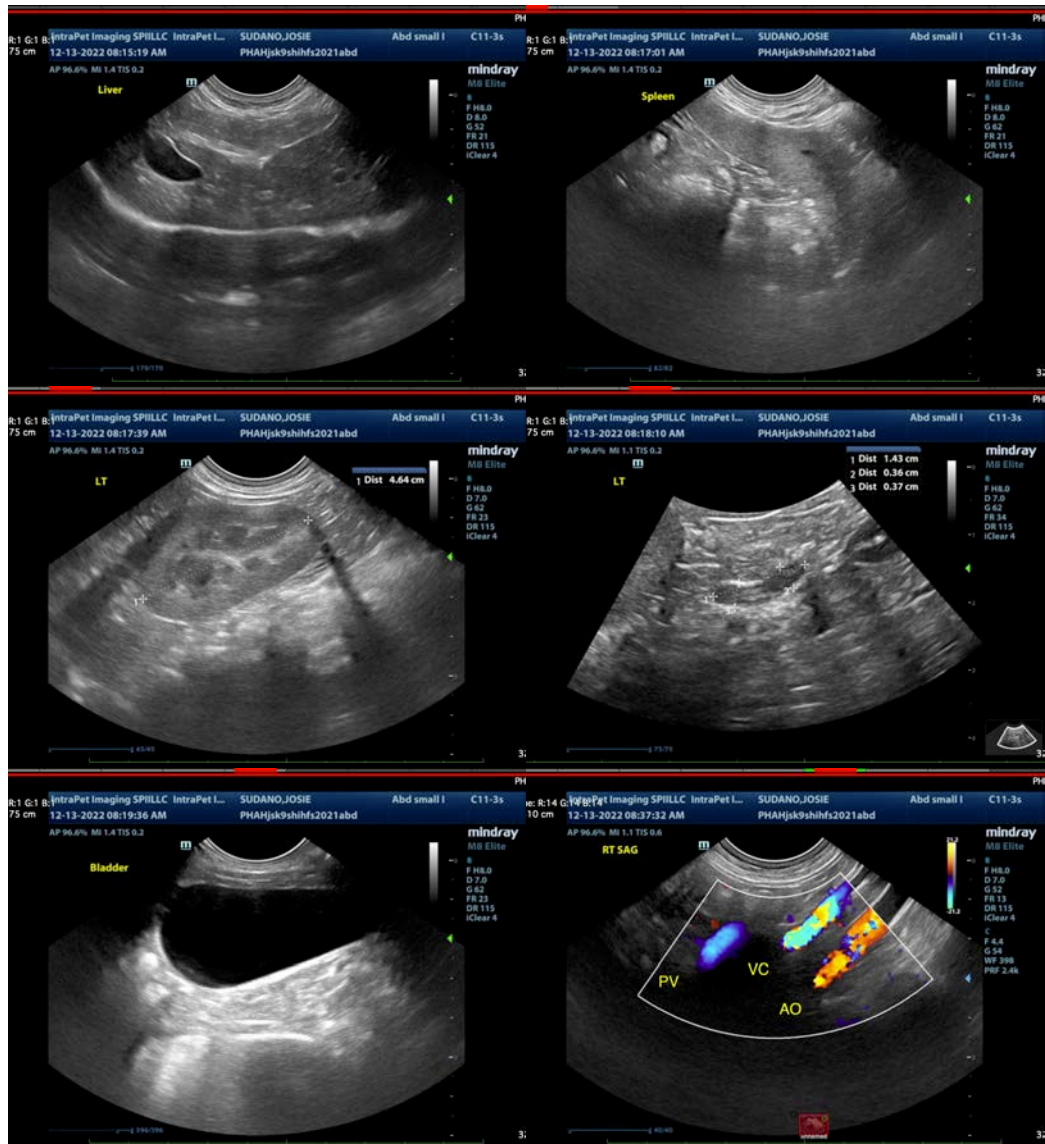
The left kidney appears somewhat large, and the right kidney was not visualized on today's exam. I suspect this is most consistent with left-sided renal hypertrophy and either an absent or small dysplastic right kidney.

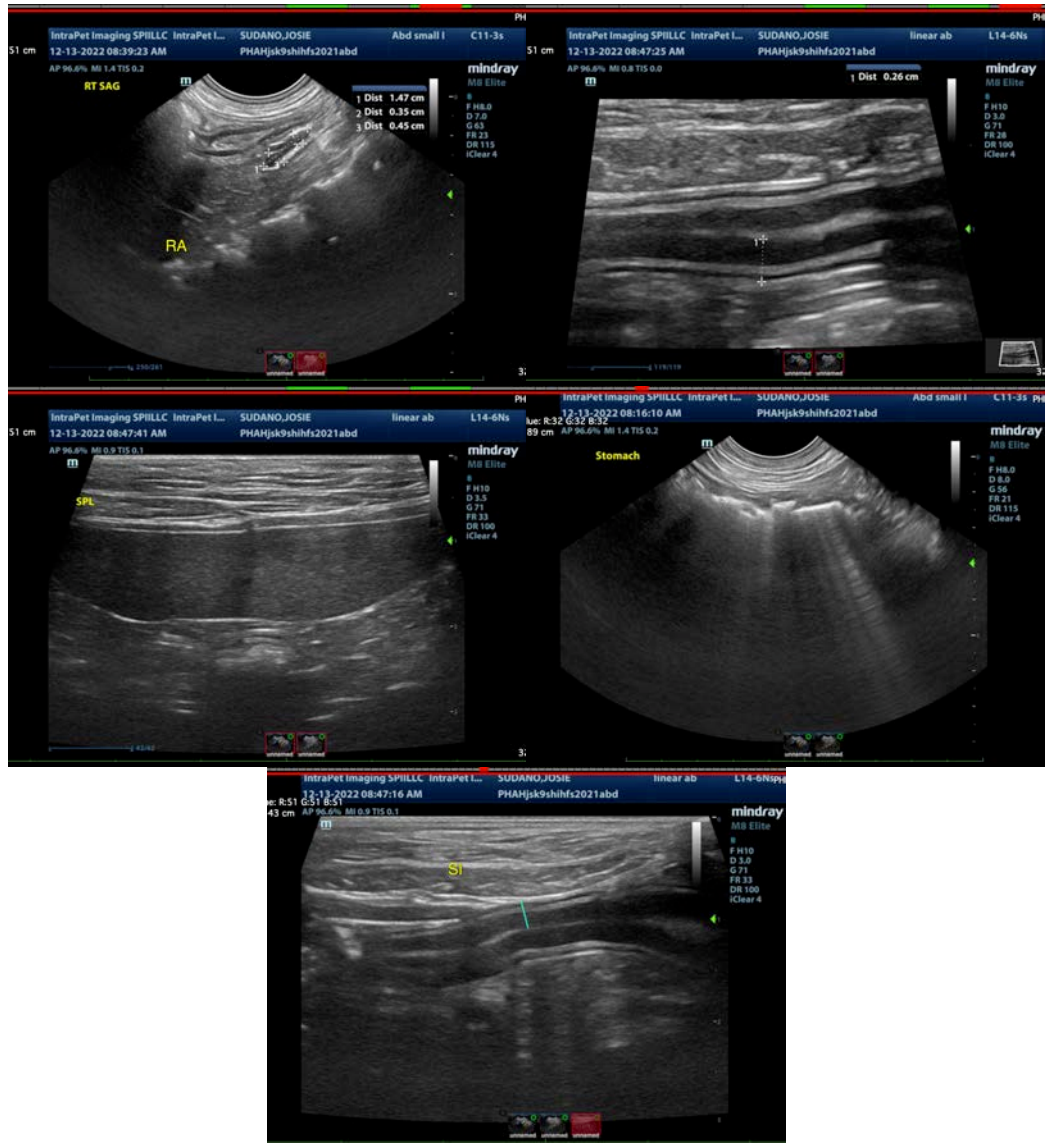
The liver appears relatively normal, but could subjectively be slightly small. No evidence of a shunt, but small shunting vessels can be missed with ultrasound. Recommend a liver function test with pre- and post-prandial bile acids. If bile acids are significantly elevated, consider a contrast CT scan +/- liver biopsy to further evaluate for a shunt, microvascular dysplasia, etc.

No focal lesions are visualized associated with the gastrointestinal tract to explain the inappetence and weight loss reported. Unfortunately, not all gastrointestinal disease can be diagnosed by ultrasound alone.

- Consider screening for Addison's disease.

- Consider a hydrolyzed or novel protein diet in the case of food allergy/dietary sensitivity.
- Recommend a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to look for additional evidence of small intestinal disease.
- Recommend chronic probiotic therapy.
- Recommend the aforementioned liver function test.
- Consider screening and treatment for GI parasitism.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com