

**DATE PRESENTING CLINICAL SIGNS**

7/13/22 Patient presented on 7/5 for lethargy, not eating or drinking well for two days. On exam, patient had moderate tartar and anisocoria

PATIENT

Spencer Snyder

Current Medications: On 7/5: Administered 300 ml SQ LRS, Administered 0.76 ml SQ Convenia, Administered 0.76 ml SQ Cerenia Administered 1.7 ml Baytril (22.7 mg/ml) IM. Since then, the owner has been unable to administer any medication orally, including the dispensed Baytril and Entyce

SPECIES

Canine

Lab Results: 7/5 CBC: Decreased PDW. Chem: Elevated BUN 29 mg/dL Elevated ALT 821 U/L, Elevated GGT 24 U/L. 7/9: CBC: NSF. Chem: Elevated BUN 39 mg/dL, Elevated ALT 392 U/L.

BREED

Shih Tzu

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Requested.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

17.1 Pounds

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

8/12/08

The prostate is normal in size and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

INTERPRETED BY

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

The left kidney has a normal shape and size (3.85 cm) with corticomedullary rim sign. Overall echogenicity is slightly hyperechoic with poor 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.

IMAGING PERFORMED BY

Andi Parkinson RDMS

The right kidney has a normal shape and size (3.69 cm) with corticomedullary rim sign. Overall echogenicity is slightly hyperechoic with poor 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.

HOSPITAL NAME

Paradise AH

Adrenal Glands

The left adrenal gland is normal in size measuring 0.59 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.

REFERRING VET

Dr. Twardzik

The right adrenal gland is normal in size measuring 0.51 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.

INVOICE

39412

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 subjectively normal 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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is mildly dilated with fluid and occasional small bits of irregular shadowing material, most consistent with normal ingesta and gas. 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 layering is largely adequate and there is no impression of reduced peristaltic activity. In some views, there is a focal hypoechoic region associated with the pylorus, measuring approximately 1.13 cm x 0.90 cm. This could represent an associated cystic region, focal wall thickening, etc. It is difficult to visualize and not apparent in all views, with no surrounding inflammation and no associated structures. Recommend continued monitoring.

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 measured 0.39 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

- Decreased corticomedullary distinction in both kidneys with corticomedullary rim sign – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Clinical significance of the corticomedullary rim sign is uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, FIP, chronic interstitial nephritis, and leptospirosis.
- Focal hypoechoic region associated with the pyloric region in the stomach – The significance of this lesion is currently unclear. Possible differentials include an associated omental cyst, abscess, focal gastric wall lesion, etc.

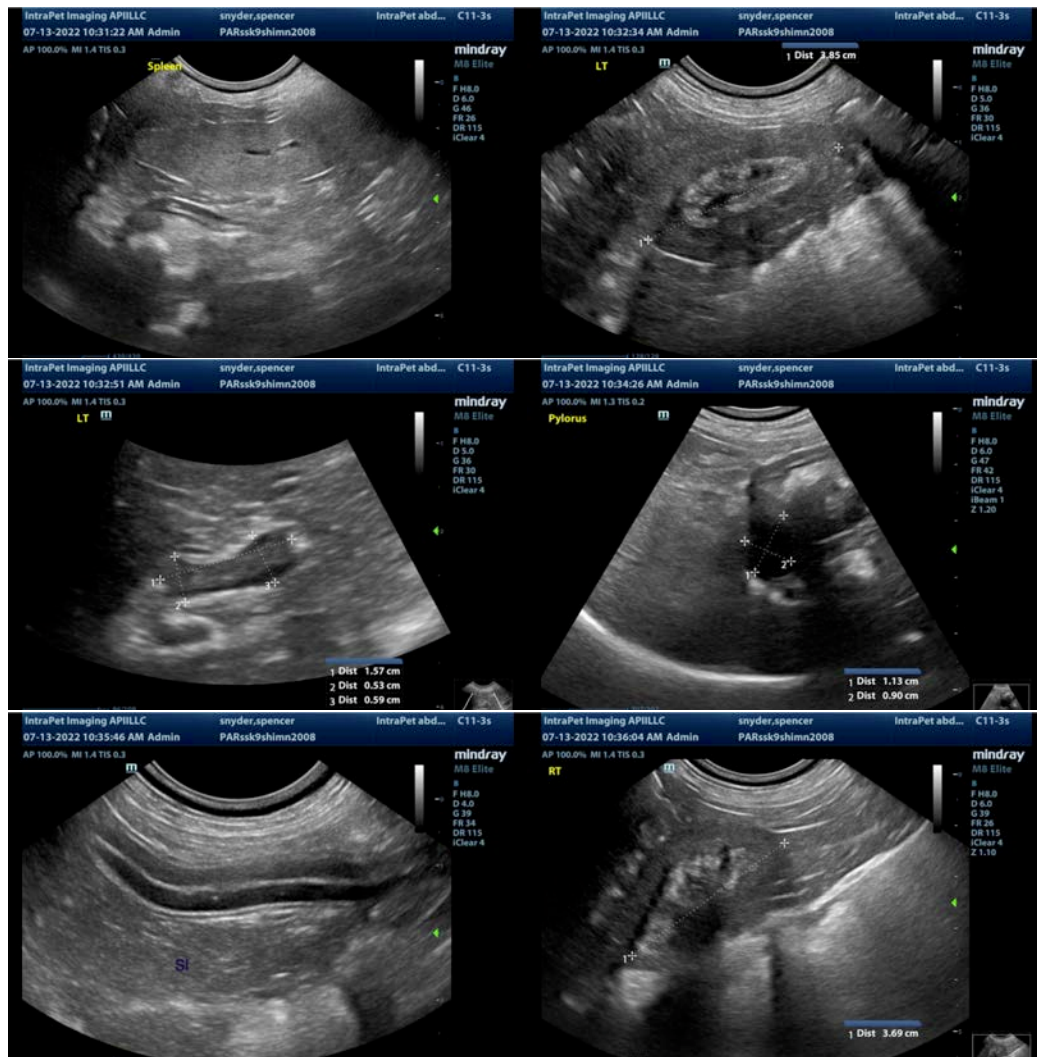
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

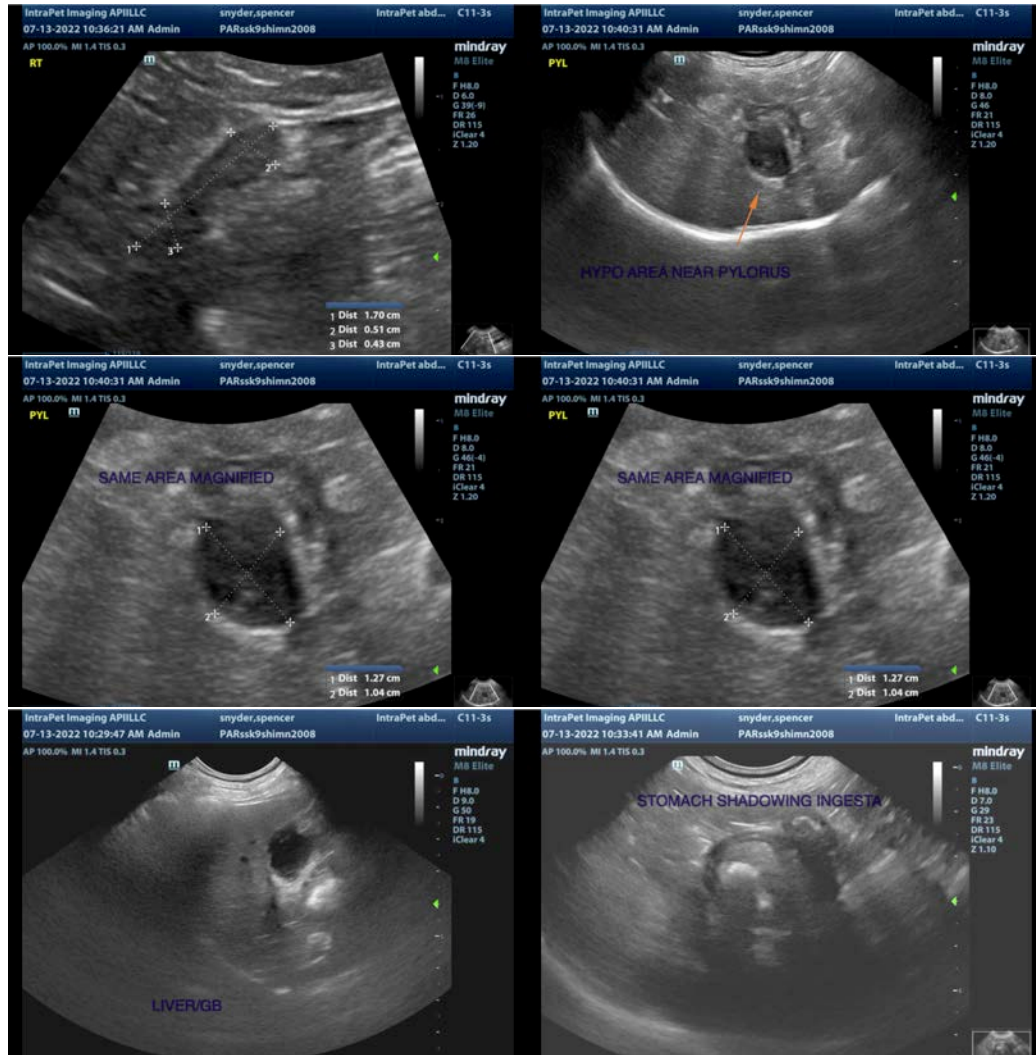
The liver appears largely normal with no focal lesions, and the gallbladder and biliary tract appear within normal limits. An obvious cause for the liver enzyme elevation is not apparent, but the reported values

indicate improvement, which is hopeful for possible resolving acute liver injury. You could consider testing for Leptospirosis, a liver function test, and a fine needle aspirate of the liver if this improvement does not continue.

There is a small hypoechoic region visualized associated with the pylorus. The nature of this lesion is unclear. It has the appearance of a possible gastric wall lesion, but it is not visible in all views of the stomach. It could also be associated with local structures such as a cystic region of the omentum, pancreas, etc. There is no surrounding inflammation. Further evaluation would likely involve advanced imaging (contrast CT scan) and/or exploratory surgery, as this region would be very difficult to sample non-invasively. Alternately, you could consider a recheck ultrasound in 4-6 weeks, sooner if the patient is not doing well.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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