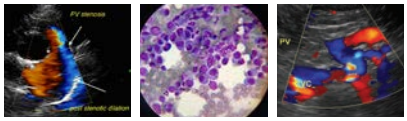
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

3/15/23

PATIENT

Ginger Garten

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

1/22/10

WEIGHT

30.8 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Stevenson Village VH

REFERRING VET

Dr. Rathbun

INVOICE

45925

PRESENTING CLINICAL SIGNS

Decreased app over the past ~6 weeks with weight loss of 5 pounds over the past month. I2/13/23 fracture of 204 that appeared open with no overt swelling, but other signs of moderate periodontal disease. PE unremarkable and CBC/Superchem/T4/UA was sent out (partially to also rule out a flare up of Ginger's historical ITP). Started Entyce, cerenia and started on gabapentin. Labs unremarkable, but UTI and started clavamox. Recheck 2/28/23 because she wasn't doing well, dec app and did not like the Entyce. The owner had only tried giving Entyce a few times and stopped the gabapentin shortly after starting it. Labs 3/6/23 NSF. Rechecked 3/13/23. Ginger had lost 5 pounds since the last PE. Slight murmur (grade I-II/VI left apical systolic), so we also performed thoracic radiographs that appeared to show right-sided heart enlargement. Thoracic radiographs unremarkable, but there was a lack of serosal detail near the stomach and with our in-house US probe I was concerned that I might have appreciated a gastric mass and recommended a barium study. The barium study revealed no overt evidence of any intraluminal gastric masses and the appeared to be no overt abnormalities with gastric emptying and no overt obstructive or neoplastic processes were highlighted.

Current Medications: Cerenia injection (1.4 mL SQ on 3/13/23); currently on cerenia tablets (24 mg - 2 tablets by mouth SID); Ginger was on 3.6 mL Entyce PO SID for a few days starting on 2/13/23, Ginger was on clavamox 250mg at 1 tablet PO SID x9 days starting on 2/14-2/15; Ginger was on gabapentin (300 mg PO BID-TID) for a few days starting on 2/13/23, then again for a few days starting on 2/28/23
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with anechoic urine. The Bladder wall appears somewhat thickened and irregular (0.38 cm). The area of the trigone, ureteral papillae and proximal urethra appear normal with no evidence of mass effects or calculi.

The left kidney has a normal shape and size (6.01 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.

The right kidney has a normal shape and size (5.17 cm) with a small non-obstructive nephrolith. 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, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.72 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is slightly abnormal in that there are numerous pinpoint hyperechoic foci throughout the parenchyma with no deviation in the shape of the adrenal gland.

The right adrenal gland is normal in size measuring 0.65 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 slightly abnormal in that there are numerous pinpoint hyperechoic foci throughout the parenchyma with no deviation in the shape of the adrenal gland.

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 is an iso- to slightly hyperechoic cystic appearing ill-defined nodule in the cranial aspect of the spleen measuring 1.35 cm x 0.91 cm.

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. There is an isoechoic nodule visualized in the mid left aspect of the liver measuring 2.72 cm x 1.87 cm.

The gall bladder lumen is significantly 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. Additionally, there is a significant amount of shadowing dependent sandy debris visualized. 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 mild to moderate 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 0.37 cm. Jejunum wall measures 0.32 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 right limb of the pancreas is prominent and 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
Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is an occasional prominent lymph node, one such lymph node is visualized near the colon measuring 0.53 cm. The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Mildly thickened/irregular urinary bladder wall – This appearance could be exacerbated by lack of urine distention. Consider urinalysis and culture and continued monitoring of the bladder wall irregularities. Findings are most consistent with cystitis, but an underlying/early neoplastic process cannot be ruled out.

- Bilateral small hyperechoic pinpoint foci visualized in both adrenal glands – The significance of this is unknown. At this time this is likely an incidental finding. Recommend continued monitoring.

- Iso- to hyperechoic cystic nodule in the spleen – There is a non-cavitated, isoechoic/cystic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis,

infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Prominent, mottled right limb of the pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

- Isoechoic left-sided liver nodule – This nodule is relatively poorly defined and could represent a benign or early neoplastic process. The appearance trends towards a more benign lesion, but a fine needle aspirate should be considered.

- Significant gallbladder distention with suspended and dependent hyperechoic/sandy debris – Findings are concerning for sandy debris/small choleliths.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are numerous abnormalities described on today's exam, but all of them are relatively mild, and I cannot pinpoint a specific lesion to explain the symptoms described.

There is mild urinary bladder wall thickening and irregularity. Correlate this with urine culture and continued monitoring of the urinary bladder wall.

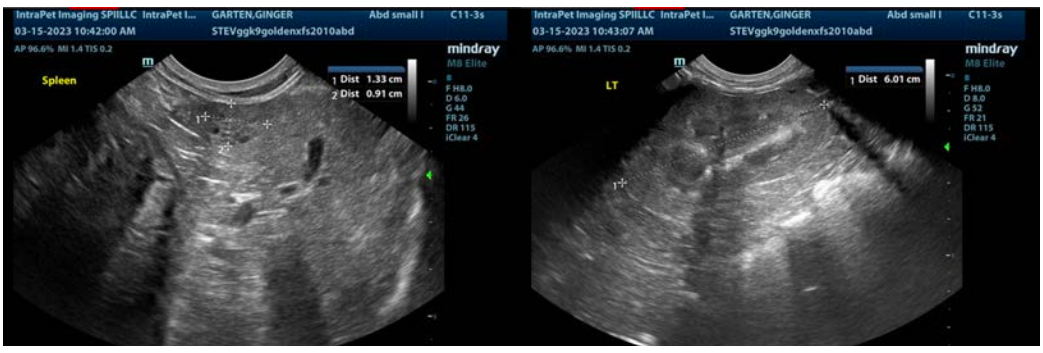
There is a cystic iso- to hyperechoic nodule in the spleen. Consider a fine needle aspirate of this lesion and continued monitoring with ultrasound.

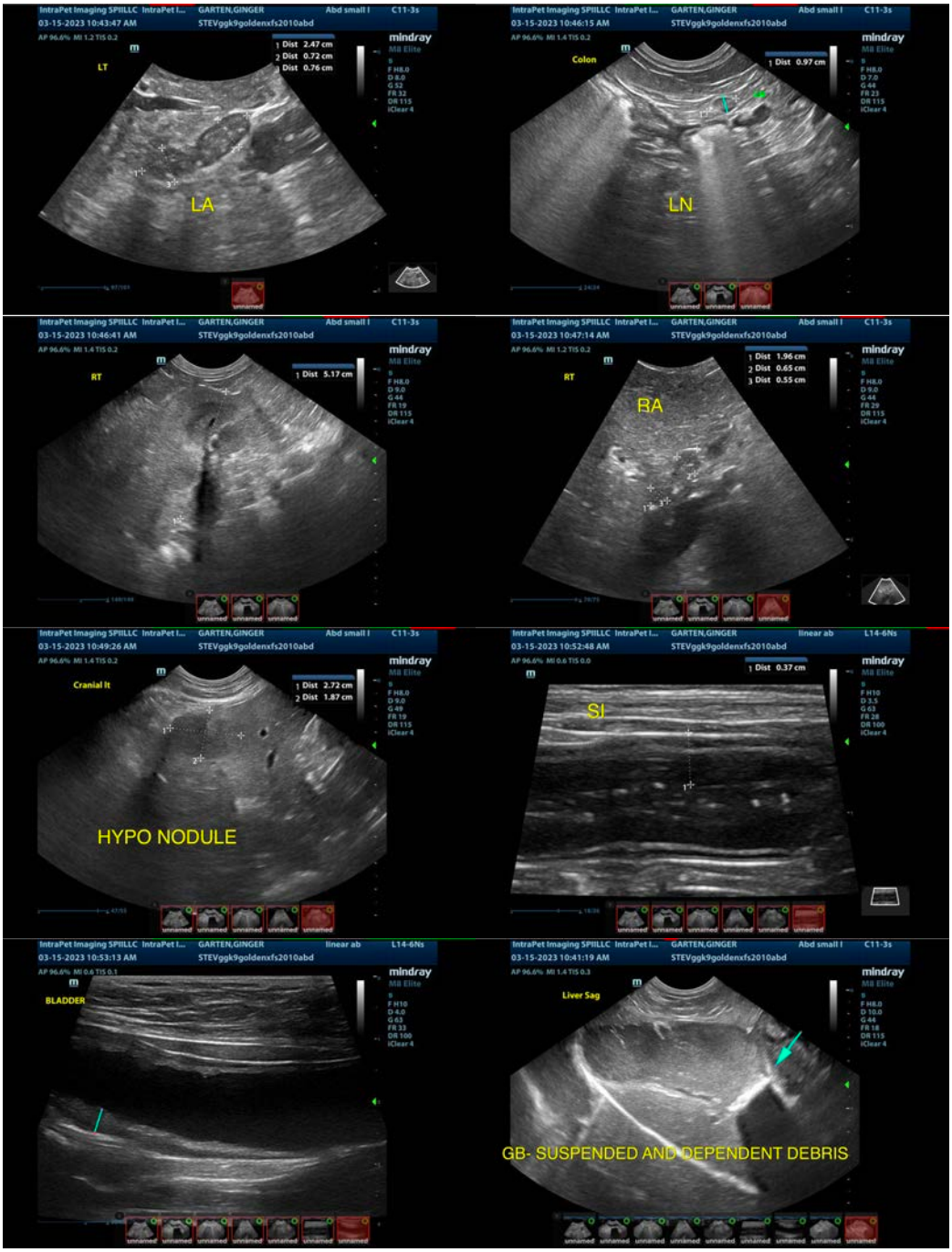
Additionally, there is a small isoechoic nodule in the liver. The significance of this is currently unknown. If possible, consider a fine needle aspirate and continued monitoring with ultrasound.

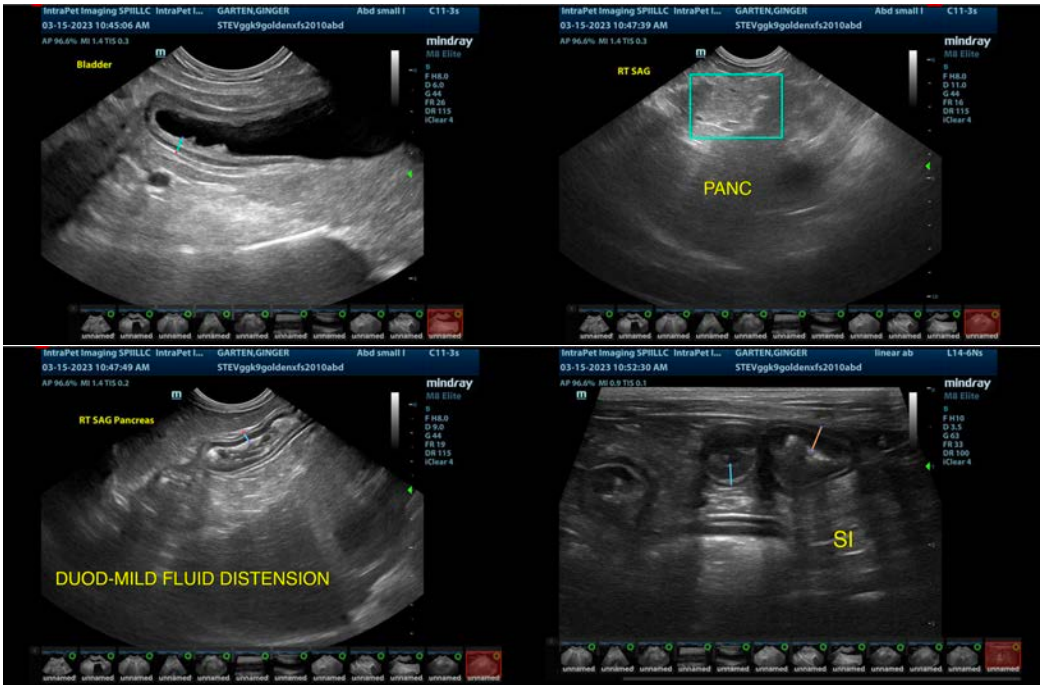
The gallbladder is significantly distended with moderate debris. This could be incidental or could be consistent with mild cholecystitis. Consider starting Ursodiol and monitoring both liver values and the appearance of the gallbladder on ultrasound.

The right limb of the pancreas appears slightly prominent, and the duodenum is mildly fluid distended. This could be consistent with mild focal enteritis/pancreatitis. Correlate findings with a quantitative cPL level and consider symptomatic treatment for pancreatitis.

You've done a nice job with initial workup of this patient. If there is concern for underlying gastrointestinal disease, which may not be readily apparent on ultrasound, you could consider a diet change to a hydrolyzed or novel protein diet. Additionally, you could consider a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to look for additional evidence of underlying gastrointestinal disease and consider starting chronic pre- and probiotic therapy. If described symptoms persist, consider reevaluation with ultrasound in the future.




LT
LA
Colon
LN
RT
RT
RA
Cranial lt
HYPO NODULE
SI
BLADDER
Liver Sag
GB- SUSPENDED AND DEPENDENT DEBRIS



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