IMAGING PERFORMED BY

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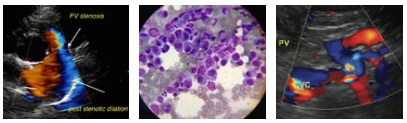


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE
6/27/22

PATIENT
Zoe Lemoncello

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Spayed Female

AGE
6/27/09

WEIGHT
9.9 lbs

INTERPRETED BY
Lisa Carioto, DVM, DVSc, Diplomate ACVIM

HOSPITAL NAME
Padonia VH

REFERRING VET
Dr. Youssef

INVOICE
31267

PRESENTING CLINICAL SIGNS

Patient hasn't eaten in a few days, only took a couple of treats. Owner tried appetite stimulant but it didn't work. Patient has been lethargic and not drank much water.
Current Medications: None.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: IV sedation utilized.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is well distended. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra. A trivial amount of free floating sediment is present, however, there is no evidence of cystoliths, polyps or a mass.

Kidneys

The **left** kidney measures 3.76 cm (3.80-4.40 cm). The capsule is smooth. The cortex is mildly hyperechoic i.e. it is isoechoic to the spleen. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. Very small mineralizations and a very small nephrolith are noted, without signs of pyelectasia. An accumulation of intrapelvic fat is noted. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 3.86 cm (3.80-4.40 cm). The capsule is very mildly irregular (trivial); seen with linear probe. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

Aortic bifurcation/trifurcation
No abnormalities observed.

Adrenal Glands

The **left** adrenal gland measures 0.41 cm. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.43 cm. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen

The spleen is at the high end of normal reference range/very mildly enlarged (10.4 mm (normal = 10 mm)). The spleen curves slightly and is longer than usual. It is within normal limits in echogenicity, however, a very subtle, diffuse miliary echotexture is noted with the linear probe. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

Liver

There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous and it is within normal limits in echogenicity. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

A small amount of free floating echogenic material, which appears aggregated, is noted within the gallbladder (GB). The wall is within normal limits in thickness and echogenicity. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, however, a small amount of sludge is present within the cystic duct. There are no signs of an obstruction.

Gastrointestinal

The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness and duodenum are at the high end of the normal reference range (0.26 cm). The definition of the wall layers is preserved, however, fogging of both the mucosa and muscularis are present in many of the segments of the jejunum, however, the submucosa is more prominent in others. No abnormalities are observed with the ileocecal colic junction. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened and mural detail is considered normal.

Pancreas

The **left limb** is mildly heterogeneous, with areas that are both hypo and more normal in echogenicity (i.e. isoechoic to the surrounding mesentery). It is more prominent than usual, however, its contours are smooth and regular. Subtle changes are suggestive of mild pancreatitis, however, age-related changes, such as nodular hyperplasia and fibrosis, appear to be contributing to the changes observed.

The **right limb** is more homogeneous compared to the left. It is very slightly hypoechoic to the surrounding mesentery. It, too, is more prominent than normal. The surrounding mesentery may be very mildly hyperechoic in some areas, but overt hyperechogenicity of the omentum is not appreciated.

Other

Lymph nodes

A lymph node in the region of the left pancreas is prominent, but remains within normal limits in echogenicity and echotexture. Mild reactive hyperplasia may be present.
A few lymph nodes are prominent in the region of the mesenteric root, however, they are not enlarged or abnormal in echogenicity.

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

- Pancreas: Smoldering pancreatitis is suspected despite the absence of overt pancreatitis. There is no evidence of neoplasia.

- Gastrointestinal tract: inflammation is suspected, for example, a chronic enteropathy due to inflammatory bowel disease, food intolerance, dysbiosis, etc. Although the definition of the wall layers is well preserved, neoplasia cannot be excluded with certainty. Differential diagnoses include lymphoma or other round cell tumour, however, *a chronic enteropathy is considered more likely*.

- Liver and Gallbladder: Cholangitis/cholangiohepatitis cannot be excluded despite the absence of abnormalities. Signs of cholecystitis are not appreciated, however, this does not rule out the possibility of a secondary bacterial infection ascending from the GI tract. Obtaining a history regarding signs of gastroesophageal reflux disease (GERD), from the client is suggested.

- *"Triaditis" cannot be excluded.*

- Spleen: Very mild splenomegaly with a somewhat subjective finding of a diffuse miliary echotexture. These findings may be due to splenitis, extramedullary hematopoiesis or non-specific reactive hyperplasia.

- Kidneys: No major changes are observed other than a very small mineralization and nephrolith in the left kidney, both of which are clinically insignificant.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A spec fPL

Analgesia for visceral pain, such as buprenorphine (0.005-0.01 mg/kg sublingually every 8-12 hours) for a minimum of 7-10 days. Continue for 3-4 weeks if an improvement is noted; the dose and frequency may be weaned to the minimum effective dose during that time.
+/- gabapentin

If signs of GERD present, 10-14 day trial with famotidine or omeprazole (0.7-1 mg/kg PO q12h)

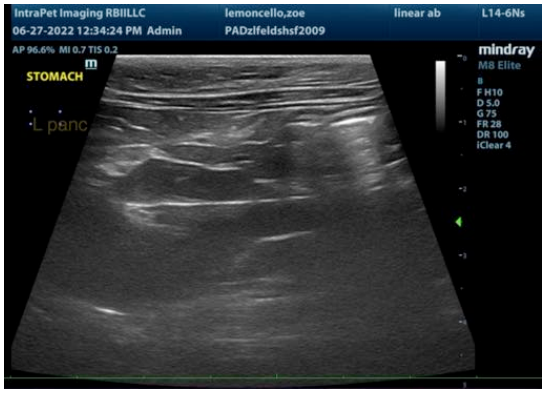
If no improvement to the above within 24-48 hours, consider the following

- Cholangitis/cholangiohepatitis and cholecystitis cannot be excluded, including a secondary ascending bacterial infection. Although indiscriminate use of antibiotics is not normally recommended, one could start treatment with a broad-spectrum antibiotic if an improvement is not observed with the above therapies.

- Deworm depending on risk of exposure, including other pets in house that go outdoors, once eating with more enthusiasm.

- TLI, serum cobalamin, and folate, to assess for underlying maldigestion and malabsorption disease and dysbiosis

- Dietary trial (veterinary prescription brand hypoallergenic, i.e., hydrolyzed or novel protein); ensure appetizing to prevent hepatic lipidosis, sarcopenia and cachexia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L14-6Ns
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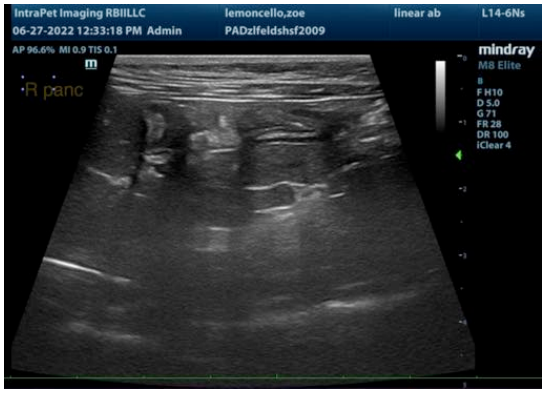
STOMACH
L panc
mindray
M8 Elite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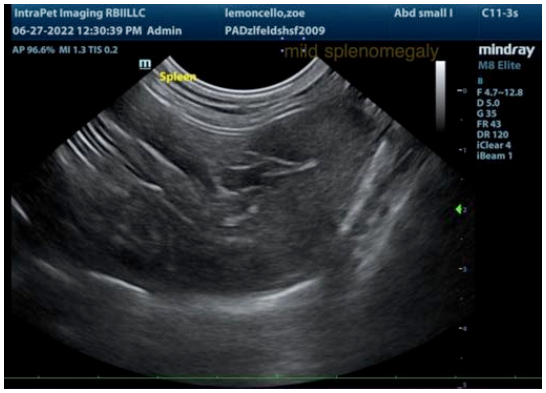
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Spleen
mid splenomegaly
mindray
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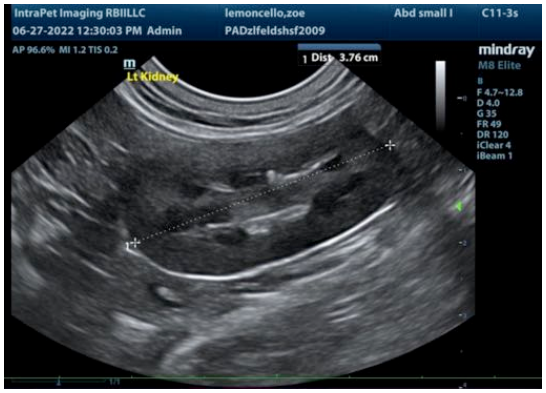
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Lt Kidney
1 Dist 3.76 cm
mindray
M8 Elite


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linear ab
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AP 96.6% MI 0.8 TIS 0.1
mindray
M8 Elite


IntraPet Imaging RBIILLC
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PADzlfeldshsf2009
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Pancreas
mindray
M8 Elite


IntraPet Imaging RBIILLC
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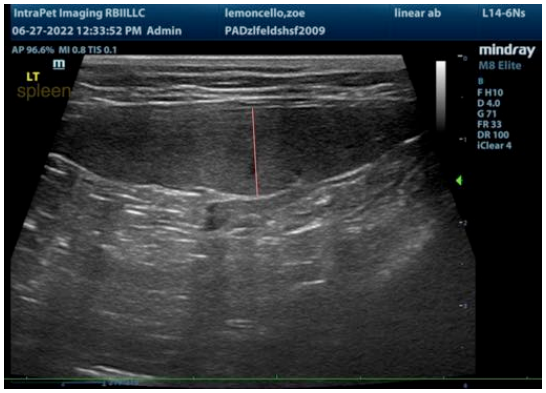
LT
spleen
LK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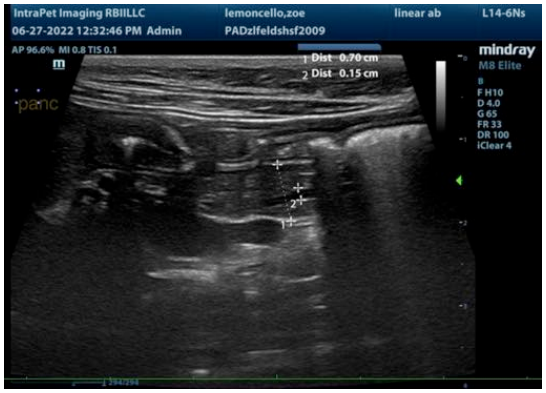
spleen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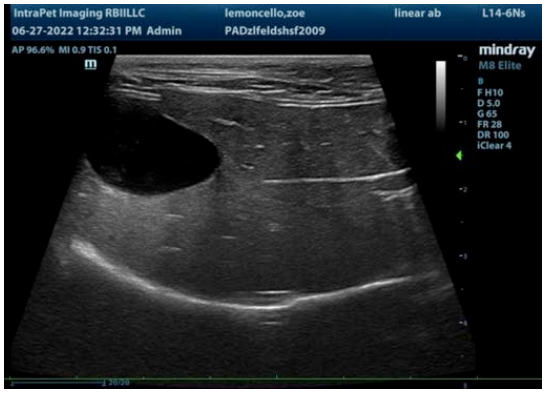
1 Dist 0.70 cm
2 Dist 0.15 cm
panc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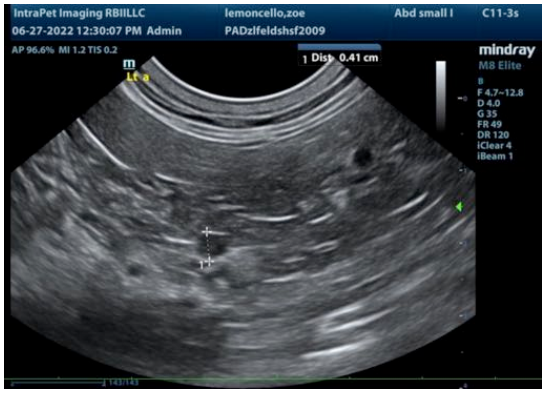
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mindray
M8 Elite
1 Dist 0.41 cm
Lt a


IntraPet Imaging RBIILLC
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C11-3s
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mindray
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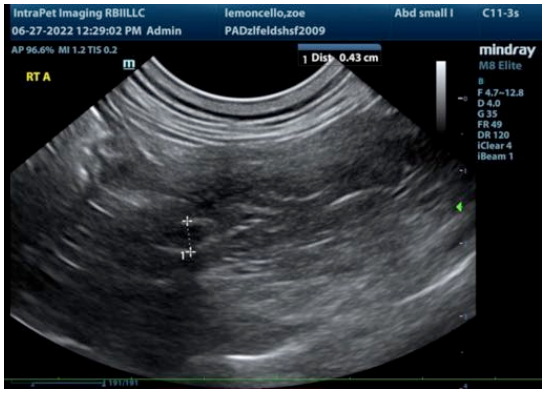
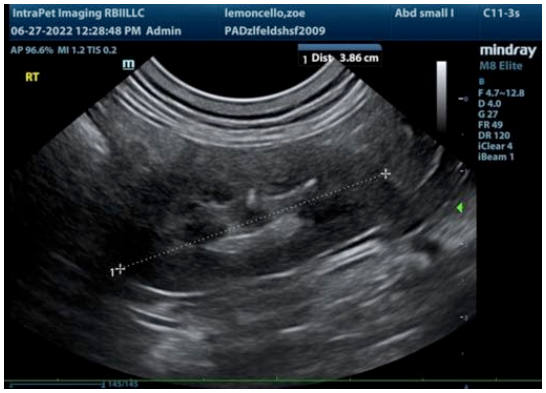
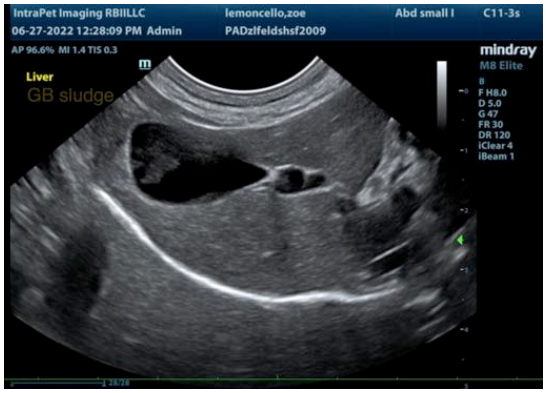
CAUD
SI







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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM
Lisa.Carioto@sonopath.com