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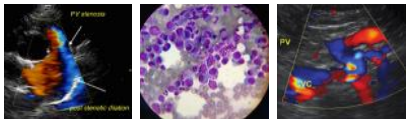

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DATE
7/7/22

PATIENT
Veruca Hatzigiannakis

SPECIES
Canine

BREED
Chihuahua

SEX
Spayed Female

AGE
9/1/2008

WEIGHT
4.4 Pounds

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

HOSPITAL NAME
Perry Hall AH

REFERRING VET
Dr. Hatzigiannakis

INVOICE
16499

PRESENTING CLINICAL SIGNS

History: ~2 week history of decreased app and weight loss. Within last 2 days diarrhea with dark color. Anorectic for ~36 hours. FYI history of stable MVD, last echo with CVCA May 2022. Had dental about a month ago.

Current Medications: Starting yesterday AM: cerenia 1 mg/kg IV SID, Protonix 1 mg/kg IV SID, unasyn 22 mg/kg IV q8h, metronidazole 15 mg/kg IV BID, buprenorphine 0.02 mg/kg SC (not repeating today due to lethargy), Entyce 3 mg/kg po sid.
Lab Results: CBC and Chem 17 nsf, snap cPL abnormal. fecal DX with giardia to Idexx NSF.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Requested by Dr.
Imaging Performed By: Stephanie Pearce RDCS, RVT.

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.

The left kidney has a normal shape and size (3.0 cm). Overall echogenicity is normal with adequate 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.

The right kidney has a normal shape and size (3.18 cm). Overall echogenicity is normal with adequate 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. A 0.53 cm cyst was present.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.49 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.

The right adrenal gland is normal in size measuring 0.49 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.

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 a slightly irregular ill-defined lesion mid spleen at the level of the hilus, it is mixed echogenicity and measures 0.95 cm x 0.49 cm.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is an iso- to hypoechoic solid mass effect visualized in the right side of the liver. Additionally, there are other ill-defined hypoechoic nodules, measuring 0.76 cm x 0.84 cm and 0.84 cm x 0.97 cm.

The gall bladder lumen is moderately 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. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with mild/moderate 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 adequate and there is no impression of reduced peristaltic activity. There is some fluid visualized within the body of the stomach, as well as some small areas of shadowing material, possibly consistent with pills, ingested foreign material, etc., and there is gas obscuring visualization of some areas of the stomach. The findings are most consistent with ileus, gastritis, etc. and obstruction is thought unlikely but cannot be ruled out.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. The duodenum measured 0.33 cm. The jejunum measures 0.29 cm.

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. The descending colon has shadowing solid stool within it. The colon wall appears very mildly thickened at 0.22 cm.

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

There is a scant amount of free abdominal fluid. There are numerous prominent mesenteric lymph nodes in the region of the ileocecal junction, measuring 0.34, 0.35, 0.37 and 0.33 cm. The omentum is of increased echogenicity in the mid abdomen in the region of these lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Ill-defined, irregular area near the hilus of the spleen. This lesion is slightly mixed echogenicity and is very ill-defined. It trends towards a more benign appearance, but an underlying neoplastic lesion cannot be ruled out. I recommend continued monitoring.

- Mildly heterogeneous liver with multiple hypo/isoechoic nodule. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. These lesions are somewhat subtle in that they are fairly close in echogenicity to the normal parenchyma. The largest on the right side could be consistent with an early mass lesion. Appearance trends toward a more benign lesion, but a fine needle aspirate is recommended.

- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

- Mild fluid distention of the gastric lumen with some small areas of shadowing debris. Correlate with feeding and medication history, as well as abdominal radiographs. The findings are most consistent with a small amount of fluid and ingested medication, etc., but foreign material or partial obstruction cannot be entirely ruled out.

- Subjectively thickened small intestine. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

- Mild mesenteric lymphadenopathy. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

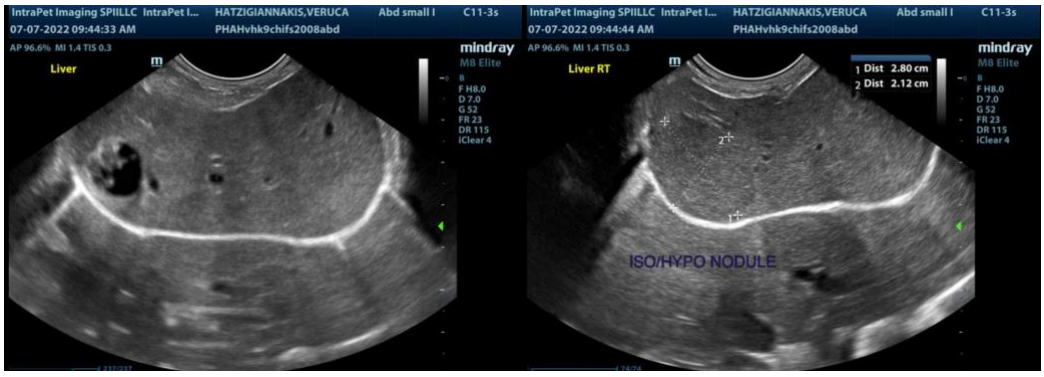
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

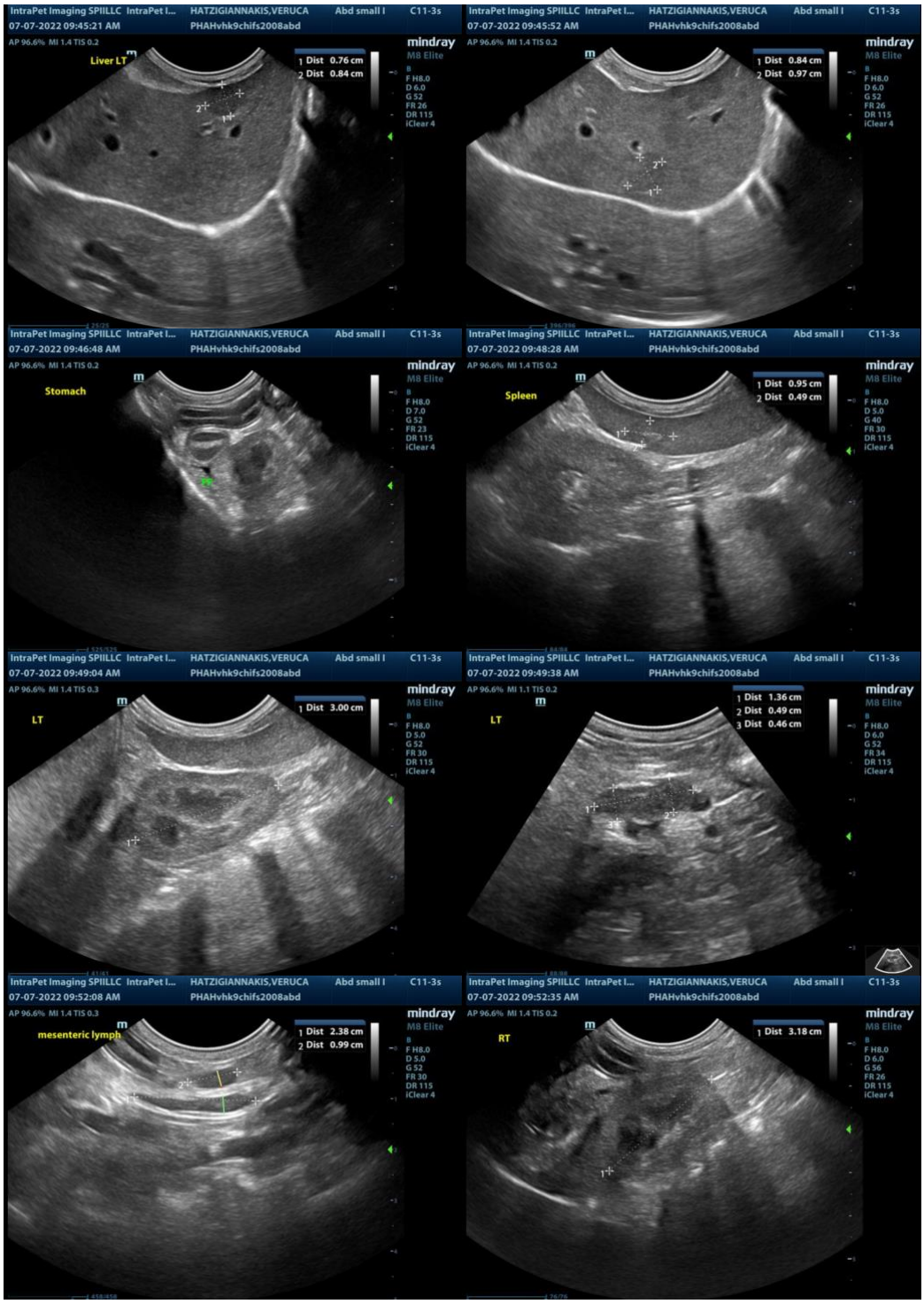
There is the general appearance of mildly thickened small intestine and some clusters of mildly enlarged lymph nodes with hyperechoic mesentery surrounding in the mid abdomen near the ileocecal junction. These types of changes would be most consistent with a generalized gastroenteritis. Additionally, there is some fluid and irregular shadowing material within the stomach, which should be monitored for gastric foreign material, etc.

There are some large nodules visualized within the liver. These nodules are relatively isoechoic (mildly hypoechoic) and could represent benign or neoplastic lesions. I suspect these are not related to the acute symptoms reported. Options moving forward would include a fine needle aspirate of the larger lesion on the right side and/or a contrast CT scan to better delineate these lesions and evaluate for possible surgical removal (of the larger lesion).

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

For now, I would treat aggressively for acute gastroenteritis. If symptoms persist, serial imaging or advanced imaging may be necessary to obtain more information.

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Liver LT
1 Dist 0.76 cm
2 Dist 0.84 cm
mindray M8 Elite
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PC
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Spleen
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LT
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mindray M8 Elite
IntraPet Imaging SPIILLC IntraPet I... HATZIGIANNAKIS,VERUCA Abd small I C11-3s
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LT
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mesenteric lymph
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mindray M8 Elite
IntraPet Imaging SPIILLC IntraPet I... HATZIGIANNAKIS,VERUCA Abd small I C11-3s
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AP 96.6% MI 1.4 TIS 0.2
RT
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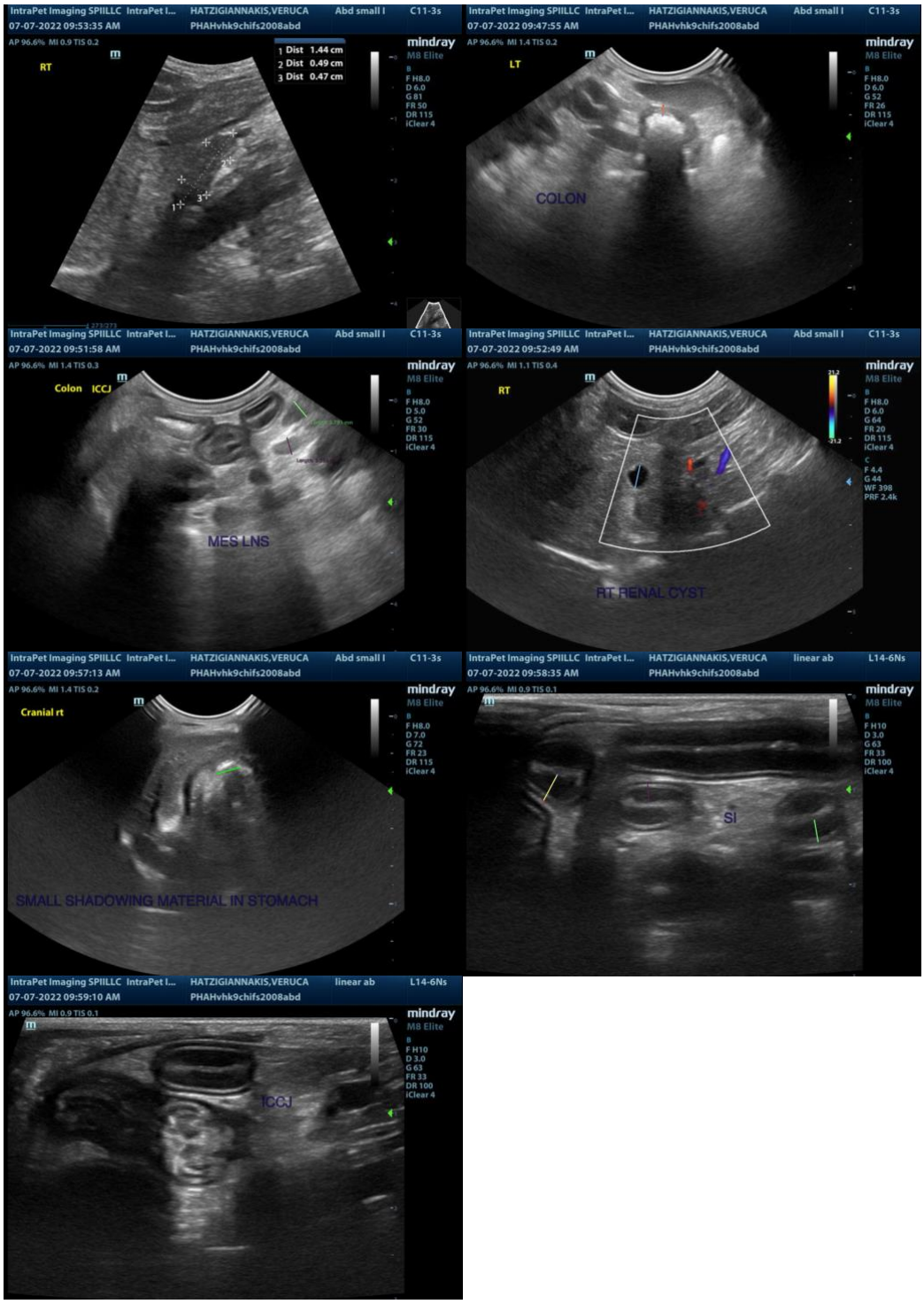
mindray M8 Elite



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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