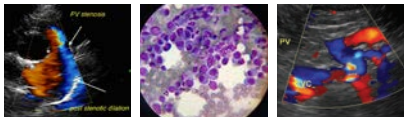
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

5/9/23

PATIENT

Jackson Pennacchia

SPECIES

Canine

BREED

Maltipoo

SEX

Neutered Male

AGE

9/23/19

WEIGHT

22.2 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

47234

PRESENTING CLINICAL SIGNS

Here on 4/28 for vomiting and not eating. Was hospitalized overnight. ATO he seemed back to normal almost immediately (2 days at most.) Started vomiting again today

Current Medications: Keppra 1500 mg ER BID, Phenobarb. 64.8 mg BID
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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.

The prostate is normal in size (0.78 cm) 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.

The left kidney has a normal shape and size (4.89 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 (4.86 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.74 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 0.64 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. No focal parenchymal abnormalities are visualized.

Liver

The liver is large in size, and normal in 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. 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 is largely empty with some intraluminal shadowing material. 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. There is a focal shadowing structure visualized within the gastric lumen, measuring approximately 2.3 cm in diameter. There is no evidence of an obstruction.

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. Duodenum wall measures 0.38 cm. Jejunum wall measures 0.22 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis. There is an isoechoic nodule visualized cranial to the left limb of the pancreas, which could be a local lymph node or a pancreatic nodule.

Free Abdomen

There is a small amount of free abdominal fluid. There is no significant diffuse lymphadenopathy visualized, but there is a slightly hypoechoic to isoechoic nodule visualized in the cranial abdomen measuring 1.12 cm in diameter, most consistent with a mesenteric lymph node or a pancreatic nodule. The mesentery is severely hyperechoic, particularly around the hypoechoic pancreas.

ULTRASONOGRAPHIC FINDINGS

- Large, prominent, irregular, hypoechoic left and right limb of the pancreas with significant surrounding hyperechoic mesentery with edema – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

- Mildly heterogeneous, large liver – 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. This could be secondary to the chronic Phenobarbital therapy.

- Shadowing structure visualized within the gastric lumen – Correlate with abdominal radiographs. This could represent focal ingesta (dog treats, etc.) or ingested foreign material. There is no evidence of a current obstruction.

- Small volume free abdominal fluid with hyperechoic mesentery in the cranial abdomen and around the pancreas – Findings are most consistent with sterile peritonitis.

- Mildly hypoechoic, rounded structure visualized in the cranial abdomen – This structure could represent a mesenteric lymph node, a pancreatic nodule, etc. Recommend continued monitoring.

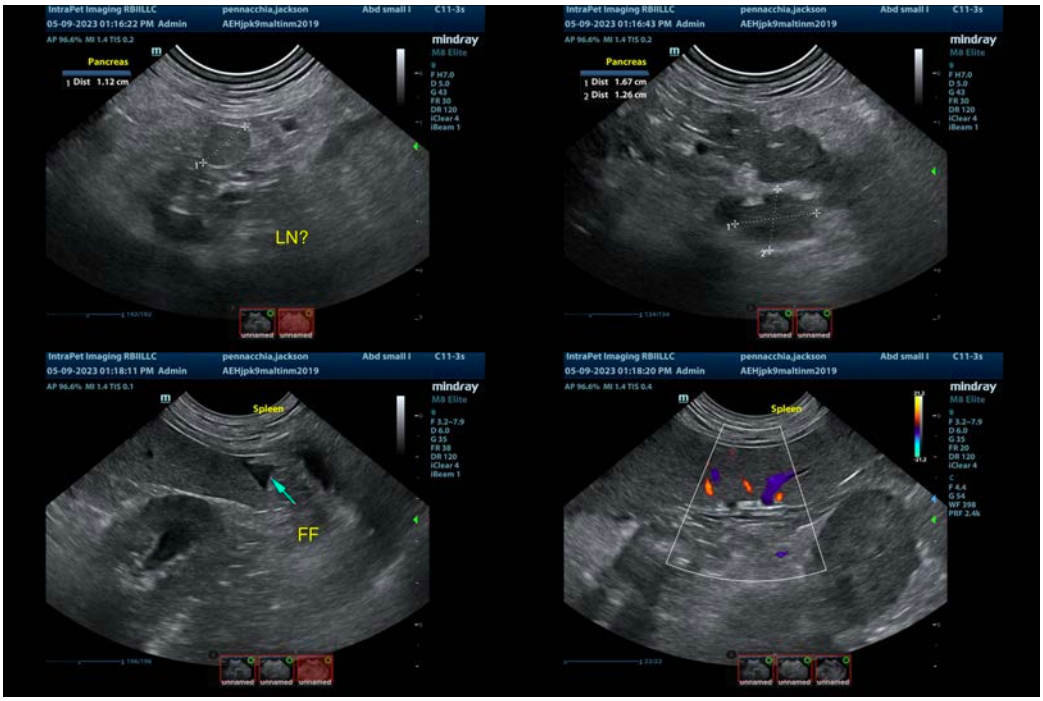
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

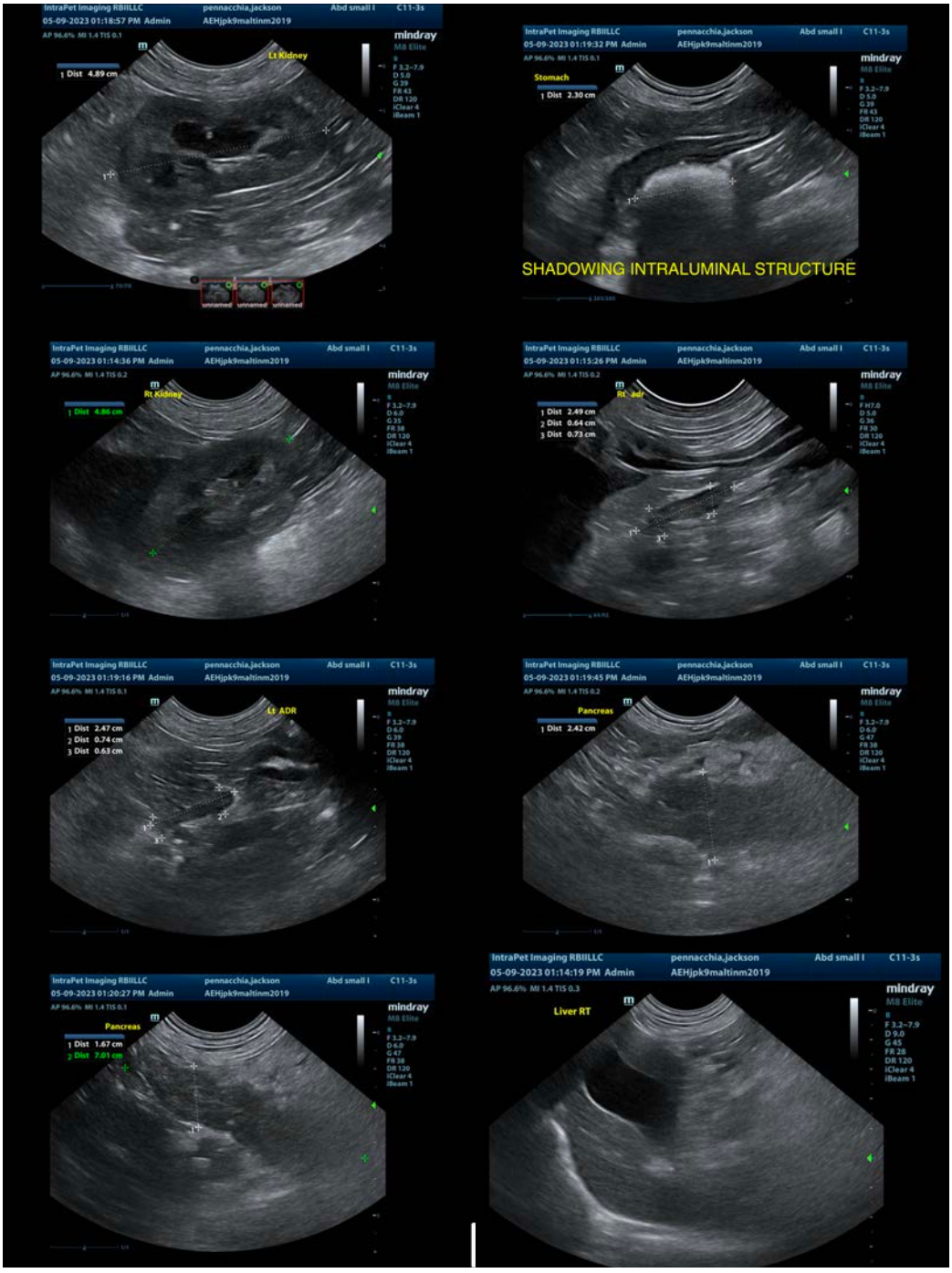
The pancreas is very prominent, large, and hypoechoic with surrounding hyperechoic mesentery and edema. These findings are consistent with moderate, and in some areas severe, pancreatitis. Recommend aggressive medical management for pancreatitis. Additionally, there is a small amount of shadowing material visualized in the gastric lumen. This could be consistent with focal ingesta or ingested foreign material. There is no evidence of a current obstruction. I suspect this is incidental at this time, but close continued monitoring is warranted.

The changes in the liver are likely due to chronic Phenobarbital therapy. There has been an association between Phenobarbital use and pancreatitis. Recommend consulting with a veterinary neurologist about possible alternatives, how to taper off of Phenobarbital, etc., as abrupt stops in seizure medications can cause seizure episodes.

There is a focal rounded hypoechoic nodule visualized in the cranial abdomen, which does not appear very inflamed. This could be a lymph node in the cranial abdomen, a pancreatic nodule, etc. Recommend reevaluation of this nodule in 2-3 months if the patient is doing well (sooner if there is concern).

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

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pennacchia,jackson
Abd small I
C11-3s
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AEHjpk9maltinm2019
mindray
M8 Elite
Lt Kidney
Dist 4.89 cm
unnamed
unnamed
unnamed
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pennacchia,jackson
Abd small I
C11-3s
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mindray
M8 Elite
Stomach
Dist 2.30 cm
SHADOWING INTRALUMINAL STRUCTURE
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pennacchia,jackson
Abd small I
C11-3s
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AEHjpk9maltinm2019
mindray
M8 Elite
Rt Kidney
Dist 4.86 cm
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pennacchia,jackson
Abd small I
C11-3s
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AEHjpk9maltinm2019
mindray
M8 Elite
Rt adr
Dist 2.49 cm
Dist 0.64 cm
Dist 0.73 cm
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pennacchia,jackson
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C11-3s
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mindray
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Lt adr
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Dist 0.63 cm
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pennacchia,jackson
Abd small I
C11-3s
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mindray
M8 Elite
Pancreas
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IntraPet Imaging RBIILLC
pennacchia,jackson
Abd small I
C11-3s
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mindray
M8 Elite
Pancreas
Dist 1.67 cm
Dist 7.01 cm
IntraPet Imaging RBIILLC
pennacchia,jackson
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C11-3s
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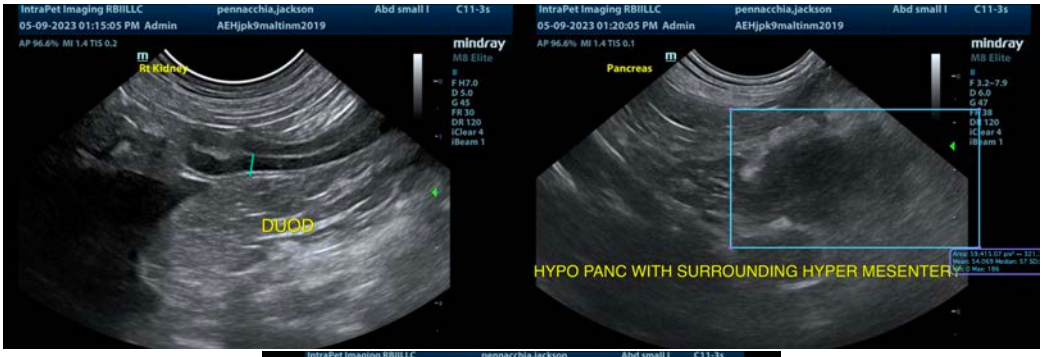
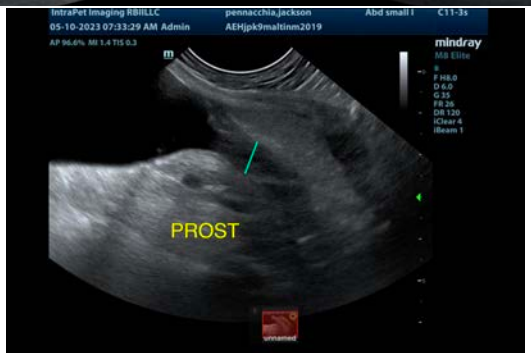
M8 Elite
Liver RT





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.

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