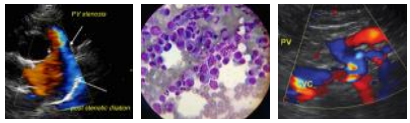
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

8.11.2023

PATIENT

Princess Bouyoukas

SPECIES

Canine

BREED

Japanese Chin

SEX

Female Spayed

AGE

8/7/2009

WEIGHT

11.6 lbs

INTERPRETED BY

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

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Unger

INVOICE

14069

PRESENTING CLINICAL SIGNS

Decreased appetite for a few weeks. She will eat human food but will no longer eat her dog food (RC S/O)
Still acting normal otherwise. Has a history of heart disease- sees CVCA.
On exam grade 4/6 murmur, significant tartar on teeth, 1 lb. weight loss.

Current Medications: Pimobendan 1.25mg BID.
Lab Results: ALP-1139 (5-131), Tri- 368 (29-291), PSL- 526 (24-140). CBC shows HCT- 35% (36-60) with plate- 725 (170-400), 4 dx- neg x 4.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, 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 2 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.83 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. Small nonobstructive cortical mineralizations are noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.12 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. Small nonobstructive cortical mineralizations are noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size (0.61 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 (0.60 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 ill-defined hyperechoic nodule visualized within the parenchyma (measuring 1.19 x 0.80 cm).

Liver

Liver is irregular and subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm 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 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. The duodenum measured as normal (0.49 cm) and the jejunum measured as normal (0.30 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. The right limb of the pancreas is particularly affected by and surrounded by hyperechoic mesentery. There is a focal hypoechoic, rounded area of the pancreas, concerning for a possible pancreatic nodule (measuring 0.86 x 0.85 cm). There is evidence of regional mesenteric inflammation. Consistent with (mild/moderate or severe) pancreatitis.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The mesentery surrounding the pancreas is hyperechoic and reactive.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hyperechoic nodule visualized in the spleen – The appearance of this nodule trends toward a more benign ideology but this could represent a benign or neoplasia lesion. Consider a fine-needle aspirate.

- Large irregular, heterogenous 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.

- Prominent hypoechoic right limb of the pancreas with surrounding hyperechoic mesentery and a focal nodule - The pancreatic changes are most consistent with (mild/mod/severe) pancreatitis/pancreatic infiltration. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving. The nature of the nodule is unclear. This could represent a benign nodule, adenoma, hyperplasia, etc., or could be an early neoplastic lesion. Additionally, an adjacent lymph node cannot be ruled out.

Secondary Findings

- Small cortical mineralizations/stones visualized in both kidneys - Hyperechoic foci are visualized in the kidney most consistent with nephroliths. There is no current evidence of obstructive disease. Correlate findings with abdominal radiographs, urinalysis, and culture. Continued monitoring is warranted for progression/obstruction.

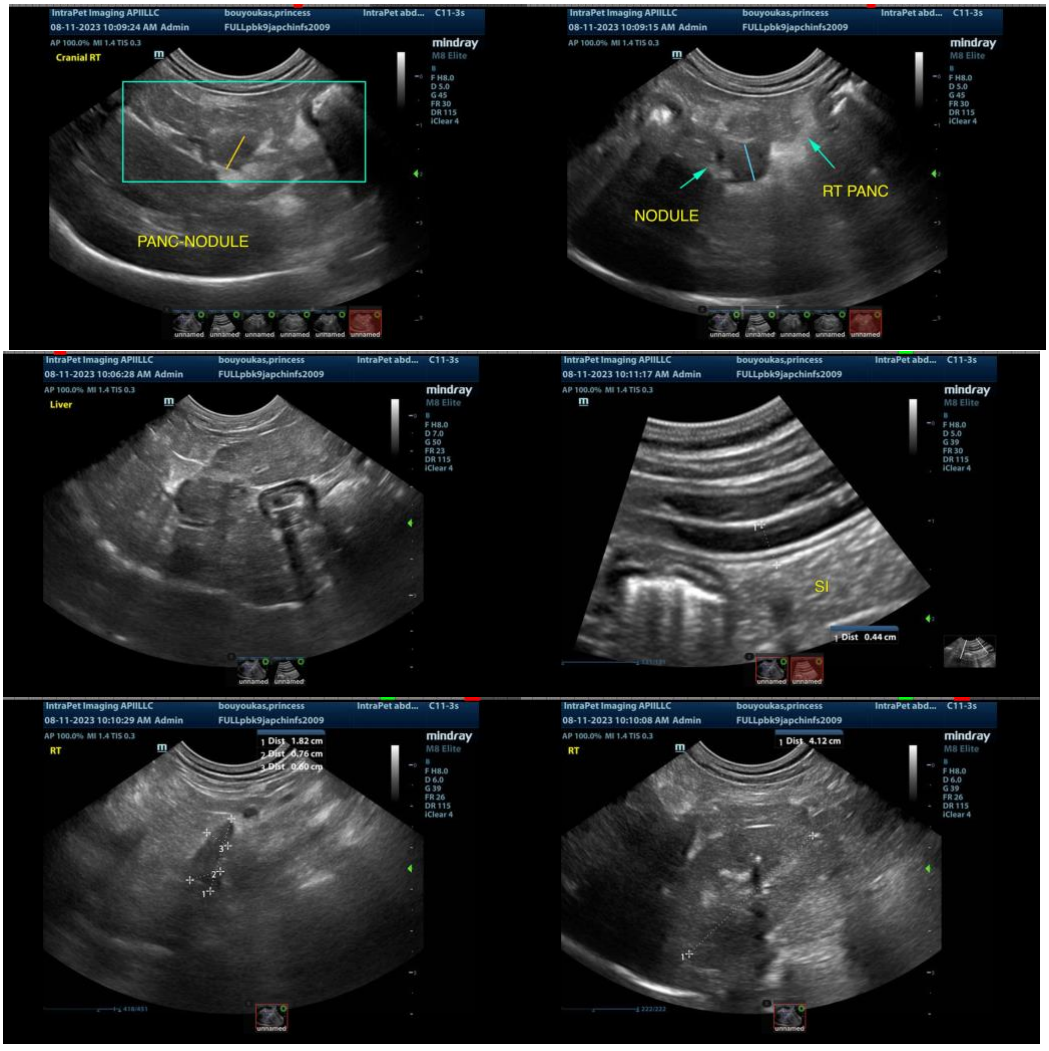
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

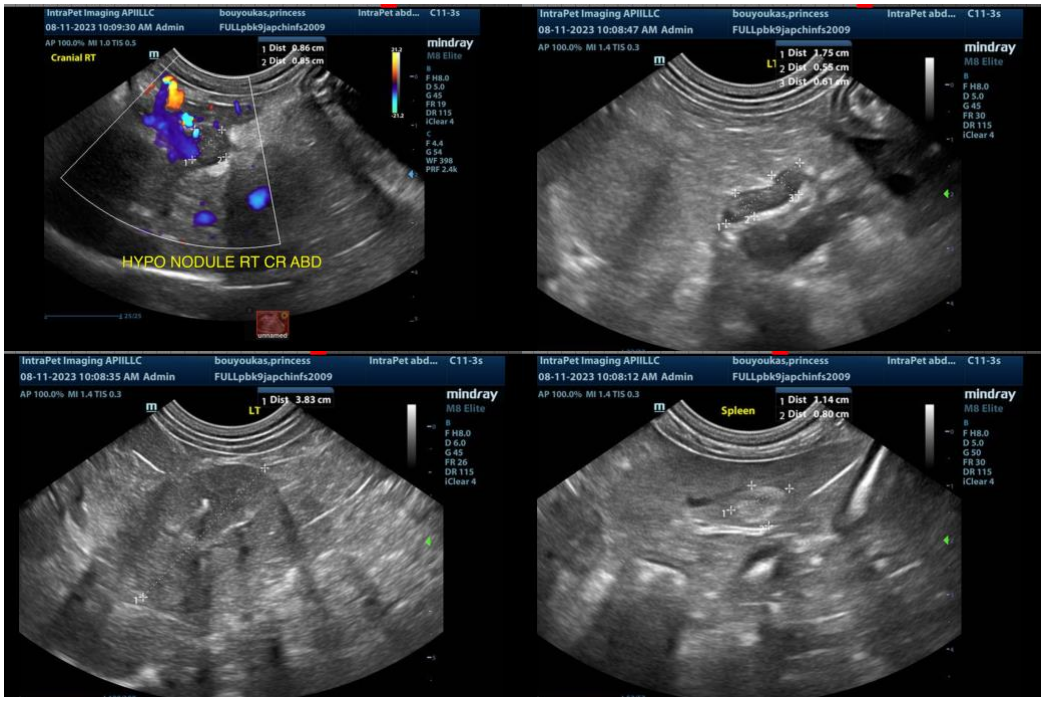
The right limb of the pancreas is inflamed and surrounded by hyperechoic mesentery, most consistent with pancreatitis. There is a focal hypoechoic nodule visualized in the region of the right limb, which is most consistent with a pancreatic nodule or an associated lymph node.

Recommend aggressive medical management for pancreatitis, and, when this patient is feeling better, consider a fine-needle aspirate of the nodule and reassessment of the pancreas. This could represent a benign or neoplastic lesion. Additionally recommend three-view thoracic radiographs.

The liver is very irregular, somewhat nodular and large, with an extension significantly beyond the stomach. Based on the elevation in ALP, this could be a vacuolar hepatopathy, but consider a liver function test and a fine-needle aspirate of the liver.

The lesion associated with the spleen could represent a benign or a neoplastic lesion. Consider a fine-needle aspirate of this lesion.





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.

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