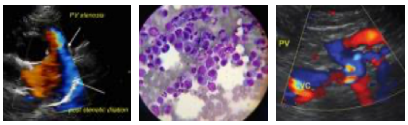
IMAGING PERFORMED BY

IntraPet.com



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DATE

2/20/23

PATIENT

Mandy Miller

SPECIES

Canine

BREED

Bichon mix

SEX

Female, spayed

AGE

2/27/2010

WEIGHT

14 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Madonna VC

REFERRING VET

Dr. Cangro

INVOICE

14601

PRESENTING CLINICAL SIGNS

Vomiting/diarrhea off and on since the beginning of January.

Current Medications: Denamarin, was on Tramadol (discontinued 1/25), Fluoxetine (discontinued 1/25), Carprofen (discontinued 1/11).
Lab Results: ALKP 569.
Radiographs: Enlarged liver.
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 wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal in size (4.08 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Pinpoint hyperechoic foci are observed within the cortex. A few small non-obstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.51 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Pinpoint hyperechoic foci are observed within the cortex. A few small non-obstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is borderline enlarged (0.62 cm at cranial pole) (0.53 cm at caudal pole) (2.18 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is borderline enlarged (0.72 cm at cranial pole) (0.55 cm at caudal pole) (1.81 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.59 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively prominent to enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogeneous in appearance. A 1.33 cm ill-defined hyperechoic nodule is observed on the right side, adjacent to the diaphragm. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

Secondary Findings:

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. The hyperechoic hepatic nodule likely represents a benign process (i.e., regenerative nodule) with a lower possibility of an emerging tumor.

- Bilateral chronic renal changes with non-obstructive nephrocalcinosis.

*An obvious cause for the patient's GI signs is not definitively identified in this study. Considerations include recurring pancreatitis, microscopic GI disease (i.e., inflammatory bowel disease, food allergy, infectious/parasitic disease), underlying metabolic issue, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

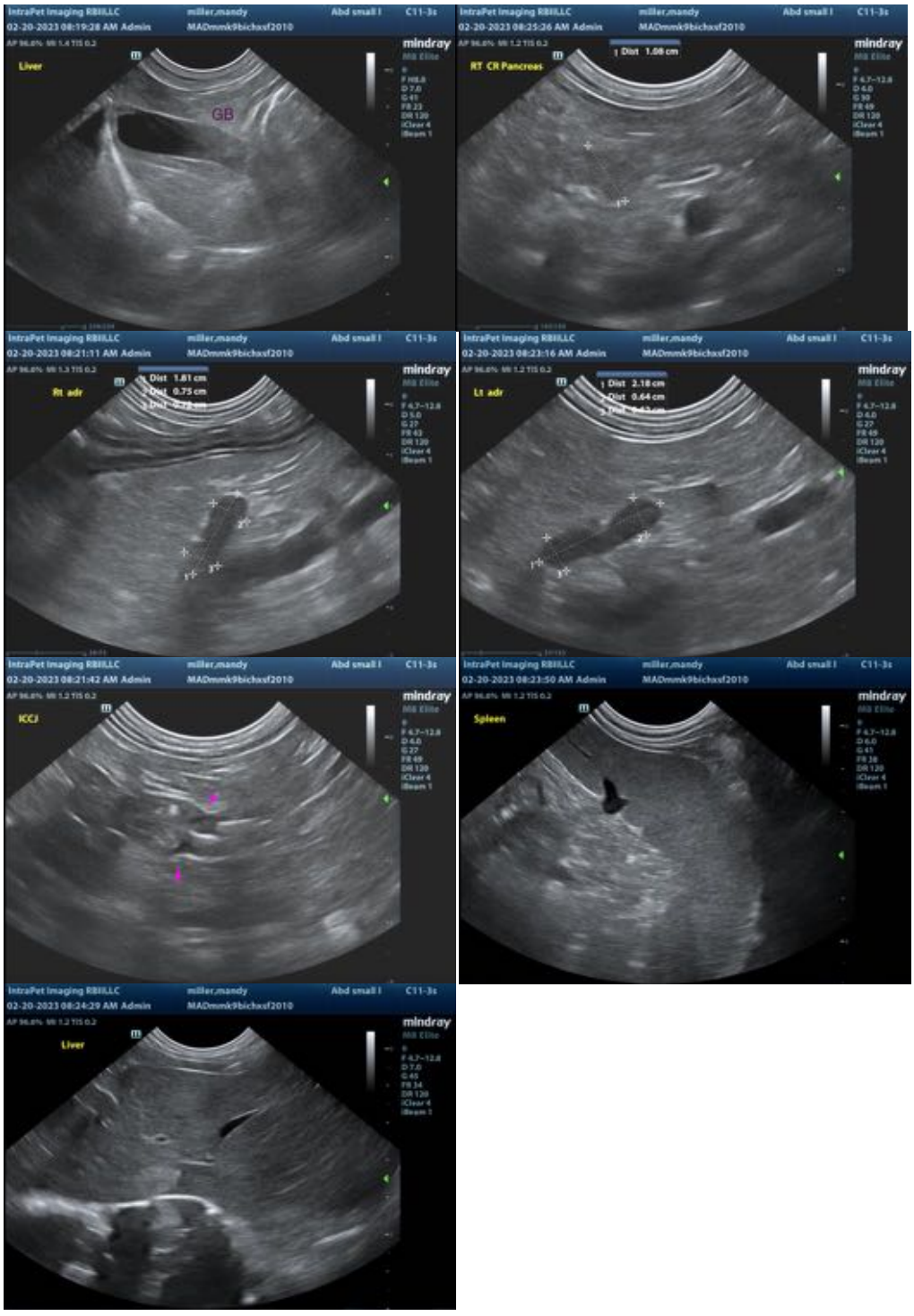
- A malabsorption panel including serum cobalamin, folate, TLI, PLI and resting cortisol is recommended (send to Texas A&M).

- Also consider a fecal evaluation for ova and Giardia as well as prophylactic deworming with Fenbendazole.

- A 6 week low fat, limited antigen or hydrolyzed protein diet should also be considered.

- Depending on the results of the above diagnostics, GI biopsies (i.e., endoscopic or surgical) may be necessary to get a definitive diagnosis.

- Regarding the elevated ALP, serial monitoring (i.e., every 3 months) of the patient's liver values is recommended. If values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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