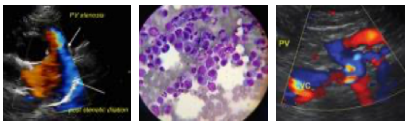
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

10/19/2021

PATIENT

Matilda Beares

SPECIES

Canine

BREED

American Bulldog

SEX

Female, spayed

AGE

2010

WEIGHT

68.8 lbs.

INTERPRETED BY

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

HOSPITAL NAME

All Creatures VS

REFERRING VET

Dr. Meadows

INVOICE

12399

PRESENTING CLINICAL SIGNS

Presented 10/4/21 for skin issue, but owner also noticed that abdomen has been distended for a while (months). Abdomen distended on exam. Recommended full lab work. Lab work indicated significant liver value elevations.

Current Medications: None at this time
Lab Results: ALT 2016 (18-121), AST 103 (16-55), ALP 2299 (5-160),
GGT 194 (0-13), Albumin 2.4 (2.7-3.9). CBC normal, T4 borderline low 0.9, 4DX negative
Date of Previous IntraPet Ultrasound: No previous
Sedation: not needed
Stat Report: not requested

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are 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. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (7.20 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Mild pyelectasia is present (0.41 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (8.75 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (1.13 cm at cranial pole) (0.87 cm at caudal pole) (3.44 cm in length) with a slightly irregular shape. The parenchyma is hypoechoic with some loss of glandular detail. No focal lesions are observed. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.62 cm at cranial pole) (0.64 cm at caudal pole) (2.81 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 subjectively normal in size (1.89 cm in width at the level of the hilus) with a slightly undulating medial contour. The parenchyma is subtly mottled in appearance. Numerous pinpoint hyperechoic foci are observed throughout the organ. A thrombus is observed in one of the vessels at the hilus. In the adjacent vessels, blood flow appears normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed. 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. A moderate amount of aggregated echogenic partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric wall is normal in thickness with a normal layering pattern. Within the gastric lumen, a 5.61 cm hyperechoic hard shadowing structure is observed. 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 colonic wall is normal. No obstructive disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional 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:

- Non-specific diffuse hepatopathy. Differentials include inflammatory/immune mediated disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), Leptospirosis, hepatotoxicosis (i.e., copper), infiltrative neoplasia (less likely), other hepatopathy.
- Splenic thrombus (hilus) with dystrophic mineralization of the parenchyma.
- Gastric foreign body.
- The gallbladder sludge could be consistent with cholestasis, fasting or early mucocele formation. This should be monitored sonographically to assess for progression.

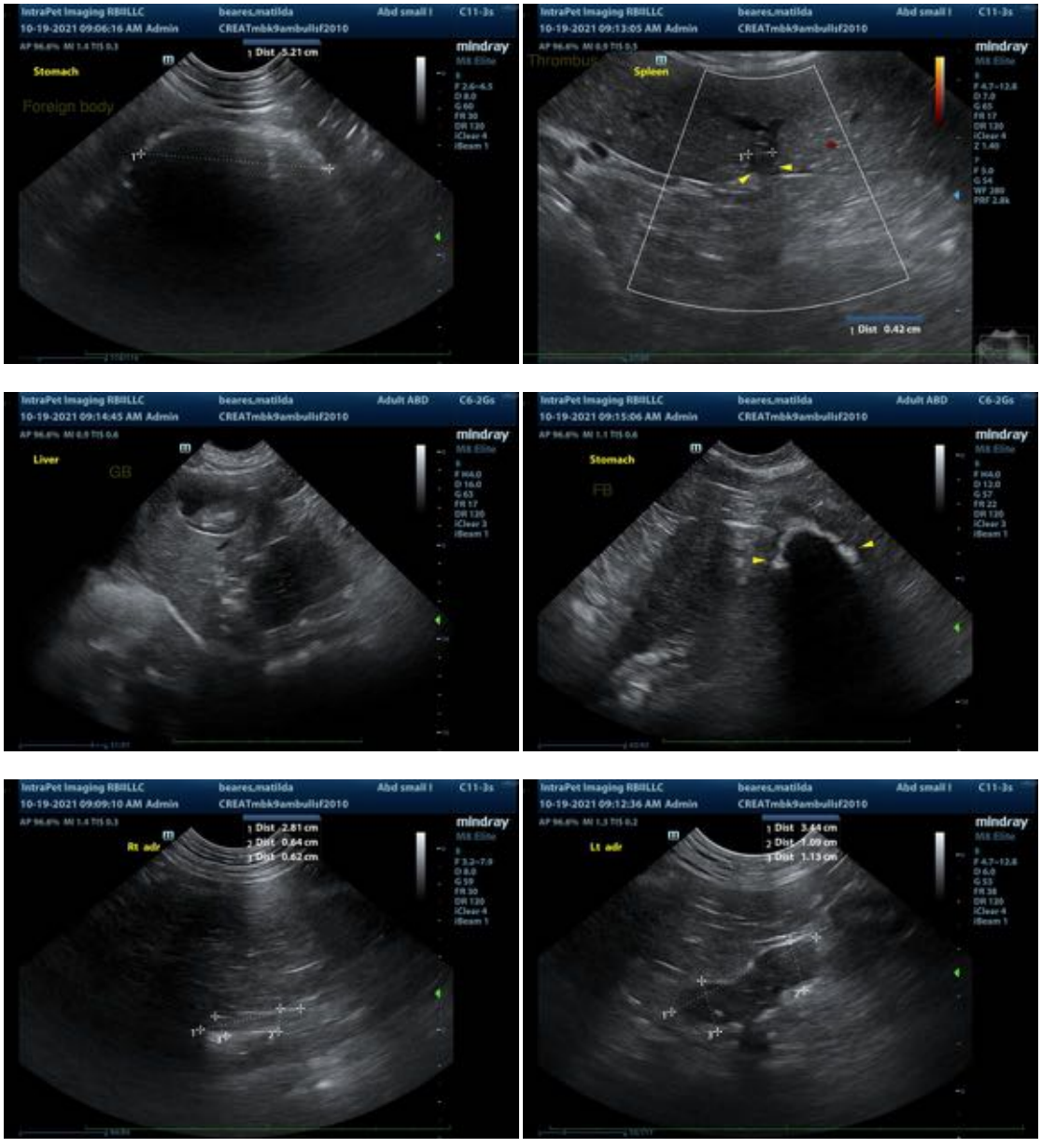
Secondary Findings:

- Bilateral, age-related renal changes with mild left pyelectasia.
- The left adrenal changes are most consistent with hyperplastic change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Leptospirosis testing (i.e., blood and urine PCR, serology) is recommended, particularly if the disease is endemic in the patient's geographic region. Hepatic tissue sampling (i.e., fine needle aspirate or biopsy) should also be considered (if clotting status is appropriate). If a surgical biopsy is pursued, aerobic and anaerobic bile cultures as well as acquisition of additional hepatic tissue samples for potential copper quantitation are recommended. If the patient undergoes surgery, removal of the gastric foreign body is recommended. If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.
- Given the presence of the splenic thrombus, an underlying cause for the patient's hypercoagulable state should be sought. Possible diagnostics could include:

1. UPC
2. Baseline blood pressure measurement
3. Thoracic radiographs to assess for occult neoplasia
4. Also consider antithrombotic therapy (i.e., Clopidogrel) if the patient's PT and PTT are normal.
5. A recheck ultrasound in 2-3 weeks is recommended to assess the status of the splenic thrombus.



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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