

**DATE PRESENTING CLINICAL SIGNS**

7/20/22

P was a well-regulated diabetic but recently started having a loss of appetite, vomiting, diarrhea, weight loss. P insulin was reduced from 16 units to 8 units due to loss of appetite. P now on 12 units. BG check 7/12 was 660

PATIENT

Rambo Matthews

Current Medications: NPH insulin- 12 units BID.

Lab Results: Mild elevation in ALP, otherwise unremarkable.

Thrombocytosis, BUN 32, ALP 332, ALT 144, USG 1.054 with 4+ proteinuria and an inactive sediment, normal T4.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient sedated with Torbugesic.

Stat Report: Not requested.

BREED

Cockapoo

Imaging Performed By: Andi Parkinson, BS, RDMS.

SEX

Male, neutered

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. A scant amount of echogenic debris is observed within the lumen. 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.

AGE

11/13/2010

The prostate is normal in size (0.90 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

WEIGHT

20.7 lbs.

The left kidney is normal size (5.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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Diplomate ACVIM
(Small Animal Internal
Medicine)

The right kidney is normal size (5.36 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

HOSPITAL NAME

Northwind AH

Adrenal Glands

The left adrenal gland is normal size (0.52 cm at cranial pole) (0.50 cm at caudal pole) (2.00 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.

REFERRING VET

Dr. Cross

The right adrenal gland is borderline enlarged (0.55 cm at cranial pole) (0.58 cm at caudal pole) (2.15 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.

INVOICE

13760

Spleen

The spleen is normal in size (1.04 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.64 cm hypoechoic nodule is observed at the caudal aspect. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein:

caudal vena cava ratio is approximately 1:1. 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 gastric lumen is mildly to moderately distended with ingesta. 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 segmentally dilated with chyme. 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 base and right limb of the pancreas are visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and mildly heterogeneous in appearance. The pancreatic duct is visible but not overtly dilated (0.24 cm in diameter). 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 presence of ingesta within the gastric lumen in the face of fasting suggests delayed gastric emptying.
- Benign diffuse hepatopathy. Diabetic hepatopathy is a top differential. Other considerations include idiopathic vacuolar hepatopathy, regenerative nodular hyperplasia or cholestatic liver disease. Inflammatory disease is considered less likely in light of the normal ALT. Infiltrative neoplasia (i.e., lymphoma) is possible but considered less likely.
- The pancreatic changes are suggestive of age-related remodeling. Mild chronic pancreatitis is possible, particularly if the patient is painful on cranial abdominal palpation.

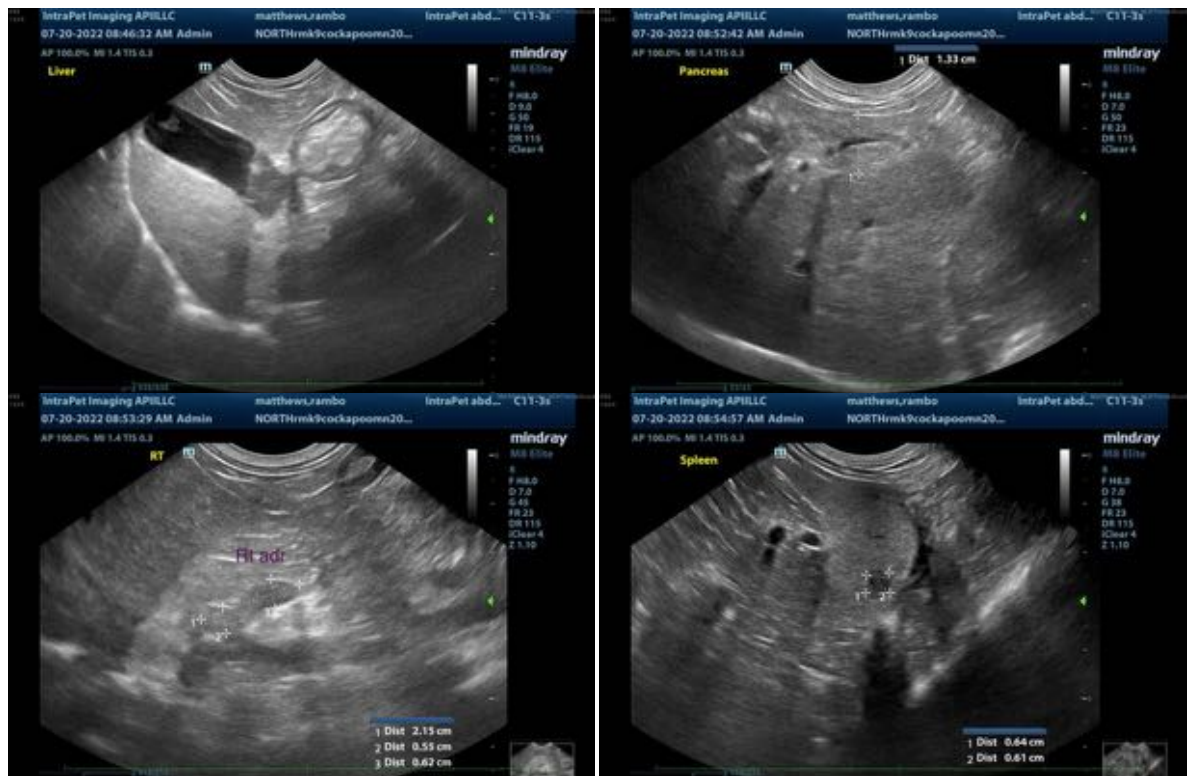
Secondary Findings:

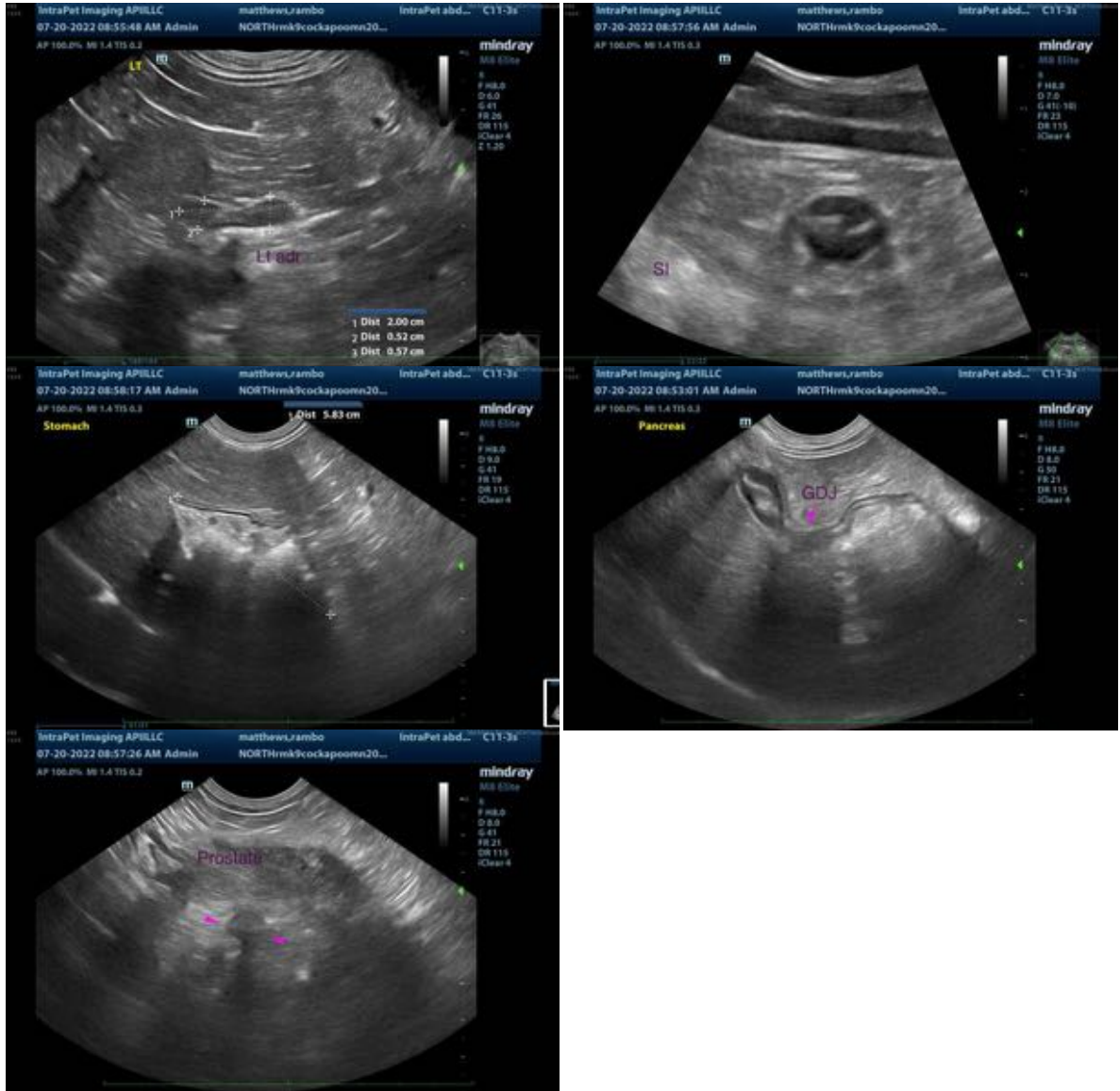
- Bilateral, chronic, age-related renal changes.
- The borderline right adrenomegaly may be a normal variant for this patient or may represent early hyperplastic change.
- The hypoechoic splenic nodule trends toward the benign (i.e., focus of lymphoid hyperplasia, extramedullary hematopoiesis or similar), however, an emerging tumor cannot be completely excluded.

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A malabsorption panel including serum cobalamin, folate, TLI and PLI is recommended as well as a fecal evaluation for ova and Giardia.
- Also consider initiation of a hypoallergenic diet, if the patient will tolerate it. A nutritional consultation (i.e., University of Tennessee) may be beneficial given the presence of concurrent disease processes.
- While awaiting test results, symptomatic care is recommended. If the patient's clinical signs fail to improve and the above diagnostics are inconclusive, gastrointestinal biopsies (i.e., endoscopic or surgical) may be warranted.
- Given the patient's age, thoracic radiographs (three-view) are recommended to assess cardiopulmonary status.





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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