

**DATE PRESENTING CLINICAL SIGNS**

10/11/22

Pet having chronic diarrhea for over a month and having a picky appetite. Pet has lost 10 lbs. since April of this year.

PATIENT

Monty Samios

Current Medications: Tylan (30g) 1/8th teaspoon BID

Lab Results: 4/11/2022: CBC: hemoglobin 12.8. Chem: SDMA: 15, BUN: 35, ALP: 220, cpl: 946, T4: 0.6

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.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Terrier mix

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension.

The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

SEX

Male, neutered

The prostate is mildly enlarged (1.75 cm width) with smooth curvilinear peripheral contours. The

parenchyma is subtly heterogeneous. No focal lesions are observed. The prostatic urethra is not overtly dilated.

AGE

3/10/2010

The left kidney is normal in size (6.54 cm in length) with a normal shape, smooth peripheral margins and

normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A hyperechoic medullary band is observed at the corticomedullary junction. A small cortical cyst is observed at the medial aspect. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

60 lbs.

The right kidney is normal size (5.99 cm in length) with a normal shape, smooth peripheral margins and

normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A hyperechoic medullary band is observed at the corticomedullary junction. A small cortical cyst is observed at the medial aspect. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

One still image of the left adrenal gland is available for interpretation. The left adrenal gland is normal size

(0.38 cm at cranial pole) (0.48 cm at caudal pole) (2.53 cm in length) with a normal shape and smooth peripheral contours. At the cranial pole, a 0.56 x 0.25 cm irregular, hyperechoic nodule is visualized. The remaining glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature appear normal.

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Aleman

The right adrenal gland is normal size (0.86 cm at the cranial pole)(0.69 cm at caudal pole) (2.37 cm in length)

with a normal shape, glandular echogenicity and detail. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

14073

Spleen

The spleen is subjectively normal in size (2.02 cm in width at the level of the hilus) with slightly undulating peripheral margins. The parenchyma is slightly mottled in appearance. At the cranial aspect, a 0.59 x 0.57 cm hypoechoic nodule is observed. At the caudolateral aspect, a 1.53 x 1.43 cm hyperechoic attenuating nodule is seen. Splenic vasculature is normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are

observed. Hepatic vasculature 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 small amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally fluid distended (mild). The small intestinal wall thickness is normal to mildly thickened (up to 0.54 cm) with retention of the normal layering pattern. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The region of the right limb is largely isoechoic relative to surrounding omental fat. See also *Other*.

Free Abdomen

There is no obvious evidence of free fluid. 1-2 prominent sublumbar lymph nodes are visualized, the largest measuring 2.33 x 1.00 cm.

Other

A 0.52 cm hypoechoic to slightly heterogeneous nodule is observed in the right cranial quadrant.

In the left cranial quadrant, a 3.34 x 1.89 cm ill-defined hyperechoic region with a hypoechoic center is visualized.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The small intestinal wall changes are most consistent with inflammatory bowel disease with some potential for emerging lymphoma.
- The origin of the lesion in the left cranial quadrant is unclear. It may be arising from pancreas, mesentery, lymph node, other. It may represent an inflammatory focus, granuloma, tumor (less likely), other.

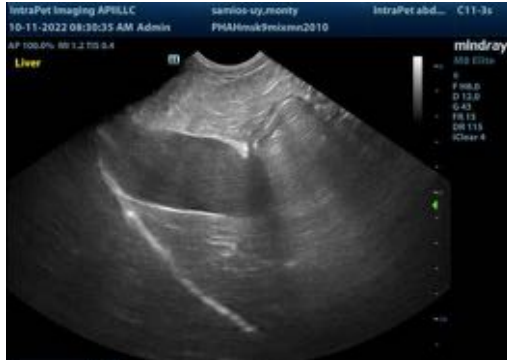
Secondary Findings:

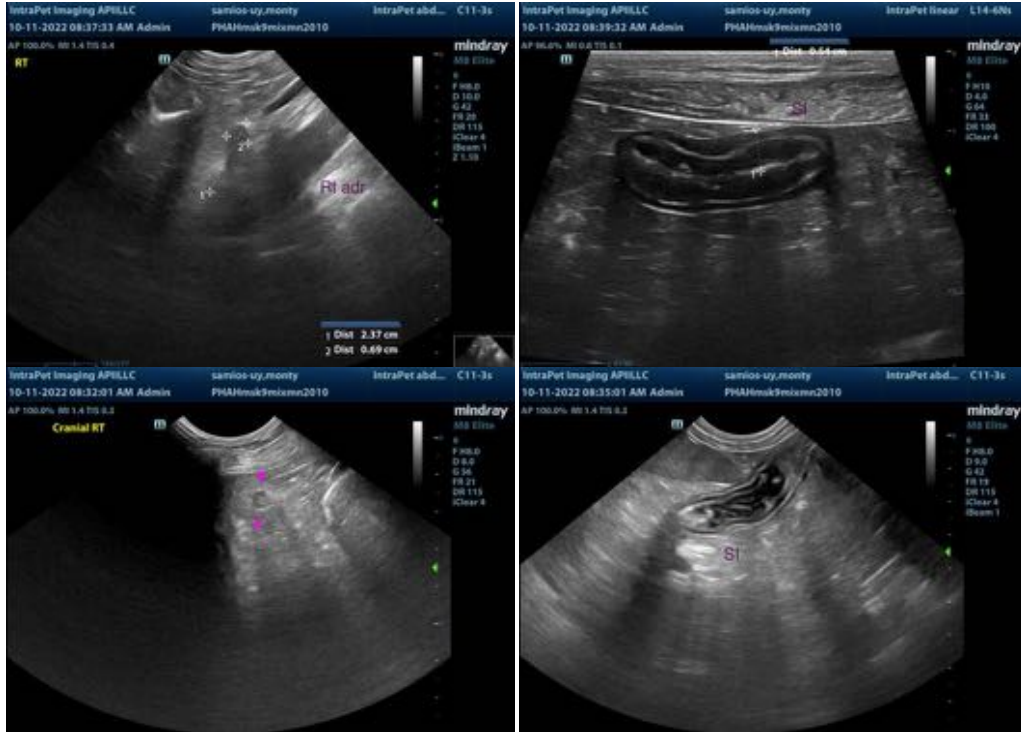
- Bilateral, chronic age-related renal changes with dystrophic mineralization.
- The left adrenal nodule trends toward the benign (i.e., benign nodular hyperplasia) with a lower possibility of an emerging tumor.
- The diffuse splenic parenchymal changes are non-specific and are most likely associated with a benign process (i.e., extramedullary hematopoiesis, lymphoid hyperplasia or similar). The hyperechoic splenic nodule is most consistent with a myelolipoma. The hypoechoic nodule may represent a benign focus (i.e., lymphoid hyperplasia) or less likely, an emerging tumor.
- 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 sublumbar lymphadenopathy could be consistent with reactive lymphadenitis, lymphoid hyperplasia or emerging neoplasia.

- The mild prostatomegaly may be a normal variant for this patient or could be consistent with late-in-life neutering (if applicable) or emerging neoplasia.
- The origin of the hypoechoic nodule in the right cranial quadrant is unclear. It may be a prominent lymph node, a nodule within the pancreas or mesentery, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Regarding the lesion in the left cranial quadrant, consider a fine needle aspirate, if accessible. A 25-gauge needle should be used.
- Regarding the chronic diarrhea, consider the following:
 1. Serum cobalamin, folate, PLI and TLI
 2. A fecal evaluation for ova/Giardia
 3. Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
 4. A 6-week limited antigen or hydrolyzed protein diet trial to assess for food allergies.
 5. Consider a 4-week course of Tylosin at 15-20 mg/kg by mouth every 12 hours as empirical treatment for small intestinal bacterial overgrowth.
 6. Consider initiation of fiber supplementation (Metamucil or Konsyl) during the diarrhea episodes.
 7. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.
 8. Depending on the results of the above diagnostics/therapeutics, endoscopic or surgical gastrointestinal biopsies may be warranted. Three-view thoracic radiographs should be performed prior to any anesthetic event.
- Regarding the prostate changes, consider a urine BRAF test to further screen for lower urinary tract neoplasia. It should be noted that a negative result does not completely rule out the possibility of cancer. Therefore, if the clinical suspicion is high, further testing (i.e., traumatic urethral catheterization or surgical biopsy) may be necessary to get a definitive diagnosis.





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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