**DATE PRESENTING CLINICAL SIGNS**

6.21.23 Chronic soft stools, intermittent diarrhea with blood.

PATIENT

Daisy Edwards

Current Medications: None listed.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Declined.
 Stat Report: Not requested.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

BREED

Rottweiler

SEX

Female Spayed

The left kidney is normal in size (6.65 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. At least one, small cortical cyst is observed. Several hyperechoic shadowing diverticular foci are observed. Moderate pyelectasia is present (0.56 cm in the longitudinal plane). There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

AGE

9/9/2010

The right kidney is normal in size (3.99 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. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

87 lbs

Adrenal Glands

The left adrenal gland is mildly enlarged, with a prominent caudal pole (0.63 cm at cranial pole) (0.88 cm at caudal pole) (2.61 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INTERPRETED BY

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

The right adrenal gland is enlarged (0.95 cm at cranial pole) (2.03 cm at caudal pole) (3.57 cm in length) with irregular peripheral contours. A 2.28 x 1.86 cm heterogenous mass is observed at the caudal pole. There is suspected vascular invasion.

HOSPITAL NAME

Mount Airy AH

Spleen

The spleen is subjectively normal in size (1.83 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is diffusely mottled with numerous small, ill-defined hypoechoic nodules throughout the organ. Splenic vasculature is normal with no evidence of thrombosis.

REFERRING VET

Dr. Atchley

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

INVOICE

13433

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated, echogenic, mostly gravity-dependent debris/sludge is observed within the lumen. 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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

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

- Right adrenal mass with suspected vascular invasion. Neoplasia (i.e., adenocarcinoma, pheochromocytoma, hemangiosarcoma) is considered likely, with a lower possibility of a benign process (i.e., adenoma, nodular hyperplasia). Mild left adrenomegaly is also present.

Secondary Findings

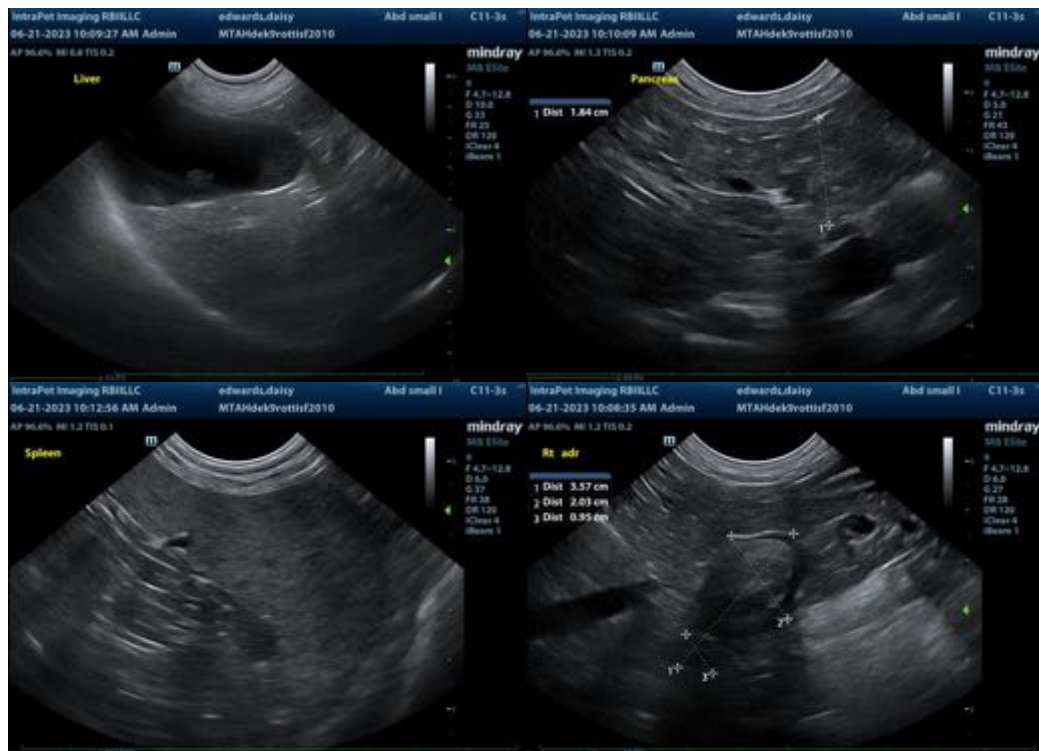
- Bilateral chronic renal changes with left dystrophic mineralization and pyelectasia
- The splenic parenchymal changes could be consistent with a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation). Alternatively, emerging neoplasia (i.e., round cell tumor) is possible.
- The hepatic parenchymal changes are nonspecific and may be secondary to age-related remodeling, regenerative nodular hyperplasia, vacuolar hepatopathy, inflammatory disease, hepatotoxicosis (i.e., copper), other hepatopathy. Correlation with the patient's liver values is recommended.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

*An obvious cause for the patient's GI signs is not definitively identified in this study. Considerations include infectious/parasitic disease, dysbiosis, food allergy/intolerance, inflammatory bowel disease, underlying metabolic issue, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Baseline lab work, including a CBC, chemistry panel, urinalysis and T4 is recommended (if not already performed).

- With regard to the right adrenal mass, consider the following:
 1. Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
 2. Baseline blood pressure measurement
 3. Further testing for a functional tumor (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels)
 4. +/- abdominal CT scan to further characterize the mass and evaluate for vascular invasion.
- Regarding the GI signs, consider the following:
 1. Fecal evaluation for internal parasites
 2. Consider prophylactic deworming with fenbendazole
 3. Initiation of a probiotic as well as a fiber supplement (i.e., psyllium) may prove beneficial.
 4. Consider a 4-week limited antigen or hydrolyzed protein diet trial.
 5. Texas GI panel including serum cobalamin and folate, TLI and PLI should be considered.
 6. Ultimately, GI biopsies may be necessary to get a definitive diagnosis.
- Regarding the splenic changes, consider an ultrasound-guided fine-needle aspirate (if clotting status is appropriate). A 25-gauge needle is recommended for the procedure.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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)
info@SonoPath.com