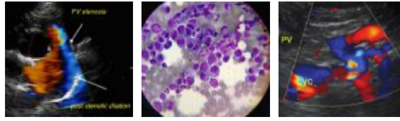


DATE
8/22/23

PATIENT
Sprout Long

SPECIES
Canine

BREED
Mixed breed

SEX
Male, neutered

AGE
11/20/2010

WEIGHT
20.1 lbs.

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

HOSPITAL NAME
Chadwell AH

REFERRING VET
Dr. Schaupp

INVOICE
15208

PRESENTING CLINICAL SIGNS

Decreased appetite followed by one episode of vomit and loose stools with straining. CPLi abnormal 8/14/23.

Current Medications: Enroquin 22.1 I PO BID, Metronidazole 250 mg 1/2 PO BID, Cerenia 16 mg 1PO QD x 4 days, Vetoryl 20 mg BID should be on 25 mg BID but just restarted at lower dose
Lab Results: Pancreatitis, slightly elevated BUN, electrolytes all WNL and ratio Na/K 1:34. Patient has Cushing's dz.
Radiographs: no obstructive pattern seen intestines distributed throughout abdomen without bunching. Liver and spleen normal size and shape.
BUN 34.7, albumin 2.4, ALP 910
Date of Previous IntraPet Ultrasound: 2/3/2023. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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 is normal.

The prostate is not definitively visualized due to its pelvic location.

The left kidney is normal in size (5.02 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The right kidney is normal size (4.82 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. 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.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.73 cm at cranial pole) (0.91 cm at caudal pole) (2.53 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 mildly enlarged (0.83 cm at cranial pole) (0.72 cm at caudal pole) (2.19 cm in length) with a normal shape. A 0.55 cm ill-defined hyperechoic to slightly heterogeneous nodule/area is observed at the cranial pole. The glandular echogenicity and detail at the caudal pole are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (xxx cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is slightly heterogeneous. A 1.06 x 0.56 cm ill-defined hyperechoic nodule/area is observed near the hilus. Splenic vasculature is normal.

Liver

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and exhibits subtle heterogeneity. 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 small amount of aggregated echogenic suspended debris 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 to borderline thickened (up to 0.50 cm) with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. The colonic lumen contains some shadowing fecal material. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is slightly hyperechoic 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.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass. There is no obvious evidence of pleural effusion in the visible window.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- An obvious cause for the patient's GI signs is not definitively identified in this study. Considerations include microscopic gastrointestinal disease (i.e., inflammatory bowel disease, dysbiosis, infectious/parasitic disease, food allergy/intolerance), underlying metabolic issue (i.e., iatrogenic hypoadrenocorticism secondary to Vetoryl therapy, low-grade pancreatitis), other.

Secondary Findings:

- Minor bilateral chronic renal changes.

- Bilateral adrenomegaly, consistent with the previous diagnosis of pituitary dependent hyperadrenocorticism. The hyperechoic nodule/area in the right adrenal gland, which was previously observed, could be consistent with a focal area of hyperplasia or an emerging adenoma, adenocarcinoma or pheochromocytoma. A benign process is favored.

- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

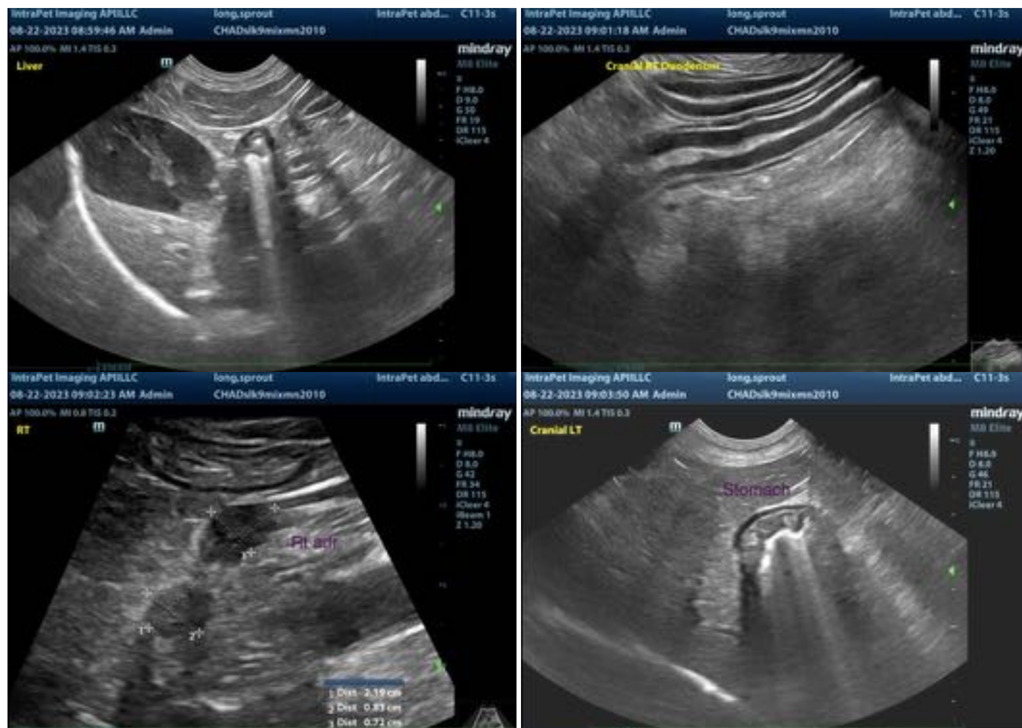
- Minor age-related pancreatic remodeling in the right limb.

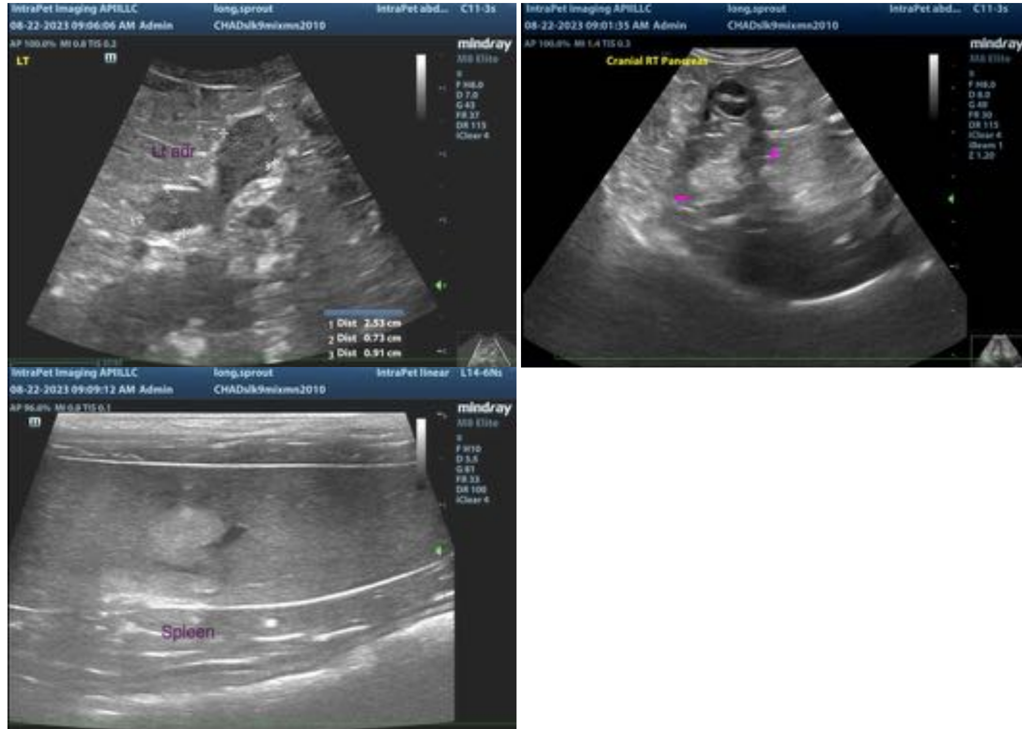
- The mild small intestinal wall thickening may be a normal variant or may be secondary to an inflammatory process (i.e., inflammatory bowel disease). Changes are similar to the previous sonogram.

- 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider repeating an ACTH stimulation test to evaluate for iatrogenic hypoadrenocorticism secondary to trilostane therapy.
- Other diagnostic/therapeutic considerations could include the following:
  - A fecal evaluation for internal parasites.
  - Texas GI panel including serum cobalamin, folate, TLI and PLI.
  - Initiation of a probiotic with a high colony count +/- fiber supplementation (i.e., psyllium).
  - Limited antigen or hydrolyzed protein diet trial when the patient is eating normally.
  - Three-view thoracic radiographs to evaluate for chest pathology.
  - If the above diagnostics are inconclusive, endoscopic or surgical GI biopsies may be warranted.
  - Given the hypoalbuminemia, also consider pre- and post-prandial serum bile acids to assess for occult hepatic dysfunction and a UPC (if proteinuria is present on the urine dipstick).





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)
info@SonoPath.com