

**DATE PRESENTING CLINICAL SIGNS**

2/8/23

In the last month, P has been increasingly hungry and vocalizing to get more food following meals. Will do with breakfast and dinner but will bark incessantly to get additional food and treats. Ddx CCD vs. malabsorption/digestive issue. No abnormal bowel movements. Pending GI panel as well Additional history of IRIS stage II renal disease, cervical hemilaminectomy C3-4 for IVDD, severe dental disease with gingival recession and halitosis, malignant melanoma treated by melanoma vaccine by internal medicine specialist. Heart murmur- grade 4/6 systolic murmur with moderate mitral valve regurgitation with mild left heart enlargement. Additional history of chronic collapsed lung lobe.

PATIENTPeanut Maxfield
Rockel**SPECIES**

Canine

BREED

Chihuahua

SEX

Neutered Male

Current Medications: Pimobendan 1.25mg q12hr, clindamycin 25mg q12hr (14 days on and 14 days off), cisapride 2mg q12hr, Senilife supplement, Gabapentin 100mg q12hr, Omega 3.

Lab Results: 1/28/2023: CBC: monocytosis 1.6k (prev 1.36k). CHEM: azotemia, normalized Creat/BUN (SDMA 16, prev 15; Creat 1.5, prev 1.9; BUN 18, prev 31), low liver values: AST 14, ALT 13. UA: pending submission. T4: 1.7 WNL.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient sedated with Gabapentin.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

9/18/08

WEIGHT

8.1 Pounds

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

INTERPRETED BYBeth Johnson, DVM
DACVIM

Prostate is very mildly enlarged (1.0 cm wide). Parenchyma is diffusely homogenous and relatively hyperechoic. Normal distinct margins and symmetrical bilobed shape are maintained. This finding is likely normal patient variant, especially if patient was neutered as an adult; however, if patient was neutered as a puppy, prostatitis or, less likely, infiltrative neoplasia cannot be ruled out. This finding should be interpreted in combination with clinical signs, urinalysis results, etc. and either further investigated or monitored, as indicated.

HOSPITAL NAME

Perry Hall AH

The right kidney is normal in size (3.03 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

REFERRING VET

Dr. Breidenbaugh

The left kidney is normal in size (3.21 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INVOICE

44823

Adrenal Glands

The right adrenal gland is normal in size (1.43 cm long x 0.72 cm at the cranial pole and 0.56 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (1.87 cm long x 0.50 cm at the cranial pole and 0.78 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. A small hypo- to anechoic nodule is noted in the caudal pole of the left adrenal gland, measuring 0.3 cm x 0.40 cm in size and does not distort shape or capsule. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent. At the level of the distal esophagus/esophageal inlet, where there is an approximate 1.0 cm diameter mildly heterogeneous, hypoechoic nodule.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The area of the pancreas contains irregular hyperechoic pancreatic remodeling.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Nodule/mass at the esophageal inlet** – Concerning for infiltrative neoplasia. A benign lesion such as a polyp can't be ruled out but is considered less likely.
- **Hyperechoic hepatomegaly** - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible but considered less likely.
- **Hyperechoic pancreas** – This finding is suggestive of pancreatic fibrosis, possibly secondary to chronic pancreatitis. A TLI is recommended to rule out exocrine pancreatic insufficiency (EPI), especially if clinical signs (weight loss, diarrhea, etc.) are present.
- **Hypo- to anechoic nodule in the caudal pole of the left adrenal gland** – likely an incidental or benign cyst/nodule with infiltrative neoplasia being much less likely.

SECONDARY FINDINGS

- Very mild prostatomegaly as described above
- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

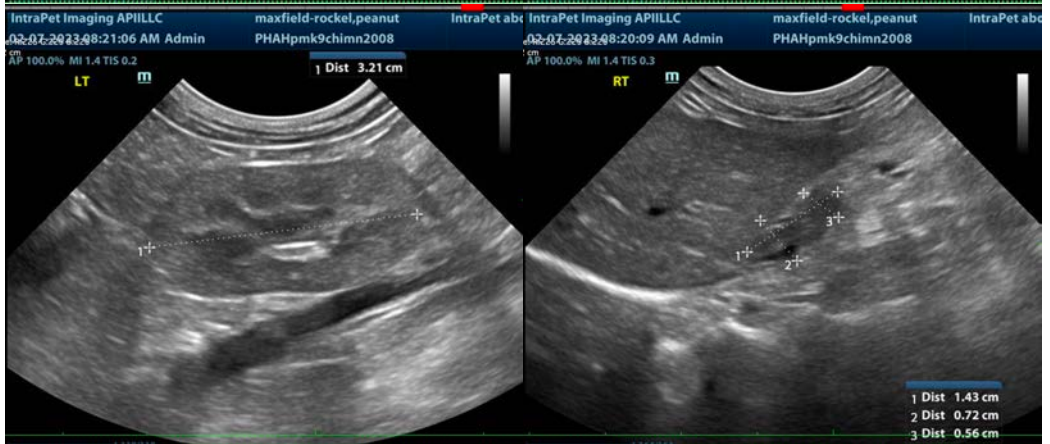
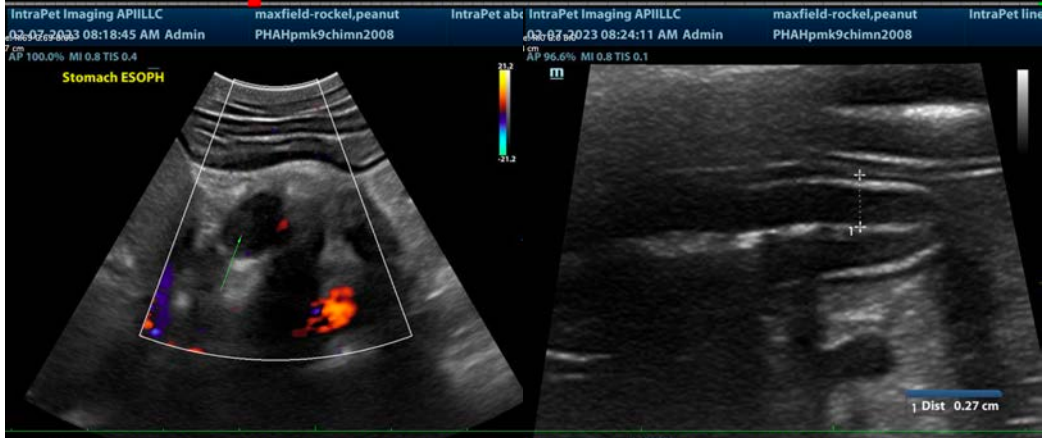
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The presence of a mass at the esophageal inlet is the most concerning pathology noted in this study. Further recommendations include either fine needle aspirate if it can safely be reached and if patient's coagulation status is appropriate, or potentially endoscopy for further evaluation and biopsy. Having said that, that mass cannot be easily blamed for the patient's reported polyphagia.

Therefore, as is reportedly already pending, to rule out proteinuria, a urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended, and to further assess gastrointestinal disease, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Given the appearance of the pancreas, exocrine pancreatic insufficiency as a cause of this patient's polyphagia should also be ruled out, so the pending GI panel should include TLI.

Beyond that, pending the above results, etc., especially given the small adrenal nodule, next diagnostic steps to work up polyphagia could include testing for hyperadrenocorticism in the form of a low-dose Dexamethasone suppression test.







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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com