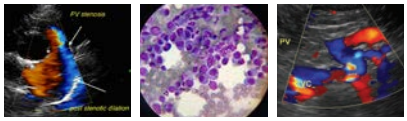
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

12/3/21

PATIENT

Scalawag Hegarty

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/13/09

WEIGHT

11.5 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Churchbille Vet Clinic

REFERRING VET

Dr. Kauffman

INVOICE

33230

PRESENTING CLINICAL SIGNS

History: Previously diagnosed with inflammatory bowel disease. Has been doing well on budesonide and Royal Canin Selected Protein PR diet. O recently had trouble sourcing canned RCVD PR and used a different canned rabbit protein food. After this change, P began having diarrhea and was seen for this on 12/2/21. There is also a grade II/VI murmur noted.

Current Medications: Budesonide 1mg - 1 tablet PO every other day long-term. Started on metronidazole liquid (100mg/mL) 12/2/21: 0.55 mL PO BID 7 days.
Lab Results: Lab work performed 06/21: CBC – wnl, Chem - mildly elevated Na (161), otherwise wnl, ProBNP wnl 67, T4 wnl, Urinalysis wnl.
Date of Previous IntraPet Ultrasound: 7-23-2019.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.14 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.21 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is large in size measuring 1.21 cm x 1.8 cm. It is observed in its normal position cranial to the left renal artery. It is uniformly rounded and normal in appearance, most consistent with a left adrenal mass.

The right adrenal gland is normal in size measuring 0.25 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.22 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with liquid fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a mild mesenteric lymphadenopathy visualized with lymph nodes measuring 0.45, 0.43, 0.31 cm. The omentum is of increased echogenicity around the lymph nodes and the ileocecal junction.

ULTRASONOGRAPHIC FINDINGS

- Enlarged left adrenal gland – most likely consistent with an adrenal mass. Left adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The left adrenal gland appears enlarged. It is irregular and rounded in appearance and does not appear to have any distinct evidence of vascular invasion. These masses can be benign or malignant and can secrete hormones or be non-active. Options moving forward include:

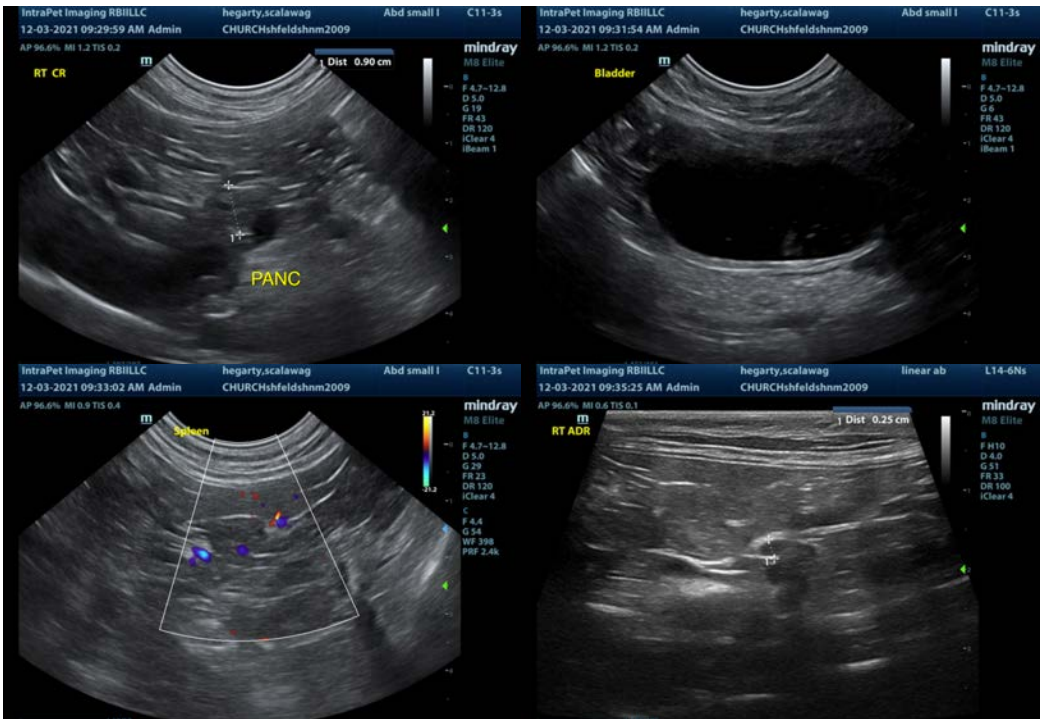
- Recommend 3-view thoracic radiographs.
- Recommend blood pressure evaluation. If hypertensive, consider evaluating catecholamine levels for possible pheochromocytoma and aldosterone levels for possible aldosterone secreting tumor.

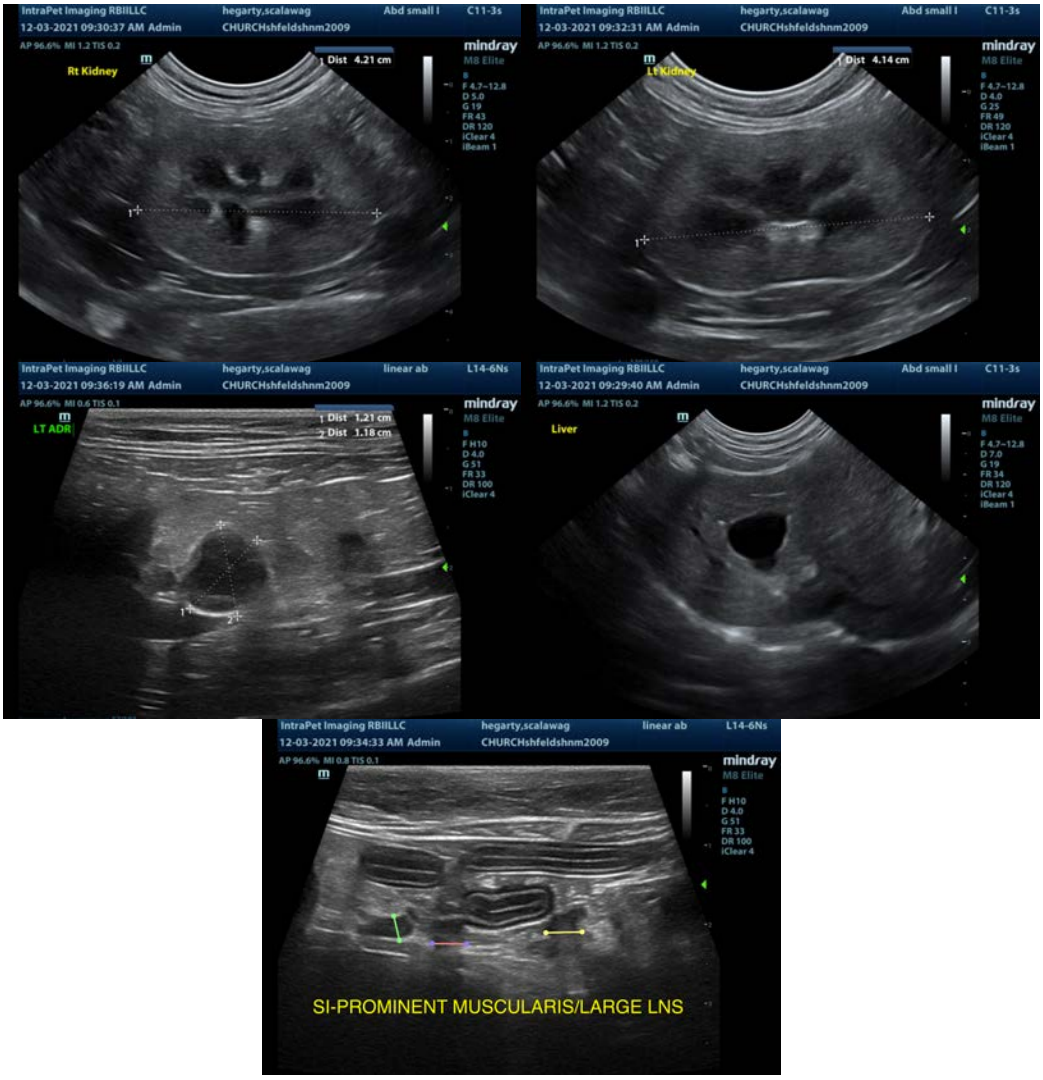
- If electrolytes are abnormal, recommend testing aldosterone levels.
- If signs of Cushing's are present, you could consider adrenal function testing with low dose Dexamethasone suppression test (protocol is different in cats than in dogs).
- If hormone excess is identified, consider referral to a veterinary surgeon for adrenalectomy +/- preoperative CT scan with contrast.
- If no symptoms of Cushing's are present, no hypertension is present, and electrolytes are normal, consider surgical resection or continued monitoring with ultrasound (recheck ultrasound in 2-3 months).

Many of these nodules can be benign and incidental in nature, but unfortunately some can be very aggressive and invasive with high metastatic potential.

Based on the history provided, I suspect this patient is relatively asymptomatic for the adrenal mass. There is a prominent pancreas visualized as well as prominent mesenteric lymph nodes and muscularis layer of the small intestine.

- If not already on a novel protein/hydrolyzed protein prescription diet, recommend starting this.
- Recommend probiotic therapy.
- Recommend GI panel to Texas A&M University for quantitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and the small intestine.
- If diarrhea and weight loss persist, recommend obtaining GI biopsies.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com