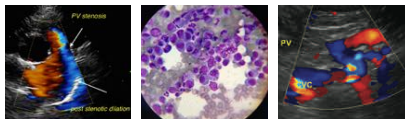
IMAGING PERFORMED BY

IntraPet.com



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DATE
7/5/22

PATIENT
Tucker Campo

SPECIES
Canine

BREED
English Springer Spaniel

SEX
Neutered male

AGE
7/3/16

WEIGHT
44.5 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Willer

INVOICE
31482

PRESENTING CLINICAL SIGNS

Owners and dogs just came back from Costa Rica on Wednesday after being away for a year owner did get cans of dog food from 7-eleven on Wednesday- did get that Wednesday and Thursday started vomiting on Thursday- initially clear but now brown fluid; not eating; not able to hold down water lethargic not aware of getting into anything.
Current Medications: Ondansetron, Ampicillin, Furosemide, Protonix, Buprenorphine.
Lab Results: See attached.
Radiographs: Suspicious gas pattern. Recheck abdominal xray -- stomach empty; gas in colon; still has irregular appearing SI or mass effect in mid-abdomen but does not appear obstructive.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick. Mucosa is hyperechoic and irregular. No masses are observed. Mineral densities with acoustic shadow consistent with cystoliths are present along the dependent wall. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

The prostate is normal for a neutered dog.

Left kidney is normal is size (5.86 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.

Right kidney is normal is size (5.97 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.

Adrenal Glands

Left adrenal gland is normal in size (2.58 cm long, 0.75 cm at cranial pole and 0.77 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.5 cm long, 1.2 cm at cranial pole and 0.79 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

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 with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

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

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion or apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- **Inflammatory bowel disease (IBD) -** This finding has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No concurrent lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probably, but lymphoma cannot be definitively ruled out without tissue sampling.

- **Heterogenous liver.**

- **Chronic Cystitis -** Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely give the location and diffuse nature of the changes. Cystoliths are noted in the bladder.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall this patient's gastrointestinal signs are likely secondary to an underlying infiltrative gastrointestinal disease +/- acute gastroenteritis from dietary indiscretion or even mild pancreatitis. However, given the attached laboratory values acute kidney insult with differentials being infectious such as Leptospirosis, toxic, etc. have to also be considered.

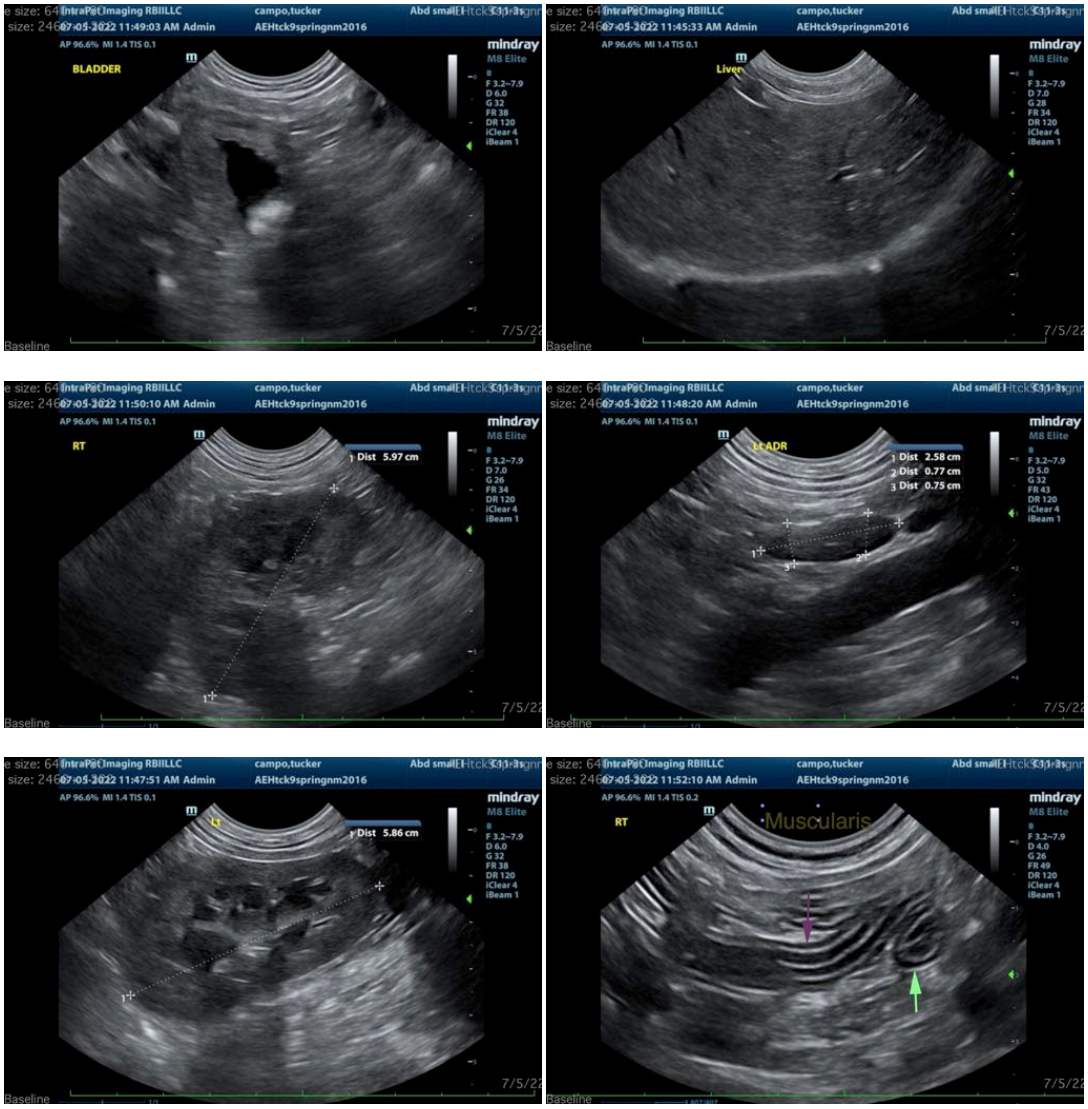
1. A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

2. A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

3. Given the azotemia combined with the liver changes testing for Leptospirosis is recommended if not already evaluated.

4. Blood pressure measurement is recommended if not recently evaluated.

5. Ultimately, biopsies of the gastrointestinal tract would be obtained to definitively diagnose and therefore, the suspected infiltrative bowel disease. However, in the meantime, empirical deworming with a 5 day course of Panacur is recommended combined with supportive medical management of this patient's gastrointestinal signs and laboratory value indicated dehydration with fluid therapy, antiemetics, gastroprotectants, appetite stimulants if necessary and potentially a broad spectrum antibiotic.



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.

Beth Johnson, DVM DACVIM

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