

**DATE PRESENTING CLINICAL SIGNS**

1/5/23

11/26/22- Owner complaint of diarrhea for ~1week. Negative fecal and normal bloodwork with normal appetite and no vomiting. Xrays showed increased segmentary peristalsis in colon as with colitis. Owner declined U/S at that time and elected Diet trial with R.C. HP and Metronidazole and tapering Prednisolone instead. Owner says patient had significant improvement on diet and meds but once tapered Pred to e.o.d. problem returned. Owner now wants to do U/S to ensure patient likely will require lifelong management with Pred type meds?

**PATIENT**

Max Groves

**SPECIES**

Canine

Current Medications: Royal Canin HP, Prednisilone-5mg- SID  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.  
Imaging Performed By: Stephanie Warga RDCS, RVT.

**BREED**

Cavalier King Charles  
Spaniel

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

Neutered Male

**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.

**AGE**

1/1/11

Prostate is normal in size, echotexture and echogenicity for a neutered male.

**WEIGHT**

25 Pounds

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, or mineral observed. A subtle chronic infarct is suspected in the right kidney. The right kidney measures 5.0 cm. The left kidney measures 4.53 cm.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The right adrenal gland measures 2.57 cm long x 0.93 cm at the cranial pole and 0.73 cm at the caudal pole. The left adrenal gland measures 2.9 cm long x 1.0 cm at the cranial pole and 1.1 cm at the caudal pole.

**HOSPITAL NAME**

Alexander AH

**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.

**REFERRING VET**

Dr. Alexander

**INVOICE**

43985

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. 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.

Diffusely, 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). Focally, in the mid abdomen, there is a loop of small bowel with a concentric hypoechoic loss of layering and a thick wall measuring 1.0 cm in thickness. The focal bowel mass is surrounded by enhanced hyperechoic mesenteric fat. The focal change is 6+ cm in length. 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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is a scant amount of anechoic free fluid.

There is no apparent lymphadenopathy noted in these images.

## **PRIMARY FINDINGS**

- **Focal small bowel mass** – concerning for infiltrative neoplasia such as lymphoma versus adenocarcinoma versus other. Benign inflammatory lesion is possible but considered less likely, given the loss of layering. Enhanced mesenteric fat and scant amount of free fluid is suggestive of a focal peritonitis surrounding the mass.
- **Bilateral adrenomegaly** – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.

## **SECONDARY FINDINGS**

- **Mild 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.
- Age related kidney changes with possible subtle chronic infarct in the right kidney

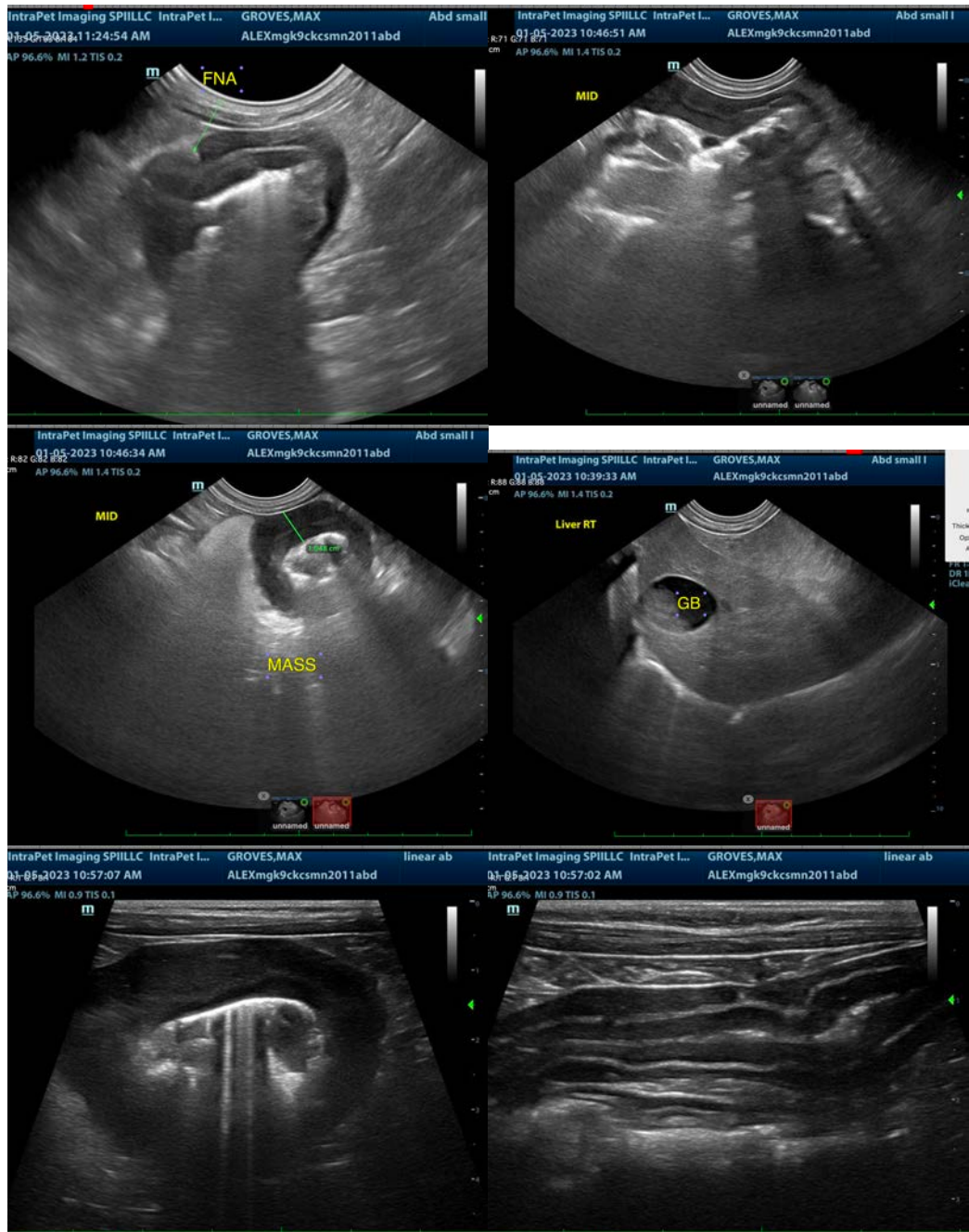
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

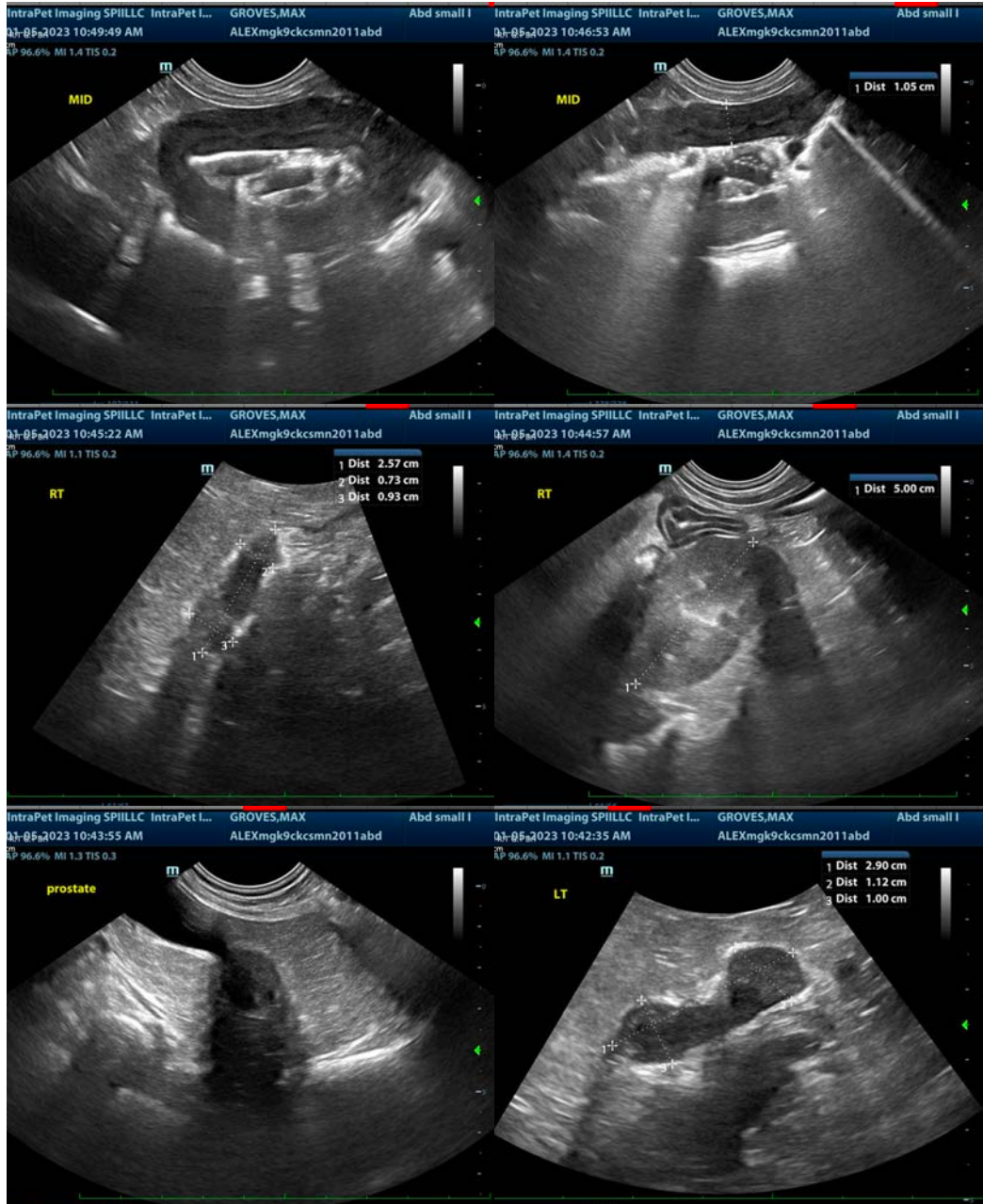
As was reportedly already performed, a fine needle aspirate of the bowel mass is recommended with submission of samples for cytology.

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

In the meantime, 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.

A probiotic such as Visbiome or Provable could potentially be added empirically to help improve/control diarrhea while awaiting results.







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.

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