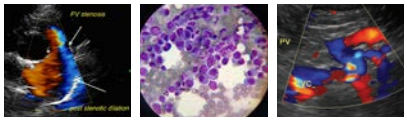
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

10/18/22

PATIENT

Dexter Cornett

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

5/19/09

WEIGHT

16.5 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Stephanie Warga
RDCS, RVT

HOSPITAL NAME

Bel Air Vet Hospital

REFERRING VET

Dr. Stevenson

INVOICE

42148

PRESENTING CLINICAL SIGNS

Chewing paws(allergies)/ inappropriate urination- straining. Recent onset wheezing when going upstairs. struggles to defecate, firm +/- larger right kidney; body score 4/5. Allergies skin lesions +urine stains, right hip resistance.

Current Medications: Lasix 10 mg/ml-1.5 ml by mouth every 12 hours
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

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, mineral or infarcts observed. The left kidney measures 3.86 cm. The right kidney measures 4.04 cm.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.37 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.33 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. An approximately 3.0 cm in diameter heterogeneous cystic mass disrupts the capsule off of the head of the spleen.

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. Several multifocal nodules/masses of mixed echogenicity are noted, primarily hyperechoic in echogenicity but containing multiple cysts of varying size. In the mid to right caudal liver, one of those cystic masses appears to be attached to extending into an approximately 5.5 cm long, 1.5 cm wide, avascular, hypoechoic structure, possibly fluid-filled with some echogenic septations and debris within the structure.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and 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 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 is empty with no evidence of obstruction or foreign material.

At the area of the Ileocecocolic junction, there is an approximately 2.5 cm round, heterogeneous, primarily hypoechoic mass.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a small amount of anechoic free fluid, enhanced mesenteric fat, and mesenteric lymphadenopathy, primarily around the liver and the Ileocecocolic mass.

PRIMARY FINDINGS

- **Bowel mass at the level of the Ileocecocolic junction** – most concerning for infiltrative neoplasia with round cell neoplasia such as lymphoma versus adenocarcinoma being the top two differentials. A benign inflammatory lesion is possible but considered much less likely. Free fluid and enhanced fat and mesentery surrounding the mass are suggestive of a focal peritonitis.

- **Inflammatory bowel disease (IBD) pattern –** Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.

- **Feline biliary cystadenomas –** In a senior cat, this liver lesion is most consistent with a/multiple benign biliary cystadenoma(s). Malignancy cannot be ruled out, especially given concurrent pathology throughout the abdomen. The avascular hypo- to anechoic structure that appears to be associated with one of these cyst masses could represent a necrotic or abscessed portion of the mass versus an associated anechoic lymph node, versus a portion of infarcted liver versus other. It is a very unusual appearing lesion without a definitive underlying etiology known based on ultrasound alone.

- **Cavitated splenic mass** – Also concerning for infiltrative neoplasia given the abundance of pathology throughout multiple organs. A benign cyst, hematoma, abscess, etc. is also possible however, and cannot be differentiated without tissue sampling.

SECONDARY FINDINGS

- Urinary bladder debris

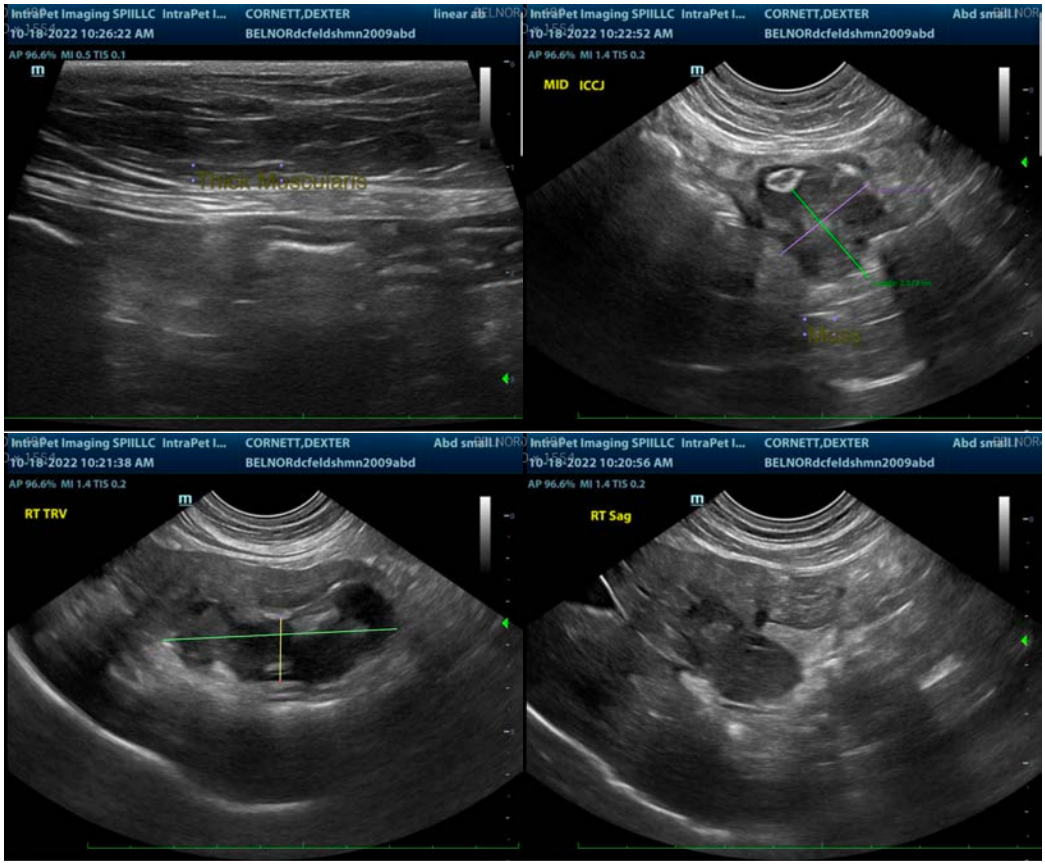
- Age related kidney changes

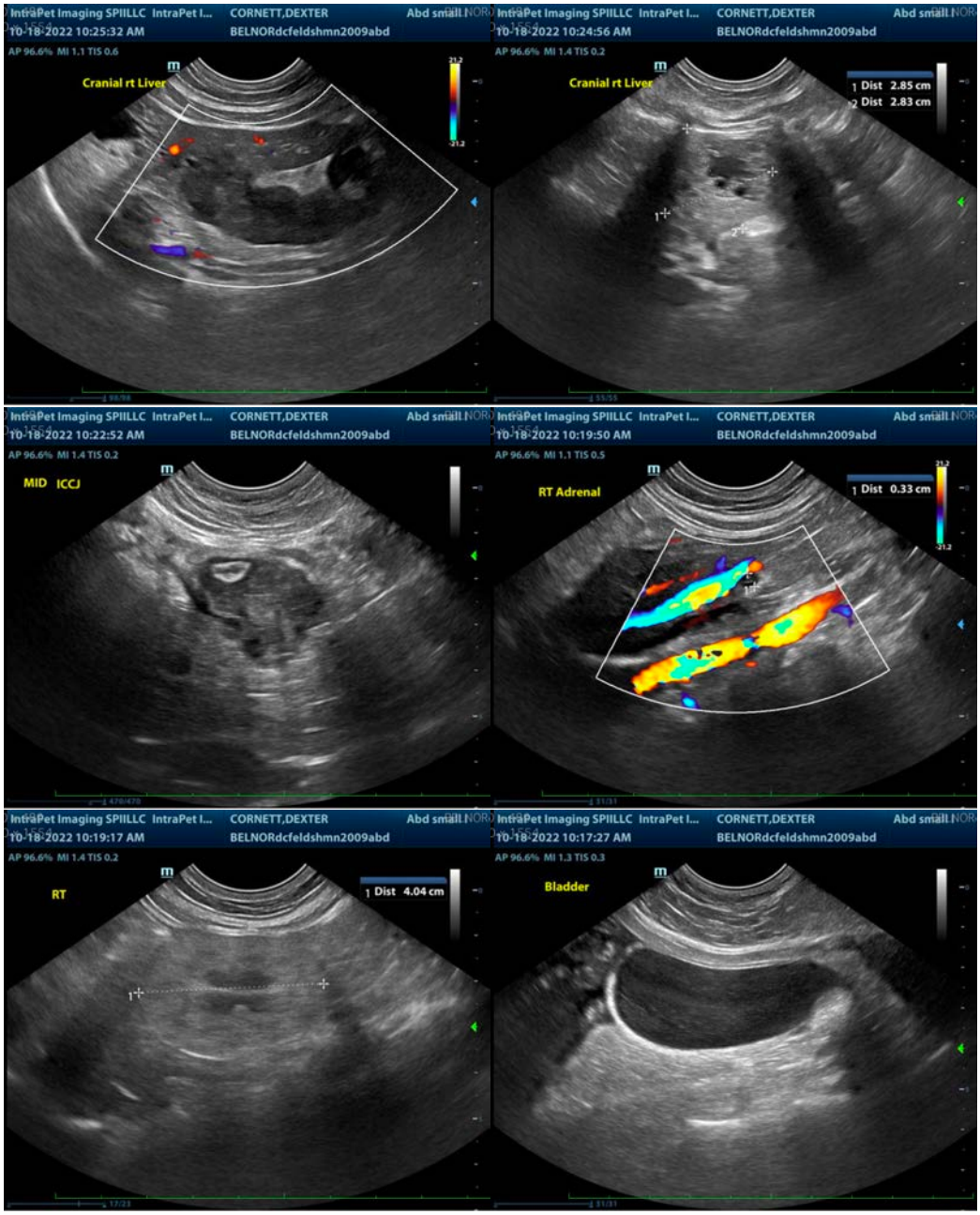
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations depend on level of aggressiveness elected by attending doctor and owner. One option, given the abundance of pathology and several atypical appearing lesions, includes an abdominal CT scan for potentially more sensitive imaging/specific tissue origination of some of the lesions, primarily the Ileocecocolic junction mass and the avascular liver extension.

Alternatively, or additionally, fine needle aspirate of the liver lesion as well as the Ileocecocolic junction mass, as well as the splenic mass could be considered if patient's coagulation status is appropriate. Pre-medication with diphenhydramine is recommended in case of mast cell tumor. Or an exploratory laparotomy could be directly pursued with plans to remove/biopsy the spleen/splenic mass, the liver mass, the Ileocecocolic junction mass, as well as obtain biopsies of the diffusely thick muscularis throughout the small bowel. In the meantime, given this patient's reported clinical signs and eosinophilia, a fecal exam is recommended if not recently evaluated, as is fungal testing if geographically appropriate, i.e., histo antigen to MiraVista.

Empirical deworming with a 5-day course of Panacur is recommended, as well as Urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended. Finally, medical management of the reported constipation with stool softener such as lactulose or potentially Metamucil is recommended.

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Cranial rt Liver
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Cranial rt Liver
1 Dist 2.85 cm
2 Dist 2.83 cm
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MID ICCJ
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RT
1 Dist 4.04 cm
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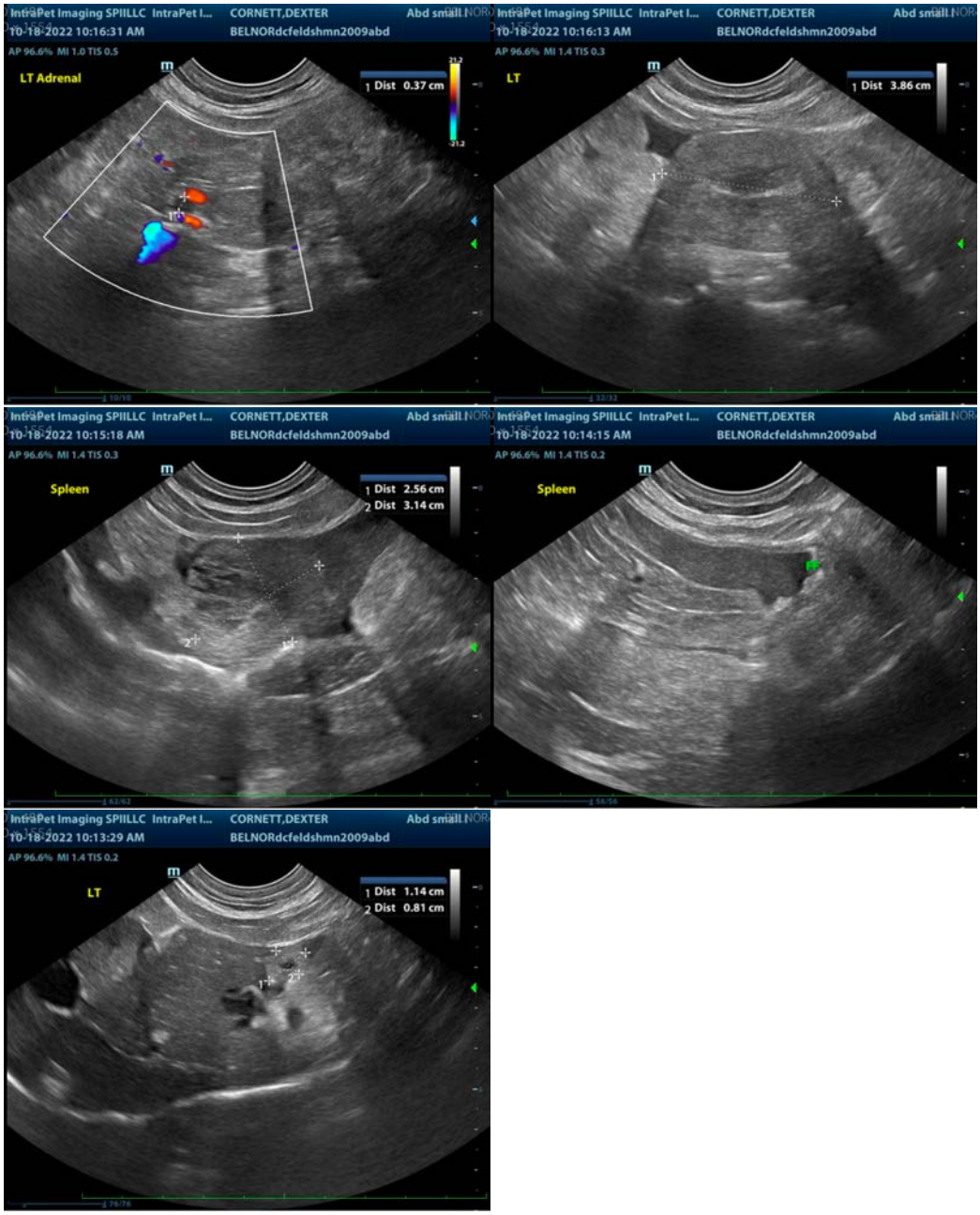
AP 96.6% MI 1.3 TIS 0.3
Bladder



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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