IMAGING PERFORMED BY

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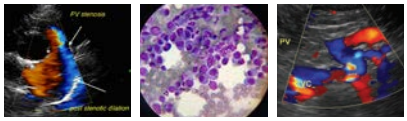

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

1/20/23

PATIENT

Juliet Ketzis

SPECIES

Feline

BREED

Siamese

SEX

Spayed Female

AGE

10/10/12

WEIGHT

6.75 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Cat Sense Feline Hospital

REFERRING VET

Dr. Sinclair

INVOICE

44359

PRESENTING CLINICAL SIGNS

Recheck AUS. Juliet has had liver issues since her previous ultrasound and has had an e. tube in. She has been icteric and was initially going up while her ALT, AST and ALKP were going down but 2 weeks ago her bilirubin had mildly decreased to 7.4 rom 8.8. 2 days ago she vomited and her appetite has been decreased since. She has become extremely icteric with her bilirubin going to 12.8. I am concerned she may be developing an obstructed gallbladder/bile duct (can possibly see on x-ray). She has also become a little more anemic.

Current Medications: Ursodiol 25mg sid (had been stopped but then restarted), Prednisolone 5mg am, 2.5mg pm, Cyproheptadine 1mg bid, Ondansetron 1mg bid given in sq fluids, Renal K powder, miralax, cerenia as needed
Lab Results: ALT = 545 U/L (12 - 130), ALKP = 366 U/L (14 - 111), GGT = 23 U/L (0 - 4), TBIL = 12.8 mg/dL (0.0 - 0.9), CHOL = 394 mg/dL (65 - 225)
Date of Previous IntraPet Ultrasound: 10/25/22. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: STAT requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (3.45 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (3.75 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 normal in size measuring 0.42 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 0.54 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 borderline large (1.19 cm), 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 large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a small, slightly cystic, irregular lesion visualized in the

right side of the liver, measuring 1.16 cm x 1.43 cm (previous measurement 10/25/22 was approximately 1.0 cm).

The gallbladder lumen is moderately to significantly distended. The wall of the gall bladder is mildly thickened (0.18 cm) with a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.25 cm. Jejunum wall measures 0.20 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 formed 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 mottled 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

There is scant free fluid. No lymphadenopathy. The omentum is generally of normal echogenicity.

Other

Ringdown artifact is visualized at the level of the diaphragm, and there appears to be pleural effusion present.

ULTRASONOGRAPHIC FINDINGS

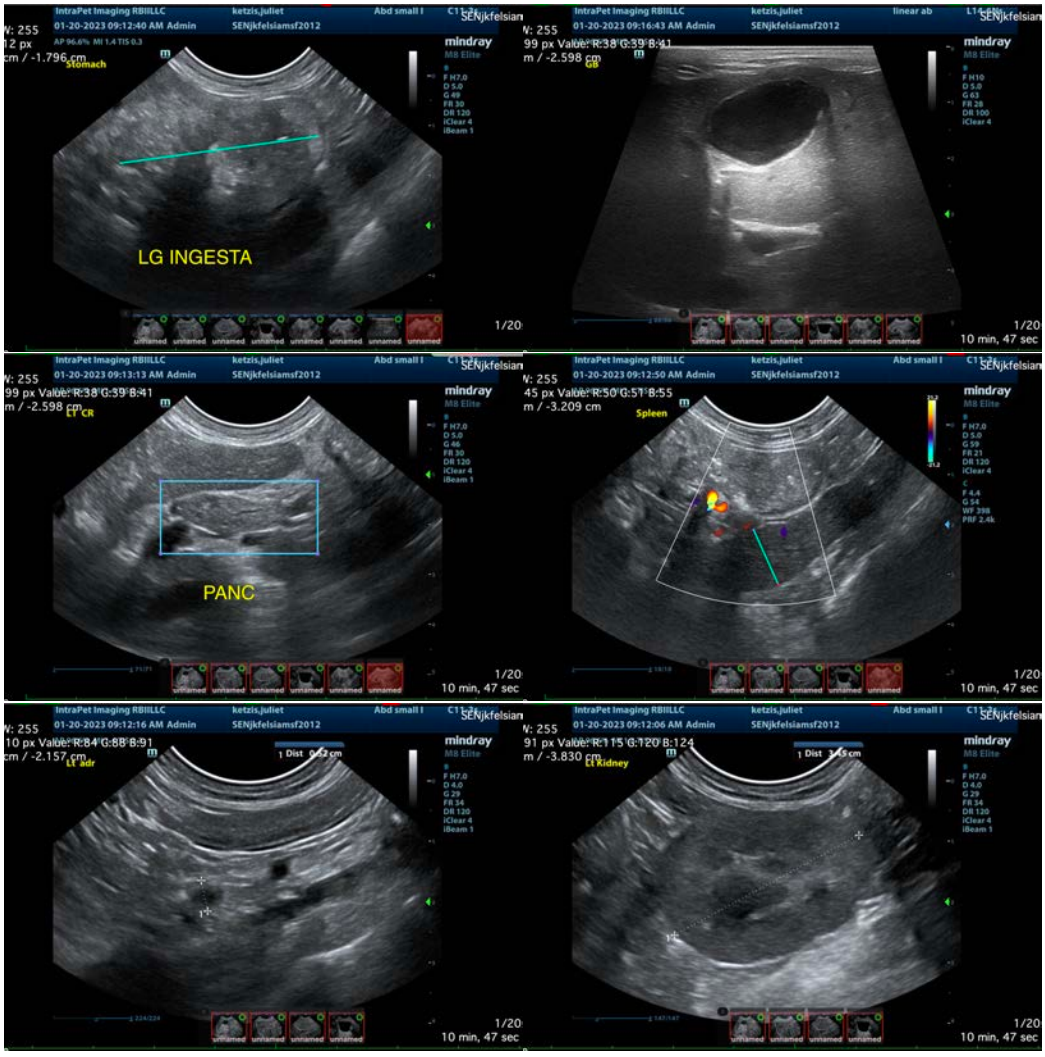
- Large, slightly irregular spleen – This could represent normal anatomic variation, congestion, or infiltrative disease. Recommend a fine needle aspirate.
- Prominent, mildly heterogeneous liver with a cystic lesion in the right liver – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. The cystic lesion appears relatively stable to the previous scan and likely represents a benign lesion.
- Moderately distended gallbladder with mildly thickened wall – This could be consistent with mild inflammation. There is no significant evidence of bile duct dilation or stone/obstruction visualized.
- Large intraluminal gastric material – Findings are consistent with a full stomach, likely secondary to tube feeding.
- Pleural effusion and scant free abdominal effusion
- Ringdown artifact seen at the level of the diaphragm – This can be associated with pulmonary parenchymal disease. Recommend 3-view thoracic radiographs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver appears large with no obvious evidence of a gallbladder obstruction or significant biliary disease. Findings are concerning for a primary hepatopathy. I would strongly consider a fine needle aspirate of the liver (if this has not already been done), provided coagulation parameters are normal, looking for underlying round cell neoplasia.

Additionally, I would recommend a fine needle aspirate of the spleen. The current Prednisone usage could potentially make obtaining a diagnosis more difficult, but if a cytologic diagnosis cannot be obtained, consider surgical biopsies. I would consider tapering the prednisone dose down to an anti-inflammatory dose (0.5 mg/kg per day) and continuing Ursodiol.

There is a scant amount of free abdominal fluid and some pleural effusion present. This could be secondary to fluid overload secondary to tube feeding, cardiac disease, hypoalbuminemia, inflammatory or neoplastic disease, etc. If not already done, quantitate the fluid volume administered with food. Consider a cardiac ultrasound and 3-view thoracic radiographs +/- a thoracocentesis with fluid analysis and cytology.

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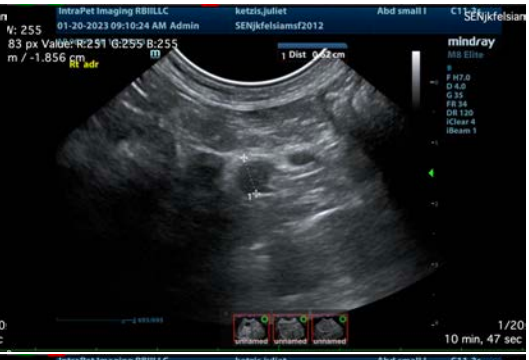
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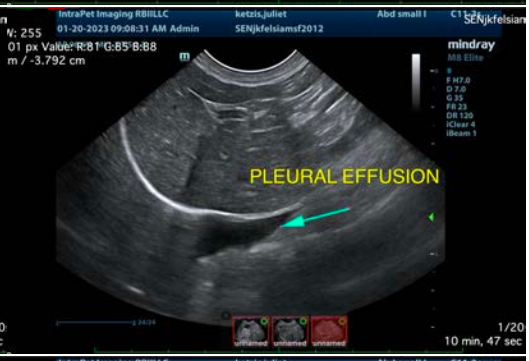
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PLEURAL EFFUSION
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IntraPet Imaging RBIIILLC
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Liver RT
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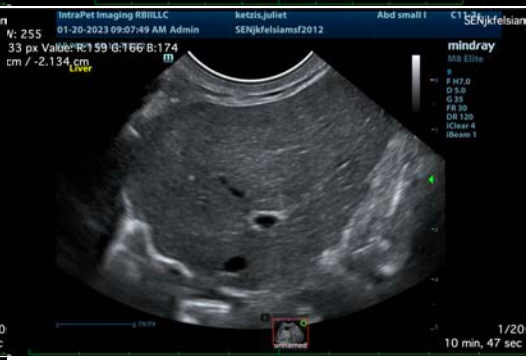
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Liver
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IntraPet Imaging RBIIILLC
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Liver
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The information and recommendations provided are based 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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