

**DATE PRESENTING CLINICAL SIGNS**

11/11/22

Alli presents for worsening hyporexia. Alli has always been picky, but has become much more unwilling to eat in the past few months. This had made diabetic management difficult and Alli's diabetes is no longer well controlled. Other than a few sebaceous adenomas, and moderate dental disease, Alli PE is unremarkable. Alli has a history of chronic pancreatitis as well. History of KCS, but currently well controlled

PATIENT

Alli Collins

SPECIES

Canine

BREED

Shih Tzu X

Current Medications: ProZinc 3 U SQ q 12 hours., Cerenia 6mg PO q 24 hours, Royal Canin Glycobalance food, Tacrolimus 0.02% Ophth. Suspension 1 drop OU BID, Iverheart Plus monthly, Gabapentin and Trazodone before grooming appointments

Lab Results: 10/3/2022: CBC - PLT $516 \times 10^3 / \mu\text{L}$. Chem. - Creatinine 0.4mg/dL, Cholesterol 372 mg/dL. UA - USG 1.054, protein 3+, glucose 3+, ketones trace

Date of Previous IntraPet Ultrasound: 6/2017. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Spayed Female

AGE

11/1/11

WEIGHT

9.6 Pounds

INTERPRETED BY

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(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Bel Air VH

REFERRING VET

Dr. Young

INVOICE

42758

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 (4.21 cm). Overall echogenicity is slightly hyperechoic with poor 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 (4.18 cm). Overall echogenicity is slightly hyperechoic with poor 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 0.59 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 0.51 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 large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 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. Jejunum wall measures 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 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Large, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. This is most consistent with a diabetic hepatopathy.
- Mild gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Mildly reduced corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

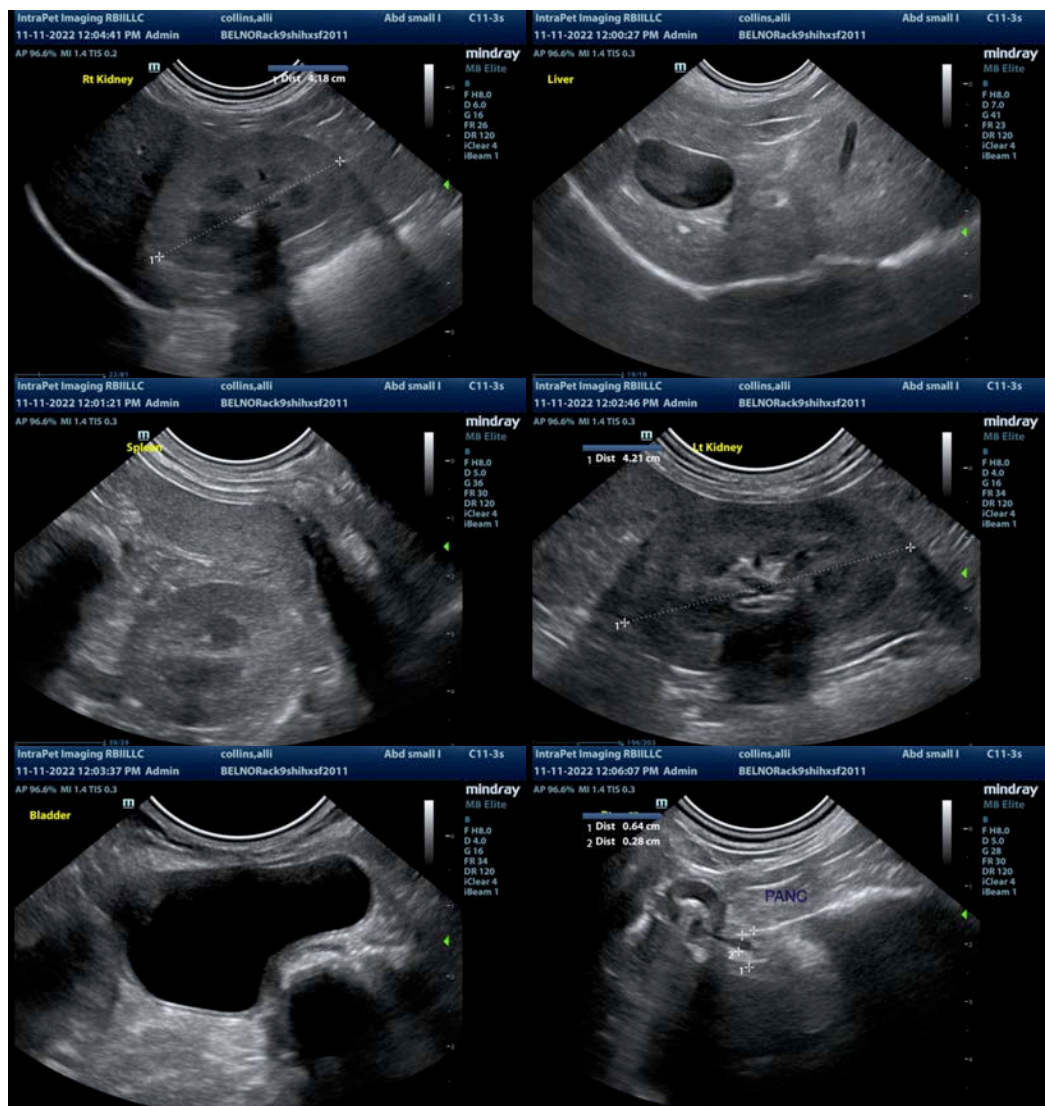
No focal lesions are visualized to explain the reduction in appetite reported. The changes in the pancreas are mild and likely consistent with previous episodes of pancreatitis. The liver changes are non-specific. You could consider a liver function test if there is concern for more significant liver disease.

I would consider sending a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to look for

evidence of underlying gastrointestinal disease. If there are significant abnormalities on the GI panel, that could be an indicator of underlying gastrointestinal disease and the possible need to transition to a hydrolyzed protein diet, or even to consider GI biopsies.

Additionally, in the past with picky eaters, I have set up paid consultations with a veterinary nutritionist (many veterinary schools offer this service) to formulate a homemade diet that adequately suits the individual's needs. This is generally very palatable but does not address an underlying medical issue if there is one.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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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