

**DATE PRESENTING CLINICAL SIGNS**

5/4/22 P presented with increased clinginess at wellness exam. Has hx of pancreatitis last fall with very elevated Spec fPL. fPL repeated at this appointment was 25.6. Not inappetent or vomiting

PATIENT

James Tong

Current Medications: Finished a course of cerenia + buprenex with no perceived change/ improvement.

Lab Results: 4/14/22 spec fPL= 25.6, CBC/ Chem/ T4 otherwise wnl

UA= USG=1.034, pH= 6, otherwise NSF.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Gabapentin.

Stat Report: Not requested.

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE**WEIGHT**

12.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Paradise AH

REFERRING VET

Dr. Halpern

INVOICE

37385

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with mildly echogenic 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 (3.86 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 (3.88 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 0.38 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 0.49 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 subjectively normal in size, and 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. There are two hypoechoic nodules visualized at 1.17 cm x 0.89 cm and 1.11 cm. Additionally, there is a small, hyperechoic cystic lesion on the left side of the liver measuring 1.3 cm x 1.28 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are 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 visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 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 hypoechoic as compared to the surrounding isoechoic mesentery. There are several focal hypoechoic nodules visualized in the pancreatic parenchyma, two of which measure 0.61 cm and 0.63 cm. There is no evidence of regional mesenteric fluid and only minimal inflammation.

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.

PRIMARY FINDINGS

- Prominent, hypoechoic pancreas with hypoechoic nodules – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation. The nodular lesions could represent nodular hyperplasia or less likely pancreatic neoplasia.
- Heterogeneous liver with hypoechoic nodules and a small hyperechoic cystic lesion – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. The significance of the nodules/mass lesions observed is unclear. These could represent benign or neoplastic lesions. Recommend a fine needle aspirate of the hypoechoic liver nodules and continued monitoring of the cystic lesion (likely too deep to be able to sample).
- Prominent muscularis layer of the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma. This can be a normal finding in some older cats.

SECONDARY FINDINGS

- Echogenic debris in the urinary bladder - The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.

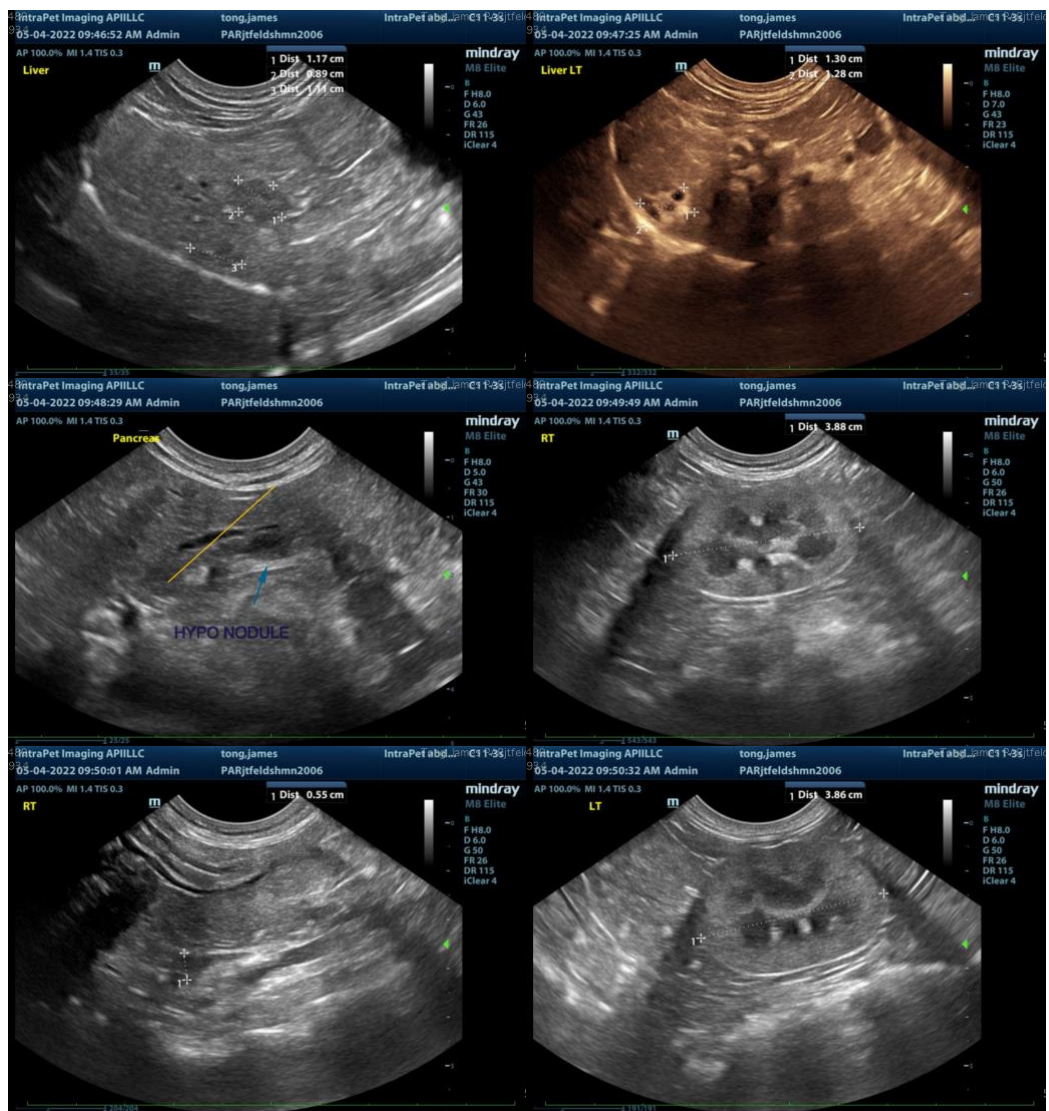
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

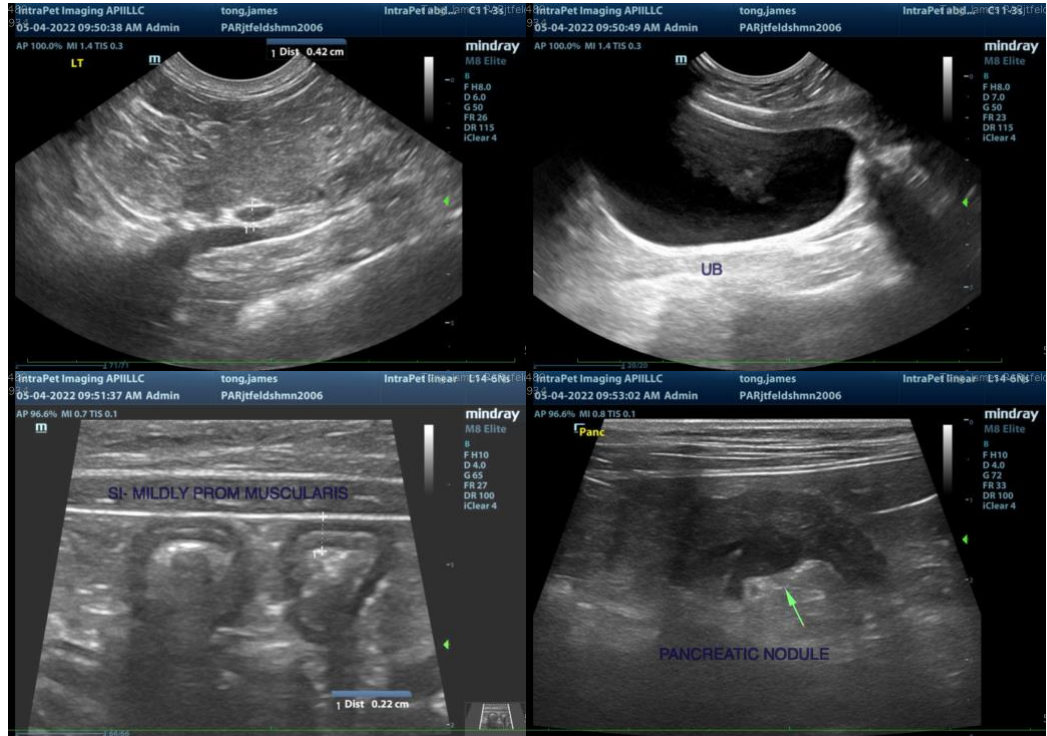
Nodular lesions are visualized in both the liver and pancreas on today's exam. These could represent benign lesions consistent with previous pancreatic disease (for the pancreas) or could be more concerning and be a neoplastic process (in either or both organs). Options moving forward would include sampling of these

lesions (I believe the pancreatic and hypoechoic hepatic nodules would be possible to sample), or continued monitoring with ultrasound (recheck in 8-12 weeks).

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

Additionally, there is a slightly prominent muscularis layer to the small intestine. This can be a normal finding in some older cats. If there are symptoms of underlying GI disease, then you could consider a GI panel to Texas A&M to further evaluate this. Additionally, there is mildly echogenic debris in the urinary bladder. Urinalysis and culture could help to better evaluate this.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com