



DATE PRESENTING CLINICAL SIGNS

12/3/21 History: Sudden onset of vomiting, lethargy, and decrease appetite, possible dysphagia.

PATIENT Current Medications: Onsior 6mg 1TSID, Laxatone BID.
Lab Results: history of hyper calcemia.

Jessie James Tunanidas Radiographs: possible small cystic calculi noted on Xray. O thinks cat is painful orthopedically.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

DSH 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, or masses. There is a 0.85 cm hyperechoic shadowing stone visualized in the dependent portion of the urinary bladder.

SEX

Neutered Male

AGE

3/25/14

The left kidney has a normal shape and size (4.14 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.

WEIGHT

12.3 Pounds

The right kidney has a normal shape and size (4.32 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.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
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Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

IMAGING PERFORMED BY

Andi Parkinson RDMS

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.

HOSPITAL NAME

Honey Go AH

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. No focal nodules or cystic lesions are observed.

REFERRING VET

Dr. Moffa

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 moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

INVOICE

33250

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 0.24 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 is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a scant amount of anechoic free fluid diffusely dispersed amongst the hyper echoic omentum. There is no significant lymphadenomegaly visualized. The omentum is generally very hyperechoic with intermixed fluid most consistent with diffuse inflammation/peritonitis (sterile or infx?). Large amounts of intra-abdominal fat hinder interpretation/visualization somewhat.

ULTRASONOGRAPHIC FINDINGS

- Hypoechoic pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with mild/moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Shadowing mineralization within the urinary bladder – Recommend urinalysis and culture and confirmation with abdominal radiographs.
- Mild gallbladder sludge – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats.
- Prominent muscularis layer to 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 appearance could also be due to mild wall edema secondary to the free abdominal fluid present.
- Scant free abdominal fluid with diffusely hyperechoic omentum – The diffusely hyperechoic mesentery and abdominal effusion are changes consistent with peritonitis (either infectious or inflammatory). Recommend fluid analysis and culture.

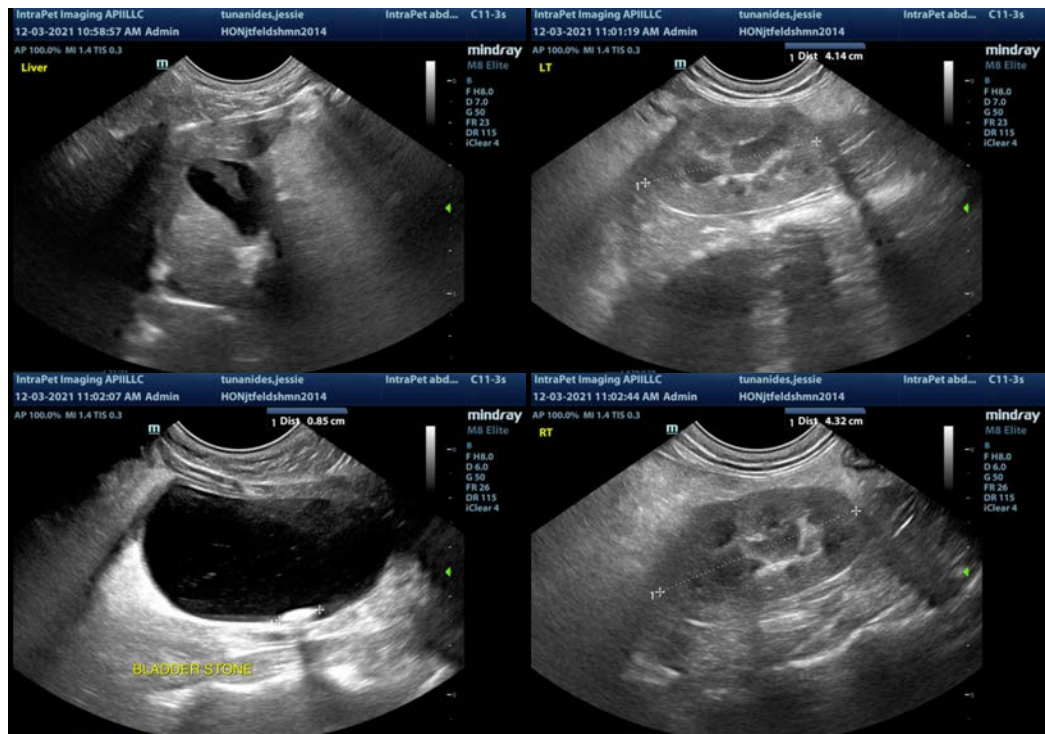
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

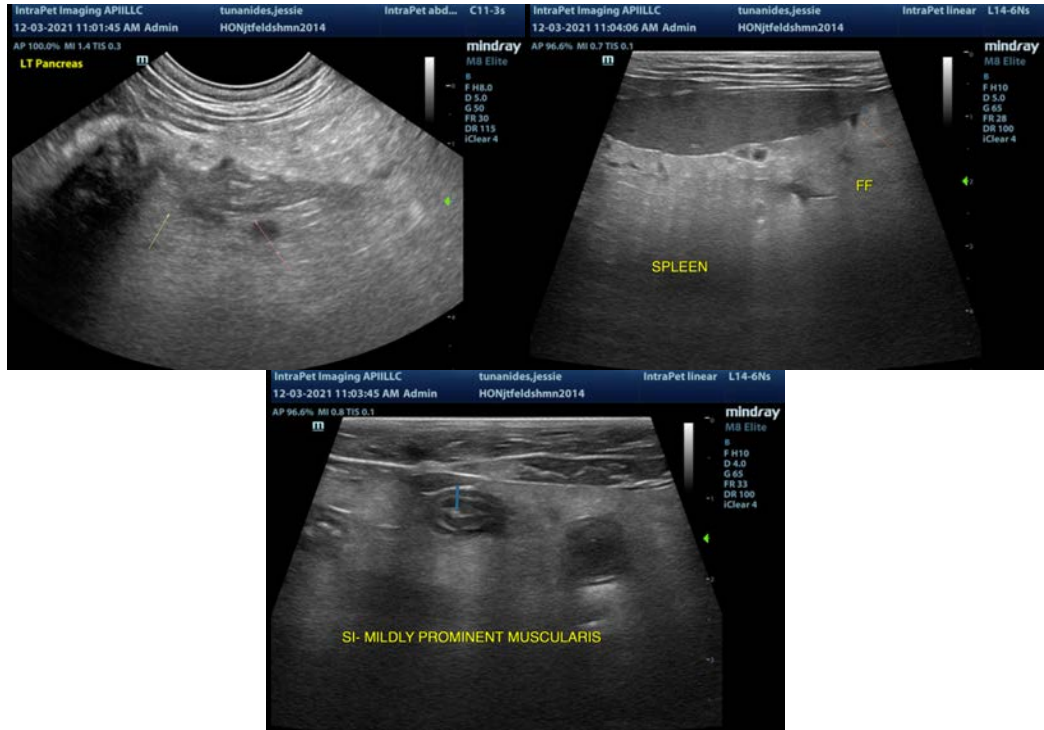
A definitive focal lesion to explain the vomiting and inappetence reported is not identified. The pancreas is prominent and surrounded by hyperechoic mesentery, so pancreatitis is suspected. There is also diffusely hyperechoic mesentery present which increases the possibility for another cause of the general inflammation

and symptoms exhibited. Consider sampling a small amount of fluid for cytologic evaluation (can probably get enough to spread out on a slide) to make sure no bacteria or neoplastic cells are observed. Consider a GI panel to Texas A&M University for a quantitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine. Additionally, the small bowel is somewhat thickened with a prominent muscularis layer. This could indicate underlying GI disease or could be secondary to edema and fluid in the abdomen. There is concern in this patient that if hyporexia persists, that there is Risk for the development of lipidosis. If symptoms persist a feeding tube may need to be considered. You could consider surgery to place a feeding tube, biopsy bowel, Panc and omentum (with cultures) and removal of the bladder stone (make sure to confirm it on radiographs as could be a pile of sandy debris). This would be an aggressive step but could be necessary if pet is not improving.

The large amount of abdominal fat does impair ultrasonographic interpretation somewhat.

Additionally, there is a stone in the urinary bladder. I suspect this is currently an incidental finding, but could be an indicator of hypercalcemia. Recommend an ionized calcium. If ionized calcium is elevated, recommend PTH and PTHrP levels. Recommend 3-view thoracic radiographs to look for concurrent intrathoracic disease and a urinalysis and culture.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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