

**DATE**

10/12/21

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Struggling To Stand; Not Eating; Drinking Less; Diarrhea; Lethargy. Date: 10-11-2021 Notes: Noted at the end of August/early September: seemed more quiet/depressed - rdvm: BW normal. Started yelping while shaking the head and having diarrhea. rdvm: fluids, antibiotics, Pred - 48 hrs later: seemed improved. Came off the Pred and seemed to revert - seems to collapse or turn to jello - posture seems crouched. Last few days: falling over more. rdvm: started Pred, 4dx (-). Ate some boiled chicken last night and this AM. Not yelping with head shake anymore. Owner noted in March 2020 had hernia repair with tacking to move the GI back into place - had previous hernia repair before adoption that failed. Known ocular issues - sees ophthalmologist - on eye drops. Current meds: Prednisone 5 mg PO q24h Assessment: Diarrhea;

SPECIES

Hyporexia; Lethargy; weakness. Plan:

Canine

Reviewed history and physical exam - owner expressed that she believes he needs other diagnostics rather than just bloodwork. Agreed with that - I do believe he needs a more extensive work up - discussed possibility for GI and spinal issue happening concurrently. Recommended hospitalization, fluids, spinal rads, full BW, abdominal U/S, supportive care as needed - owner agreed to plan.

BREED

Current Medications: Buprenex, Prednisone 5 mg PO q24h.

Boston Terrier

Lab Results: WNL. 4Dx neg.

SEX

Radiographs: Not provided by the veterinarian.

Neutered male

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: not needed

Stat Report: not requested

AGE

5/1/10

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System****WEIGHT**

20 lbs

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. A portion of the bladder is visualized externally when imaged lateral to the rectum. This is most consistent with a perineal hernia.

INTERPRETED BY

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

Kathleen Sennello
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The left kidney has a normal shape and size (4.74 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Animal Emergency
Hospital

The right kidney has a normal shape and size (4.47 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

REFERRING VET

Dr. Nacke-Horney

Adrenal Glands

The left adrenal gland is normal in size measuring 0.58 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.

INVOICE

92341

The right adrenal gland is normal in size measuring 0.7 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. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder 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 is significantly dilated with fluid. This is most consistent with ingesta and gas. 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 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. The duodenum measured as normal and the jejunum measured as normal (0.29 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

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

PRIMARY FINDINGS:

- Perineal hernia with intrapelvic bladder visualized next to rectum.
- Borderline bilateral adrenomegaly. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Prominent, hypoechoic pancreas particularly in the left limb adjacent to the gastric body. The pancreatic changes are most consistent with mild/moderate pancreatitis/pancreatic infiltration. I

recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Heterogenous 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.
- Dilated fluid filled stomach. Correlate with feeding history. If not recently fed differentials include delayed gastric emptying or partial gastric obstruction (none was clearly observed).

SECONDARY FINDINGS:

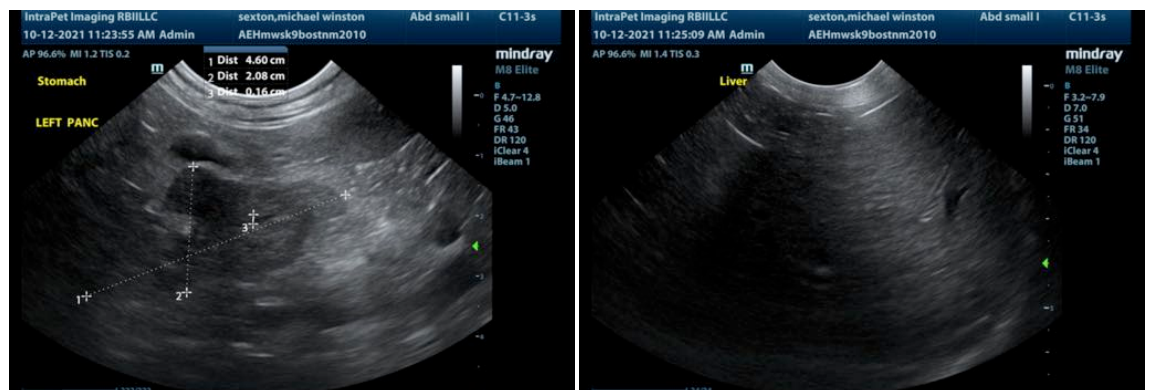
- Mildly reduced corticomedullary distinction. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

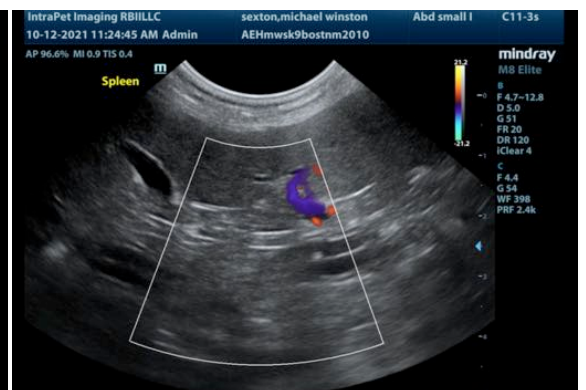
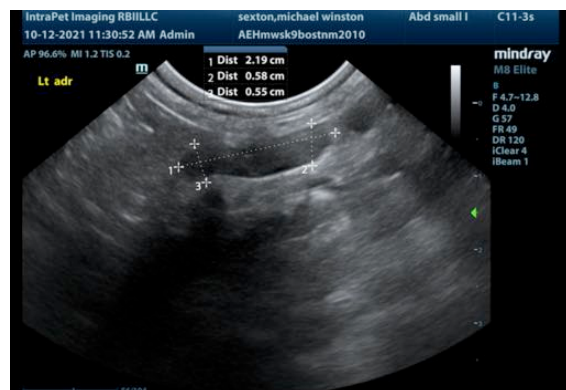
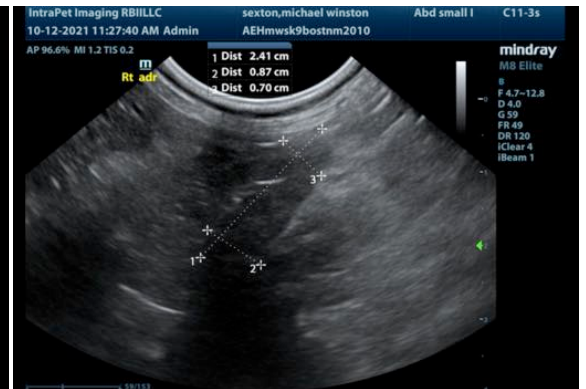
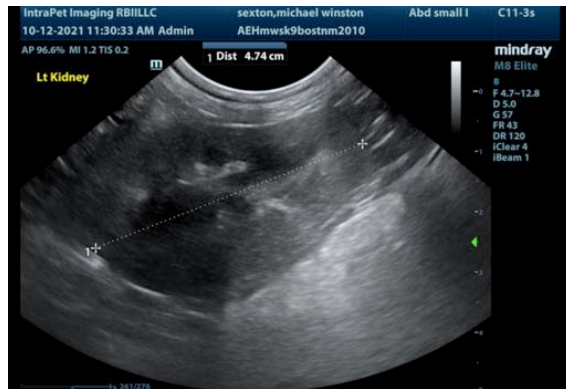
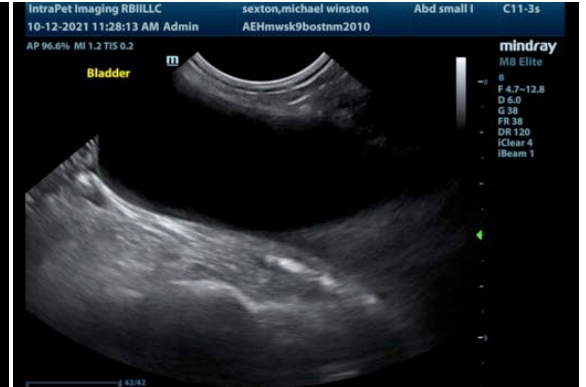
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

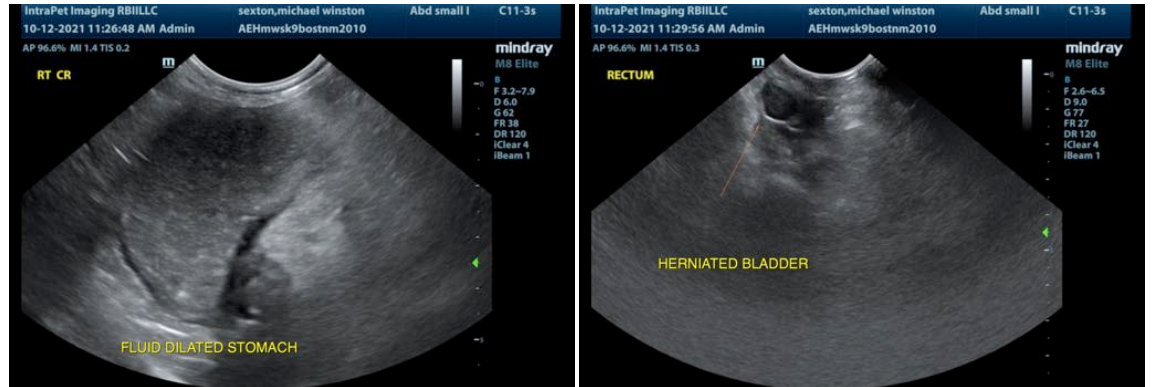
The changes are most consistent with either current or recent pancreatitis. I recommend a quantitative PLI with cobalamin and folate to further evaluate the pancreas and the gastrointestinal tract. Additionally the stomach is fluid filled. This could be consistent with ileus secondary to pancreatitis, but serial radiographs may be helpful in making sure that there is not a foreign body that is not visualized on ultrasound.

The adrenal glands are prominent. This could be normal for this individual or consistent with early Cushing's disease. Correlate with clinical signs. If signs of Cushing's are present consider adrenal function testing (once the patient is stabilized, etc.).

Additionally the urinary bladder appears to be somewhat herniated through a perineal hernia. It is unclear whether these abnormalities/findings are consistent with the clinical signs or if there is another issue causing collapse/head shaking, etc. Consider a consultation with a veterinarian neurologist for additional input. I recommend treatment for pancreatitis and close monitoring of the stomach with possible promotility medication (Metoclopramide).







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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