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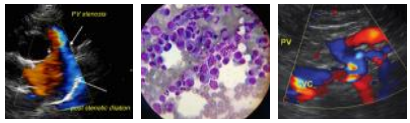

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DATE

10/7/21

PATIENT

Sunday Morning Douthat

SPECIES

Canine

BREED

Cockapoo

SEX

Spayed Female

AGE

2010

WEIGHT

20 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Hatzigiannakis

INVOICE

13617

PRESENTING CLINICAL SIGNS

History: Starting around 10/2 pet had decreased appetite, lethargy, vomiting and diarrhea. On exam mild pain on abd palpation just caudal to xiphoid. Labs consistent with pancreatitis. No known food item to lead to incident.

Current Medications: Proin 25 mg 1/2 po sid, started on 10/4: Unasyn 2 mg/kg BID IV, Cerenia 1 mg/kg SID IV, Buprenorphine 0.1 mg/kg SC bid, Metronidazole 15 mg/kg IV. started Protonix 1 mg/kg iv SID 10/5 along with Entyce 3 mg/kg po sid.

Lab Results: mild decrease Cl, mild increase ALP, abnormal SNAP cPL
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not needed.
Stat Report: Not requested.

780ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall appears subjectively mildly irregular and thickened, measuring 0.38 cm in width. The ureteral papillae, trigone and proximal urethra (to a depth of 2.0 cm) appear normal with no evidence of masses or calculi.

The left kidney has a normal shape and size (4.67 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, infarcts or hydroureter. Renal vasculature is normal. There are numerous small non-obstructive nephroliths. Renal vasculature is normal.

The right kidney has a normal shape and size (4.8 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, infarcts or hydroureter. Renal vasculature is normal. . There are numerous pinpoint non-obstructive nephroliths.

Adrenal Glands

The left adrenal gland is normal in size. 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 0.76 cm at the caudal. 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 large 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 too numerous to count ill-defined hypoechoic nodules throughout the liver varying in size from 0.25 – 1.3 cm. The gall bladder lumen is mildly 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 is moderately distended with shadowing and liquid ingesta. It generally measures at a normal thickness of <0.7 cm with some variability due to rugal folds. The distinction of gastric wall layers is largely normal. There is a 2.42 cm x 1.01 cm hyperechoic non-shadowing structure visualized at the junction of the duodenum and the pylorus. The wall appears somewhat irregular in this area. I suspect this is tissue density, but cannot rule out some form of foreign material. Findings are consistent with a partial to complete obstruction.

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 (0.5 cm in wall thickness) and the jejunum measured as normal (0.34 cm). Visualized peristalsis appears appropriate. As described under stomach, there is an abnormal structure within the lumen of the bowel at the junction of the pylorus and the duodenum. Concerning for a polyp/mass.

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/region of the pancreas) is normal and isoechoic to surrounding 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 lymphadenomegally 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

- Intraluminal structure observed at the junction of the pylorus and duodenum, primary differentials would be a benign mass (polyp, leiomyoma, etc.) or neoplasia. Other possibilities exist and the possibility for foreign material exists, but this structure is not shadowing. The gastric lumen is mildly dilated suggestive of a partial or complete obstruction.
- Large heterogenous liver with hypoechoic ill-defind nodules- 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.

Secondary Findings

- Subjectively mildly thickened bladder wall- The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.

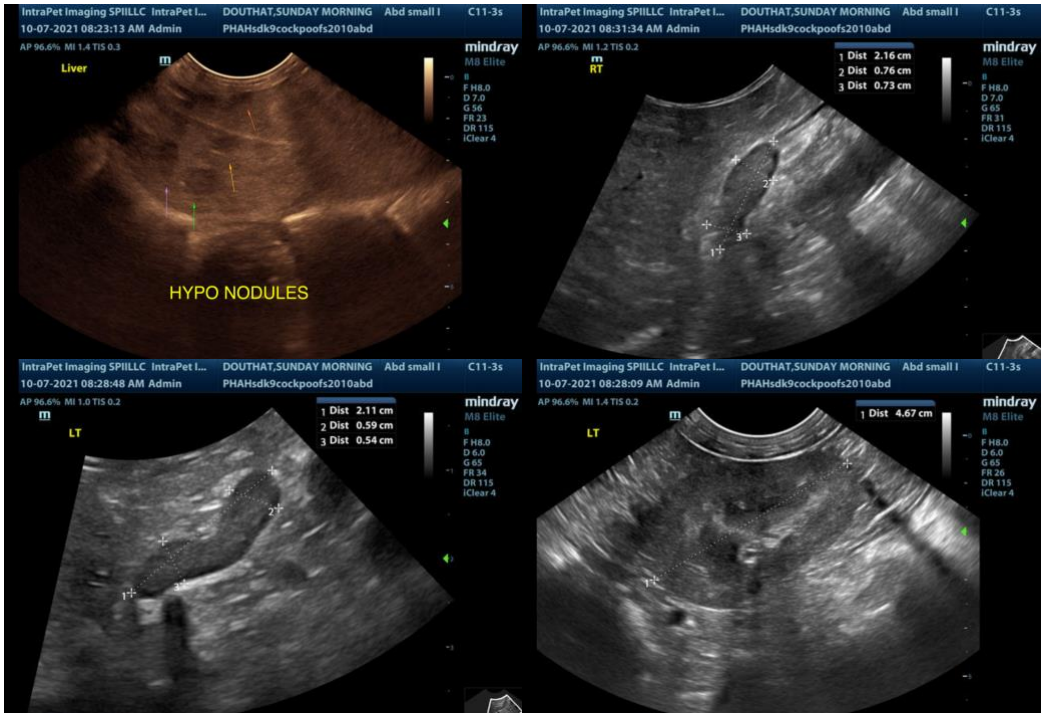
- Mild gallbladder debris- The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Pinpoint non-obstructive nephroliths in the kidneys- The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

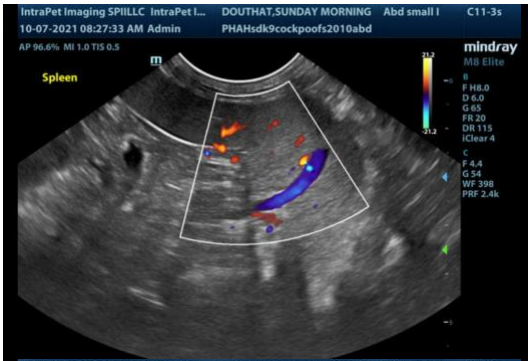
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is structure apparent within the lumen of the distal pylorus/proximal duodenum. This structure is not shadowing, but appears to occupy a large portion of the lumen. Additionally, the stomach is dilated, suggestive of a partial obstruction. This could be a benign or cancerous lesion, biopsy would be necessary to differentiate.

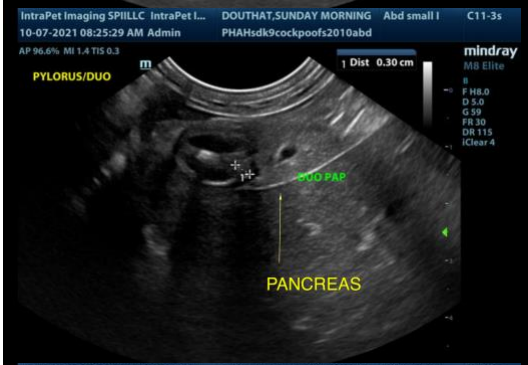
I suspect there is concurrent small intestinal disease based on the diarrhea reported. You could consider a GI panel with PLI/TLI/cobalamin/folate to further evaluate for dysbiosis, pancreatic insufficiency, B12 deficiency, etc. I recommend obtaining GI biopsies at the same time as evaluation of the gastric lesion. I recommend 3 view thorax.

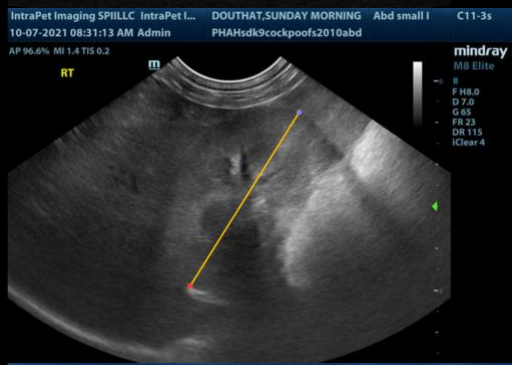
The lesions observed in the liver are non-specific and likely benign, although metastasis is not excluded. Consider biopsy of the liver at the time of surgery.

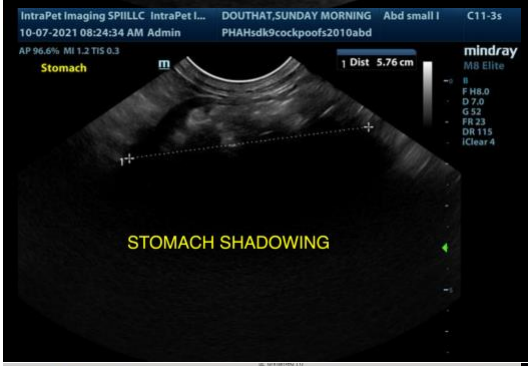


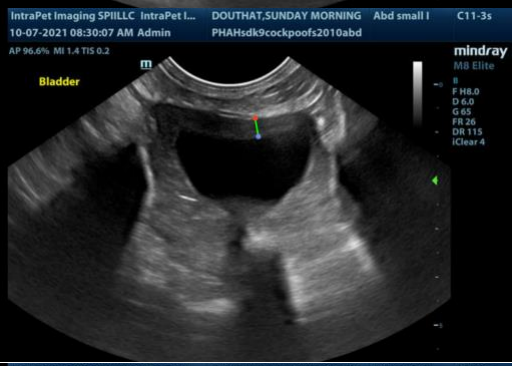

Spleen

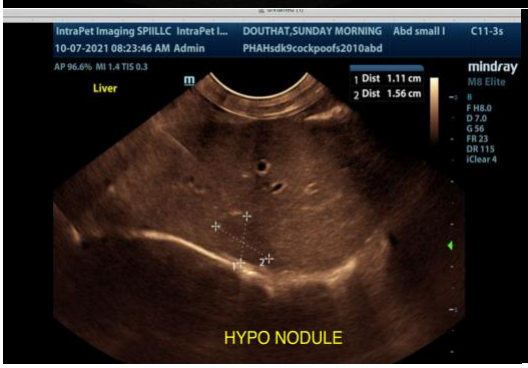

PYLORUS/DUO
INTRALUMINAL MASS/MATERIAL

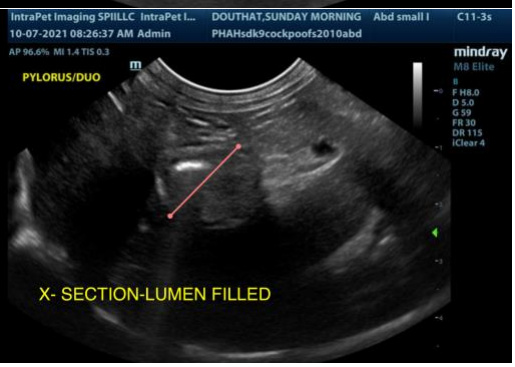

PYLORUS/DUO
PANCREAS

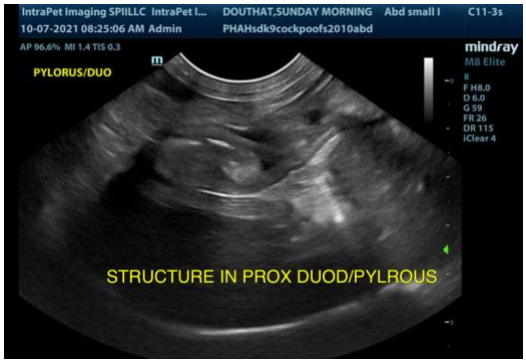

RT


Stomach
STOMACH SHADOWING


Bladder


Liver
HYPO NODULE


PYLORUS/DUO
X- SECTION-LUMEN FILLED



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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