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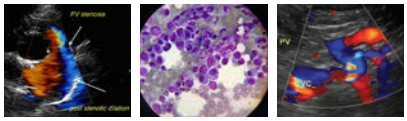

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

9/21/22

PATIENT

Penelope Gallagher

SPECIES

Canine

BREED

Terrier X

SEX

Spayed Female

AGE

9/14/17

WEIGHT

9 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. King

INVOICE

41478

PRESENTING CLINICAL SIGNS

Vomiting, ADR, Lethargic 9/14-- suspected chocolate ingestion
Did well here, home; Has had continue signs - vomiting after eating, despite therapy. Readmit-- rads -- no obvious fb- but some speckles
Labs -- chem 10 /lytes, K 3.4, ALT 272; she has lost about 0.4 lbs since last here; IVF restarted, ate once then vomited.

Current Medications: Buprenorphine, Sucralfate, Protonix, Cerenia.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

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 (3.83 cm). Overall echogenicity is normal with adequate 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 (3.39 cm). Overall echogenicity is normal with adequate 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 0.48 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 0.38 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 homogenous echotexture. 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 gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and 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 <0.7cm 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. The pylorus appears somewhat prominent and questionably thickened. The pyloric wall measures at 0.58 cm with reduced detail of layering.

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 0.27 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.

Other

There is a somewhat ill-defined hyperechoic lesion in the abdomen measuring 2.11 cm x 1.26 cm. This is a superficial lesion/structure that does not appear to be associated with any other abdominal structure and does not significantly color flow.

ULTRASONOGRAPHIC FINDINGS

- Mottled, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Prominent pyloric wall – This could represent partial outflow tract obstruction or inflammatory type change. No obvious obstructive pattern is present in the stomach (but recently vomited).
- Focal hyperechoic structure located superficially in the abdomen – I suspect this is an incidental finding, but a fine needle aspirate could be considered.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No obvious lesion is visualized to explain the symptoms described. The pancreas appears somewhat prominent and mottled. Correlate these findings with a quantitative cPLI level and consider empirical treatment for pancreatitis.

Additionally, the pyloric wall appears subjectively thickened. The significance of this is unclear, as there does not appear to be an outflow tract obstruction visualized, but this can be misleading due to the recent vomiting. These types of changes could be consistent with hypertrophy, neoplasia, or mild inflammation. You could consider a small barium swallow and following with serial radiographs to see if gastric emptying appears normal. You could also consider an upper GI endoscopy to further evaluate this area.

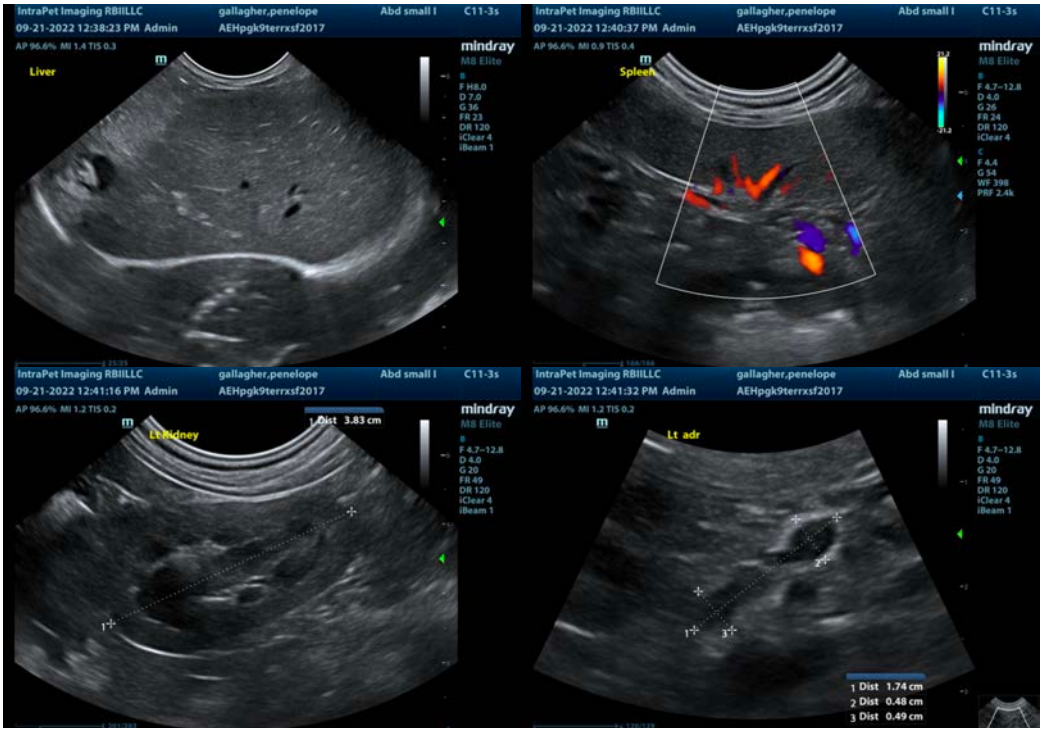
There is a hyperechoic superficial structure visualized in the abdomen that does not appear to have a direct association with any other structures. This could be an omental lesion, a body wall lesion, etc. Consider a fine needle aspirate of this lesion and/or continued monitoring.

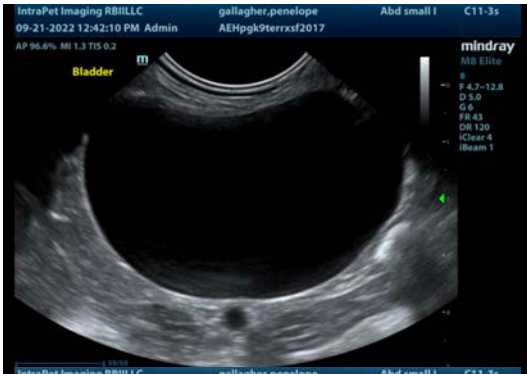
As with all vomiting patients, consider possible metabolic causes such as Addison's disease, etc. If metabolic disease is thought unlikely, consider primary GI causes such as dietary intolerance/food allergy, GI parasitism, pancreatitis, dysbiosis, foreign body ingestion, IBD, and intestinal neoplasia.

- Consider a novel protein/hydrolyzed protein prescription diet.
- Recommend chronic probiotic therapy.
- Consider a GI panel with quantitative PLI, TLI, cobalamin and folate.
- Recommend a baseline cortisol.
- Recommend serial radiographs +/- barium swallow to look for any evidence of ingested foreign material, pyloric outflow tract obstruction, etc.

If symptoms persist despite appropriate medical therapy, consider obtaining GI biopsies and evaluation of the pylorus, esophagus, etc.

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

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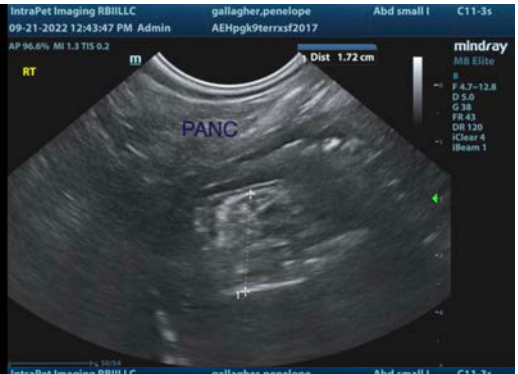
Bladder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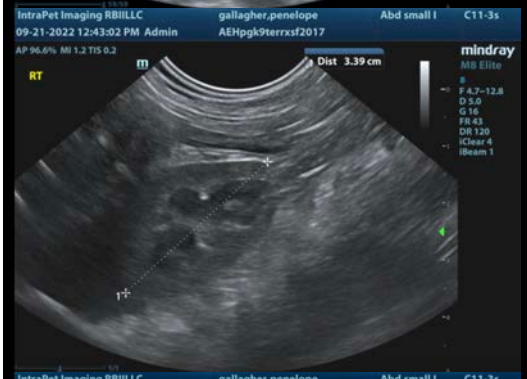
RT
Dist 1.72 cm
PANC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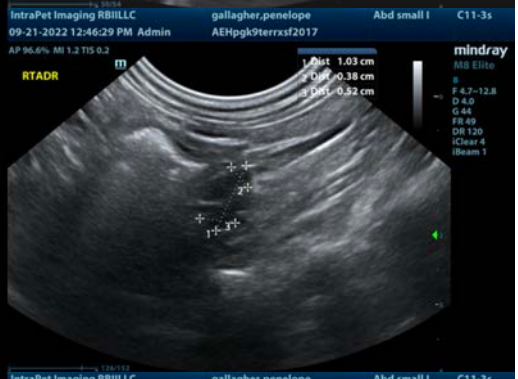
RT
Dist 3.39 cm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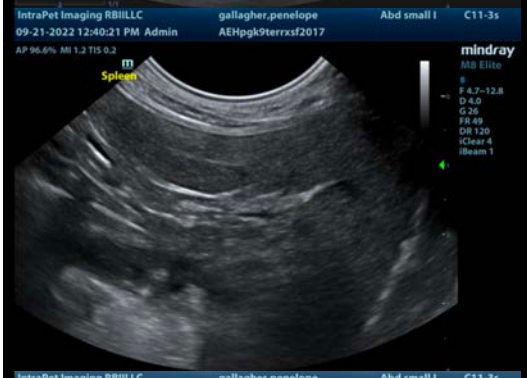
RTADR
Dist 1.03 cm
Dist 0.38 cm
Dist 0.52 cm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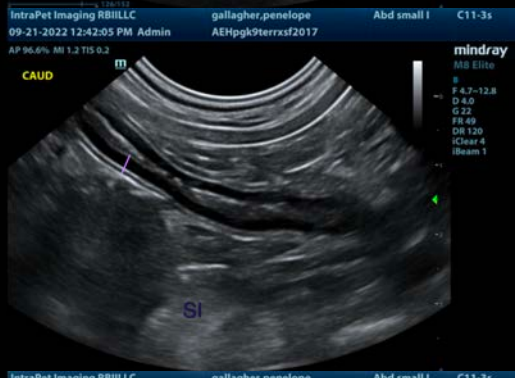
Spleen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CAUD
SI


IntraPet Imaging RBIILLC
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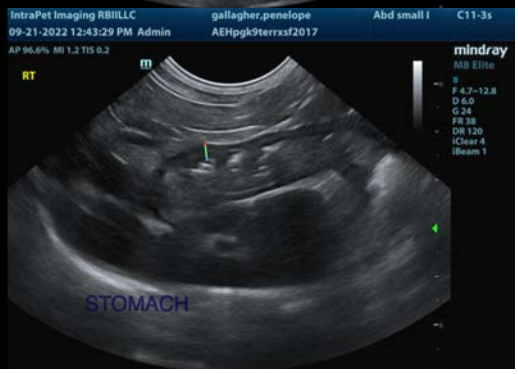
RT
PYLORUS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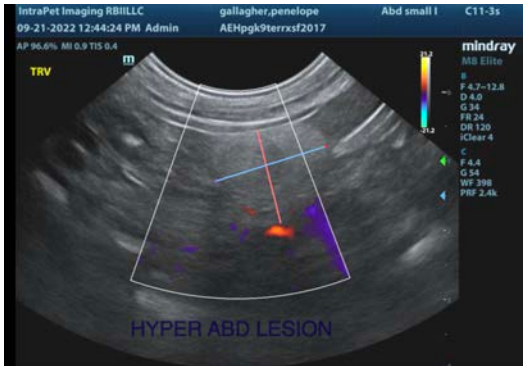
STOMACH



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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