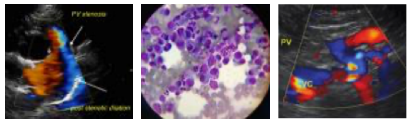
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

4.26.2023

PATIENT

Lilly Froehlich

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

4/28/2012

WEIGHT

7.38 lbs

INTERPRETED BY

Jessica Midence, DVM, DACVIM (SAIM)

HOSPITAL NAME

Festival VC

REFERRING VET

Dr. Harvey

INVOICE

12905

PRESENTING CLINICAL SIGNS

Previously well controlled on i/d. Ravenous appetite end of March, Presented 4/18 for vomiting. Improved slightly with SQ fluids, Cerenia, Vit B12 but continued to vomit. Did ok over the weekend but vomited everything on Monday. P now mildly icteric, continues to want to eat but cannot keep food down. DDX- chronic pancreatitis vs other pancreatic vs methimazole reaction vs other liver disease. P fractious- will be premedicated with gabapentin but will likely need additional injectable sedation. P hospitalized at Fallston today for IVF, will likely return tomorrow.

Current Medications: methimazole 2.5 mg PO BID. Last methimazole dose effectively 4/22 as P vomited dose on Sunday and O has not given since.
Lab Results: 4/20- significant elevation ALT, moderate elevation AST, mild elevation ALP, mild hyperbilirubinemia, mildly elevated amylase, mildly elevated amylase but normal fPL.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: IV sedation.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is moderately distended with anechoic urine and bladder thickness is considered normal for volume of urine.

Suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed.

The left kidney is normal in size (3.50 cm) shape and architecture with smooth peripheral margins. There is decreased corticomedullary distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal in size (3.40 cm) shape and architecture with smooth peripheral margins. There is decreased corticomedullary distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.47 cm) with a normal shape and is normal in appearance and echogenicity.

The right adrenal gland is normal in size (0.46 cm) with a normal shape and is normal in appearance and echogenicity. There is central hyperechoic mineralization (which can be normal in aging cats).

Spleen

The splenic echotexture is mild to moderately mottled, with parenchyma hypoechoic to liver. The capsule is undulating. The parenchyma does seem to bulge the capsule at the hilus. The spleen measures thick (1.20 cm) and begins to fold on itself (though this could be secondary to sedation). The splenic vasculature is normal without signs of congestion or thrombosis.

Liver

The liver is subjectively normal in size with normal contours, structure, with smooth peripheral margins. The echogenicity appears slightly coarse and hyperechoic with slightly decreased portal markings. The visible portions of the vasculature and biliary tract appear normal.

The gallbladder is significantly distended with anechoic bile. The wall is a normal thickness and smooth, although there is a single polypoid-like projection into the lumen (0.26 x 0.28 cm). Luminal contents are anechoic. The cystic and common bile ducts are dilated and tortuous. The common bile duct is dilated (up to 0.62 cm / normal is up to 0.40 cm) and can be followed to the duodenal papilla. The wall of the common bile duct is also thickened (0.142 cm). The common bile duct terminates at the duodenal papilla, where there is a focal hyperechoic, (isoechoic to hepatic parenchyma), very round, smooth mass (0.67 cm x 0.35 cm). The fat and tissue surrounding the portahepatis and common bile ducts is mildly hyperechoic.

Gastrointestinal Tract

The gastric lumen is empty. The stomach wall is of normal wall thickness with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed and the pyloric outflow tract appears normal.

The small intestines are diffusely abnormal and measure diffusely thick. The duodenum measures thick (0.28 cm) and the jejunum also measure thick (up to 0.25 cm). There is both mucosal and segmental muscularis thickening throughout the intestines. Wall layering is blurred in multiple loops of bowel (though not all) and preserved in others. Also, many loops of bowel have a hyperechoic mucosa. There is no evidence masses, ileus of foreign body. The small intestines are diffusely empty.

The sections of colon are visualized with formed fecal material and gas shadowing distally.

Pancreas

The left pancreas is diffusely hypoechoic and measures thick (up to 1.30 cm at the body). There is mildly hyperechoic surrounding fat. There are no cysts or nodules. The pancreatic duct is dilated (0.27 cm).

Peritoneum

There are multiple mildly enlarged and hypoechoic mesenteric and intestinal lymph nodes that are considered to be reactive. At the cranial-most edge of the left pancreas, and just caudal to the duodenum, common bile duct and stomach, there is a significantly enlarged hypoechoic cluster of lymph node presumed to be pancreatic or duodenal/perihepatic lymph nodes. These lymph nodes are mottled and measure 0.94 cm thick x 1.63 cm in length. There is a scant amount of effusion cranially around the common bile duct.

ULTRASONOGRAPHIC FINDINGS

Findings

- Common bile duct mass at the duodenal papilla, likely causing partial biliary duct obstruction
- Concern for metastatic disease/perihepatic/pancreaticoduodenal lymph nodes
- Moderate pancreatitis
- Splenomegaly with mottled echotexture
- Diffusely thickened intestines with areas of blurred layers
- Chronic degenerative renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

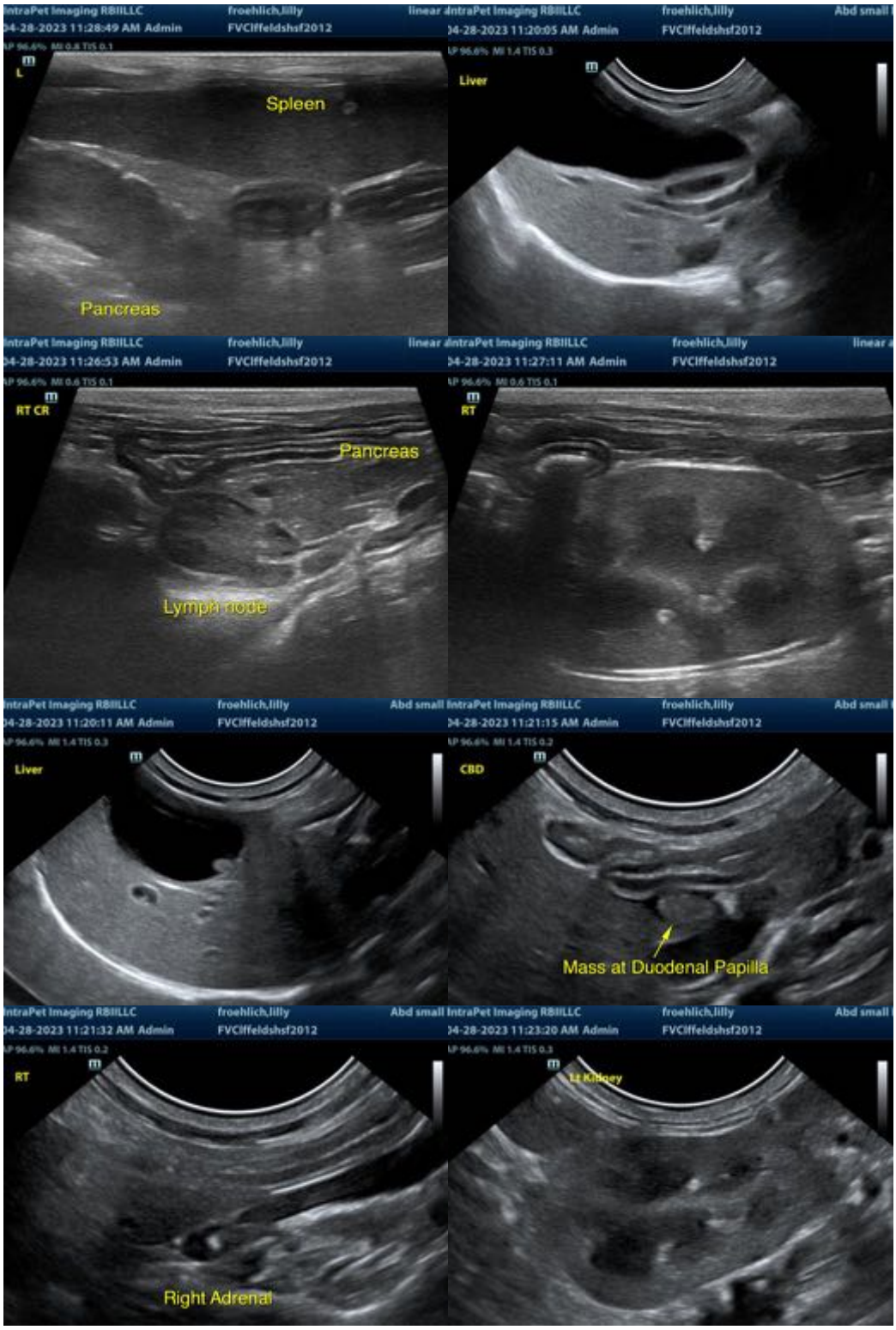
The mass structure within the common bile duct at the level of the duodenal papilla is concerning for a mass. Another consideration would be inspissated biliary sludge, but given that this mass is a very smooth, round structure, has the echotexture of tissue, and there is no sludge elsewhere in the biliary tree, a neoplastic process is prioritized. Also, the adjacent lymph nodes raise concern for a neoplastic process. The mass is likely causing a partial biliary duct obstruction. There is inflammation and A scant effusion in this area of the abdomen as well. A CT scan could be considered for further characterization, although surgery of this area of obstruction may be needed to relieve the obstruction.

The pancreaticoduodenal/perihepatic lymph nodes are highly concerning for a metastatic disease process. The lymph nodes are significantly enlarged (approaching 2.00 cm) and very mottled in appearance. Fine-needle aspirate could be considered, but care should be taken given the vasculature in the area. These lymph nodes almost appear confluent with the left limb of the pancreas, which is inflamed.

The appearance of the spleen may be reactive lymphoid hyperplasia or extramedullary hematopoiesis, but round cell neoplasia cannot be ruled out. The enlargement of the spleen could also be secondary to sedation, depending on what medications were used. Consider fine-needle aspirate of the spleen to characterize further.

The intestines are diffusely thick, and the mesenteric lymph nodes appear reactive. There is blurring of layers in certain segments of bowel. A chronic enteropathy is suspected. Consider a GI panel.

There are chronic degenerative renal changes. Consider routine monitoring of renal values.


froehlich,lilly
FVCIffeldshsf2012
Spleen
Pancreas
Liver
RT CR
Pancreas
Lymph node
RT
Liver
CBD
Mass at Duodenal Papilla
RT
Right Adrenal
Lt Kidney

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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