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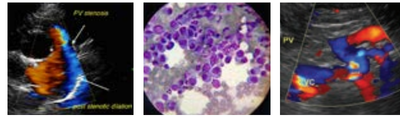

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

1/5/22

PATIENT

Olive Crafts

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

9/1/11

WEIGHT

12 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Charm City VH

REFERRING VET

Dr. Karbonik

INVOICE

33998

PRESENTING CLINICAL SIGNS

History: anorexia for the past few days, no vomiting or diarrhea
on PE, P lost 1# since November and is tense on abdominal palpation; mild icterus; P has a long-standing mammary mass.

Lab Results: inc ALT, ALKP, and Bilirubin. Attached separately.
Radiographs: cholecystolithiasis on rads.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce RDCS, RVT

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 (4.66 cm). Overall echogenicity is slightly hyperechoic with mildly decreased 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.

The right kidney is small and irregular (2.4 cm). Overall echogenicity is slightly hyperechoic with mildly decreased 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.37 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 heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature are normal. The biliary tract appears dilated with stones (see gallbladder). There are numerous small intrahepatic biliary stones visualized. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is mildly thickened and slightly prominent, but has a smooth mucosal surface. There is a moderate amount of dependent mineralized debris present, most consistent with stones within the gallbladder. The cystic and common bile ducts appear dilated

with a thickened wall, and there are numerous mineralizations visualized within the bile duct. The most prominent stone measures 0.55 cm distal to the liver. The bile duct is 0.44 cm at this area, and there appears to be at least a partial obstruction.

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 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 measured 0.18 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

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 subcutaneous mammary mass imaged, measuring approximately 0.88 cm x 2.8 cm.

PRIMARY FINDINGS

- Stones visualized within the gallbladder and dilated bile duct – most consistent with cholecystitis and biliary obstruction (partial or complete).

- Prominent, hypoechoic pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with 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.

- Heterogeneous liver with intrahepatic biliary stones – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.

- Subcutaneous mammary mass visualized – Recommend surgical removal with histopathology.

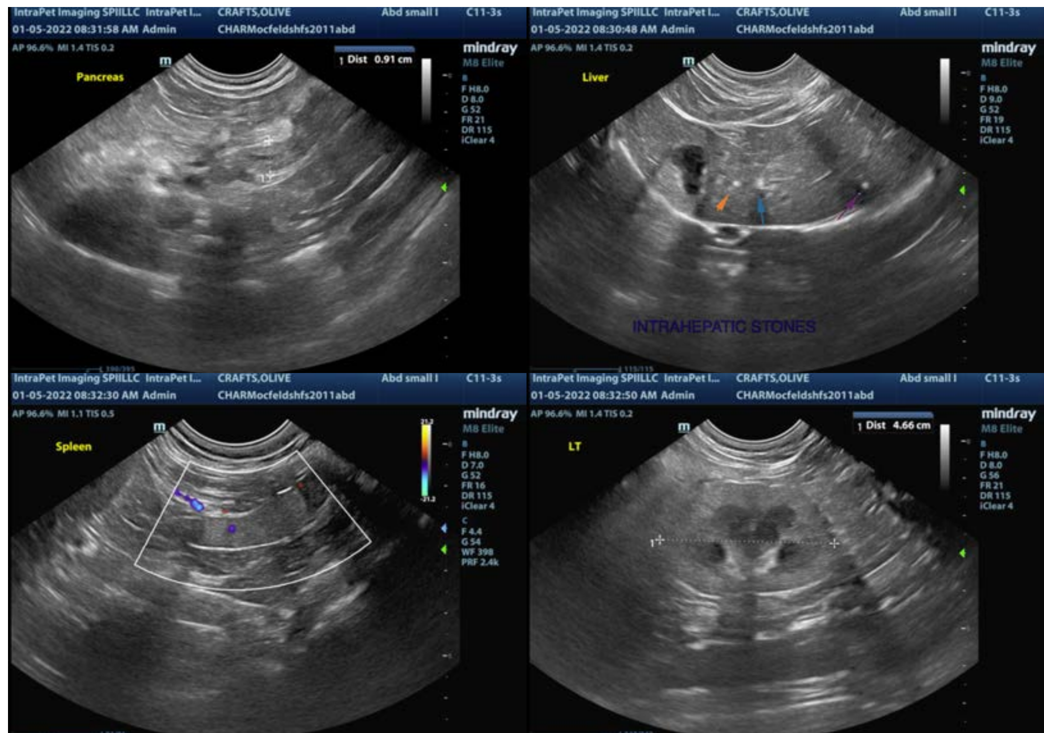
SECONDARY FINDINGS

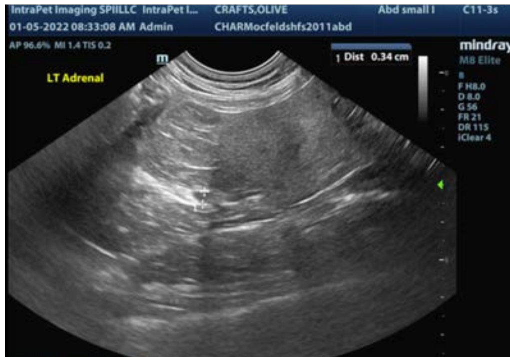
- Mildly decreased corticomedullary distinction in both kidneys with a small irregular right kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The right kidney has likely had previous infarcts and fibrosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are numerous stones visualized within the gallbladder, which does not appear overtly distended, and within the bile duct, which appears thickened and distended. Findings are most consistent with cholecystitis and a partial or early complete biliary obstruction.

- Recommend treatment for cholecystitis/pancreatitis with IV fluids, antibiotics, Ursodiol, Denamarin, pain medications, GI meds, etc., and close monitoring of the liver values, and monitoring with ultrasound.
- Recommend a GI panel to Texas A&M with a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and to look for possible Triaditis.
- If medical treatment is not successful, and bilirubin values continue to rise, you could consider an anti-inflammatory dose of steroids (0.5 mg/kg per day). If this is unsuccessful, referral to a surgeon for possible surgical intervention would need to be considered +/- a preoperative contrast CT scan.
- Recommend 3-view thoracic radiographs to rule out intrathoracic disease.
- Ideally, recommend a fine needle aspirate of the liver provided coagulation parameters are appropriate prior to considering any steroid therapy, as an underlying neoplastic process cannot be ruled out.

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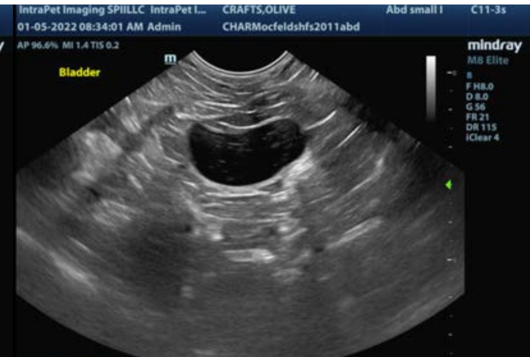
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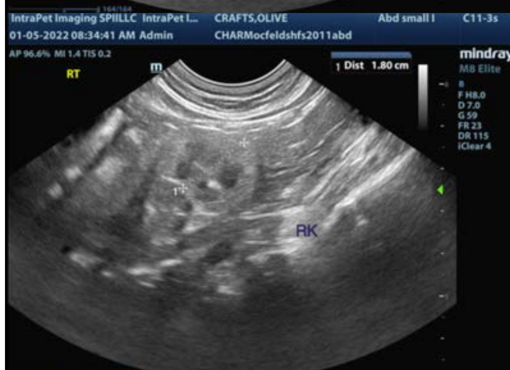
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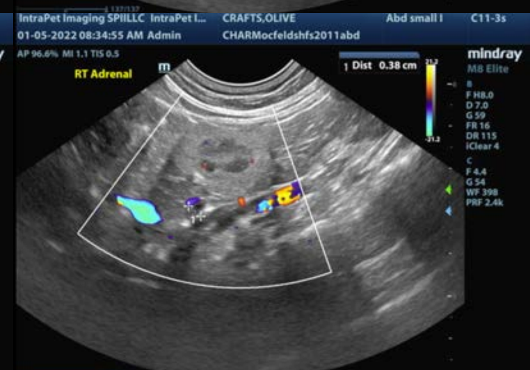
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D 7.0
G 59
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DR 115
iClear 4
F 4.4
G 54
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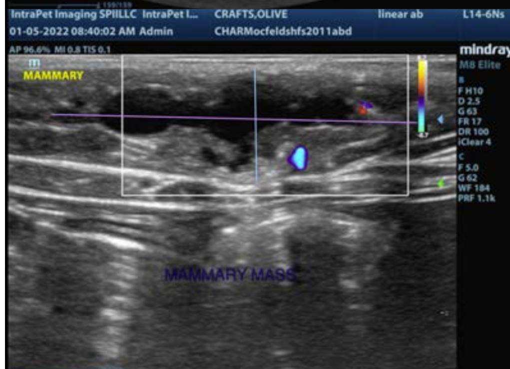
PRF 2.4k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mindray
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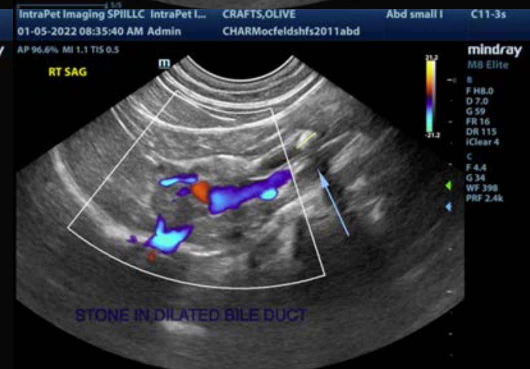
PRF 1.1k
MAMMARY MASS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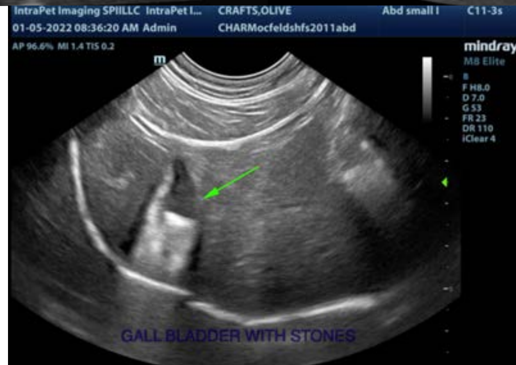
STONE IN DILATED BILE DUCT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G 53
FR 23
DR 110
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GALL BLADDER WITH STONES

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.

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