

**DATE PRESENTING CLINICAL SIGNS**

6/2/2022

PATIENT

Chloe Ecker

Current Medications: Metro 7.5mg/kg dose IV, ampicillin 22mg/kg dose IV, cerenia 2mg/kg dose IV
 Lab Results: Neutrophils 22 (H), HCT 41, ALB 1.8 (L), ALP unreadable, ALT 781 (H), tbili 7.7 (H), GGT 55 (H).
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Requested by DVM.
 Imaging Performed By: Andi Parkinson, RDMS.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Pomeranian

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone is normal.

SEX

Spayed Female

The left kidney is small in size (2.66 cm in length); with an irregular shape. The cortex is variably thickened. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia or hydroureter.

AGE

5/31/2015

The right kidney is small in size (2.65 cm in length); with an irregular shape. The cortex is variably thickened. There is poor corticomedullary distinction. A cortical infarct is observed at the caudal pole. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia or hydroureter.

WEIGHT

6 lbs

Adrenal Glands

The left adrenal gland is normal size (0.46 cm at cranial pole) (0.39 cm at caudal pole) (1.31 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.58 cm at cranial pole) (0.50 cm at caudal pole) (0.98 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INTERPRETED BY

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

HOSPITAL NAME

Everhart Veterinary
 Hospital

REFERRING VET

Dr. Rubinstein

Spleen

The spleen is normal in size (1.05 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver**INVOICE**

11001

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is contracted. The wall is diffusely thickened (up to 0.43 cm) and heterogenous in appearance. The cystic and common bile ducts are thickened. The common bile duct is borderline dilated

(up to 0.23 cm in diameter at the level of the duodenal papilla). There is no evidence of an intraluminal obstruction. The duodenal papilla is mildly thickened (0.53 cm in width).

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The pancreas is diffusely enlarged (particularly the base and right limb) with irregular, peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and mildly heterogenous in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. The mesentery effacing the serosal surface is hyperechoic.

Free Abdomen

The mesentery throughout the abdomen is hyperechoic. Trace free fluid is suspected. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The pancreatic changes are consistent with moderate to severe, acute pancreatitis with secondary peritonitis.
- The gall bladder and cystic/common bile duct wall changes are most consistent with cholecystitis/cholangitis, respectively.
- Although the hepatic parenchyma is visibly normal, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis), cannot be completely excluded, particularly in light of the patient's liver values.

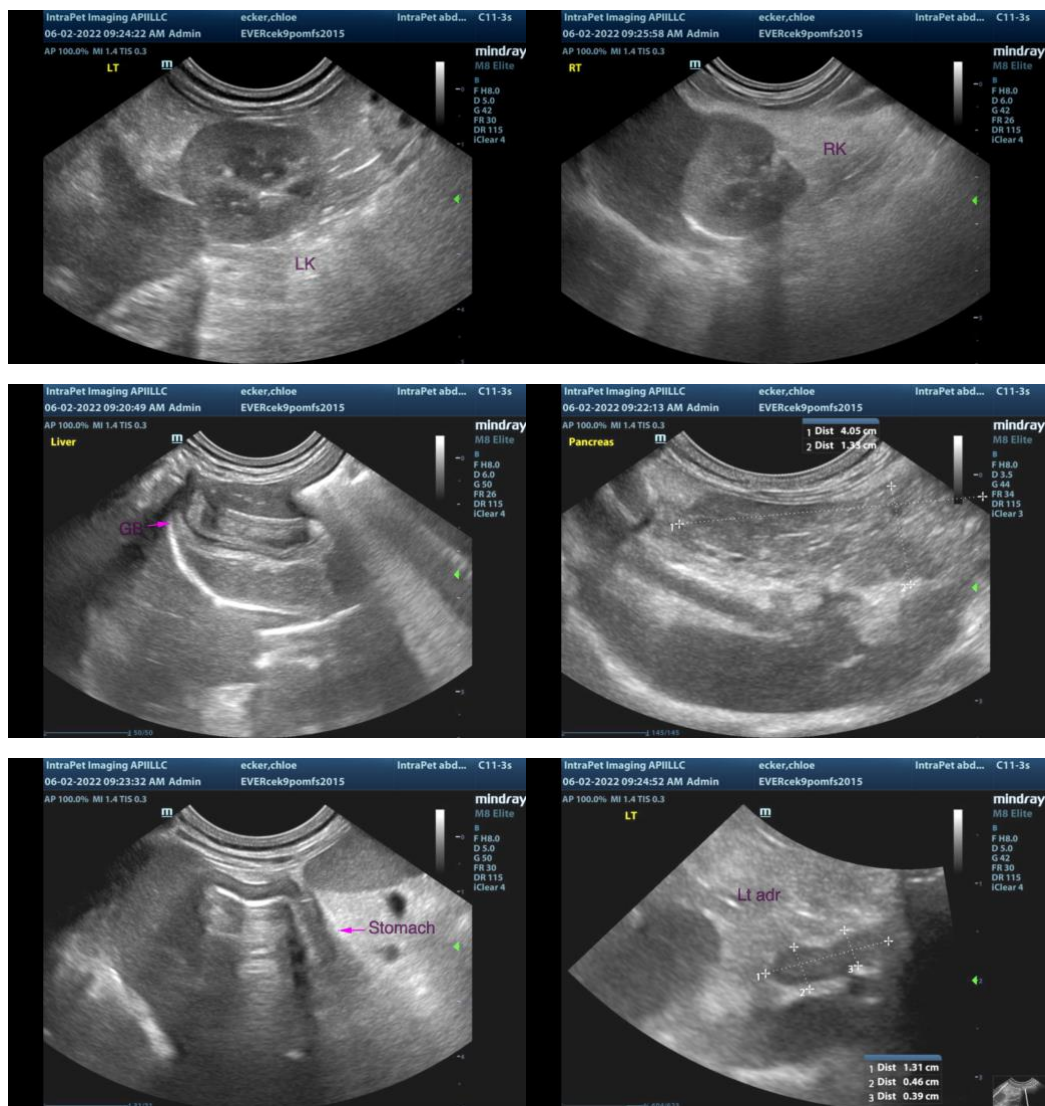
Secondary Findings

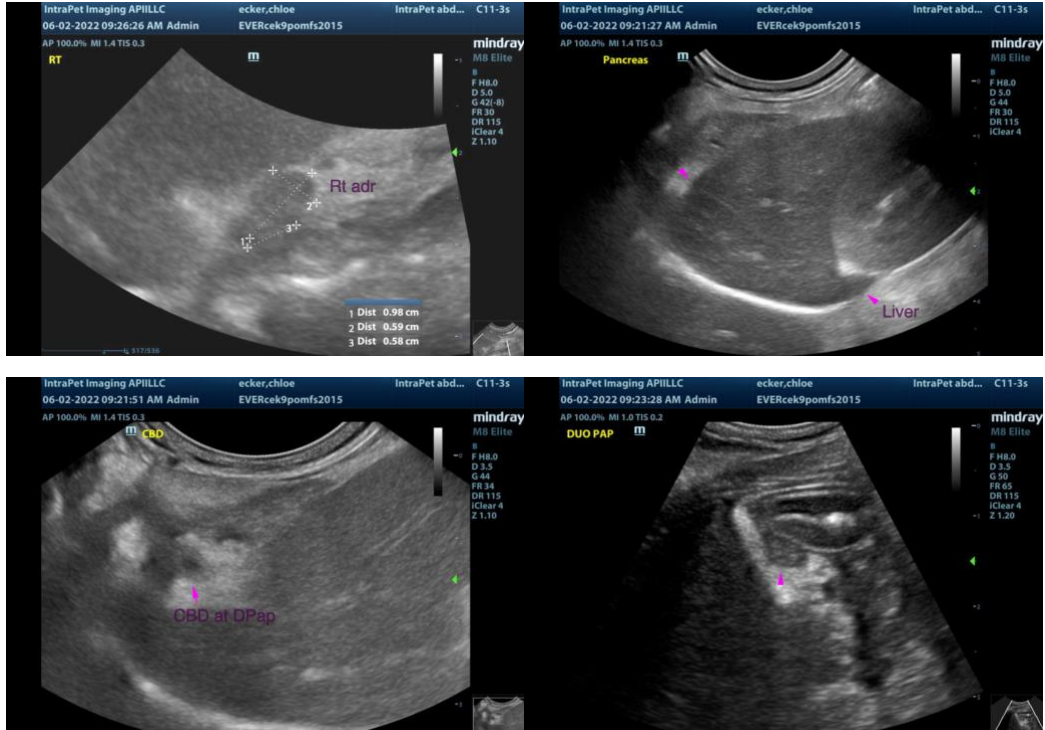
- Bilateral, chronic renal changes with dystrophic mineralization and a right cortical infarct

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Aggressive supportive care for acute pancreatitis and cholecystitis/cholangitis is recommended, including IV fluid therapy, broad-spectrum antibiotics, gastric protectants, pain medication, +/- fresh frozen plasma. If available hyperbaric oxygen treatment may be beneficial in reducing pancreatic inflammatory. Consider initiation of trickle feeding as soon as the patient will tolerate it, as this will help to maintain enterocyte health.

- Thoracic radiographs are also recommended, as moderate to severe pancreatitis can result in pulmonary effects.
- Serial monitoring of the patient's liver values, particularly the total bilirubin, is recommended. If total bilirubin continues to increase, an abdomen exploratory with assessment of bile duct patency may be warranted.
- Also consider daily sonograph monitoring of the pancreas and bile ducts to assess for progression.





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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