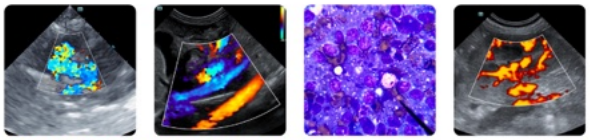


PATIENT

Lexi Gruett

SPECIES

Canine

BREED

Havanese

SEX

Spayed female

AGE

14 years

WEIGHT

17.8 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Allison Maxey

HOSPITAL NAME

Evergreen AH

REFERRING VET

Dr. Maxey

INVOICE

69440

DATE

12/18/25

PRESENTING CLINICAL SIGNS

History: Decreased appetite, liquid yellow diarrhea with urgency and tenesmus. Duration of symptoms ~2-3 days. No vomiting.
Abnormal PE/Chem/CBC/UA Results: Abdomen tense, liquid yellow diarrhea. Monocytosis (1,890/ul), thrombocytosis (581, 000/ul), hypophosphatemia (2.1 mg/dl), amylase > 2,500 U/L, lipase 5,072 U/L, pancreatic lipase 1,410 U/L

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder lumen is normally distended, and the bladder wall appears thin and smooth. The urine is anechoic. The bladder neck and proximal urethra appear normal. No uroliths or ultrasonographic evidence of inflammatory or neoplastic disease are identified.

The left kidney is normal in shape and size, measuring 4.25×2.52 cm, with a cortical thickness of 0.39 cm in the sagittal plane. The renal cortex is isoechoic relative to the liver parenchyma. A small thin-walled cyst measuring approximately 2.53×2.45 mm is identified at the caudal pole. Very small echogenic foci consistent with mineral deposits are noted within the renal calyces, not forming discrete calculi. There is no evidence of pyelectasia or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

The right kidney is normal in shape and size, measuring 4.68×3.10 cm, with a cortical thickness of 0.45 cm in the sagittal plane. Similar small echogenic mineral deposits are noted within the renal calyces. There is no evidence of pyelectasia or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

Adrenal Glands

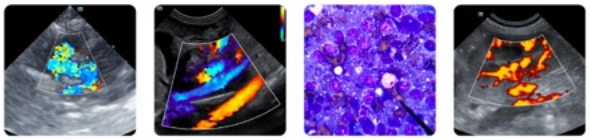
The left adrenal gland is partially visualized and measures approximately 0.59 cm at the caudal pole. The right adrenal gland is not visualized.

Spleen

Splenic thickness measures approximately 1.57 cm. The splenic parenchyma is predominantly homogeneous; however, a hypoechoic focus measuring approximately 2.67×4.45 cm and a hyperechoic focus measuring approximately 2.88×2.91 mm are identified adjacent to the splenic hilum, compatible with benign splenic nodules such as myelolipoma or splenic nodular change (Bates bodies). The splenic capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with sharp margins and a regular contour. The hepatic parenchyma is isoechoic relative to the renal cortex and mildly hyperechoic relative to the spleen. The parenchyma is mildly heterogeneous, with several small hypoechoic foci, the largest measuring approximately 1.57×0.53 cm. No hepatic lymphadenopathy is observed.



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The gallbladder lumen is moderately distended. The gallbladder wall is thin. The contents are primarily anechoic with a mild to moderate amount of biliary sludge. No dilation of the cystic duct or common bile duct is identified.

Gastrointestinal

The stomach is fluid-filled and moderately distended, with preserved wall layering and mural thickness measuring approximately 2.15 mm. The pylorus measures approximately 4.02 mm. The duodenum measures approximately 2.62–2.92 mm, and the jejunum measures approximately 3.13 mm. No evidence of mechanical obstruction, ileus, or intraluminal foreign material is identified. The colon measures approximately 0.78 mm and appears largely empty.

Pancreas

The pancreas is not clearly visualized.

An area adjacent to the pylorus extending toward the left side demonstrates small, poorly defined hypoechoic nodulations measuring approximately 2.5–3 mm. These findings may represent pancreatic nodular hyperplasia. Improved evaluation of this region, ideally using a high-frequency linear transducer, would be beneficial for further characterization.

Peritoneal Cavity

No abdominal effusion or signs of peritonitis are observed. Cranial mesenteric lymph nodes are not visualized, and the surrounding regions appear unremarkable. The iliac trifurcation is normal.

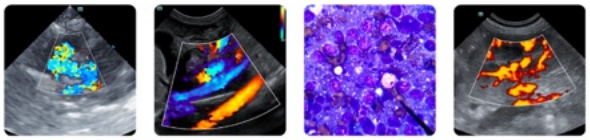
ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS

- Distended fluid-filled stomach.
- Mild duodenal and jejunal wall thickening.
- Suspected pancreatic nodular changes adjacent to the pylorus, with limited pancreatic visualization.
- Mild biliary sludge.

SECONDARY FINDINGS

- Few small hepatic hypoechoic foci.
- Small incidental splenic nodules.
- Small renal cortical cyst and minimal calyceal mineral deposits bilaterally.



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The right pancreatic limb, which represents the largest portion of the canine pancreas, was not visualized during the examination. Therefore, the possibility of primary pancreatic pathology affecting this region cannot be excluded. Given the clinical context, inflammation within the right pancreatic limb remains a significant consideration.

The presence of small hypoechoic nodulations adjacent to the pylorus, within the anatomic region corresponding to the pancreatic body and left pancreatic limb, may represent pancreatic nodular hyperplasia, or less likely, an early inflammatory change.

The fluid-filled stomach and mild thickening of the duodenum and jejunum are most compatible with reactive gastroduodenitis and enteritis, likely secondary to pancreatitis. The absence of mechanical obstruction, ileus, or intraluminal foreign material supports a functional, inflammatory process rather than a primary obstructive condition.

The hepatic and splenic nodules are most consistent with benign changes, such as hyperplasia. The hyperechoic splenic nodule is most consistent with a myelolipoma or Gamna–Gandy body and is considered incidental.

Renal findings, including small cortical cysts and minimal calyceal mineral deposits, are also considered incidental and unrelated to the current clinical presentation.

Recommendations

- Medical management for suspected acute pancreatitis is recommended, including analgesia, antiemetics, gastrointestinal support, and fluid therapy as clinically indicated.
- Monitoring of electrolytes, particularly phosphorus, is advised given the documented hypophosphatemia.
- Serial monitoring of pancreatic and liver enzymes may be useful to assess response to therapy and disease progression.
- A useful tip to help visualize the right limb of the pancreas, particularly in patients with cranial abdominal pain, is to place the patient in left lateral recumbency, which allows ventral displacement of the pancreas and improves access to the right cranial abdomen. A right intercostal approach through the 10th to 12th intercostal spaces, using the liver as an acoustic window, is recommended. The transducer should be positioned just caudal to the costal arch, identifying the proximal descending duodenum as a key landmark, as the right pancreatic limb lies immediately medial and dorsal to it. Gentle fanning and sliding movements with minimal transducer pressure can help delineate the pancreatic parenchyma.

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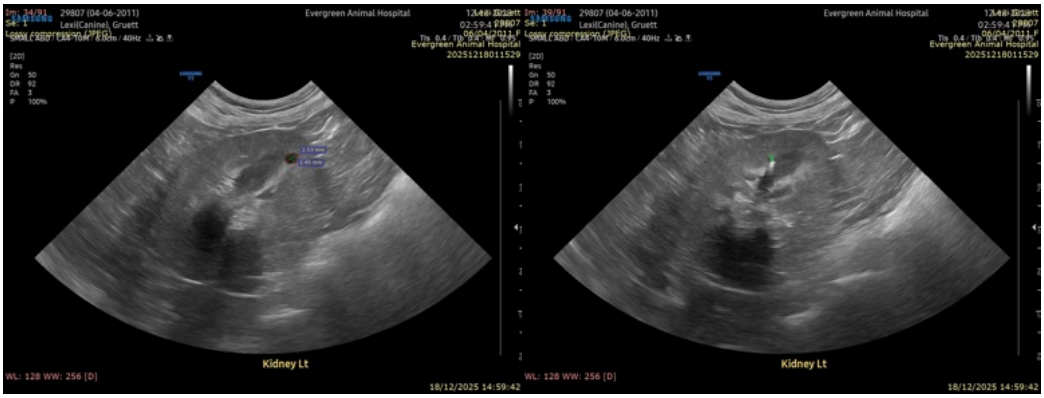

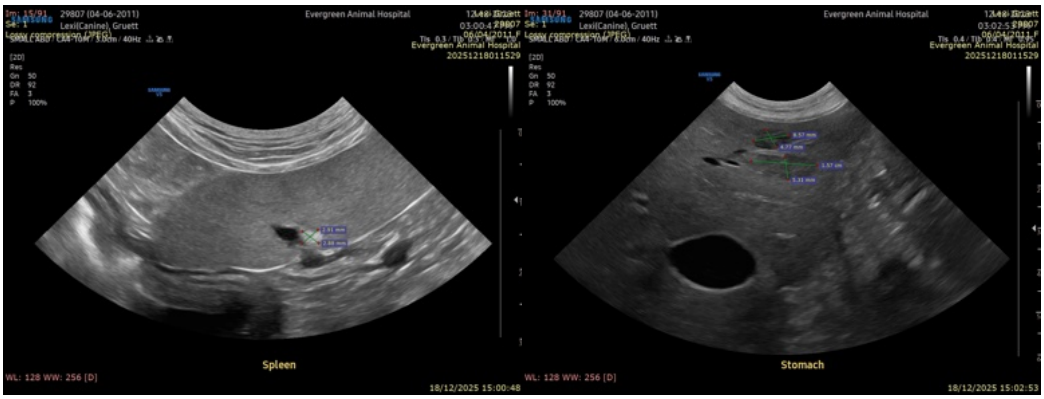

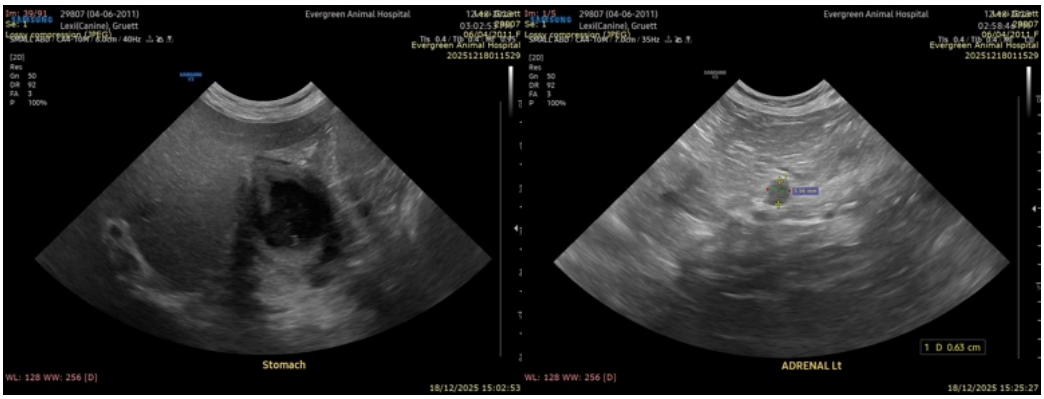

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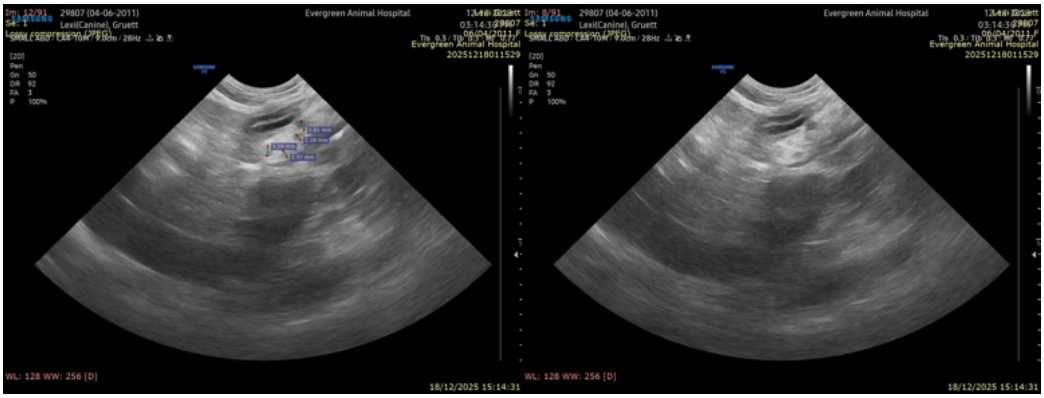

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

MV Esp Ultrasound in Domestic and Wild Animals

info@SonoPath.com