



PATIENT

Lila Rehberger

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

13 Years

WEIGHT

4.63 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

CVN

HOSPITAL NAME

Animal Emergency
Hospital, Volusia

REFERRING VET

Dr. Van Nieuwal

INVOICE

20414

DATE

1/7/23

PRESENTING CLINICAL SIGNS

History: Owner states patient did not eat yesterday other than when owner gave her sausage and eggs this morning. Yesterday afternoon patient had strange mucousy, bloody stool. Patient vomited on January 3rd, urine normal. Is able to hold water down. Otherwise acting sort of lethargic and just not herself. Patient came to ER last night for these symptoms and elected outpatient care despite VOD warning will likely not improve unless hospitalized. Today owner brought patient back to do hospitalization plan since no improvement seen at home.

Abnormal PE/Chem/CBC/UA Results: CBC: MCHC 40.4, MPV 7.4 COMP: BUN 32, phos 7.5, globulin 3.9, cholesterol >450, ALT 236, ALP 613, GGT 19, Tbilli 0.8, amyl 2438, LIP too high to read (>10,000 WITH 10X DILUTION) EPOC: pCO2 29.5, sodium 135, potassium 3.0, chloride 102, ionized calcium 1.12, BUN 28, creat 1.64 PCV/TS: 35%/8.0 g/dL clear CPLi: strong abnormal/positive Fecal float/direct: neg for parasite, RBC seen, normal bacteria present

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **left kidney** was subnormal in size and severely dystrophic with cortical infarcts and collapse. The left kidney measured 2.3 cm.

The **right kidney** revealed moderate degenerative changes with cortical infarcts and collapse. The right kidney measured 3.34 cm.

Adrenal Glands

The **left adrenal gland** was visualized obliquely, and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.5 cm.

The **right adrenal gland** was not visualized.

Spleen

The **spleen** in this patient was uniform, yet volume contracted. Hydration status should be assessed. A slight hypoechoic nodule was noted in the mid spleen.

Liver

The **liver** revealed increased portal markings, coarse architecture and irregular swelling. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

Th **stomach** was empty, as was the distal small intestine, however, the duodenum was thickened and edematous.



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Pancreas

Lila Rehberger

The **pancreas** revealed extensive mixed hypoechoic parenchymal changes with enhanced surrounding mesentery enveloping the upper duodenum, which was spastic. Areas of fluid filled cysts or abscesses were noted in the right limb of the pancreas. Ultrasound guided FNA of the pancreas and drainage of any cystic component is recommended.

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Canine

ULTRASONOGRAPHIC FINDINGS

BREED

Shih Tzu

- Extensive pancreatitis/cholangitis pattern
- Dystrophic kidneys
- Volume contracted spleen with slight hypoechoic nodule in the mid spleen
- Thickened, edematous duodenum

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

AGE

13 Years

FNA of the liver and right limb of the pancreas is indicated. No evidence of posthepatic obstruction, however, may develop secondarily given the position of the pancreatic pathology around the portal hilus. Aggressive treatment for pancreatitis with pain management, plasma expanders, broad spectrum antibiotics and GI protectants all indicated. Recheck sonogram in 48-72 hours or earlier if bilirubin values elevate.

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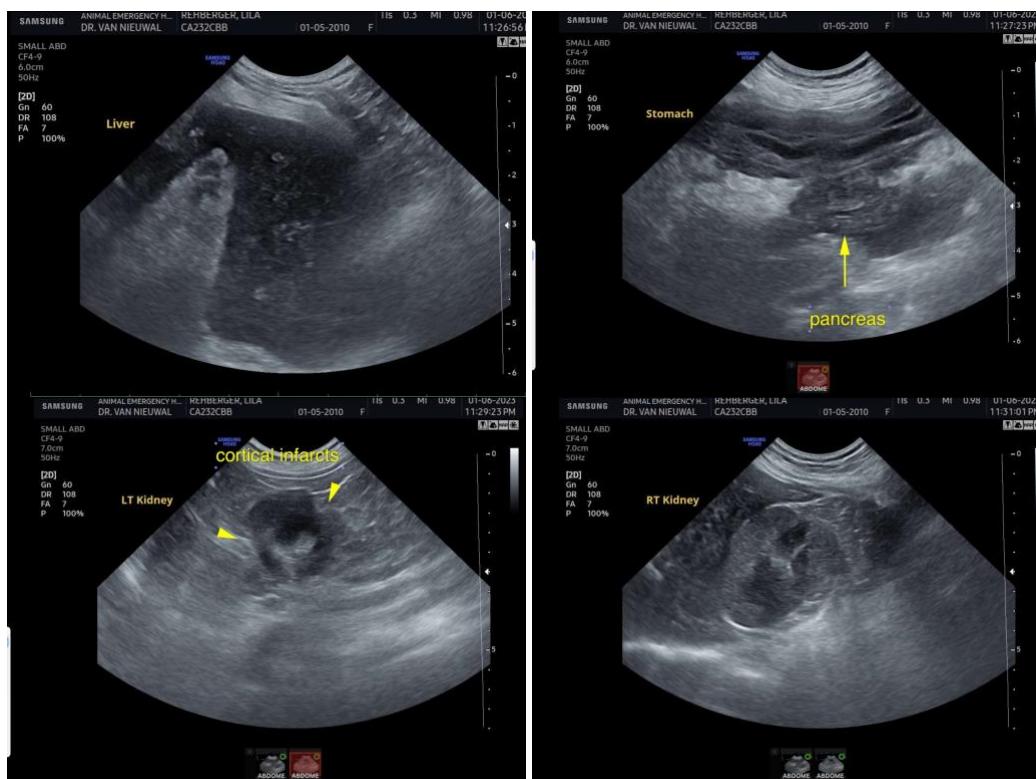
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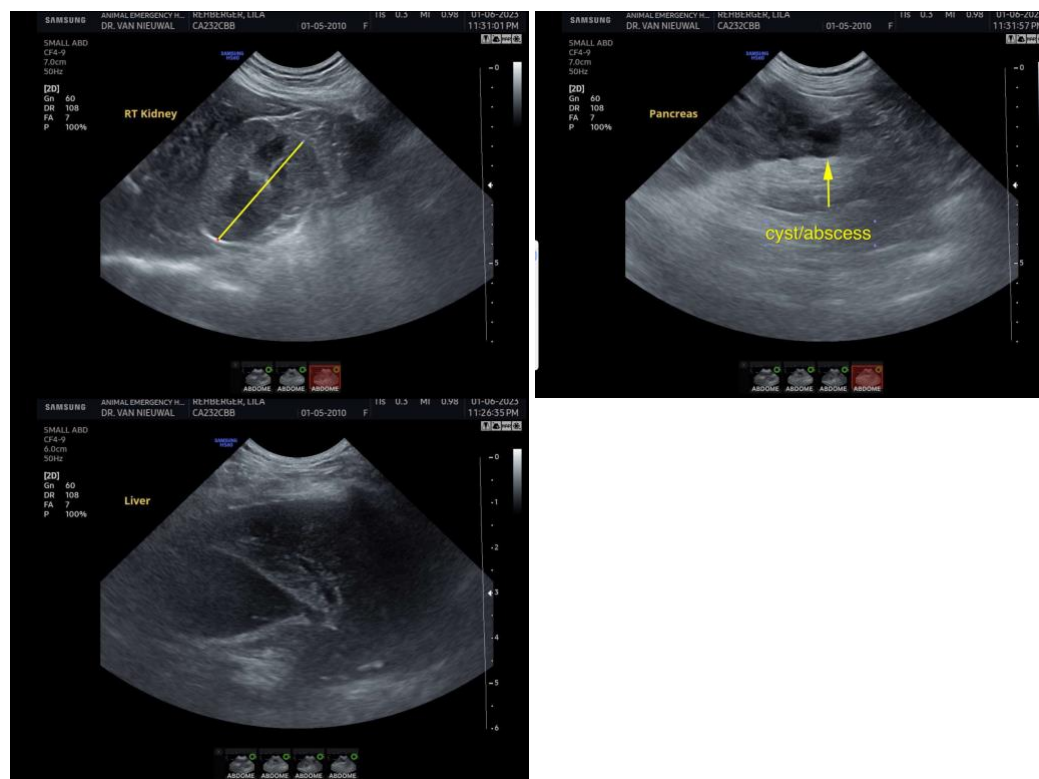
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com