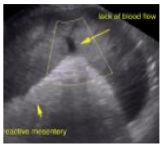
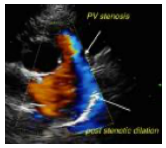
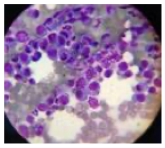
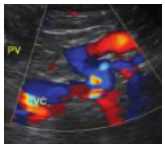
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Brandi McCabe

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

8 years

WEIGHT

5.1 kg

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores Vet Emerg Ctr

REFERRING VET

Dr Christian

INVOICE

12578

DATE

3.30.23

PRESENTING CLINICAL SIGNS

History: Presented at our hospital for increased liver values, vomiting, and decreased appetite. O stated P vomited Sunday night and Monday morning (~5days ago) after having a decreased appetite for about a week. Bloodwork at RDVM showed elevated liver values and pancreatitis, and O is interested in an AUS. Previous Health Concerns: pancreatitis, UTI with stones about 2 years ago, constipation Current Medications: Clavamox, buprenorphine, Cerenia, metronidazole Appetite/When did they eat last: decreased

Abnormal PE/Chem/CBC/UA Results: Cardiovascular: bradycardia, no m/a noted Integument: bruising noted over left jugular vein on ventral neck(iatrogenic?), no petechiae noted elsewhere 3/30/23 ALT 1584 H; ALP 214 H; GGT 52 H; TBIL 1.4 H; Lac 3.13 H; BUN 6 L 3/27/23: HGB 18.8; ALT 2114 with 1/4 dilution, GGT 26; Tbili 1.2

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 1-2 cm, are normal.

The left kidney is normal in size (4.05 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (4.16 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size (0.34 cm at cranial pole) (0.38 cm at caudal pole) (1.96 cm in length) with a normal shape and 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 in normal size (0.33 cm at cranial pole) (0.41 cm at caudal pole) (1.65 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (0.93 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

The liver is subjectively small in size with normal curvilinear peripheral contours. The parenchyma is hope relative to the spleen and homogenous in appearance. No focal lesions are observed. Intrahepatic biliary tracts appear normal.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, gravity-dependent sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly to moderately distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Suspected microhepatica. Differentials include congenital disease (i.e., microvascular dysplasia, congenital portosystemic shunt), fibrosis, inflammatory disease, other hepatopathy.

Secondary Findings

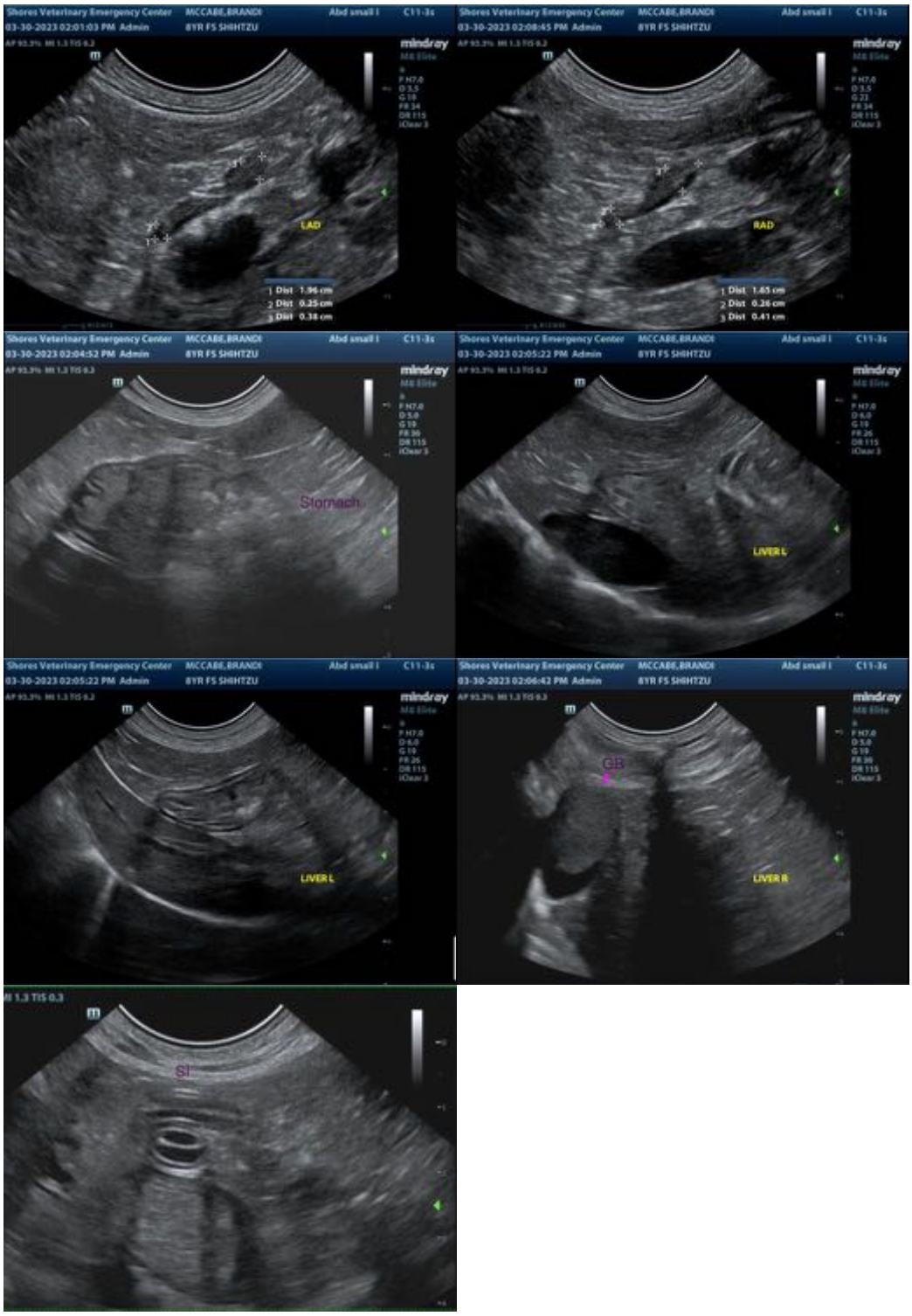
- Minor bilateral renal dystrophic mineralization. If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying. Correlation with the patient's clinical history is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Pre-and postprandial serum bile acids are recommended along with Leptospirosis testing (i.e., blood and urine PCR, serology).

- Depending on the results of the above diagnostics, liver biopsies and aerobic and anaerobic bile cultures +/- a contrast CT scan (to assess for a congenital portosystemic shunt) may be necessary to get a definitive diagnosis.

- While awaiting test results, supportive care is recommended, including fluid therapy, antiemetics, gastric protectants, hepatic antioxidants, +/- broad-spectrum antibiotic therapy (as empirical treatment for bacterial cholangiohepatitis).



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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