**PATIENT PRESENTING CLINICAL SIGNS**

Axl Olson
SPECIES History: Patient presents for recheck ultrasound. Last ultrasound 12/5/22 – previous findings: The gallbladder changes are most consistent with an emerging mucocele. (????) Non-specific diffuse hepatopathy. Differentials include inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, reactive hepatopathy, microvascular dysplasia, other. Secondary Findings: Bilateral, age-related renal changes with non-obstructive nephrocalcinosis and cortical cysts. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis. Patient was started on Ursodiol and Denamarin after last ultrasound.
Canine
BREED Chihuahua
SEX Abnormal PE/Chem/CBC/UA Results: Bile Acids and ALT were elevated prior to starting Ursodiol therapy. ALT normalized after. Bile Acids not repeated. **Please see attached in link.
Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

12 years, 8 mos

WEIGHT

5.08 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Dr. Kathryn Hicks

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Urinary System

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

The prostate is normal in size (0.55 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (2.87 cm in length) with an irregular shape. The cortex is variably thickened and hyperechoic relative to the spleen. Numerous varying-sized cortical cysts (some of which are complex) are observed. A few of the cysts cause capsular expansion. There is poor corticomedullary distinction. Nonobstructive mineralized foci are seen. Moderate pyelectasia is present (0.52 cm in the transverse plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (2.95 cm in length) with an irregular shape. The cortex is variably thickened and hyperechoic relative to the spleen. A few varying-sized cortical cysts (some of which are complex) are observed. A few of the cysts cause capsular expansion. There is poor corticomedullary distinction. Nonobstructive mineralized foci are seen. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

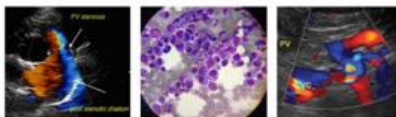
Adrenal Glands

The left adrenal gland is normal in size (0.28 cm at cranial pole) (0.35 cm at caudal pole) 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 (0.45 cm at cranial pole) (0.50 cm at caudal pole) 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 (0.82 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.

**PATIENT****Liver**

Axl Olson

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

SPECIES

Canine

The gall bladder is distended. The wall is normal in thickness. A large amount of aggregated, echogenic sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

BREED

Chihuahua

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 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.

SEX

Neutered Male

AGE

12 years, 8 mos

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

WEIGHT

5.08 lbs

Free Abdomen

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

INTERPRETED BY

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

ULTRASONOGRAPHIC FINDINGS**Primary Findings**

- Gallbladder changes are consistent with a mucocele. Changes are similar to the previous sonogram.
- Questionable mild hepatomegaly

Secondary Findings

- Bilateral chronic renal changes with nonobstructive nephrolithiasis, pyelectasia, and cortical cysts. Changes are similar to the previous sonogram.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis. Changes are similar to the previous sonogram.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**INVOICE**

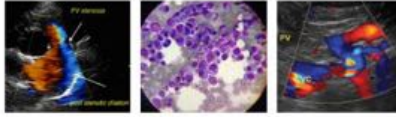
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- Given the appearance of the gallbladder, a prophylactic cholecystectomy should be considered. If pursued, liver biopsies should also be obtained. If not pursued, continuation of Ursodiol therapy with serial sonographic monitoring (i.e., 4 weeks) is recommended to assess for progression. The client should be warned of the potential for gallbladder rupture with subsequent bile/septic peritonitis.

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- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is also recommended.



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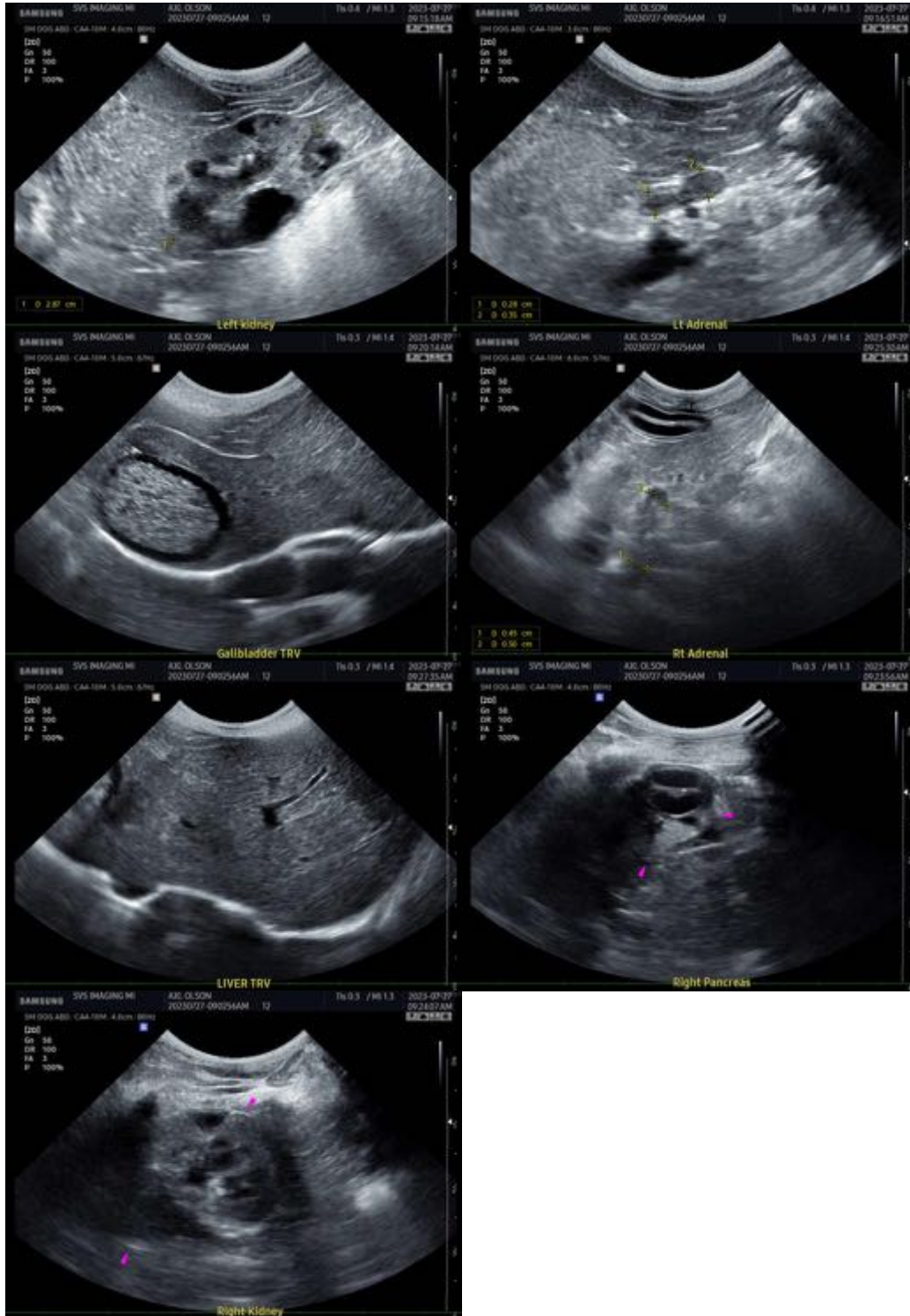
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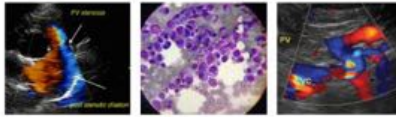
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

IMAGING PERFORMED BY

svsimagingqc.net 309-737-3070



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PATIENT

Axl Olson

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.

SPECIES

Canine

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com

BREED

Chihuahua

SEX

Neutered Male

AGE

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