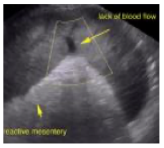
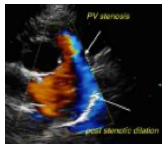
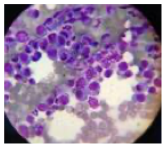
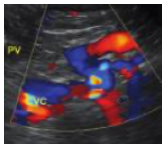
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Toby Matheson

SPECIES

Canine

BREED

Maltese

SEX

Neutered Male

AGE

12 years, 1 mo

WEIGHT

4.15. kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Brian Barnes

HOSPITAL NAME

Westview VH

REFERRING VET

Dr Brian Barnes

INVOICE

12636

DATE

4.3.23

PRESENTING CLINICAL SIGNS

History: Has hepatic mass, recent AUS on Feb 13th, 2023. Started having suspect seizures, will vocalize and fall over. Has DMVD Stage B1.

Recent x-rays decreased serosal detail. 1) Large left to mid hepatic mass. 2) Pronounced nodular hyperplasia (3) Suspect myelolipomas of the spleen 4) Echogenic structure in the mid to caudal abdomen 5) Small cystic calculus. 6) Bilateral, chronic renal changes with cortical infarcts and right dystrophic mineralization. 7) DMVD Stage B1, well compensated at this time. 7) Trace TR, no PH 8) Blepharitis

Abnormal PE/Chem/CBC/UA Results: Has had a few suspect seizure episodes., vocalizes last <1 min. Heart grade 2/6 AV murmur, lungs clear, reg/reg no Arrhythmias. Abdomen cranial abdominal fullness.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended. The wall is appropriate thickness for the level of repletion. The mucosal surface in the region of the apex is slightly irregular. At least two small cystic calculi are visualized (the largest measuring 0.28 cm in diameter). A scant amount of suspended echogenic debris is also seen. The region of the trigone is normal.

The region of the prostate is not visualized due to its pelvic location.

The left kidney is normal in size (4.56 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. A small cortical cyst is seen at the craniolateral aspect. A few hyperechoic foci are observed within the cortex. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The right kidney is normal in size (4.53 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. A small cortical cyst is seen at the lateral aspect. A few hyperechoic foci are observed within the cortex. Several hyperechoic shadowing diverticular foci are observed. A cortical infarct is suspected at the caudolateral aspect. There is no evidence of pyelectasia or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.42 cm at cranial pole) (0.46 cm at caudal pole) (1.82 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 appear normal.

The right adrenal gland is in normal size (0.50 cm at cranial pole) (0.46 cm at caudal pole) (1.73 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 appear normal.

Spleen

The spleen is normal in size (1.30 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few irregular hyperechoic nodules/areas are visualized (the largest measuring 1.11 cm in diameter). Splenic vasculature appears normal.

Liver

The liver is subjectively enlarged with irregular peripheral contours. A >5.20 cm round, heterogenous, slightly cavitated mass is arising from the left side. Also on the left side, an approximately 4.00 cm ill-

defined cavitated mass is seen. The remaining hepatic parenchyma is heterogenous in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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

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.

Pancreas

The pancreas is normal in size with normal peripheral contours. The pancreatic duct is normal. The base and limbs of the pancreas are isoechoic to surrounding omental fat. No focal lesions are observed. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The mesentery in the cranial- to midabdomen is hyperechoic. A small amount of echogenic free fluid is present. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The larger hepatic mass is similar in size compared to the previous sonogram. A new smaller cavitated mass is now seen. Given this finding, metastatic disease is of concern. Cranial peritonitis is present.

- The ascites is likely secondary to hepatic pathology.

Secondary Findings

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

- Small cystic calculi

- The hyperechoic splenic nodules trend toward the benign (i.e., myelolipomas) with a low possibility of emerging neoplasia.

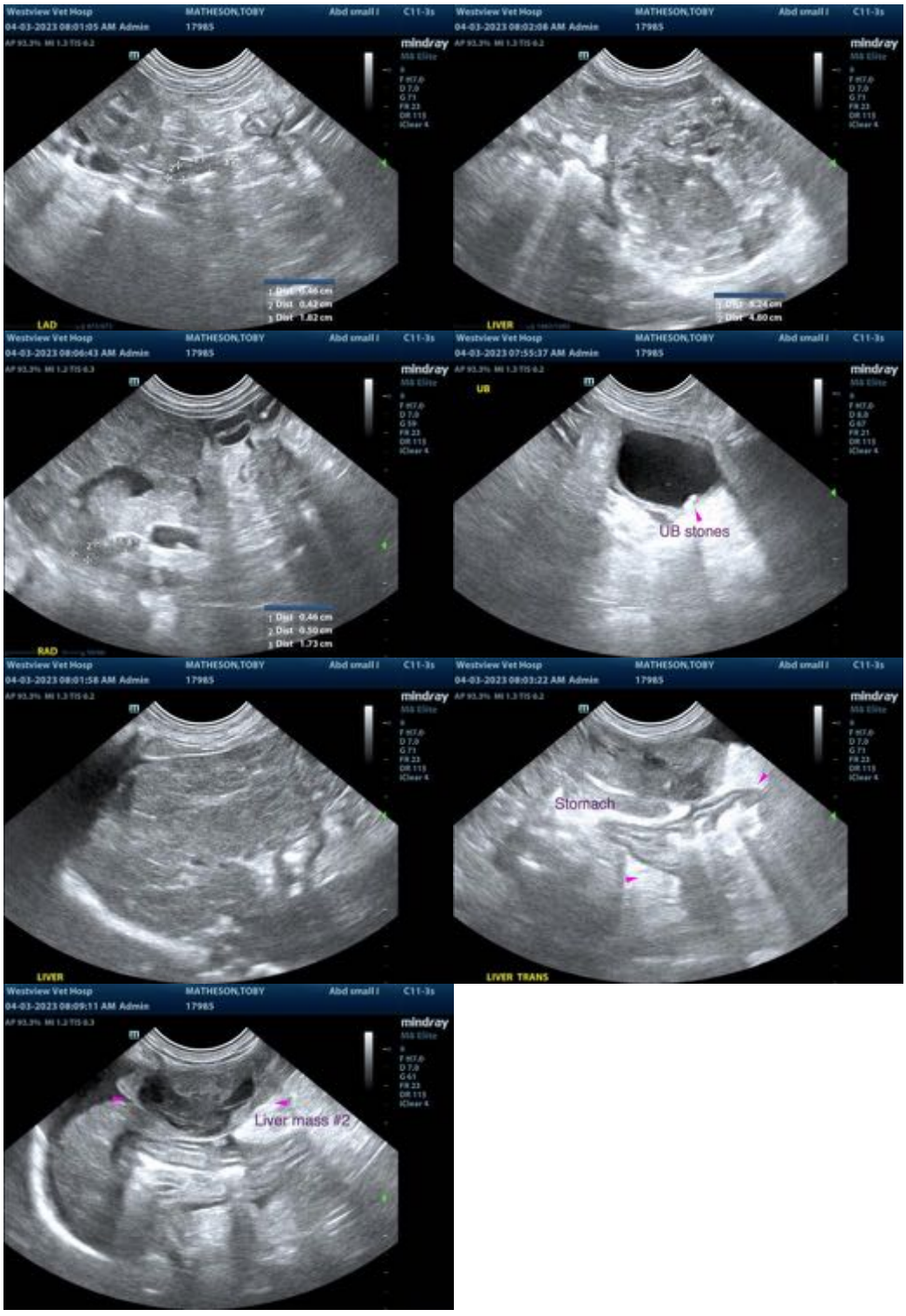
*An obvious cause for the patient's seizure-like episodes is not definitively identified in this study. Considerations include hepatic encephalopathy, metastatic disease to the brain, primary neurologic disease, intermittent cardiac arrhythmia, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

- Also consider an ECG +/- Holter monitor to assess for the presence of an arrhythmia.

- Consider consultation with a board-certified neurologist +/- brain MRI may be necessary to determine if a metastatic brain lesion is present.



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)
info@SonoPath.com