**PATIENT PRESENTING CLINICAL SIGNS**

Sandy Blow History: Recheck abdominal ultrasound due to concern of developing gall bladder mucocele and chronic elevated liver enzymes. Patient has been on Ursodiol 250mg Tabs - 2 tabs PO SID since last abdominal ultrasound in February 2023.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Please see attached

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Austr Shepherd Mix

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface in the region of the apex is mildly irregular. 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 2 cm, are normal.

SEX

Spayed Female

The left kidney is normal in size (6.13 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. A few small cortical cysts are seen. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

AGE

14 years

The right kidney is normal in size (6.18 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

WEIGHT

68 lbs

Adrenal Glands

The left adrenal gland is normal in size (0.64 cm at cranial pole) (0.71 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.

INTERPRETED BY

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

The right adrenal gland is normal in size (0.83 cm at cranial pole) (0.81 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.

IMAGING PERFORMED BY

Amy Mayhew LVT

Spleen

The spleen is normal in size (1.70 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Two-to-three small hypoechoic nodule/areas are visualized (the largest measuring 0.57 cm in diameter). Splenic vasculature is normal.

HOSPITAL NAME

SVS Imaging Michigan

Liver

The liver is subjectively normal in size with slight rounding of the left lateral lobe. The parenchyma is isoechoic relative to the spleen and diffusely mottled, with several varying-sized hyperechoic nodules throughout the organ (the largest measuring 2.30 cm in diameter). One-to-two small, cystic lesions are also observed in the left lateral lobe. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

REFERRING VET

Dr. Coleman

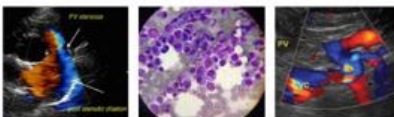
The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of echogenic-to-mineralized debris is observed within the lumen (most of which is gravity-dependent and some of which is suspended). The cystic and common bile ducts are normal/not seen.

INVOICE

13410

DATE

6.19.23

**PATIENT** *Gastrointestinal*

Sandy Blow

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.

SPECIES

Canine

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.

BREED

Austr Shepherd Mix

Free Abdomen

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

SEX

Spayed Female

ULTRASONOGRAPHIC FINDINGS**Primary Findings****AGE**

14 years

- Gall bladder debris/sand. These changes are improved compared to the previous sonogram, as the debris now appears mobile.

- The hepatic changes are most consistent with a benign process (i.e., regenerative nodular hyperplasia) +/- concurrent age-related remodeling and/or vacuolar hepatopathy. However, more insidious hepatic pathology (i.e., inflammatory disease, infiltrative neoplasia) cannot be completely excluded. Correlation with the patient's liver values and clinical history is recommended. The small, cystic, hepatic lesions are likely a benign incidental finding.

WEIGHT

68 lbs

Secondary Findings

- Mild bilateral chronic renal changes
- The hypoechoic splenic nodules/lesions trend toward the benign (i.e., focus of lymphoid hyperplasia, or similar) with a lower possibility of emerging neoplasia.

INTERPRETED BY

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

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Amy Mayhew LVT

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**HOSPITAL NAME**

SVS Imaging Michigan

- With regard to the gallbladder, Ursodiol therapy can be continued with recheck ultrasound in 3-4 months. Alternatively, Ursodiol therapy can be discontinued. In this instance, a recheck ultrasound is recommended in 1-2 months to assess for redevelopment of mucocele-like changes.
- The liver values should also be monitored periodically (i.e., every 3-4 months) to assess for persistent/worsening enzyme increases.

REFERRING VET

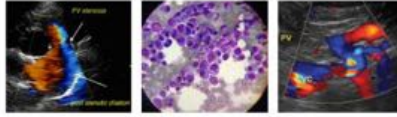
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PATIENT

Sandy Blow

SPECIES

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AGE

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REFERRING VET

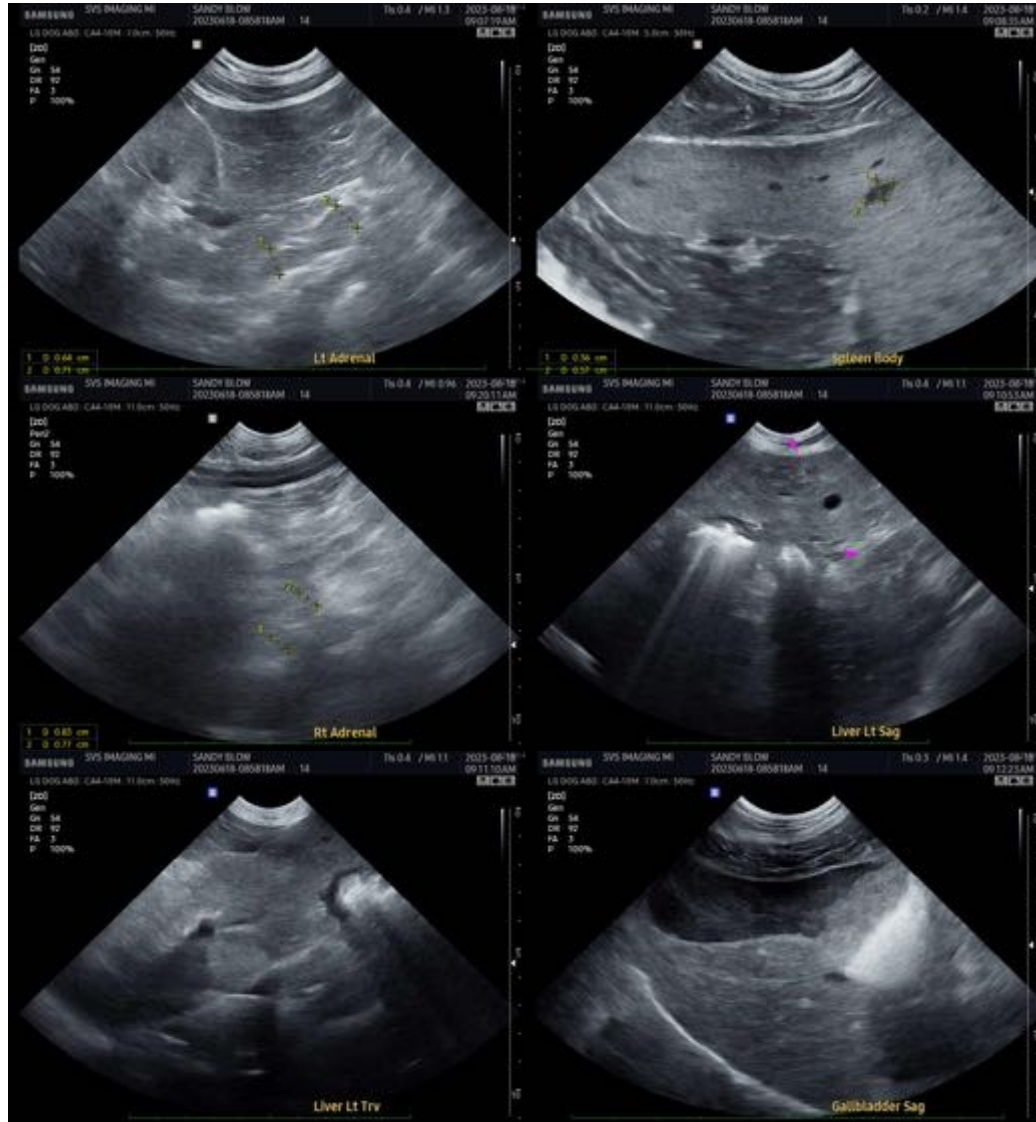
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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