

PATIENT PRESENTING CLINICAL SIGNS

PATIENT Auggie Norris
SPECIES Canine
BREED Wire-Haired Fox Terrier
SEX Spayed Female
AGE 14 Years
WEIGHT 31.5 Lbs.

History: Recent history of decreased appetite, PU/PD, and abdominal discomfort. Increasing liver values. Normal LDDS. Concern for splenic and liver lesions. Abnormal appearance of gall bladder wall (cholelith present in bile duct)
 Abnormal PE/Chem/CBC/UA Results: 12/01/2021 ALT 311, ALP 1334, BUN 45. Normal CBC and chem otherwise. Low dose dex suppression test WNL

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (5.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (5.42 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal size (0.59 cm at cranial pole) (0.62 cm at caudal pole) (2.50 cm in length); normal shape; 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 normal size (1.30 cm at cranial pole) (0.58 cm at caudal pole) (2.47 cm in length); normal shape; 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 (1.58 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Several varying sized irregular hyperechoic nodules are observed throughout the organ. Splenic vasculature is normal.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

INTERPRETED BY

Andrea Nicastro, DMV,
Diplomate DACVIM
(Small Animal
Internal Medicine)

IMAGING PERFORMED BY

Tiffany Brady, DVM

HOSPITAL NAME

Shiloh VH

REFERRING VET

Tiffany Brady, DVM

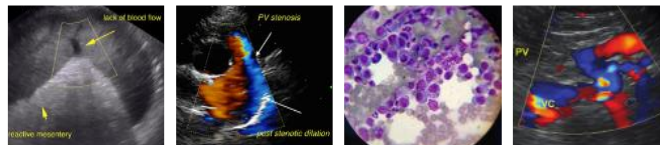
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The gall bladder is distended. The wall is normal in thickness. An excessive amount of aggregated echogenic partially dependent to suspended sludge is observed within the lumen. An aggregation of sludge is also observed at the neck of the gall bladder at its entry point into the cystic duct. The proximal cystic duct is mildly dilated. The common bile duct is normal/not seen.



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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 small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

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

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and hepatotoxicosis are also possible. Infiltrative disease is considered less likely.
- Excessive gall bladder sludge

Secondary Findings

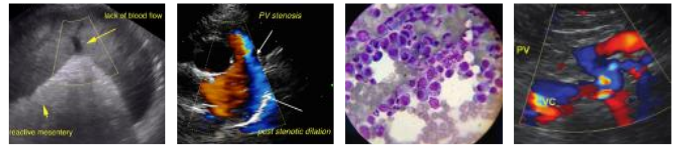
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.
- Minor age-related renal changes.
- The hyperechoic splenic nodules trend toward the benign (i.e., myelolipomas or foci of lymphoid hyperplasia) with low potential for emerging neoplasia.

*An obvious cause for the patient's clinical signs is not identified in this study.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider the following:

- Pre- and post-prandial serum bile acids to assess hepatic function +/- a fine needle aspirate of the liver (if clotting status is appropriate)
- Given the PU/PD, a urinalysis and urine culture and sensitivity are recommended to assess for occult pyelonephritis.
- Also consider three-view thoracic radiographs to assess for occult neoplasia in the chest.
- Given the presence of gall bladder sludge, consider initiation of Ursodiol therapy. Alternatively, a repeat ultrasound can be performed in 2-3 weeks, preferably 2 hours post-small meal. If gall bladder changes are similar to the current scan, initiation of Ursodiol therapy



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can be initiated at that time.

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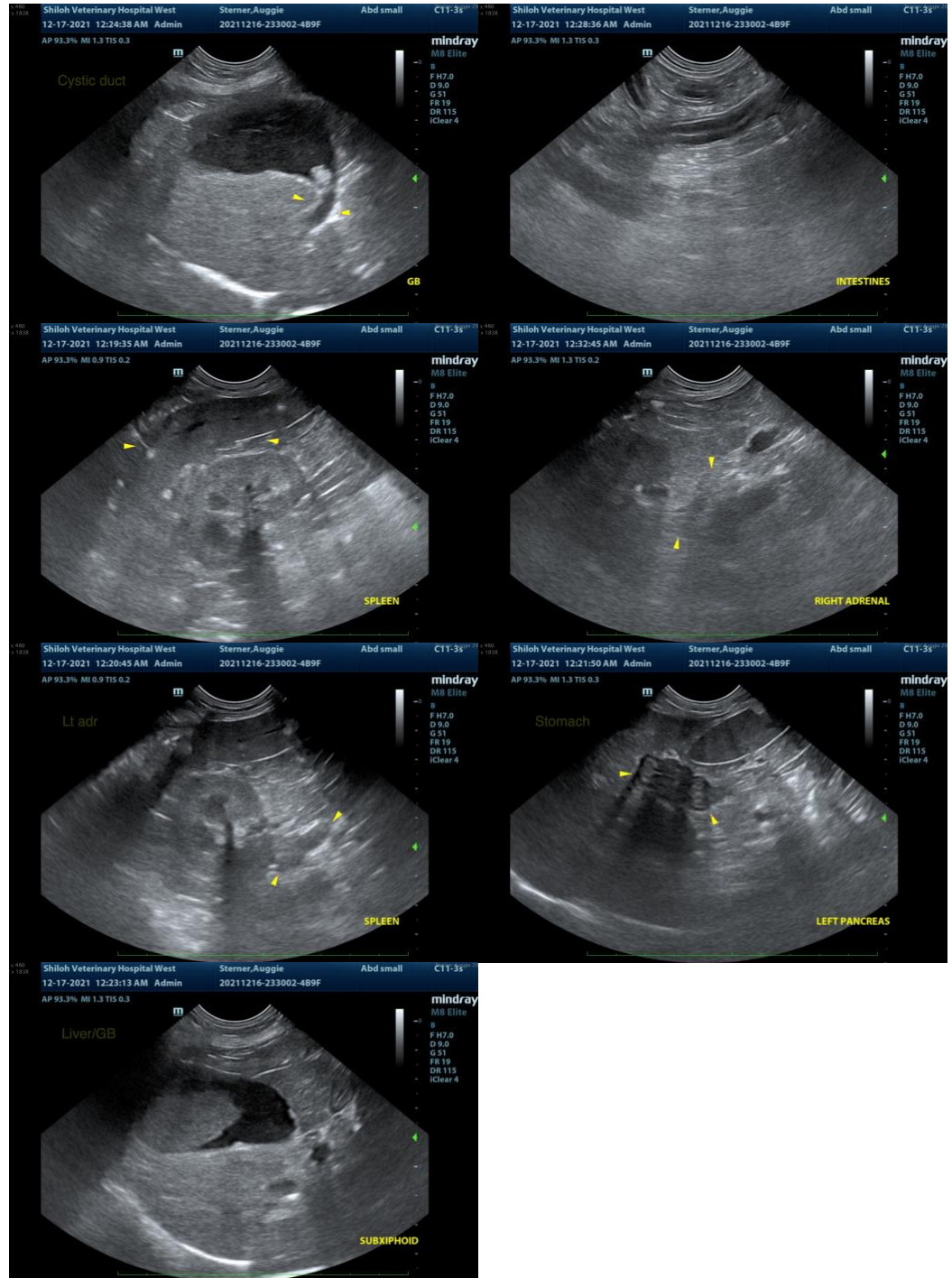
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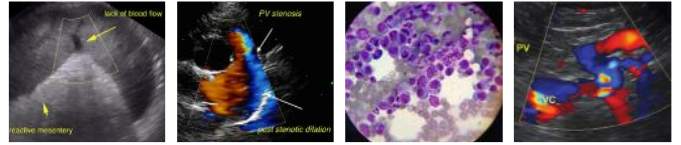
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



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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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