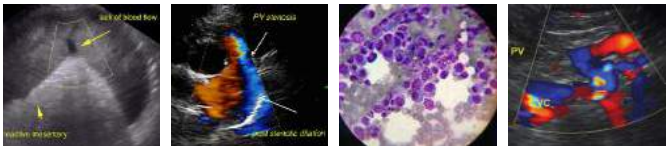
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Schotzie Thompson

SPECIES
Canine

BREED
Miniature Schnauzer

SEX
Male Neutered

AGE
13 Years

WEIGHT
20.6 lbs.

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

IMAGING PERFORMED BY
Potomac Mobile Veterinary Ultrasound

HOSPITAL NAME
Buckeystown Veterinary Hospital

REFERRING VET
Dr. Jarrett

INVOICE
11843kk

DATE
9/16/21

PRESENTING CLINICAL SIGNS

History: Vomiting/inappetence for about two days. Abdominal rads showed poor serosal detail and possible mass effect. Getting hydroxyzine, gabapentin, Deramaxx (just discontinued due to elevated ALT).

Abnormal PE/Chem/CBC/UA Results: Chem- BUN increased, phosphorus increased, lipase increased, ALP 494. ALT 170. CBC NSF cPLI normal U/A- USG 1.027, pH 5.5, 3+ protein, 2+ hyaline casts.

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 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 prostate is normal in size (2.19 x 0.79 cm) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (6.03 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. Renal vasculature is normal.

The right kidney is normal size (6.06 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. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.48 cm at cranial pole) (0.52 cm at caudal pole) (1.64 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.

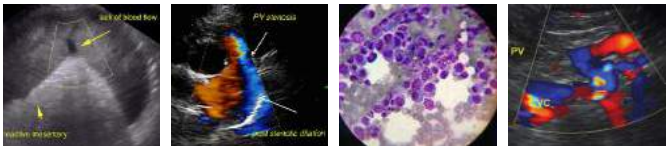
The right adrenal gland is normal size (0.42 cm at cranial pole) (0.42 cm at caudal pole) (2.29 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.23 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 enlarged with rounded peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled in appearance with numerous, small, ill-defined, hypoechoic nodules/areas throughout the organ. An approximately 3 cm hypoechoic to heterogeneous irregular mass is observed on the right side. Hepatic vasculature and intrahepatic biliary tracts are of normal



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volume with no evidence of congestion. The gall bladder is distended. The wall is normal in thickness. A moderate amount of aggregated, echogenic, partially dependent sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with ingesta. The gastric wall in the region of the fundus is borderline thickened (up to 0.46 cm) with retention of the normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is normal in thickness with a normal layering pattern. There is evidence of mucosal fogging in some segments. Discreet masses are not identified. The colonic wall is normal. The colonic lumen contains granular appearing fecal material. There is no evidence of obstruction.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hypoechoic 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.

Free Abdomen

Trace free fluid is observed. A 1.12 cm mesenteric lymph node is observed in the mid-abdominal cavity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

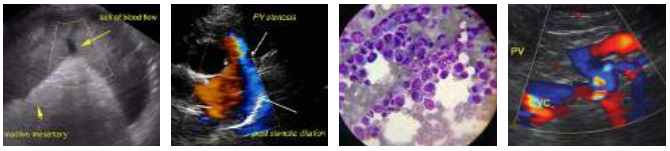
- Right hepatic mass. Differentials include adenoma, adenocarcinoma, regenerative nodule, and other. The diffuse hepatic parenchymal changes are non-specific and could be secondary to benign pathology (i.e., nodular hyperplasia, vacuolar hepatopathy) or possibly more insidious disease (i.e., infiltrative neoplasia, inflammatory disease, and other).
- Gall bladder sludge. Differentials include cholestasis, early mucocele formation, secondary to fasting.
- The bowel changes are consistent with a diffuse enteropathy (i.e., inflammatory bowel disease, lymphangiectasia, emerging neoplasia, and other).
- The trace ascites may be secondary to increased vascular permeability, low oncotic pressure, or increased hydrostatic pressure. Correlation with clinical findings is recommended.

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.
- Bilateral, age-related renal changes.
- The prominent mesenteric lymph node is likely reactive.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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



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2. Fine needle aspirates of the liver, including the mass, are recommended. (if clotting status is appropriate). 25-guage needles should be used. If cytological evaluations are inconclusive, surgical biopsies +/- hepatic mass removal may be warranted.

3. Further GI work up could include the following:

    a. A malabsorption panel including serum cobalamin, folate, PLI and TLI.

    b. A fecal evaluation for ova/Giardia

    c. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended.

    d. Endoscopic or surgical gastrointestinal biopsies.

4. Given the proteinuria, a UPC and urine culture and sensitivity are recommended.

5. Given the gall bladder changes, consider initiation of Ursodiol therapy. Alternatively, a repeat ultrasound in two to three weeks can be considered, preferably 2 hours following a small meal. If gallbladder changes are similar, Ursodiol therapy can be initiated at that time.

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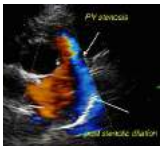
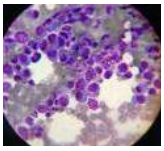
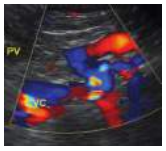

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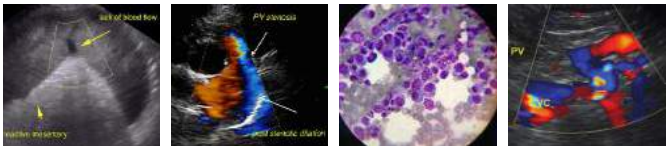

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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