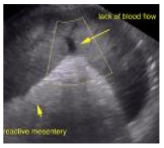
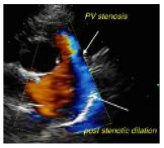
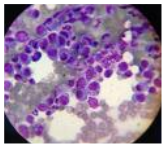
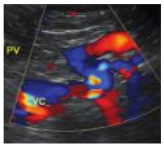
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
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PATIENT
Max Hickman

SPECIES
Canine

BREED
Maltese Mix

SEX
Intact Male

AGE
11 years

WEIGHT
8.8 lbs

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

IMAGING PERFORMED BY
Dr. Reyes

HOSPITAL NAME
Mobile Vet Ultrasound

REFERRING VET
Dr. D'Ambrose

INVOICE
10824

DATE
4/29/22

PRESENTING CLINICAL SIGNS

History: Max was diagnosed with Cushing's Disease about a month ago. He was started on 10 mg Vetoryl, but then the dose was decreased to 5 mg due to electrolyte changes. Max is currently on Ursodiol 250 mg (1/4 tab SID), Enalapril 2.5 mg 1 tab BID, Clopidrogel 75 mg, 1/4 tab SID. Max has been acting lethargic, increased RR but previous echo was normal (March), coughing up foam about twice daily, anorexia.

Abnormal PE/Chem/CBC/UA Results: Lytes from yesterday: Na: 146 K: 5.0 Na/K: 29 Cl: 101 03/28 BUN: 53 Plt: elevated Rest NSF UA: Hyaline casts UPC: 3.4 Thyroid panel: Free T4: 0.5

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. The region of the trigone and the visible portion of the proximal are normal.

The prostate is enlarged (2.37 cm in width) with a normal shape and smooth curvilinear peripheral contours. The parenchyma is heterogenous in appearance. The prostatic urethra is not overtly dilated.

The left kidney presented normal size (3.96 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 in size (3.95 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mimimal loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few, tiny, nonobstructive nephroliths are present. There is no evidence of pyelectasia, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.67 cm at cranial pole) (0.75 cm at caudal pole) (1.55 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 borderline enlarged (0.98 cm at cranial pole) (0.56 cm at caudal pole) (1.91 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 (0.73 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 swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and slightly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature

and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder is distended. The wall is mildly thickened (up to 0.30 cm) and hyperechoic. A moderate to large amount of aggregated, echogenic suspended sludge, in a stellate pattern, is observed within the lumen. The cystic and common bile ducts are normal/not seen. The mesentery effacing the serosal surface of the gall bladder is questionably reactive.

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

No free fluid is observed. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The gall bladder changes are consistent with a fully-formed mucocele and suspected concurrent cholecystitis, +/- mild adjacent peritonitis.
- Mild bilateral adrenomegaly, consistent with the previous diagnosis of pituitary-dependent hyperadrenocorticism.
- The hepatic parenchymal changes are nonspecific and could be secondary to vacuolar hepatopathy (i.e., secondary to Cushing's disease), regenerative nodular hyperplasia, inflammatory disease and/or other hepatopathy. Correlation with the patient's liver values is recommended.

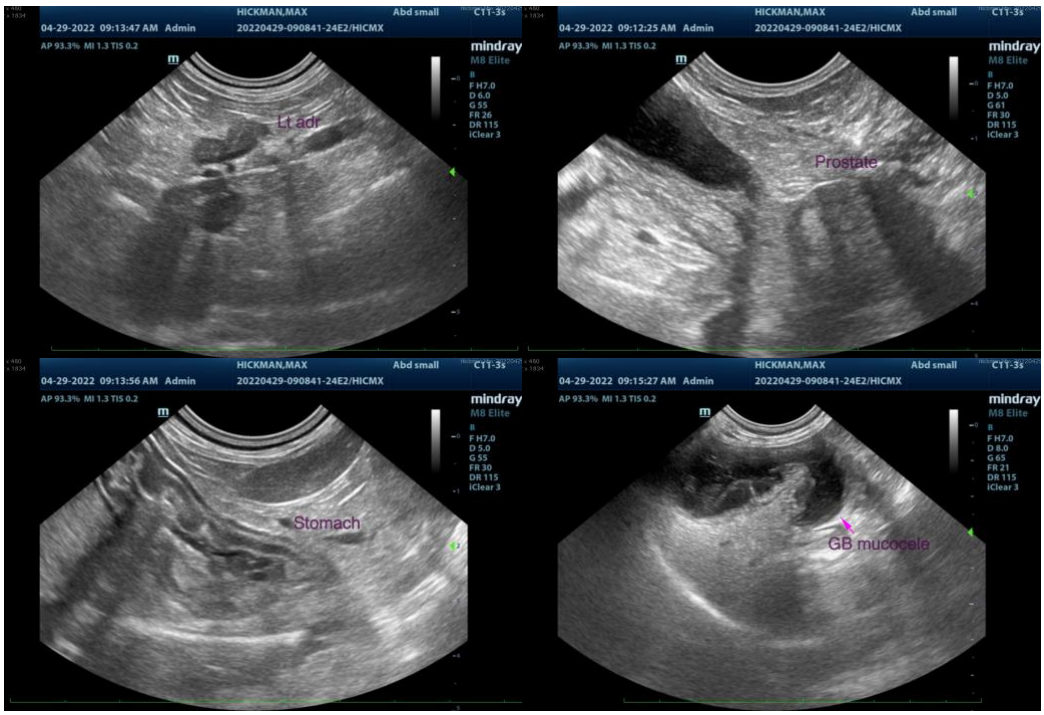
Secondary Findings

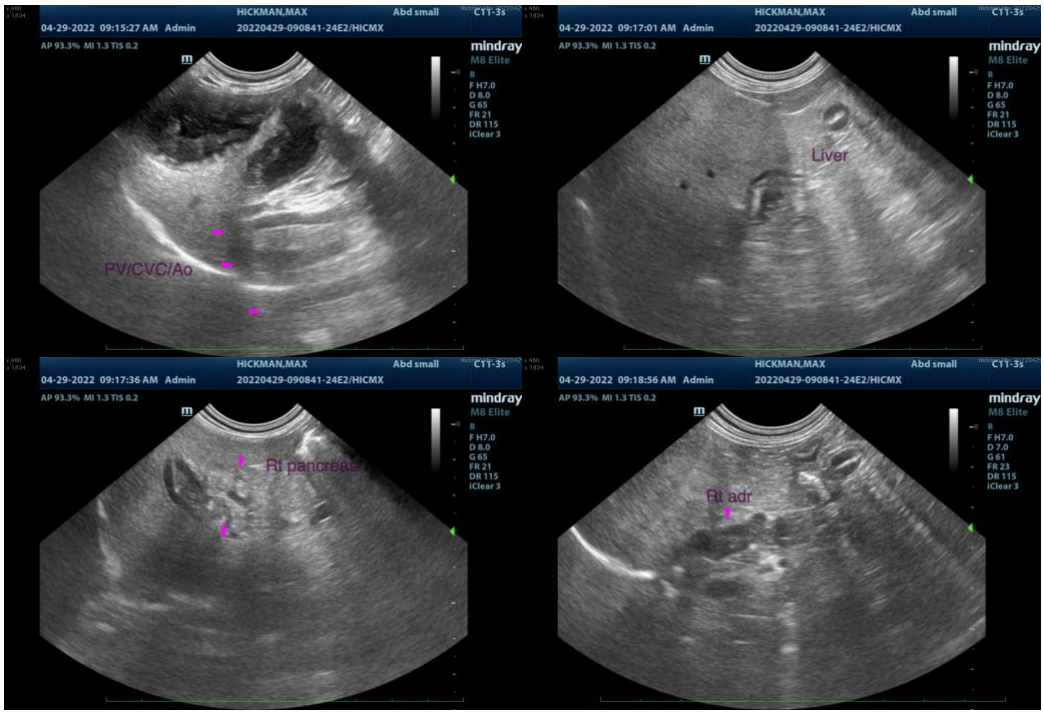
- Minor, bilateral age-related renal changes with right nonobstructive nephrolithiasis
- The prostate changes are most consistent with benign prostatic hyperplasia. Bacterial prostatitis is also a differential but considered unlikely in the absence of lower urinary tract signs.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Supportive care for cholecystitis is recommended (i.e., broad-spectrum antibiotic therapy, Denamarin, ursodiol and medical management). A cholecystectomy should also be considered, with submission of the gall bladder, as well as hepatic tissue samples for histopathology. Three-view thoracic radiographs and clotting times (i.e., PT/PTT) should be performed prior to anesthesia.

- Regarding the electrolyte changes, an ACHT Stimulation Test is recommended to assess for cortisol suppression.





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