

PATIENT PRESENTING CLINICAL SIGNS

Boo Herb History: Just treated for pneumonia. Resent syncope episode. Hypertensive. Not eating and drinking well and recent diarrhea since on medication for pneumonia.

SPECIES

Abnormal PE/Chem/CBC/UA Results: BUN= 33. ALT= 191, Alk-phos= >2000.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Urinary System

Mix

The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. Several small cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

SEX

Spayed Female

The left kidney is normal in size (4.30 cm in length); with a relatively normal shape and smooth peripheral contours. The cortex is mildly thickened and isoechoic relative to the spleen and heterogenous with numerous varying sized cortical cysts and foci of mineralization. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter.

AGE

12

The right kidney is normal in size (4.88 cm in length); with a relatively normal shape and smooth peripheral contours. The cortex is mildly thickened and isoechoic relative to the spleen and heterogenous with numerous varying sized cortical cysts and foci of mineralization. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter.

WEIGHT

13

INTERPRETED BY

Adrenal Glands

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

The left adrenal gland is enlarged in size (0.92 cm at cranial pole) (2.17 cm at caudal pole) (2.82 cm in length); with irregular peripheral contours. The parenchyma is heterogenous with loss of glandular detail. There is evidence of capsular expansion without capsular escape. There is no obvious evidence of vascular invasion.

IMAGING PERFORMED BY

Christensen

The right adrenal gland is enlarged in size (1.61 cm at cranial pole) (1.93 cm at caudal pole) (2.57 cm in length); with irregular peripheral contours. The parenchyma is heterogenous with loss of glandular detail. There is evidence of capsular expansion without capsular escape. There is no obvious evidence of vascular invasion.

HOSPITAL NAME

Tranquility VC

Spleen

The spleen is normal in size (0.92 cm 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.

REFERRING VET

Christensen

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen. A 0.66 cm septated cyst is observed deep on the left side. The parenchyma is otherwise homogeneous. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

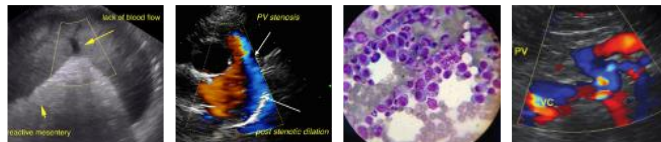
INVOICE

22298

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal.

DATE

5/3/23



PATIENT

Boo Herb

SPECIES

Canine

BREED

Mix

SEX

Spayed Female

AGE

12

WEIGHT

13

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Christensen

HOSPITAL NAME

Tranquility VC

REFERRING VET

Christensen

INVOICE

22298

DATE

5/3/23

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.

Lymph Nodes

The abdominal lymph nodes are normal/not visible.

Other

In the visualized portion of the thorax, several "ring-down" lesions are visualized.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

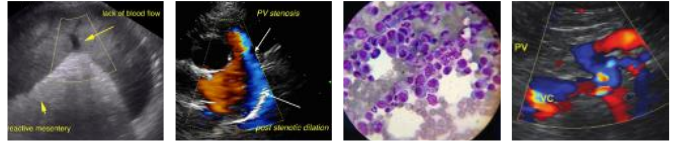
- The bilateral adrenal changes could be consistent with macronodular hyperplasia or emerging tumors (i.e., adenomas, adenocarcinomas, pheochromocytomas). Changes are similar to the previous sonogram.
- Cystic calculi

Secondary Findings

- The hepatic parenchymal changes are nonspecific and are most consistent with vacuolar hepatopathy (endocrine, idiopathic). However, inflammatory disease, fibrosis, hepatotoxicity (i.e., copper) or less likely, infiltrative neoplasia, cannot be completely excluded. The cystic lesion is likely a benign lesion with a lower possibility of an emerging vascular tumor.
- The "ring-down" lesions in the thorax are most consistent with pulmonary parenchymal disease (i.e., pneumonia)
- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis with nonobstructive nephrocalcinosis and cortical cysts and trace pyelectasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the recent syncopal episode, consider an ECG and a recheck echocardiogram.
- If the patients GI signs do not improve once the antibiotics have been discontinued, a more comprehensive GI work up (i.e., fecal evaluation for ova/giardia, GI panel, pre- and postprandial serum bile acids +/- GI biopsies) may be necessary to get a definitive diagnosis. In the meantime, symptomatic care, along with a probiotic +/- fiber supplement (i.e.,



PATIENT psyllium) should be considered.

Boo Herb Regarding the bilateral adrenomegaly, consider the following:

SPECIES • UPC, to assess for proteinuria

Canine • Low-dose dexamethasone suppression test and urine/blood catecholamine levels to assess for functional adrenal tumors.

BREED Regarding the bilateral renal changes:

Mix • Consider a urine culture and sensitivity to assess for occult infection. The culture should be performed at least 5-7 days after the last dose of antibiotics.

SEX Regarding the cystic calculi:

Spayed Female • If the patients clinical condition can be stabilized, cystotomy with stone removal analysis and culture can be considered. Otherwise, consider an attempt at medical dissolution.

AGE

12

WEIGHT

13

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Christensen

HOSPITAL NAME

Tranquility VC

REFERRING VET

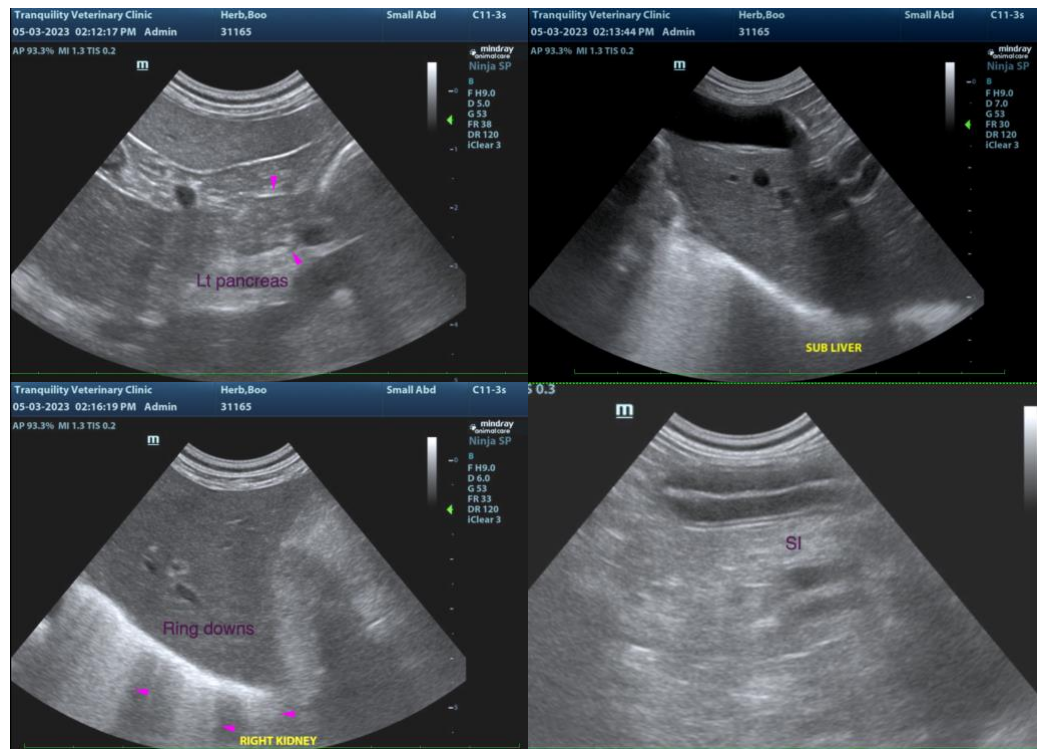
Christensen

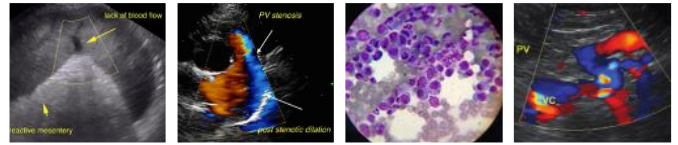
INVOICE

22298

DATE

5/3/23





PATIENT

Boo Herb

SPECIES

Canine

BREED

Mix

SEX

Spayed Female

AGE

12

WEIGHT

13

INTERPRETED BY

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

IMAGING PERFORMED BY

Christensen

HOSPITAL NAME

Tranquility VC

REFERRING VET

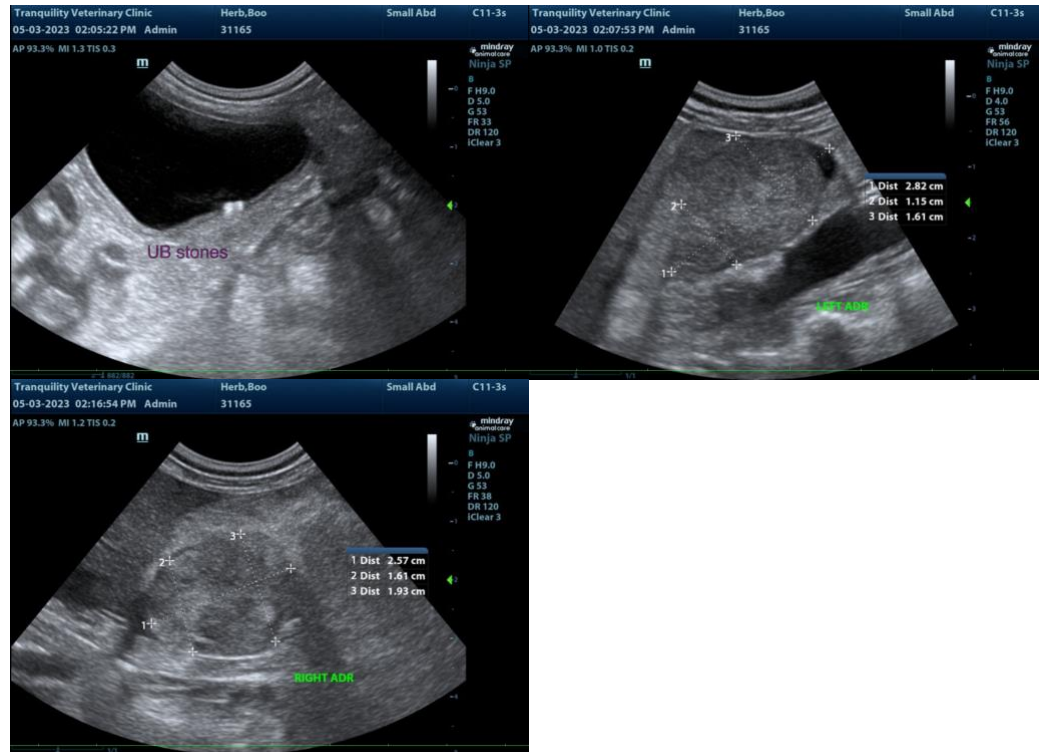
Christensen

INVOICE

22298

DATE

5/3/23



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