

**DATE PRESENTING CLINICAL SIGNS**

8/1/23

Hx of soft tissue contracture, MPLs, perianal tumor and LEs/GGT elevations. PE: perianal tumor not associated with AG. No other clinical signs.

**PATIENT**

Lucy Huang

Current Medications: Ketorolac ophthalmic drops OS SID x 2.5 mos. None other.

Lab Results: "Prev" labs = 5/2023: ALT 166 (prev. 138), ALP 262 (prev. 195), GGT 46 (prev. 41).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Canine

Imaging Performed By: Andi Parkinson, BS, RDMS.

**BREED**

Chihuahua

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone is normal.

**SEX**

Female, spayed

The left kidney is normal size (3.62 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

**AGE**

4/28/2008

The right kidney is normal in size (3.58 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A small cortical cyst is observed at the lateral aspect. There is no evidence of pyelectasia, infarcts or hydronephrosis.

**WEIGHT**

8 lbs.

**Adrenal Glands**

The left adrenal gland is mildly enlarged (0.67 cm at cranial pole) (0.57 cm at caudal pole) (1.91 cm in length) with a slightly irregular shape. There is questionable glandular tissue within the phrenicoabdominal vein. The glandular echogenicity and detail are otherwise unremarkable.

The right adrenal gland is mildly enlarged (0.59 cm at cranial pole) (0.56 cm at caudal pole) (1.53 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.

**INTERPRETED BY**

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

**HOSPITAL NAME**

Timonium AH

**Spleen**

The spleen is normal in size (0.95 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.

**REFERRING VET**

Dr. Montessi

**Liver**

The liver is normal to slightly prominent in size with swollen/irregular peripheral contours, particularly in the region of the caudate process. The parenchyma is hypoechoic relative to the spleen and exhibits mild heterogeneity. A few ill-defined hypoechoic to heterogeneous swelling/nodules are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**INVOICE**

15163

**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 pyloric outflow tract is patent. 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 disease is noted.

### ***Pancreas***

The 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***

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:**

- Diffuse hepatopathy. A benign process (i.e., regenerative nodular hyperplasia, inflammatory disease, hepatotoxicosis (i.e., copper), other) may be present. Alternatively, infiltrative neoplasia (i.e., round cell tumor) is also possible.

### **Secondary Findings:**

- Bilateral chronic renal changes with subtle dystrophic mineralization.
- Mild bilateral adrenomegaly. There is questionable glandular tissue within the left phrenicoabdominal vein. This may represent a true finding or may be an imaging artifact.
- Gallbladder debris/sludge, non-mucocele.
- Minor age-related pancreatic remodeling in the right limb.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Consider fine needle aspirates of the liver (if clotting status is normal). 25-gauge needles should be used. If cytology results are inconclusive, laparoscopic or surgical biopsies may be necessary to get a definitive diagnosis. If hepatic tissue sampling is not pursued at this time, consider rechecking liver values and an abdominal ultrasound in 4-6 weeks to assess for progression.
- The left adrenal gland should also be reevaluated in 4-6 weeks to assess of potential glandular tissue within the phrenicoabdominal vein.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.



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.

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