

**DATE PRESENTING CLINICAL SIGNS**

10/5/21 Longstanding heart murmur with no clinical signs. Recently, just not quite right. More picky about food, sleeping a lot, legs shaking, but still happy and overall active. Owner's last pet acted this way prior to cancer diagnosis.

PATIENT

Lexee Mercado

Current Medications: just started Clavamox and Denamarin

Lab Results: Elevated LE on bloodwork.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not needed.

SPECIES

Canine

Stat Report: Not requested.

BREED

Chihuahua

SEX

Spayed Female

AGE

2008

WEIGHT

12 lb 8 oz

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

HOSPITAL NAME

Chadwell AH

REFERRING VET

Dr. Haskin

INVOICE

26059

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall largely appears normal, but in the apical region appears somewhat thickened and irregular, measuring 0.38 cm in diameter. The trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of mucosal irregularities, masses or cystic calculi. These findings would be more consistent with cystitis, but a neoplastic process cannot be ruled out.

The left kidney has a normal shape and size (3.3 cm). Overall echogenicity is slightly hyperechoic with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.18 cm). Overall echogenicity is slightly hyperechoic with mildly decreased corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive nephroliths are present. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.57 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.55 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous hypoechoic, ill-defined nodules visualized. The largest measures 1.2 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.24 cm. Jejunum wall measured 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

PRIMARY FINDINGS

- Heterogeneous liver with ill-defined, hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

SECONDARY FINDINGS

- Subjectively thickened apical urinary bladder wall – most consistent with cystitis. Recommend urinalysis and culture. A neoplastic process is considered less likely, but this should be monitored.
- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Correlate these findings with lab work results and clinical signs. If there is concern for liver dysfunction, recommend a liver function test. If there is a significant ALT elevation, consider Leptospirosis testing. Consider fine needle aspirate of the liver if coagulation parameters are normal and if clinically warranted. If there is a persistent or progressive elevation, consider a liver biopsy.

The apical wall of the urinary bladder appears somewhat irregular. Recommend urinalysis and culture, as this could be consistent with cystitis. If neither of these are present, recommend continued monitoring of the urinary bladder wall, as a neoplastic process cannot be excluded as a possibility.



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com