

**DATE**

11.9.2022

**PATIENT**

Fred Brooks

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

Neutered Male

**AGE**

5/19/2009

**WEIGHT**

25lbs

**INTERPRETED BY**

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

**HOSPITAL NAME**

Banfield Columbia

**REFERRING VET**

Dr. Hirsch

**INVOICE**

11991

**PRESENTING CLINICAL SIGNS**

Pet presented for routine dental. Pre-and postprandial serum bile acids/anesthetic bloodwork showed ALKP 990, ALT 147. Previously labs showed ALKP 300s and no elevation ALT. Normal at home, not drinking excessively. Has lost 5 pounds but that was planned, and pet is on the hills metabolic diet. Ultrasound is being pursued prior to anesthesia.

Current Medications: Hydroxyzine 25mg PRN, Just started Denamarin

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Midazolam/Torbugesic IV.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

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

The urinary bladder wall is 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 (0.84 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (5.79 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several pinpoint hyper foci are observed within the cortex. A few, small cortical cysts are observed. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (5.31 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal size (0.60 cm at cranial pole) (0.58 cm at caudal pole) (1.82 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 (0.49 cm at cranial pole) (0.66 cm at caudal pole) (2.00 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 (1.48 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 prominent to enlarged with swollen, slightly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen. A 5.40 cm multiseptated cystic structure is observed on the left side. In addition, several smaller, irregular cystic lesions are also observed adjacent to the larger cystic lesion. Hepatic vasculature and intrahepatic 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 to moderate amount of aggregated, echogenic, partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***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. There is no evidence of an obstructive pattern.

### ***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***

There is no evidence of free fluid. The **abdominal lymph nodes** are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The left cystic hepatic lesions could be consistent with benign cysts or emerging vascular tumors. A benign process is favored. The diffuse hepatic parenchymal changes are nonspecific and trend toward the benign (i.e., vacuolar hepatopathy and/or regenerative nodular hyperplasia) with a lower possibility of an inflammatory process or infiltrative neoplasia.

### **Secondary Findings**

- Bilateral chronic age-related renal changes with dystrophic mineralization
- Gall bladder debris/sludge - incidental

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

Consider a recheck ultrasound in 4-6 weeks to reassess the cystic hepatic lesions. If they are growing in size, surgical removal with submission for histopathology should be considered.

If a dental procedure is to be pursued, benzodiazepines should be avoided, and opioids used judiciously.

Given the patient's age, three-view thoracic radiographs are recommended prior to anesthesia to assess cardiopulmonary status.

Given the liver enzyme elevations, recheck bloodwork is recommended in 2-3 months.



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.

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