**DATE PRESENTING CLINICAL SIGNS**

1/17/2022

History: Hx of elevated liver enzymes, increasing after 30 days of monitoring.

PATIENT

Ellie Conklin

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Torbugesic IV.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

SPECIES

Canine

BREED

Bichon

SEX

Female, spayed

AGE

10/1/2009

WEIGHT

24.7 lbs.

INTERPRETED BY
 Andrea Nicastro, DVM,
 Diplomate ACVIM
 (Small Animal Internal
 Medicine)
HOSPITAL NAME
 Bayside Animal
 Medical Center
REFERRING VET

Dr. Buchanan

INVOICE

12855

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 mildly distended with mostly 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 left kidney is normal size (5.27 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (5.30 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.61 cm at cranial pole) (0.66 cm at caudal pole) (1.99 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 (0.57 cm at cranial pole) (0.56 cm at caudal pole) (2.05 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 (1.43 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 slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits a fine heterogeneous appearance. On the right side, a vague swelling is observed within the parenchyma, causing mild capsular expansion. A few intrahepatic biliary stones are visualized. Hepatic vasculature is normal volume with no evidence of thrombosis. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of echogenic mostly gravity-dependent debris 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. No obstructive 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. The abdominal lymph nodes are normal/not visible.

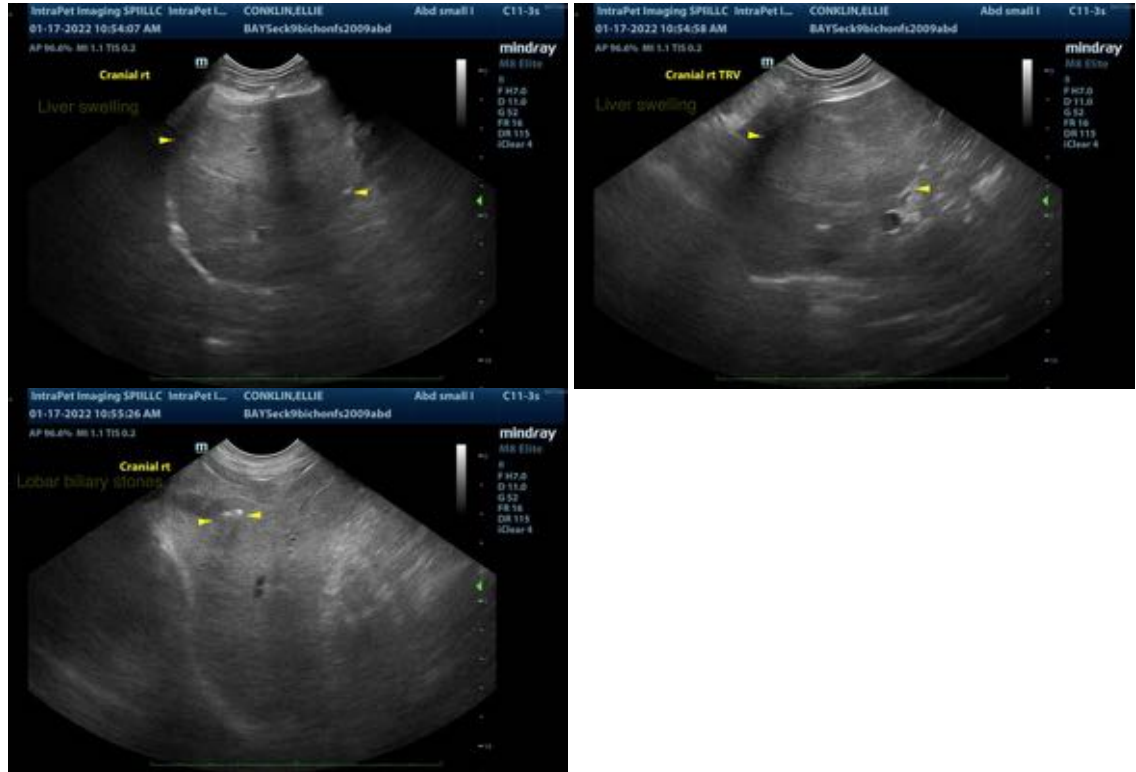
ULTRASONOGRAPHIC FINDINGS

- Non-specific diffuse hepatopathy. Differentials include inflammatory/immune mediated disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis, Leptospirosis), hepatotoxicosis, infiltrative neoplasia (i.e., lymphoma), other hepatopathy +/- benign age-related change. The swelling in the right lateral lobe may represent an emerging neoplastic process or may be secondary to the other differentials listed above. Intrahepatic biliary stones – incidental.
- Gallbladder debris- incidental.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Leptospirosis testing (i.e., blood and urine PCR, serology) is recommended.
- Pre- and post-prandial serum bile acids to assess hepatic function.
- Consider hepatic tissue sampling (i.e., fine needle aspiration or surgical biopsy). If surgical biopsies are pursued, aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue sample for potential copper quantitation are recommended. If tissue sampling is not to be pursued at this time, consider empirical treatment for bacterial cholangiohepatitis/Leptospirosis with follow up bloodwork in 7-10 days. If no improvement is seen in the liver values, antibiotics should be discontinued and hepatic tissue sampling revisited. Intrahepatic biliary stones- incidental.
- A recheck ultrasound is recommended in 1 month to monitor for progression of the right hepatic swelling.
- Given the patient's age, three-view thoracic radiographs are recommended.





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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