

**DATE PRESENTING CLINICAL SIGNS**

8/20/21

History: Elevated ALT 222 and Creat 1.6 on pre-op labs. Remainder of chem is normal except elevated lipase. CBC normal, 4DX negative.

PATIENT

Willow Daisey

Current Medications: Galliprant 60mg 1 PO QD.
 Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
 Sedation: Butorphanol/Midazolam administered IV prior to exam.
 Stat Report: STAT report not requested by the veterinarian.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Samoyed

Urinary System

The urinary bladder, trigone, and pelvic urethra are 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.

SEX

Female, spayed

The left kidney is normal size (6.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

AGE

4/29/2010

The right kidney is normal size (6.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

WEIGHT

64 lbs.

Adrenal Glands

The left adrenal gland is enlarged (1.01 cm at cranial pole) (0.85 cm at caudal pole) (2.80 cm in length) with a slightly irregular shape. A 1.59 x 0.66 cm hyperechoic nodule/area is observed in the mid to cranial aspect. The glandular echogenicity and detail at the caudal aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

INTERPRETED BY

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

The right adrenal gland is small in size (0.44 cm at cranial pole) (0.33 cm at caudal pole) (1.91 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.

HOSPITAL NAME

Festival Veterinary
 Clinic

Spleen

The spleen is subjectively normal in size (1.44 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is mottled in appearance with several ill-defined hypoechoic areas. Splenic vasculature appears normal with no evidence of thrombosis.

REFERRING VET

Dr. Cianelli

Liver

The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is hypoechoic to isoechoic relative to the spleen and diffusely heterogeneous in appearance with several small ill-defined hypoechoic areas throughout the organ. 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 suspended debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

INVOICE

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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. A 1.32 x 0.44 cm mesenteric lymph node is visualized.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

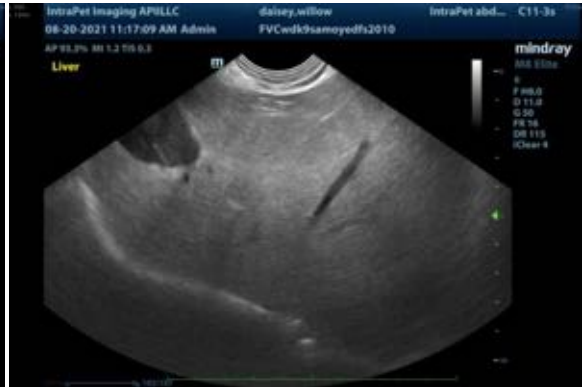
- Non-specific diffuse hepatopathy. Differentials include inflammatory/immune mediated disease, hepatotoxicosis (i.e., copper), infiltrative neoplasia (less likely), reactive hepatopathy +/- concurrent age-related changes.
- The left adrenal changes could be consistent with a benign process (i.e., nodular hyperplasia). Alternatively, an early neoplastic process (i.e., pheochromocytoma), adenocarcinoma, adenoma may be present. A functional tumor is of concern, particularly given the small right adrenal size and potential for secondary atrophy.

Secondary Findings:

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Minor age-related renal pathology.
- The prominent mesenteric lymph node is likely reactive.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If an aggressive approach is desired, hepatic tissue sampling (i.e., fine needle aspirate) or surgical biopsy can be considered (if clotting status is appropriate). If surgical biopsies are pursued, aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for possible copper quantitation should also be obtained.
- Three-view thoracic radiographs should be performed prior to anesthesia.
- To further investigate the left adrenal changes, consider the following:
 1. Baseline blood pressure measurement
 2. Low-dose dexamethasone suppression test and urine/blood catecholamine levels
- If a more conservative approach to the left adrenal gland is desired, consider a repeat ultrasound in 1-2 months to assess for progression.





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, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com