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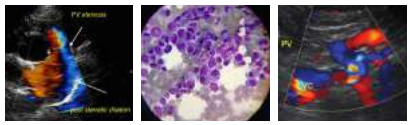

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DATE

9/16/21

PATIENT

Minnie Willner

SPECIES

Canine

BREED

Mixed Breed

SEX

Female Spayed

AGE

1/1/19

WEIGHT

8.8 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Banfield Pet Hospital of Glen Burnie

REFERRING VET

Dr. Dechtiaruk

INVOICE

11831kk

PRESENTING CLINICAL SIGNS

History: Pet was seen by Dr Schinner for routine exam. Alt on bloodwork was 150 (mild elevation). He recommended liver work up. Bloodwork was checked again and ALT 170. Owner wants to do ultrasound to make sure liver is ok.

Current Medications: No current medications.

Lab Results: Elevated ALT.

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound:

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

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

The right kidney is normal size (3.71 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal size (0.37 cm at cranial pole) (0.43 cm at caudal pole) (1.45 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 (0.42 cm at cranial pole) (0.50 cm at caudal pole) (1.29 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 (0.64 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 normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein to

caudal vena cava ratio is approximately 1:1 making a congenital extrahepatic portosystemic shunt unlikely. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. 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 pancreas is normal in size with normal peripheral contours. The pancreatic duct is normal. The base and limbs of the pancreas are isoechoic to surrounding omental fat. No focal lesions are observed. 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

- Unremarkable abdomen. There is no obvious evidence of a congenital extrahepatic portosystemic shunt.

**An obvious cause for the elevated ALT is not identified in this study. Differentials include inflammatory/immune-mediated disease, hepatotoxicosis (i.e., copper), reactive hepatopathy, and other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Consider pre- and post-prandial serum bile acids to assess for occult hepatic dysfunction.

2. If a conservative approach is desired, consider serial monitoring (i.e., every 2-3 months) of the patient's liver values with repeat abdominal imaging +/- hepatic tissue sampling if liver values progress. Alternatively, empirical treatment for cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced) can be considered. If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values. If an aggressive approach is desired, surgical liver biopsies with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissues for copper quantitation can be pursued.

3. Leptospirosis testing is also a consideration. However, if the ALT elevation is chronic, this differential is considered less likely.


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Spleen


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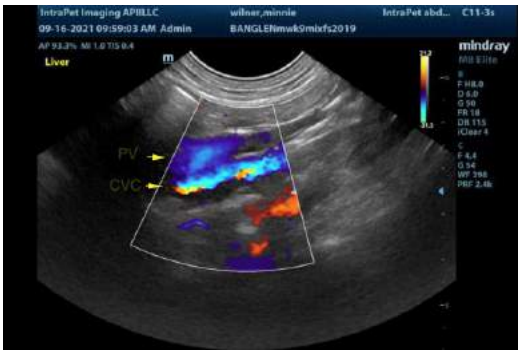
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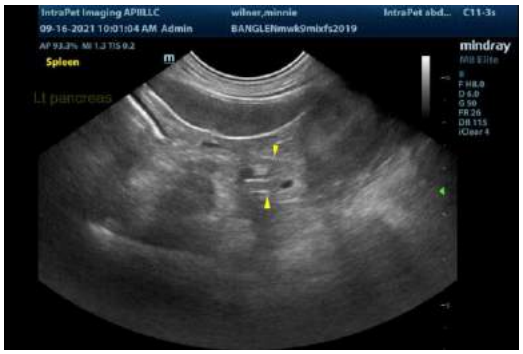

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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