

PATIENT

Arya Michels

SPECIES

Canine

BREED

Chihuahua x

SEX

Spayed Female

AGE

12 Years

WEIGHT

9.3 lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Amazon Park Animal
Clinic

REFERRING VET

Dr. Jones

INVOICE

74736

DATE

4/23/26

PRESENTING CLINICAL SIGNS

Healthy older dog, history of seizures and chronically elevated liver enzymes, especially ALP. Is PU/PD.

ABNORMAL Labwork Values: ALP over 993, moderately elevated ALT and GGT.

Current Medications: Levetiracetam 125 mg tid, urosidiol 250 mg 1/4 sid

Radiographic Findings: We will send radiographs tomorrow morning

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal is size (4.32 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal is size (3.87 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Adrenal glands are mildly plump for a small dog. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. Left measures 0.69 cm at the cranial pole and 0.65 cm at the caudal pole. Right measures 1.1 cm at the cranial pole and 0.70 cm at the caudal pole.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is mildly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion

The gallbladder is unable to be visualized in these images.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.



PATIENT

Arya Michels

SPECIES

Canine

BREED

Chihuahua x

SEX

Spayed Female

AGE

12 Years

WEIGHT

9.3 lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Amazon Park Animal
Clinic

REFERRING VET

Dr. Jones

INVOICE

74736

DATE

4/23/26

The visible small intestines are normal in wall thickness and layering. Hyperechoic mucosal fogging or speckling is noted. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material, or infiltrative disease; however, visualization is partially inhibited by gas.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Mild/subjective bilateral adrenomegaly – In a patient diagnosed with hyperadrenocorticism, this finding is most consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism. This finding can also be seen with stress and/or normal patient variant. Interpret in combination with clinical signs of hyperadrenocorticism and/or other adrenal disease.
- Mildly heterogenous liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- The gallbladder is not visualized in these images.

SECONDARY FINDINGS

- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
- Subtle/mild mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Differentials for a primary cholestatic liver enzyme pattern (increased ALP) are vast and non-specific. Differentials include, but are not limited to, benign nodular hyperplasia which occurs in 70% of older dogs and often does not result in an abnormal ultrasound, reactive or idiopathic/vacuolar hepatopathy, cholestasis and/or hyperadrenocorticism as well as many chronic non-hepatobiliary diseases such as



PATIENT

Arya Michels

SPECIES

Canine

BREED

Chihuahua x

SEX

Spayed Female

AGE

12 Years

WEIGHT

9.3 lbs

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Amazon Park Animal
 Clinic

REFERRING VET

Dr. Jones

INVOICE

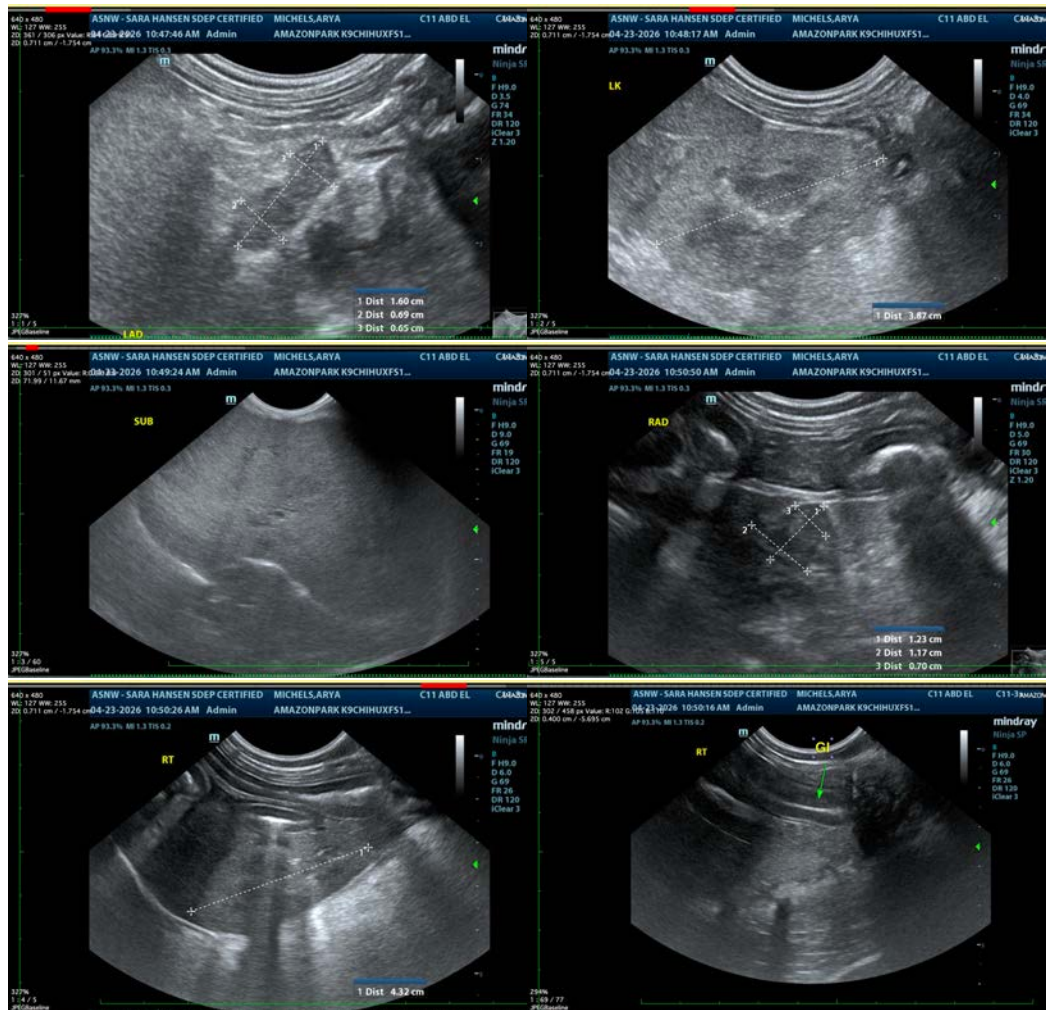
74736

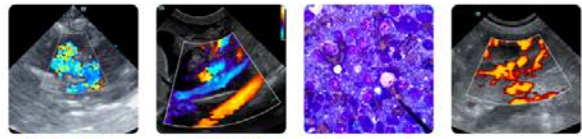
DATE

4/23/26

chronic infections/inflammation from dental disease, IBD, neoplasia, hyperlipidemia, hypothyroidism, chronic pancreatitis, chronic stress, etc.

- Adrenocortical testing such as a low dose dexamethasone suppression test could be considered especially given the appropriate clinical signs for hyperadrenocorticism such as PU/PD.
- A fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate.
- Otherwise, recommendations include addressing any other concurrent disease and monitoring. If values are progressive, recheck imaging is recommended.
- Additionally, a blood pressure is recommended if not recently evaluated.





PATIENT

Arya Michels

SPECIES

Canine

BREED

Chihuahua x

SEX

Spayed Female

AGE

12 Years

WEIGHT

9.3 lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Amazon Park Animal
Clinic

REFERRING VET

Dr. Jones

INVOICE

74736

DATE

4/23/26

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.

Beth Johnson, DVM, DACVIM
info@sonopath.com