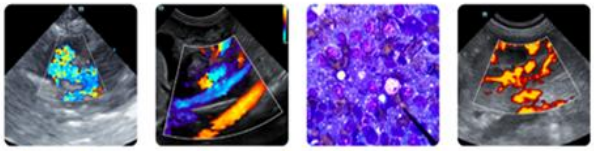


PATIENT

Nanee Arroyo

SPECIES

Canine

BREED

Mixed

SEX

FS

AGE

12yr

WEIGHT

44.0lb

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Gabriel Ferrer DVM

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

Dr. Laura Solis

INVOICE

24995

DATE

06/01/2026

PRESENTING CLINICAL SIGNS

- Px presented as a referral for an abdominal ultrasound due to an episode of collapse and a suspected mass effect seen on radiographs. Px originally visited rDVM due to an episode of collapse where Px was unresponsive and had urinated and defecated on herself. After the episode of collapse Px was lethargic, inappetent, was not drinking water, and presented with a distended abdomen. Px was started on Prednisone and owner reported that they saw improvement in Px's condition afterwards. No vomiting or diarrhea reported. Sample of spleen was collected via FNA, results currently pending. Limited echocardiogram was performed and no pericardial effusion nor macrometastasis was observed in this Px.

Abnormal PE/Chem/CBC/UA Results: Bloodwork attached below for your reference.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is moderately 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.

Right kidney is normal in size (7.14 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.

Left kidney is normal in size (6.13 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

Right adrenal gland is normal in size (1.0 cm at cranial pole and 0.68 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. A hyperechoic nodule is noted in the cranial right adrenal pole. Nodule does not disrupt normal shape and/or architecture. The nodule measured 0.7 cm x 0.8 cm.

Left adrenal gland is normal in size (0.9 cm at cranial pole and 0.5 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. A hyperechoic nodule is noted in the cranial left adrenal pole. Nodule does not disrupt normal shape and/or architecture. The nodule measured 0.6 cm x 0.9 cm.

Spleen

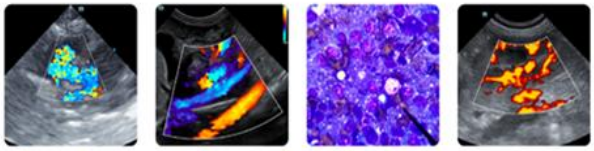
The spleen contains an ~ 4 cm in diameter mixed partially cystic mass originating from the mid medial aspect as well as a second discrete homogenous hypo to anechoic nodule near the cranial aspect of the spleen measuring 1.2 cm in size.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal



PATIENT

Nanee Arroyo

SPECIES

Canine

BREED

Mixed

SEX

FS

AGE

12yr

WEIGHT

44.0lb

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Gabriel Ferrer DVM

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

Dr. Laura Solis

INVOICE

24995

DATE

06/01/2026

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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

Pancreas

Pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

The visible heart base (RA) and pericardium are unremarkable without obvious pathology noted in these images at this time. If cardiac function evaluation is desired, a full echocardiogram is recommended.

ULTRASONOGRAPHIC FINDINGS

- The splenic mass and adjacent nodule could represent the same underlying etiology with both benign processes such as extramedullary hematopoiesis, cyst hematomas, etc. as well as infiltrative neoplasia including sarcoma, round cell neoplasia, other and cannot be fully differentiated without tissue sampling.
- Bilateral hyperechoic adrenal nodules – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.
2. As is reportedly already pending, FNA of both splenic masses/ nodules are recommended if patient's coagulation status is appropriate.
3. The adrenal gland changes are of unknown if any clinical significance but could be considered as contributors to patient's reported clinical signs pending additional evaluation. Because of this a BP is recommended if not recently evaluated. Having said that, I suspect the splenic mass is the primary contributor to patient's reported clinical signs and warrants investigation first.

PATIENT

Nanee Arroyo

SPECIES

Canine

BREED

Mixed

SEX

FS

AGE

12yr

WEIGHT

44.0lb

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Gabriel Ferrer DVM

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

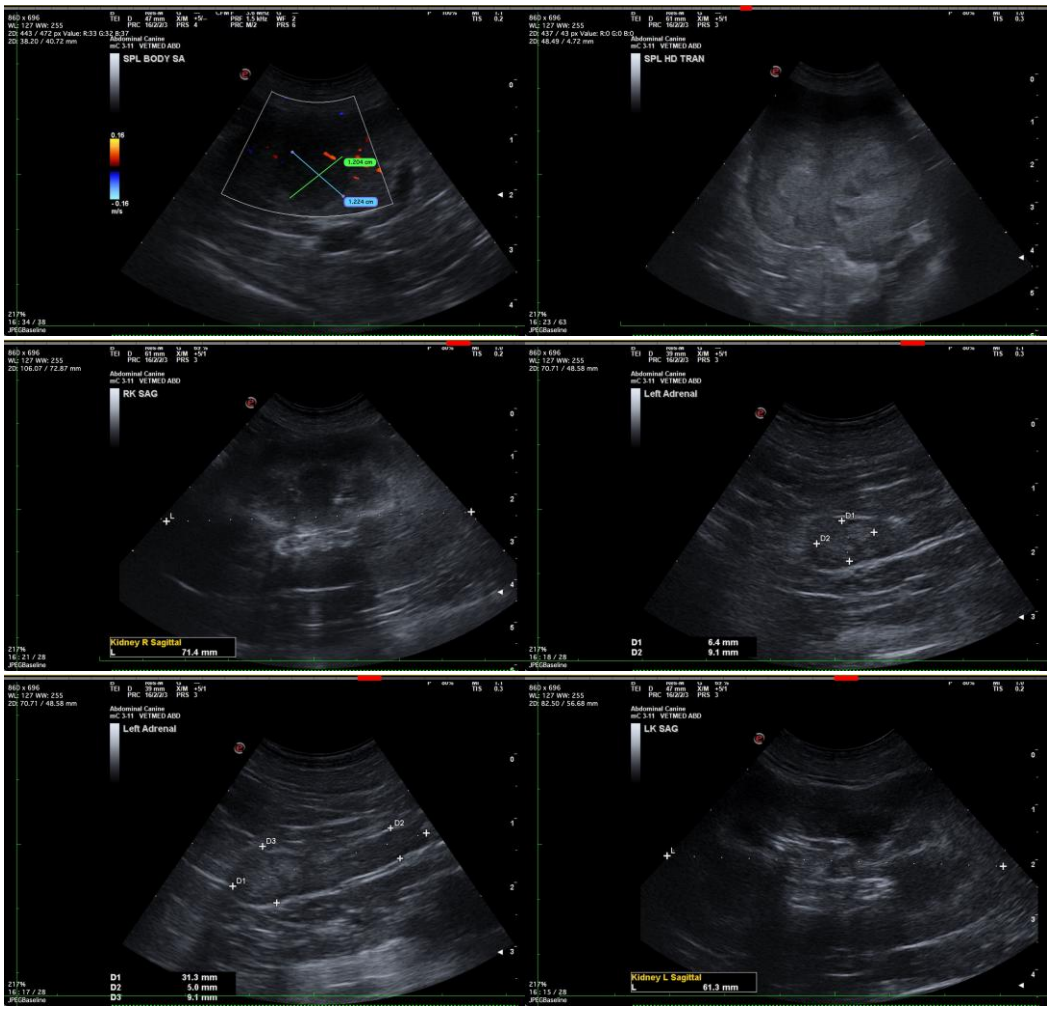
Dr. Laura Solis

INVOICE

24995

DATE

06/01/2026



PATIENT

Nanee Arroyo

SPECIES

Canine

BREED

Mixed

SEX

FS

AGE

12yr

WEIGHT

44.0lb

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Gabriel Ferrer DVM

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

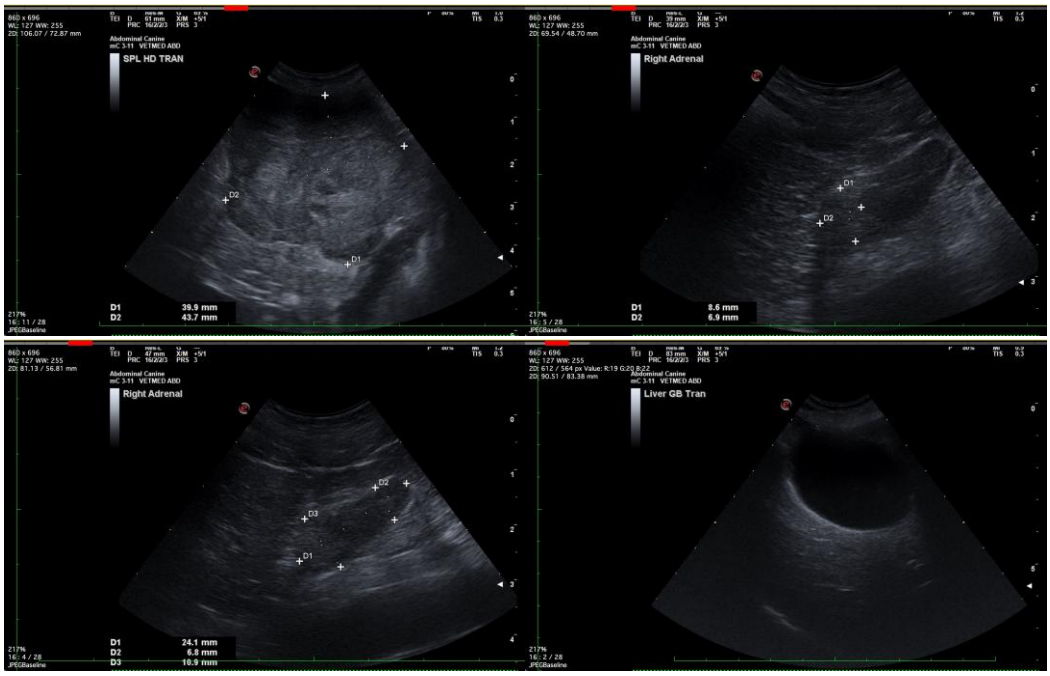
Dr. Laura Solis

INVOICE

24995

DATE

06/01/2026



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