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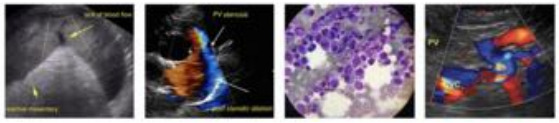


Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Pudgy Tenny

SPECIES

Canine

BREED

Great Pyrenees Mix

SEX

Neutered Male

AGE

5.21.2010

WEIGHT

84.6 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

Dr. Kelsey Pruitt

INVOICE

11252

DATE

7.22.22

PRESENTING CLINICAL SIGNS

Clinical Exam Findings: Intermittent pale mucous membranes. Hind end weakness.
Abnormal lab-work values: Elevated ALT, Alk Phos, Calcium. Low platelet count (artifact?)
See printed labs.
Radiographic Findings
Gabapentin 300 mg po q 8-12 h. Amantadine 100 mg po sid

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is 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.

The **prostate** is normal in size (0.88 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The **left kidney** is normal size (7.04 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (7.03 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.80 cm at cranial pole) (0.69 cm at caudal pole) (2.48 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 enlarged (2.33 cm at cranial pole) (1.53cm at caudal pole); with a mass effect at the cranial pole. The mass effect appears to extend into the caudal vena cava, where a 4.06 x 2.84 cm echogenic tumor thrombus is visualized within the lumen. The right adrenal parenchyma is heterogenous with loss of glandular detail.

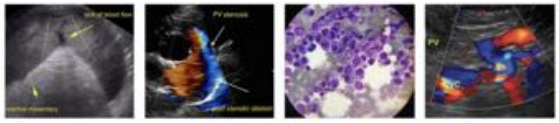
Spleen

The **spleen** is normal in size (2.67 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No distinct focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely mottled in appearance. A few, small, multiseptated cystic areas are observed deep on the left side. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Several varying-sized choleliths as well as a small to moderate amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.



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Gastrointestinal

The **gastric lumen** is mildly to moderately distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. 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. The lumen of the descending colon contains shadowing fecal material. There is no evidence of an obstructive pattern.

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.

Other

A **brief echocardiogram** reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Right adrenal mass effect with extension/invasion into the caudal vena cava. Neoplasia (i.e., pheochromocytoma, adenocarcinoma) is considered likely with a lower possibility of a benign pathology. The caudal vena cava lesion could, alternatively, represent a blood clot secondary to adrenal neoplasia. However, tumor invasion is considered a more likely scenario based on the sonographic findings.
- The hepatic parenchymal changes are nonspecific and could be secondary to a benign age-related process (i.e., remodeling, regenerative nodular hyperplasia and/or vacuolar hepatopathy). However, metastatic disease cannot be completely excluded. The cystic areas deep in the left liver trends toward the benign with a lower possibility of emerging neoplasia.

Secondary Findings

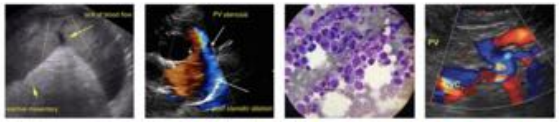
- Cholelithiasis – incidental/nonobstructive
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Minor, age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

Given the right adrenal and caudal vena cava changes, a baseline blood pressure measurement is recommended.

To further evaluate for a functional tumor, urine/blood catecholamine levels and a low-dose dexamethasone suppression test or ACTH stimulation test can be considered.



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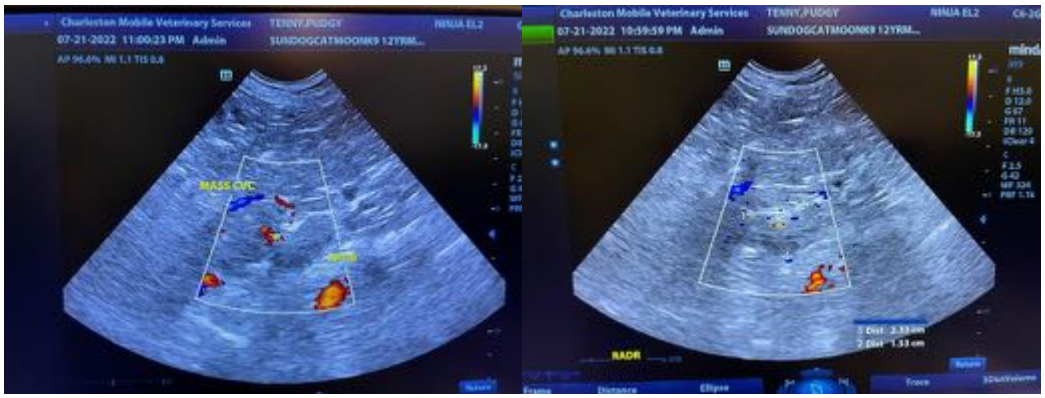
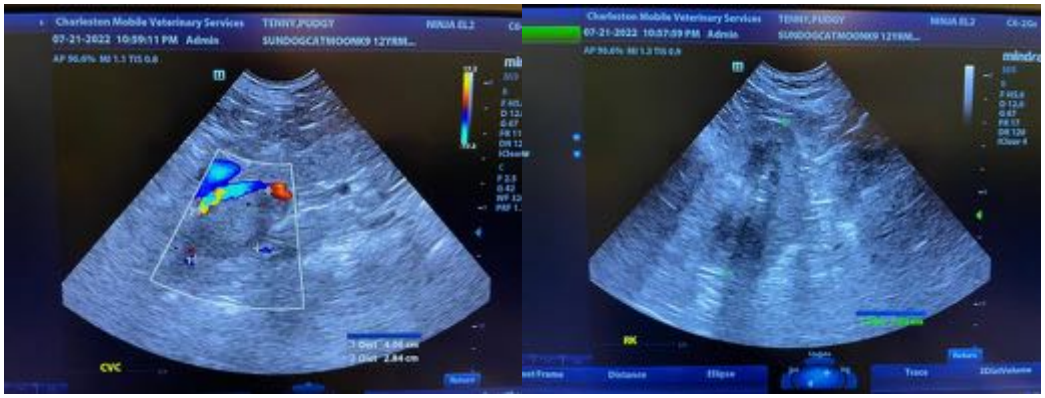
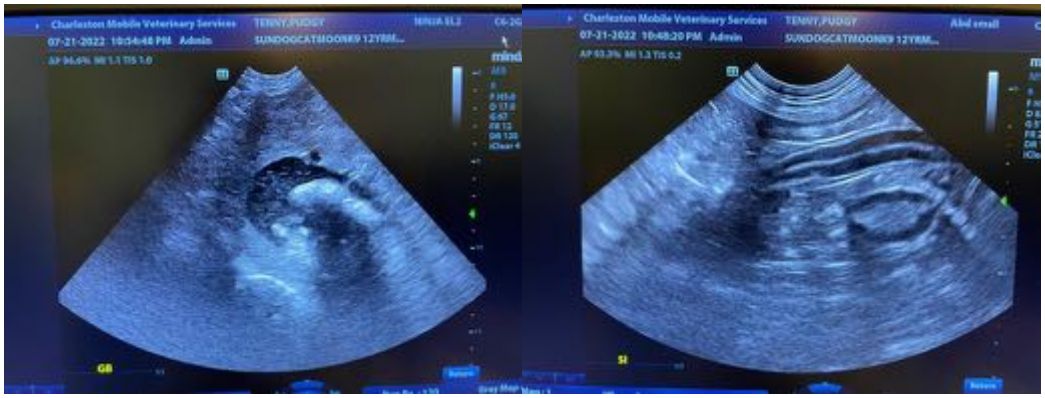
If an aggressive approach is desired, consider referral to a board-certified surgeon to discuss right adrenalectomy along with removal of the tumor thrombus in the caudal vena cava. An abdominal CT scan would be useful in presurgical planning. The owner should be warned, however, of the high risk of perioperative complications with this procedure. If surgery is not pursued, palliative/symptomatic care is recommended.







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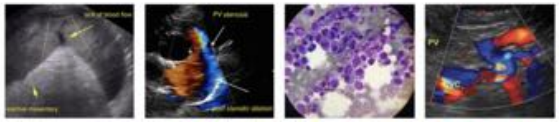

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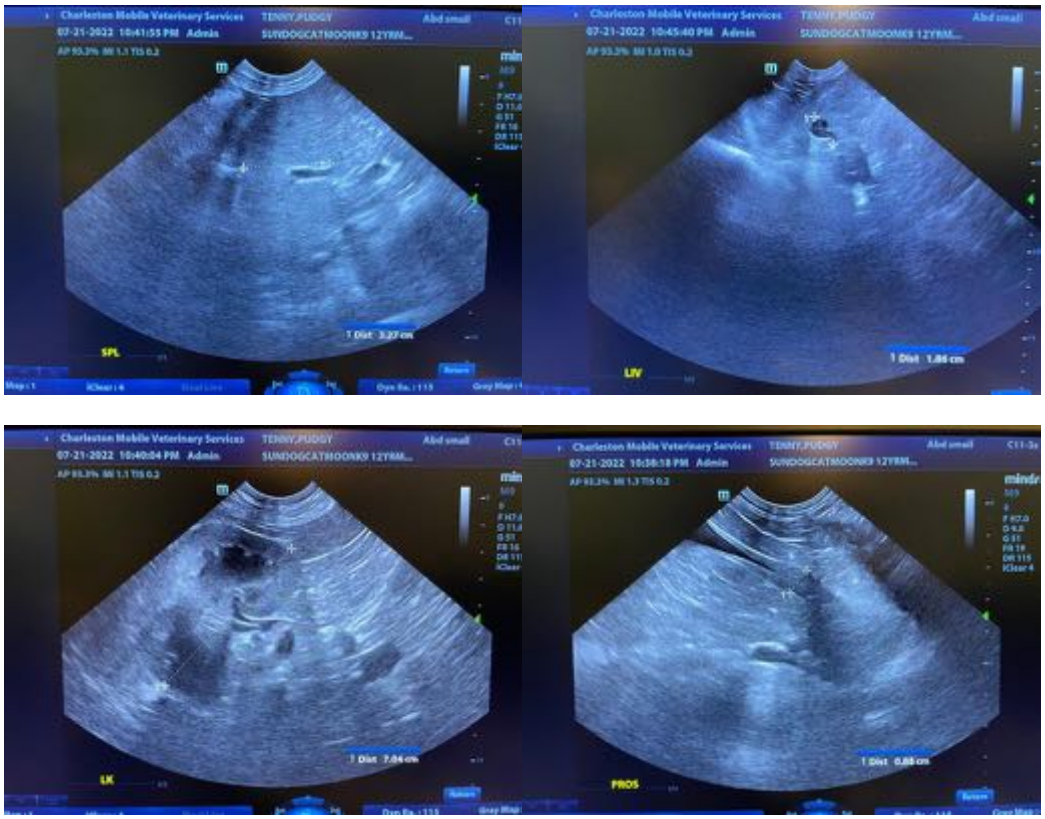

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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