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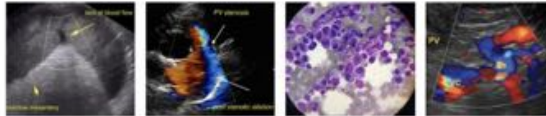


Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT
Vildi Lavado

SPECIES
Canine

BREED
Yorkie

SEX
Female, spayed

AGE
12/21/2011

WEIGHT
6.38 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. Clayton

INVOICE
14807

DATE
4/12/23

PRESENTING CLINICAL SIGNS

History of bladder stones that were previously removed. Pulmonary mass. Splenectomy (benign). Gallbladder debris. Liver mass biopsied and recent decrease in appetite. Also has underlying heart disease stage B2. Previous liver biopsy showed a vacuolar hepatopathy. Splenic biopsy showed thrombosis. Left inguinal hernia.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal size (xxx cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. A few small non-obstructive nephroliths are visualized. Mild pyelectasia is present (0.24 cm in the transverse plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (3.40 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged and irregular with a mass effect (2.21 x 0.98 cm). The parenchyma is mildly heterogeneous with 1-2 cavitated lesions, the larger measuring 0.41 cm in diameter. There is no obvious evidence of vascular invasion.

The right adrenal gland is normal size (0.81 cm at cranial pole) (0.39 cm at caudal pole); 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.

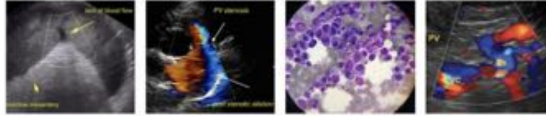
Spleen

Previous splenectomy. The region of the splenic fossa is normal.

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled in appearance. An approximately 3.86 cm mildly hypoechoic to slightly heterogeneous mass is observed deep on the left side. 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. The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of mostly gravity dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal



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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 ileocecocolic junction and colonic wall are normal. The colonic lumen contains shadowing fecal material. 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. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass. There is subjective bi-atrial enlargement.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

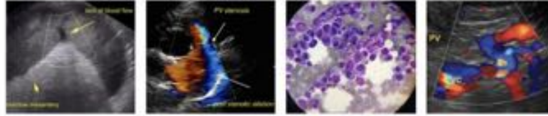
- Left hepatic mass. This lesion is larger compared to the previous sonogram. The previous biopsies showed a benign process. However, malignant transformation (i.e., adenoma, adenocarcinoma, other) cannot be completely excluded. The diffuse hepatic parenchymal changes are non-specific and could be secondary to regenerative nodular hyperplasia, vacuolar hepatopathy, infiltrative neoplasia, other hepatopathy.
- Left adrenal mass. Differentials include benign macronodular hyperplasia vs tumor (i.e., adenoma, adenocarcinoma, pheochromocytoma, other).

Secondary Findings:

- Gallbladder debris- non-mucocele.
- Bilateral chronic renal changes with non-obstructive nephrocalcinosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess cardiopulmonary status, if not already performed, particularly if the patient is to undergo anesthesia.
- Regarding the hepatic mass, a fine needle aspirate could be considered (if clotting status is appropriate). A 25 gauge needle should be used. If cytology results are inconclusive or if an aspirate is not performed, an excisional biopsy can be considered. An abdominal CT scan would be useful in pre-surgical planning.
- If aggressive diagnostics are not pursued, consider serial sonographic monitoring (i.e., every 2-3 months) to assess for growth.



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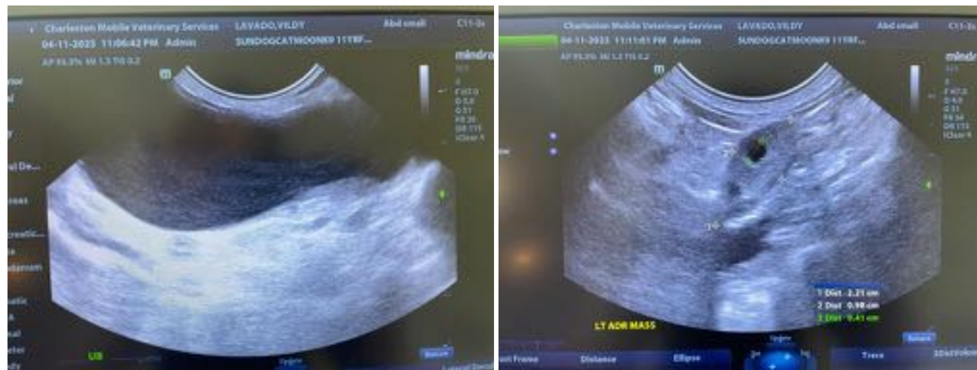
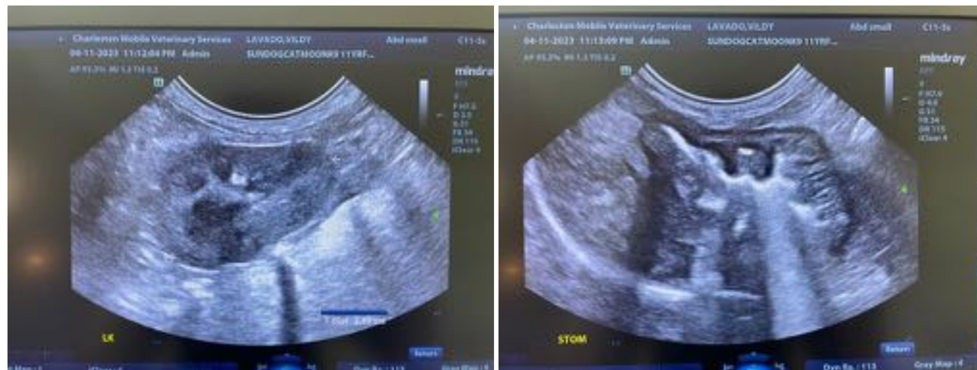
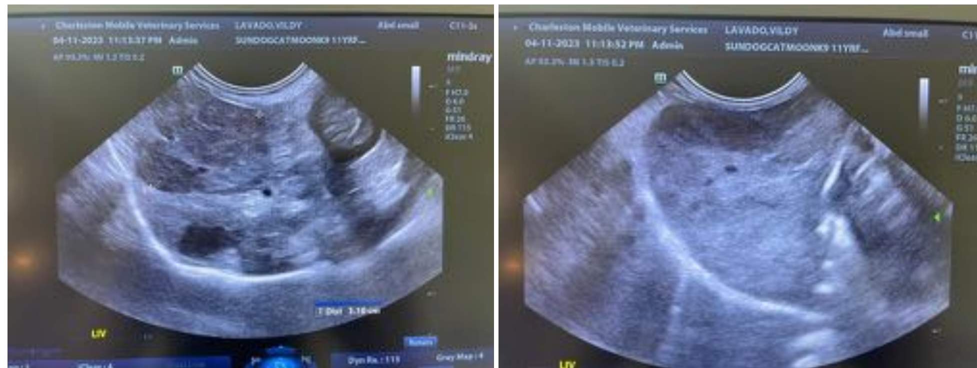
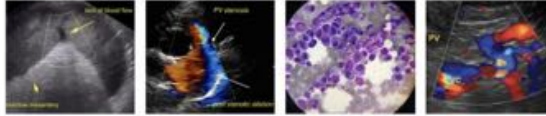
- Regarding the left adrenal mass, consider the following:
    1. Baseline blood pressure measurement
    2. Further testing for a functional tumor (i.e., low-dose Dexamethasone suppression test, urine/blood catecholamine levels).
    3. Urinalysis to assess for isosthenuria and proteinuria
    4. An abdominal CT scan would also be useful in further characterizing the lesion.
- If the patient is to undergo anesthesia for a dental cleaning, blood pressure and ECG should be closely monitored, particularly given the presence of heart disease and the left adrenal mass. Also, given the hepatic changes, Benzodiazepines should be avoided and opioids used judiciously.









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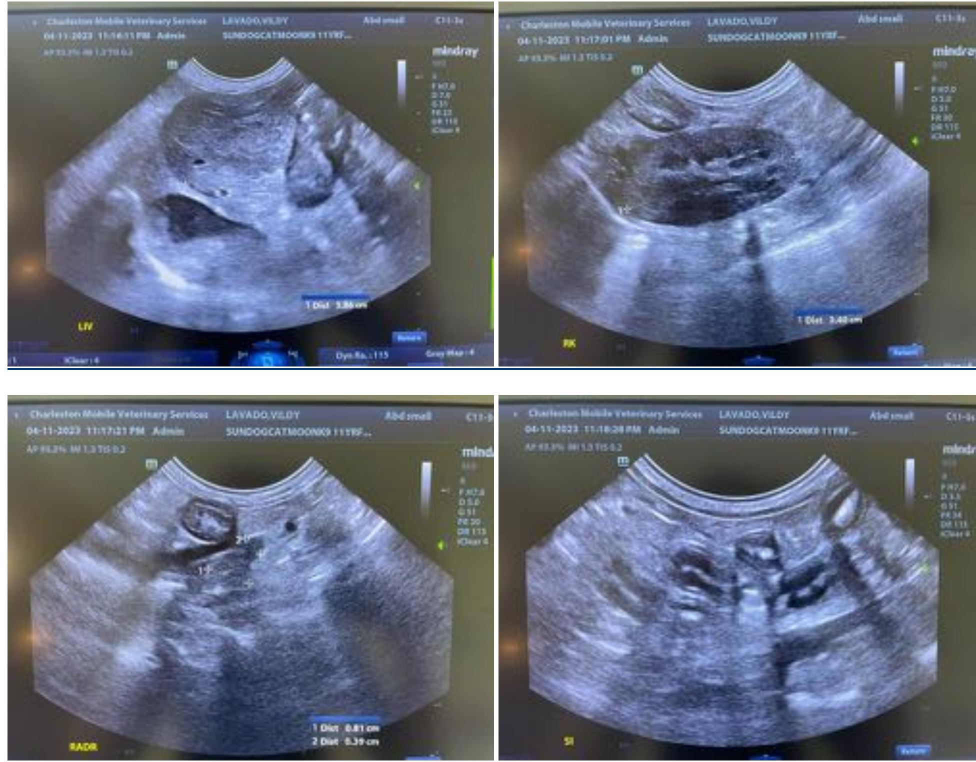

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com