



**PATIENT PRESENTING CLINICAL SIGNS**

Nickii Manley History: intermittent vomiting, lethargy, declining over the past 2 months

**SPECIES Abnormal PE/Chem/CBC/UA Results:**

Canine Cortisol 10.6

BUN 41.6

Creat 2.9

TP 8

**BREED** Globulin 4.2

UA-cocci

St Bernard Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX Urinary System**

Spayed Female

The urinary bladder is moderately distended with anechoic urine. The wall in the region of the apex is mildly thickened (up to 0.54 cm) with a slightly irregular mucosal surface. The wall tapers to a normal thickness as it extends towards the cystourethral junction. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

11 years

The left kidney is normal in size (7.20 cm in length) with a normal shape, architecture and 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. Renal vasculature is normal. The mesentery surrounding the kidney is mildly hyperechoic. A small amount of retroperitoneal fluid is visualized.

**WEIGHT**

35.6 lbs

The right kidney is normal in size (7.40 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is enlarged (1.74 cm at cranial pole) (0.68 cm at caudal pole) with an irregular shape. A 2.16 x 0.94 cm irregular heterogenous mass is observed at the cranial pole. The mass causes capsular expansion. Glandular echogenicity and detail at the caudal pole are normal. There is suspected invasion of the mass into the caudal vena cava, with an associated large thrombus.

**IMAGING PERFORMED BY**

Dr. Petro

The right adrenal gland is normal in size (1.44 cm at cranial pole) (0.64 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Mason Dixon  
Animal EH

**Spleen**

The spleen is normal in size (1.88 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 appears normal.

**REFERRING VET**

Hayley Heindel, CVT

**Liver**

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and slightly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not

**DATE**

6.29.23



**PATIENT** seen.

Nickii Manley

**Gastrointestinal**

The lumen is not distended. 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. There is no evidence of an obstructive pattern.

**SPECIES**

Canine

**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.

**BREED**

St Bernard Mix

**Free Abdomen**

There is questionable trace ascites. The abdominal lymph nodes are normal/not visible.

**SEX**

Spayed Female

**Other**

The caudal vena cava is dilated. A 6.50 x 1.95 cm thrombus is observed within the lumen. There is also evidence of extension of the left adrenal mass into the caudal vena cava.

**AGE**

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**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Left adrenal mass with invasion into the caudal vena cava and a large associated caval thrombus. Neoplasia (i.e., carcinoma, pheochromocytoma) is suspected.
- Bilateral chronic renal changes
- Retroperitoneal is present, which may be secondary to left adrenal and/or renal pathology.

**WEIGHT**

35.6 lbs

**Secondary Findings**

- The urinary bladder wall changes are suggestive of cystitis.
- The slight hepatic parenchymal modeling may be secondary to age-related remodeling, regenerative nodular hyperplasia, metastatic disease, inflammatory disease, other hepatopathy.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**HOSPITAL NAME**

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Animal EH

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- Given the urinalysis finding, a urine culture and sensitivity should be considered.
- Regarding the left adrenal mass, consider the following:

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Hayley Heindel, CVT

1. A baseline blood pressure measurement should also be considered to assess for systemic hypertension.
2. Further testing for a functional tumor (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels)
3. +/- abdominal CT scan for further characterization
4. In the meantime, palliative care is recommended.

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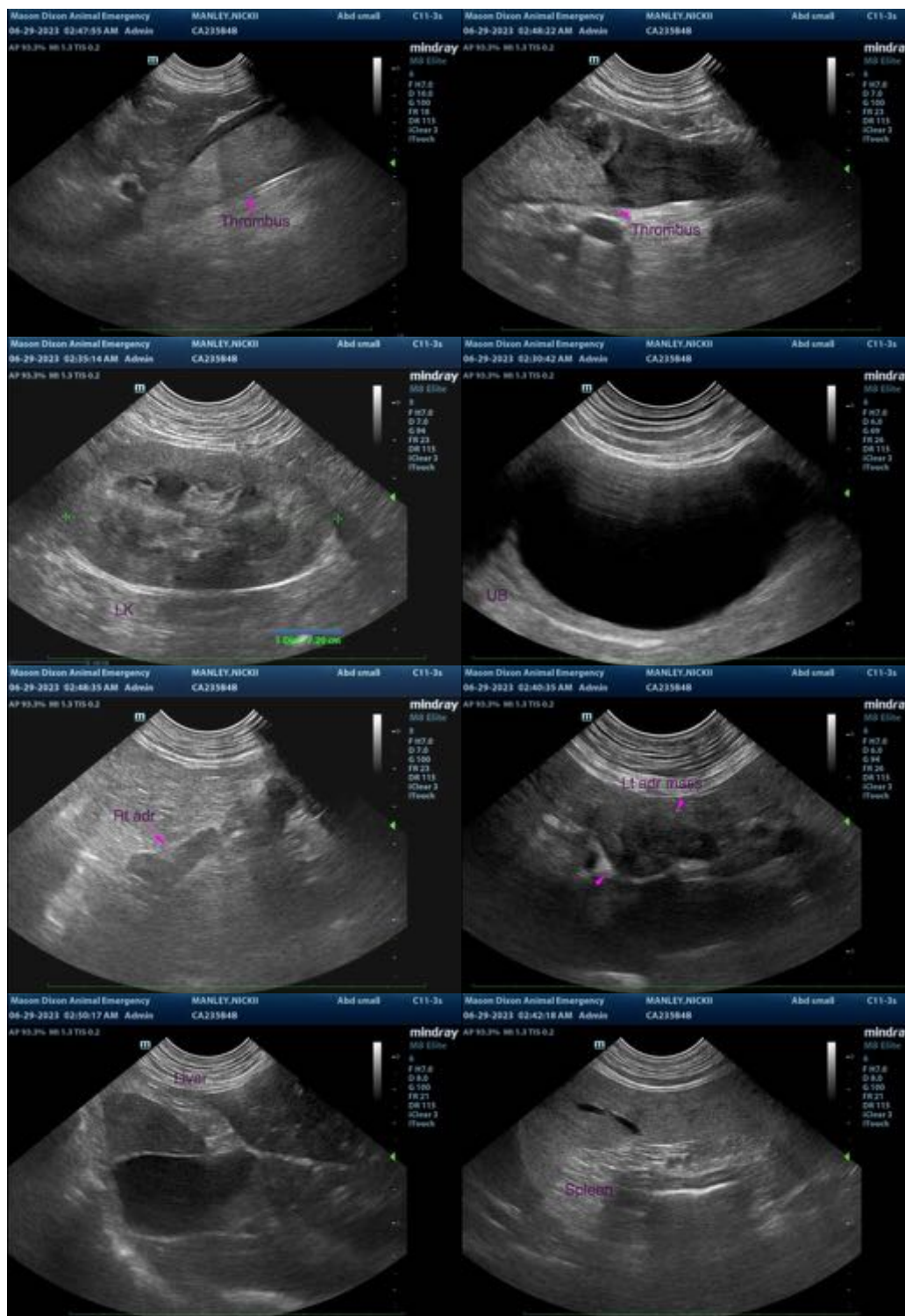
Dr. Petro

**HOSPITAL NAME**

Mason Dixon  
Animal EH

**REFERRING VET**

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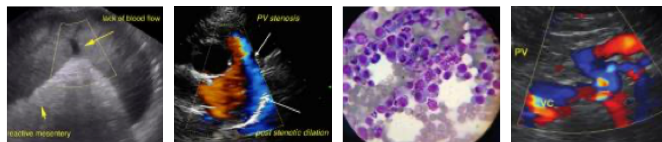


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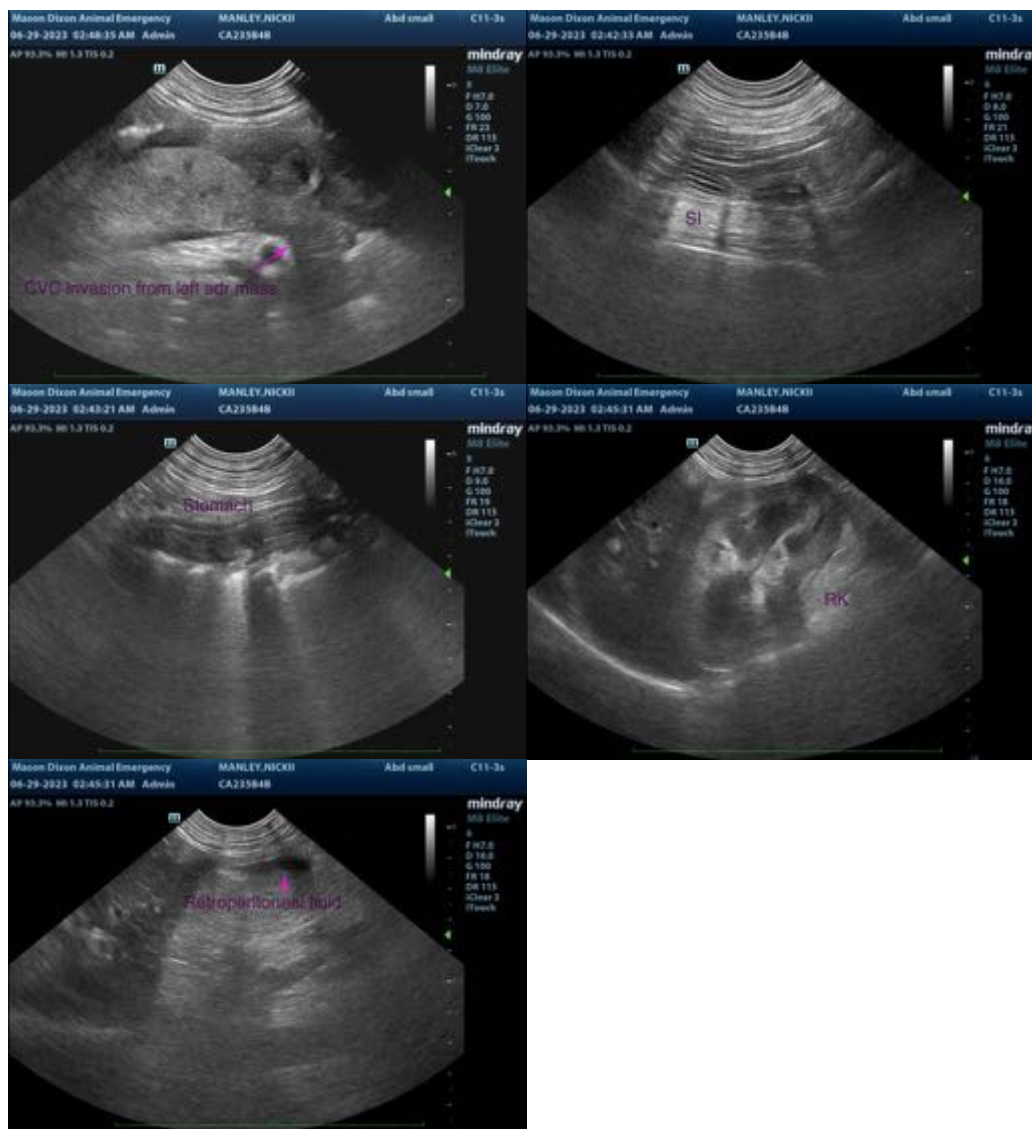
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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