

**PATIENT PRESENTING CLINICAL SIGNS**

Appa Limehouse The patient presented with a history of progressive azotemia and concerned for an abdominal mass on palpation. The patient was sedated with Torb for scan.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

German shepherd

*Urinary System*

The urinary bladder, trigone, and pelvic urethra are 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.

**SEX**

Male, neutered

The prostate is normal in size (1.78 cm in width) with a normal shape and smooth peripheral contours. A focal area of hyperechoic tissue is observed on the left portion of the prostate. The prostatic urethra is not overtly dilated.

**AGE**

8/16/2016

The left kidney is small in size (6.55 cm in length) with an irregular shape. The cortex is variably thickened and irregular and there is poor corticomedullary distinction. The internal renal medullary architecture is abnormal. There is no evidence of pyelectasia, nephroliths or hydroureter. There appears to be reduced vascular uptake.

**WEIGHT**

111.9 lbs.

The right kidney is small in size (6.88 cm in length) with an irregular shape. The cortex is variably thickened and irregular and there is poor corticomedullary distinction. The internal renal medullary architecture is abnormal. There is no evidence of pyelectasia, nephroliths or hydroureter. There appears to be reduced vascular uptake.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
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(Small Animal Internal  
Medicine)

*Adrenal Glands*

The left adrenal gland is normal size (0.47 cm at cranial pole) (0.50 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.

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The right adrenal gland is normal size (0.85 cm at cranial pole) (0.66 cm at caudal pole) (3.66 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.

**HOSPITAL NAME**

Soutside AH

*Spleen*

The spleen is subjectively prominent in size (2.63 cm in width at the level of the hilus) with normal curvilinear peripheral contours. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**

Dr. Carroll

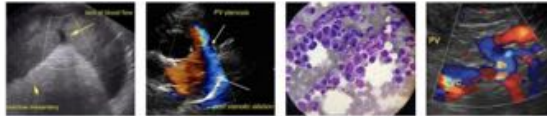
*Liver*

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gallbladder is of normal contours

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12967

**DATE**  
2/8/22



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and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

***Gastrointestinal***

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 colonic wall is normal. 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.

**ULTRASONOGRAPHIC FINDINGS**

- The bilateral renal changes are most consistent with renal dysplasia with a lower possibility of a prior insult (i.e., infection, toxin).
- The prominent spleen may be a normal variant for this patient or may be secondary to lymphoid hyperplasia or extramedullary hematopoiesis. Infiltrative neoplasia is possible but considered unlikely.
- Prostate changes are suggestive of remodeling and/or hyperplasia. Neoplasia is possible but considered unlikely.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given the patient's clinical history and sonographic changes, consider the following:

1. Urine culture and sensitivity
2. UPC (if proteinuria is present)
3. Blood pressure measurement
4. Transition to a prescription renal diet, if not already receiving.
5. Serial monitoring of the patient's renal values and blood pressure are recommended to assess for progression.



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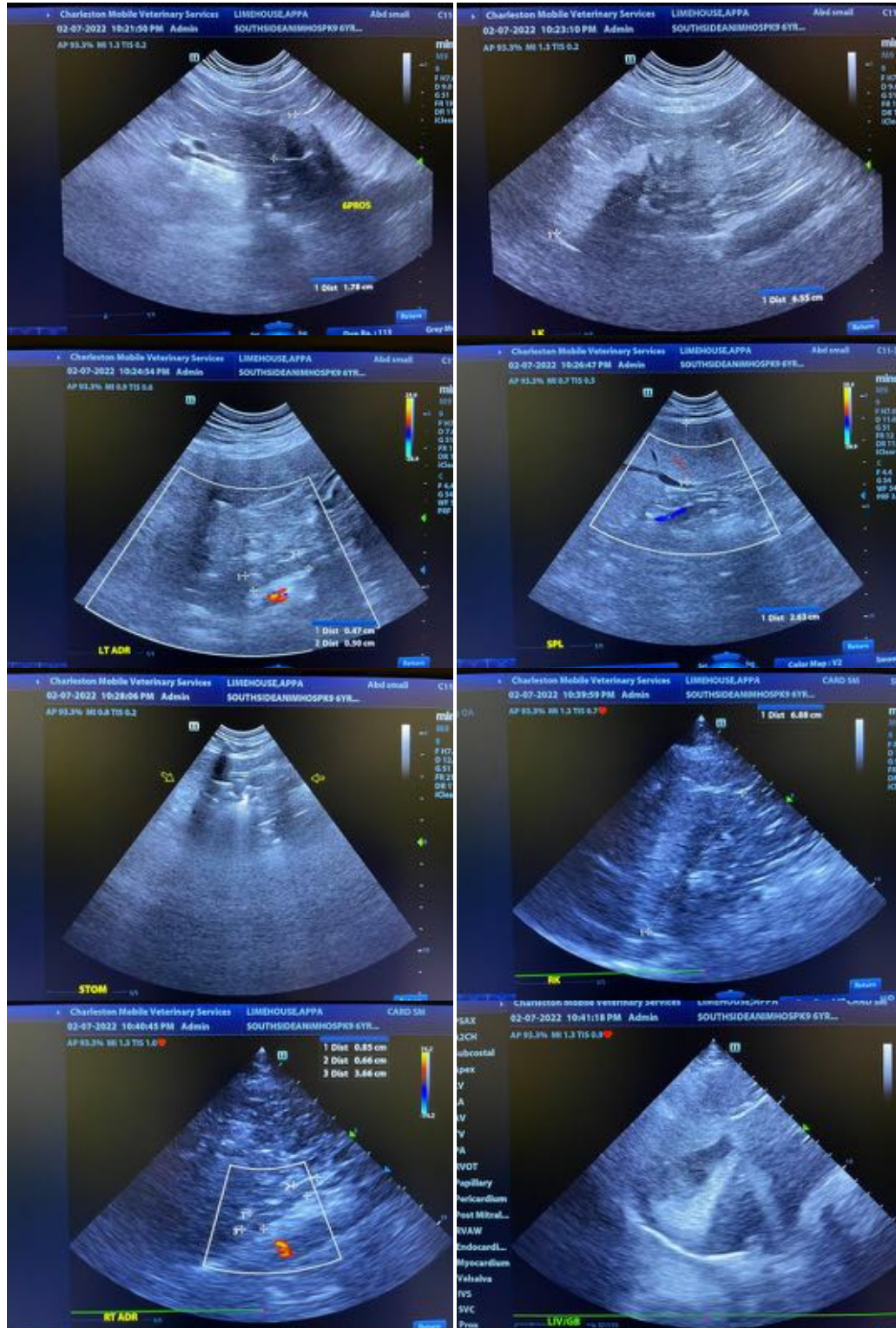
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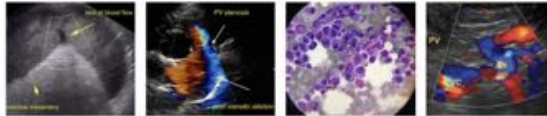
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



**PATIENT**

Appa Limehouse

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.

**SPECIES**

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