



## PATIENT PRESENTING CLINICAL SIGNS

**Kanelo Varela**  
History: The patient is presented as a referral due to a large round mass seen on the abdomen radiograph. Wanted to further evaluate the origin of the mass.

**SPECIES**  
Abnormal PE/Chem/CBC/UA Results: X-RAY: Large round mass is seen on the abdomen

Canine

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### BREED *Urinary System*

Mixed

The urinary bladder is moderately distended. The wall in the region of the apex is mildly thickened (up to 0.48 cm) with an irregular mucosal surface. The wall tapers to a normal thickness as it extends towards the cystourethral junction. A small amount of suspended echogenic debris, as well as a small amount of gravity-dependent mineralized sand is observed within the lumen. No distinct calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

### SEX

Intact Male

The prostate is enlarged (3.37 cm in width) with slightly irregular peripheral margins. The parenchyma is largely isoechoic relative to surrounding omental fat and heterogenous, with numerous, varying-sized, ill-defined cystic areas throughout the gland. The prostatic urethra is not overtly dilated.

### AGE

8 years

The left kidney is normal in size (6.13 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is minimal loss of corticomedullary distinction. Numerous hyperechoic-to-mineralized foci are observed throughout the cortex. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

### WEIGHT

59.6 lbs

The right kidney is normal in size (7.11 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is minimal loss of corticomedullary distinction. Numerous hyperechoic-to-mineralized foci are observed throughout the cortex. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

## INTERPRETED BY

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

### *Adrenal Glands*

The left adrenal gland is normal in size (0.58 cm at cranial pole) (0.62 cm at caudal pole) with a normal shape and smooth peripheral contours. Small hyperechoic-to-mineralized foci are observed throughout the gland. Glandular echogenicity and detail are otherwise normal. The phrenicoabdominal vein and surrounding vasculature are normal.

## IMAGING PERFORMED BY

Dr. Ferrer DVM

The right adrenal gland is normal in size (0.83 cm at cranial pole) (0.49 cm at caudal pole) (2.62 cm in length) with a normal shape and smooth peripheral contours. Small hyperechoic-to-mineralized foci are observed throughout the gland. Glandular echogenicity and detail are otherwise normal. The phrenicoabdominal vein and surrounding vasculature are normal.

## HOSPITAL NAME

Paseos VC

### *Spleen*

The spleen is normal in size (2.79 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Numerous small hyperechoic-to-mineralized, pinpoint-to-small linear foci are observed throughout the organ. Splenic vasculature appears normal.

## REFERRING VET

Dr. De Jesus

### *Liver*

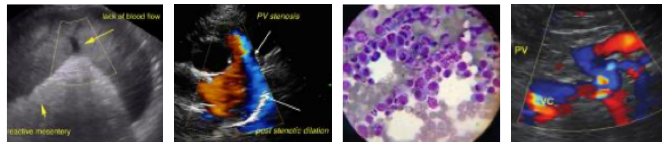
The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion.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

## INVOICE

13439

## DATE

6.21.23



**PATIENT**

Kanelo Varela

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**SPECIES**

Canine

**Gastrointestinal**

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly fluid-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 is normal in thickness 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.

**BREED**

Mixed

**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.

**SEX**

Intact Male

**Free Abdomen**

A small amount of free fluid is present.

**AGE**

8 years

**Lymph Nodes**

(See "Other" category).

**WEIGHT**

59.6 lbs

**Other**

The left testicle is subjectively enlarged (3.14 x 2.89 cm). The gland has a hyperechoic rim (measuring up to 0.36 cm). The parenchyma is otherwise hypoechoic to slightly heterogenous in appearance. The right testicle is subjectively small in size (relative to the left testicle) with a slightly irregular shape. The parenchyma is subtly mottled in appearance, with a few, ill-defined hypoechoic areas. (3.14 x 2.89 cm).

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DVM, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

At the aortic trifurcation, ill-defined fat opacities (measuring up to 6.25 cm in the longest dimension) are observed.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- The fat opacities near the aortic trifurcation may represent intrabdominal lipoma(s), liposarcoma(s), enlarged fatty lymph nodes, other.
- The right testicular changes could be consistent with a tumor, age-related hyperplasia, inflammation, other. The left testicular changes are most consistent with age-related remodeling +/- atrophy.
- A small amount of ascites is present (the cause of which is unclear). It may be secondary to increased vascular permeability (i.e., vasculitis), low oncotic pressure, or increased hydrostatic pressure.

**IMAGING PERFORMED BY**

Dr. Ferrer DVM

**HOSPITAL NAME**

Paseos VC

**REFERRING VET**

Dr. De Jesus

**Secondary Findings**

- Urinary bladder debris/sand
- Dystrophic mineralization of the kidneys, adrenal glands and spleen (the cause of which is unclear). This finding can sometimes be seen with endocrinopathies, hypercalcemia, or may be a benign incidental finding.

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- The prostate changes are most consistent with cystic benign prostatic hyperplasia. Concurrent bacterial prostatitis is possible but is considered less likely in the absence of lower urinary tract infection signs.

## SPECIES

Canine

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider fine-needle aspiration of the hyperechoic tissue in the caudal abdomen, along with three-view thoracic radiographs to assess for evidence of pulmonary metastatic disease. Depending on the results, removal of the fatty tissue may be warranted, particularly if it's causing clinical signs in the patient. If surgery is pursued, castration, with submission of the testicles for histopathology is also recommended.
- Baseline lab work, including a CBC, chemistry panel, urinalysis and T4 is recommended to assess overall metabolic function, and to evaluate for underlying endocrinopathies that may be resulting in dystrophic mineralization of the abdominal organs.

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Mixed

## SEX

Intact Male

## AGE

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## WEIGHT

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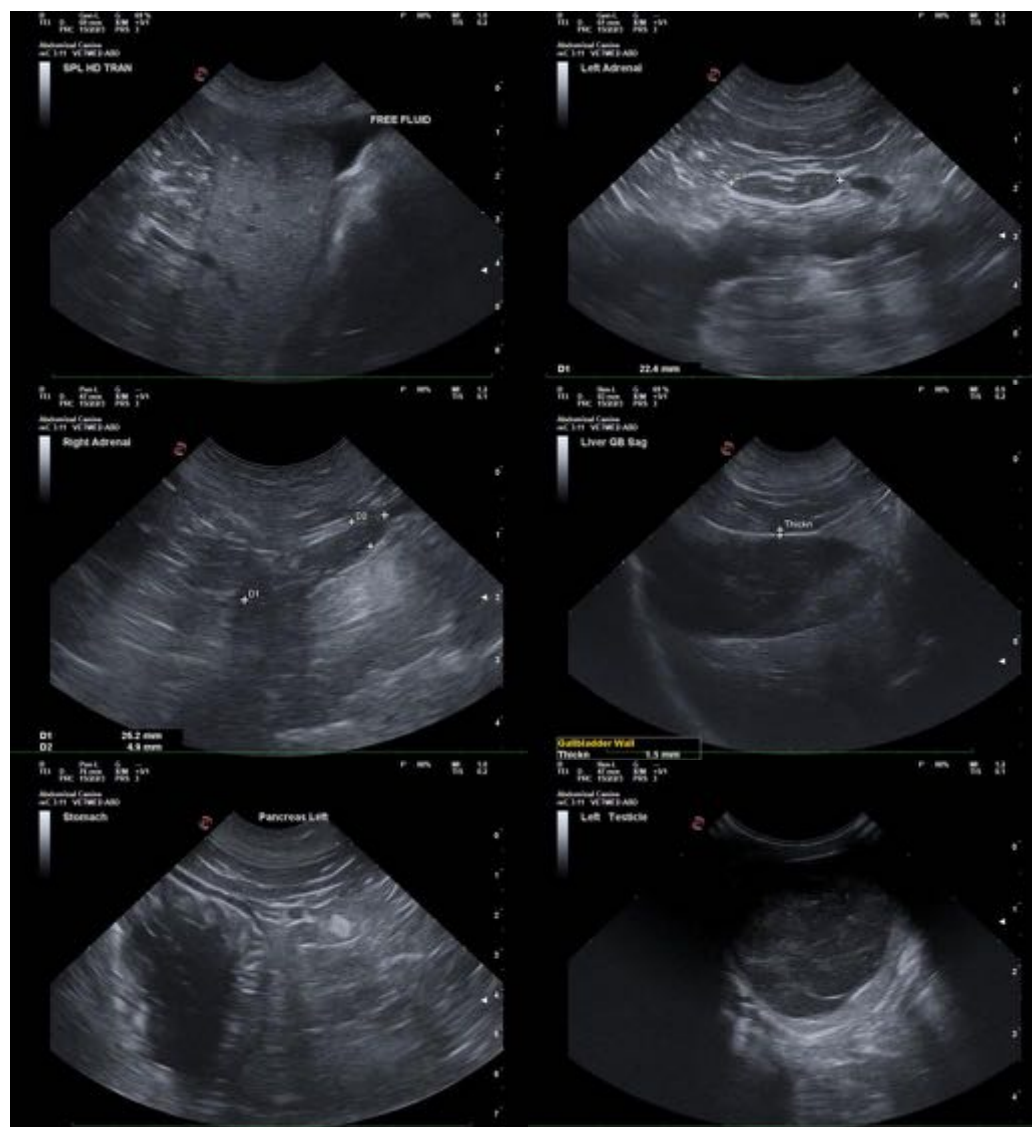
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**SPECIES**

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**BREED**

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**AGE**

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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](mailto:info@SonoPath.com)