



## PRESENTING CLINICAL SIGNS

### PATIENT

History: Vomiting, possible mass

Ringo Pe Benito

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### SPECIES

#### Urinary System

Canine

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is slightly irregular in the region of the apex. 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.

### BREED

Boxer

The prostate is normal in size (1.04 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

### SEX

Neutered Male

The left kidney is normal size (6.71 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A small cortical cyst is observed at the craniaolateral aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### AGE

9 years

The right kidney is normal in size (6.24 cm in length); with a slightly irregular shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Foci of mineralization are visualized. There is no evidence of pyelectasia or hydroureter. Renal vasculature is normal.

### WEIGHT

62.7 lbs

#### Adrenal Glands

The left adrenal gland is normal size (0.62 cm at cranial pole) (0.61 cm at caudal pole) (3.09 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.

### INTERPRETED BY

Andrea Nicastro, DVM,  
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The right adrenal gland is mildly enlarged (1.30 cm at cranial pole) (0.82 cm at caudal pole) (2.55 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.

### IMAGING PERFORMED BY

Jessica Miller

#### Spleen

The spleen is normal in size (1.55 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 is normal.

### HOSPITAL NAME

Summit Dog & Cat  
Hosp

#### 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.

### REFERRING VET

Dr. Traci Volger

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal.

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#### Gastrointestinal

The gastric lumen is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural

### DATE

3/23/22



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detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative 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.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Bilateral chronic age-related renal changes with right-sided non-obstructive mineralization.

\*\*There is no obvious evidence of an abdominal mass. An obvious cause for the vomiting is not identified in this study. Considerations include microscopic gastrointestinal disease, low-grade pancreatitis, underlying metabolic issue, other.

**Secondary Findings**

- Mild right adrenomegaly

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Baseline lab work, (i.e., CBC Chemistry panel, urinalysis and T4) is recommended, if not already performed). Other diagnostic considerations include the following:

- GI panel (i.e., serum cobalamin and folate, TLI and PLI)
- Fecal evaluation for ova and Giardia
- Thoracic radiographs to assess potential esophageal disease
- A resting cortisol level can also be considered to assess for hypoadrenocorticism. However, given the prominent right adrenal gland, this diagnosis is considered less likely.
- Consider a hypoallergenic diet trial
- Ultimately, GI biopsies (i.e., endoscopic or surgical) may be necessary to get a definitive diagnosis.



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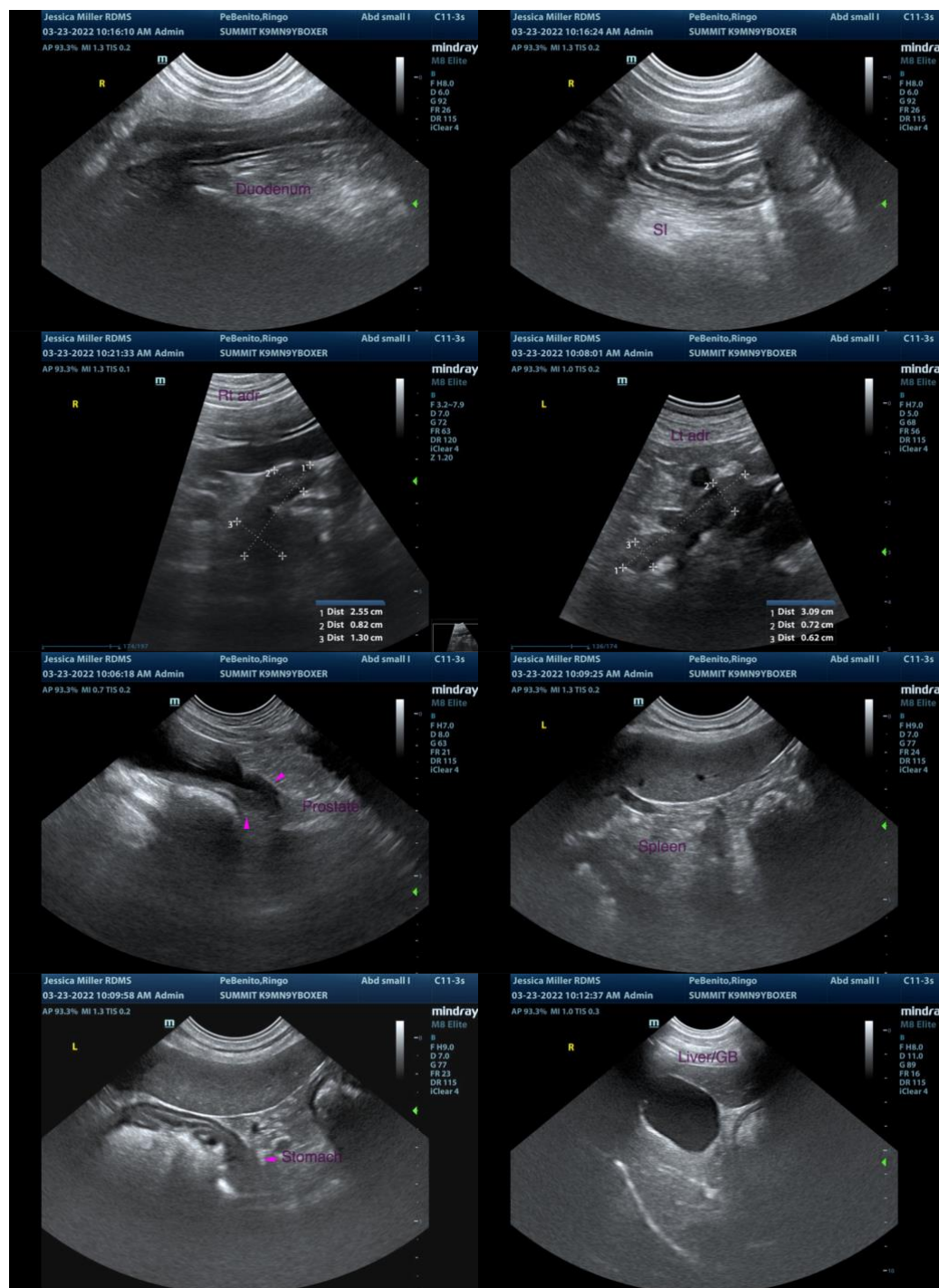
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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