



**PATIENT PRESENTING CLINICAL SIGNS**

Gizmo Barrs

Px presented yesterday for ADR one episode of vomiting, lethargy and inappetence, lab work was wnl, px is UTD on vax and preventatives. Acute onset, no other hx. X-rays were suggestive of GI fb and explore was scheduled for today. However, todays rads were less consistent with gi fb, so AUS was ordered prior to proceeding with sx.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

Shih Tzu

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**SEX**

Male

Prostate is normal in size for an intact male. Parenchyma is diffusely homogenous and relatively hyperechoic. Normal distinct margins and symmetrical bilobed shape are maintained.

**AGE**

1

The right kidney is normal in size (4.28 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

**WEIGHT**

5 kg

The left kidney is normal in size (3.96 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (0.67 cm at the cranial pole and 0.44 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Dr. James Hornbuckle

The left adrenal gland is normal in size (0.34 cm at the cranial pole and 0.33 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Golden Isles AH

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. James Hornbuckle

**Liver**

**INVOICE**

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The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**DATE**

6/29/23

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**Gastrointestinal**



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The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty to mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no distention or evidence of obstruction or infiltrative disease. However, there is an approximately 1.5 cm in diameter, slightly rectangular shaped, hypoechoic intraluminal density that could represent a normal piece of kibble versus a non-obstructive or intermittently obstructive foreign object, which can't be definitively ruled out. Complete visualization is partially inhibited by the artifact caused by the gas.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

**ULTRASONOGRAPHIC FINDINGS**

- Bilateral medullary rim sign - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.
- There is no evidence of an obstructive pattern, plication, or definitive foreign material in these images. However, the large amount of gas in the stomach partially limits complete visualization, and there is an intraluminal structure within the stomach that does not shadow that could represent a foreign object, but normal kibble also cannot be ruled out.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations include continued supportive/symptomatic medical management while awaiting the also pending radiograph report and while continuing fasting. Recheck imaging is recommended following another 12-24 hours of fasting or sooner if vomiting persists. Alternatively, additional diagnostic options could include a barium swallow or potentially upper GI gastroscopy for further visualization of the stomach and potential removal of the foreign object if one is located.



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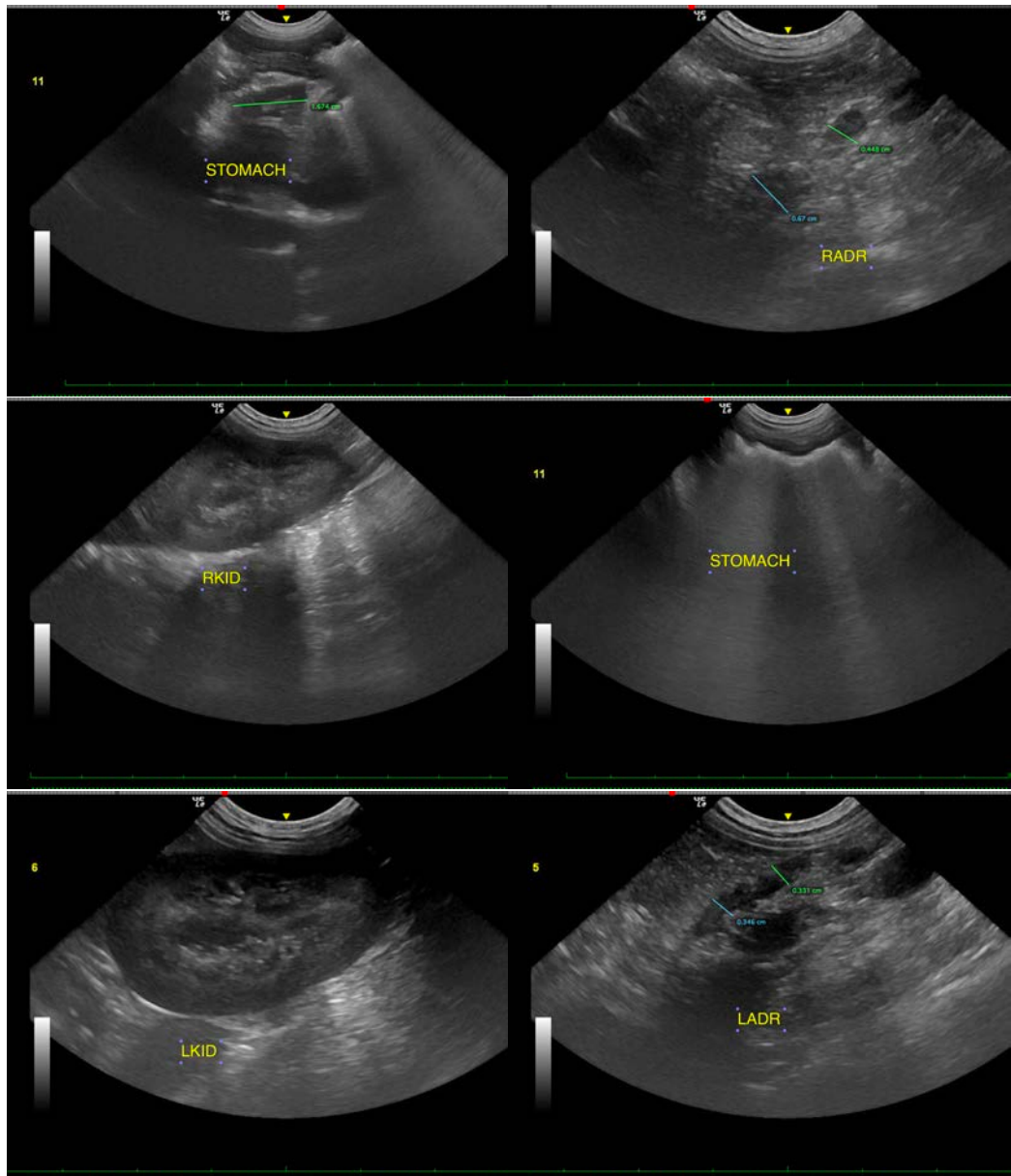
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM, DACVIM**  
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