

**DATE**

10.27.2022

PRESENTING CLINICAL SIGNS

Weight loss, on/off episodes of lethargy, inappetence, vomiting since beginning of August.

PATIENT

Mikey Hannah

Current Medications: Mirtazapine PRN, Gabapentin PRN, Bland low-fat diet.

Lab Results: ALT 190 (18-121), ALKP 167 (5-160), Spec CPL 379 (0-200).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Jack Russell Mix

Urinary System

The **urinary bladder** is mildly to moderately distended with anechoic urine. The wall in the region of the apex is moderately thickened (up to 0.52 cm) with an 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.

SEX

Neutered Male

The **prostate** is normal in size (0.80 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

AGE

10/19/2008

The **left kidney** is normal size (5.30 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

WEIGHT

24.8lbs

The **right kidney** is subjectively normal size with a normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

INTERPRETED BY

Andrea Nicastro, DMV,
Diplomate DACVIM
(Small Animal
Internal Medicine)

Adrenal Glands

The **left adrenal gland** is enlarged (1.10 cm at cranial pole) (1.14 cm at caudal pole) (3.06 cm in length); with a slightly irregular shape. The parenchyma is hypoechoic with loss of glandular detail. No distinct focal lesions are observed. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Frederick Road VH

The **right adrenal gland** is normal size (0.51 cm at cranial pole) (0.55 cm at caudal pole) (3.11 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 appear normal.

REFERRING VET

Dr. Beyer

Spleen

The **spleen** is normal in size (1.25 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.

INVOICE

11913

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 **gall bladder** lumen is moderately distended. The wall is thin and smooth. A scant amount of suspended, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is moderately distended with ingesta despite fasting. A few, small, hyperechoic shadowing structures are also observed within the ingesta. 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 distended with gas and chyme (mild). 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.

Pancreas

A portion of the **pancreas** is obscured by the gastric distention. In the visualized portions (right limb) the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. One to two prominent mesenteric **lymph nodes** are visualized, the largest measuring 1.33 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The presence of ingesta within the gastric lumen despite fasting suggests delayed gastric emptying.
- The left adrenal changes could be consistent with an emerging tumor (i.e., adenoma, adenocarcinoma, pheochromocytoma) or hyperplastic change.

Secondary Findings

- Bilateral degenerative renal changes. The urinary bladder wall changes could be consistent with cystitis or may be artifactual due to lack of full repletion. Correlation with the patient's urinalysis clinical history is recommended.
- The prominent mesenteric lymph nodes are likely reactive.

*An obvious cause for the patient's clinical signs is not identified in this study. Considerations include primary gastrointestinal disease (i.e., motility disorder, inflammatory bowel disease, food allergy), underlying metabolic issue, occult neoplasia, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for occult disease in the chest.

Other diagnostic/therapeutic considerations include the following:

1. Pre-and postprandial serum bile acids to assess for hepatic dysfunction
2. Fecal evaluation for ova and Giardia
3. Malabsorption panel, including serum cobalamin and folate, TLI and PLI, is also recommended

4. Consider empirical treatment for a gastric motility disorder with a pro-motility agent (i.e., metoclopramide).
5. Depending on the results of the above diagnostics, GI biopsies (i.e., endoscopic, or surgical) may be necessary to get a definitive diagnosis.
6. While awaiting test results, symptomatic care (i.e., antiemetics, appetite stimulants) recommended.

Regarding the left adrenal gland, a repeat ultrasound is recommended in 4-6 weeks to assess for progression.



