

**DATE**

5/30/22

PATIENT

Snickerdoodle Jackman

SPECIES

Canine

BREED

Pomeranian mix

SEX

Female, spayed

AGE

1/16/2010.

WEIGHT

11.9 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency
 Hospital

REFERRING VET

Dr. Nacke-Horney

INVOICE

13440

PRESENTING CLINICAL SIGNS

Patient has a history of diabetes mellitus and renal failure. Has had a decreased appetite for the past 3-4 days - owner noted that Tuesday or Wednesday lick the residue from a glass that had lemonade in it Last night owner needed to carry her up and down the stairs Recently owner has seen her sleep more and not really wanting to get up Yesterday was only given insulin at night due to appetite changes Today was not interested in eating - owner did not give insulin - started vomiting water Owner noted that recently her hair has seemed more knotty Current meds: - Novalin 4 units BID - last given last night.

Current Medications: Potassium chloride, Amp/Sulb, Insulin, Buprenorphine, Maropitant citrate, Pantoprazole, Buprenorphine, Acepromazine.

Lab Results: ALP 717, ALT 128, creatinine 2.0, BUN 75, glucose 630, USG 1.020.

Trace proteinuria, inactive sediment. No ketonuria.

Date of Previous IntraPet Ultrasound: No previous ultrasound.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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.

The left kidney is normal size (4.24 cm in length) with a relatively normal shape. The cortex is variably thickened and hyperechoic and there is moderate loss of corticomedullary distinction. Mineralized foci are visualized. Trace pyelectasia is present. Several cortical cysts are seen. There is no evidence of infarcts or hydronephrosis.

The right kidney is normal size (4.35 cm in length) with a relatively normal shape. The cortex is variably thickened and hyperechoic and there is moderate loss of corticomedullary distinction. Mineralized foci are visualized. Trace pyelectasia is present. Several cortical cysts are seen. There is no evidence of infarcts or hydronephrosis.

Adrenal Glands

One still image of the left adrenal gland is available for interpretation. The left adrenal gland is mildly enlarged (0.42 cm at cranial pole) (0.72 cm at caudal pole) (1.81 cm in length) with a slightly irregular shape. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (0.63 cm at cranial pole) (0.70 cm at caudal pole) (1.52 cm in length); normal shape. The parenchyma at the cranial pole is hyperechoic to slightly heterogeneous in appearance. The glandular echogenicity and detail at the caudal pole are unremarkable. Surrounding vasculature appears normal.

Spleen

The spleen is normal in size (0.86 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.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. A

moderate amount of aggregated echogenic, mostly gravity-dependent debris/sludge is observed within the lumen.

Gastrointestinal

The gastric lumen is moderately fluid distended and hypomotile. Hyperechoic shadowing material is observed within the fluid. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract appears patent at the time of the study. 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.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic 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

Primary Findings:

- Gastric ileus. The shadowing material in the gastric lumen may represent foreign material and/or ingesta.

Secondary Findings:

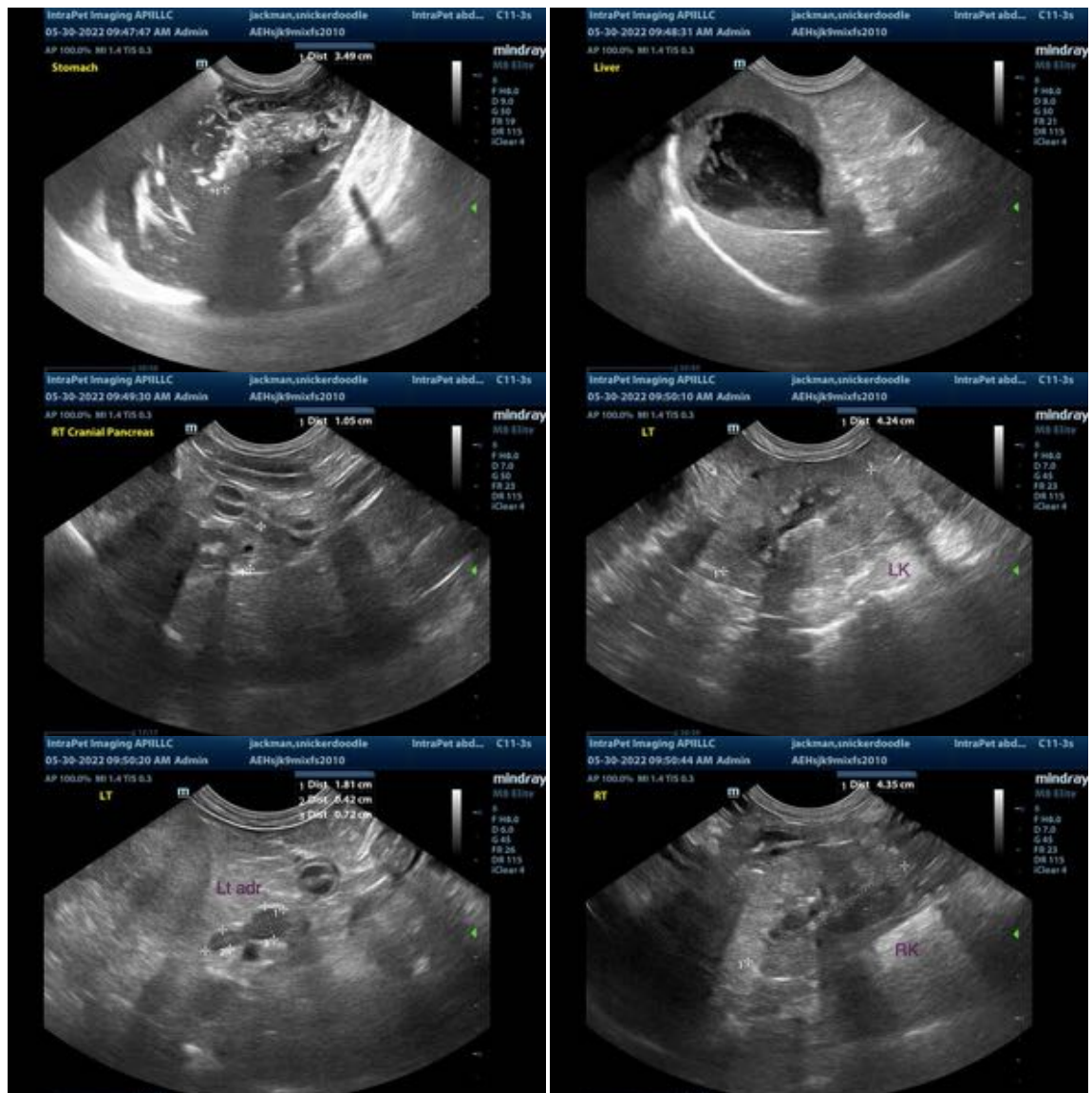
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis with dystrophic mineralization and cortical cysts.
- Mild bilateral adrenomegaly.
- Age-related pancreatic remodeling. Low-grade pancreatitis is also possible, particularly if the patient exhibits pain on cranial abdominal palpation.

*An obvious cause for the patient's clinical signs is not definitively identified in this study. Gastric foreign material with an intermittent outflow tract obstruction is possible. Other considerations include diabetic ketoacidosis, occult urinary tract infection, underlying neoplasia, other metabolic disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Thoracic radiographs are recommended to assess for occult disease in the chest.
- A urine culture and sensitivity should also be considered.

- Abdominal radiographs may be useful in further characterizing the shadowing material within the gastric lumen.
- Consider a cPLI to further assess for pancreatitis +/- a full GI panel (send to Texas A&M).
- Supportive care for diabetic ketoacidosis is recommended with repeat abdominal imaging in 12-24 hours to assess for possible intermittent pyloric outflow tract obstruction.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com