

**DATE PRESENTING CLINICAL SIGNS**

2/1/22

History: Presenting Complaint: Lethargic; Weakness; Whining. Date: 01-31-2022 Notes: Came back in a few hours later after seeing her and she was extremely lethargic and didn't want to get up. Was having her tongue hanging out. Did get SQ fluids and injectable maropitant.

PATIENT

Homie Boegner

Assessment: BG 37 on presentation. DDx: liver disease, kidney disease, infection, neoplasia, inflammation vs. other. Plan: On presentation, placed IV catheter and got BG was 37. Gave bolus of 0.5ml/kg IV and started on IV fluids Talked to owner that Homie has declined significantly since being here earlier. Now has a temperature and BG is low. Supplemented but, I am worried about her. Recommended keeping here, doing bloodwork, IV fluids and antibiotics. Depending on what is found can do an AUS tomorrow. Plan: BG q3hr and temp q3, CBC/Chem 17/Lytes, IV fluids maintenance, Unasyn 15mg/kg IV TID, buprenorphine 0.02mg/kg IV TID, BP, urinalysis, maropitant 1mg/kg IV tomorrow. Creatinine 3.1, BUN 35, ALT 293, AlkP 274, T-bili 1.4, sodium 171. Mild anemia with a hematocrit at 29.4% and an elevated white count with neutrophilia and suspected bands.

SPECIES

Feline

BREED

Domestic shorthair

Current Medications: Dextrose, Unasyn, Cerenia.

Date of Previous IntraPet Ultrasound: 7-12-21.

SEX

Female, spayed

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

AGE

1/31/2005

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.

WEIGHT

8 lbs.

The left kidney is normal in size (3.45 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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

The right kidney is normal size (3.60 cm in length) with a slightly irregular shape. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few non-obstructive nephroliths are visualized. There is no evidence of pyelectasia or hydronephrosis. Renal vasculature is normal.

HOSPITAL NAME

Animal Emergency
Hospital

Adrenal Glands

The left adrenal gland is upper limits of normal in size (0.56 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Silva

The right adrenal gland is upper limits of normal in size (0.53 cm length; xxx cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

12951

Spleen

The spleen is contracted (0.45 cm in width at the level of the hilus) with normal curvilinear peripheral contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. The parenchyma is hypoechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed. Vascular and

biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic duct is prominent. The common bile duct is visible/tortuous but not overtly dilated.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is gas 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 thickness is normal with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

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 borderline dilated (0.25 cm in diameter). There is no evidence of peripancreatic inflammation or effusion. See also *Other*.

Free Abdomen

There is no evidence of free fluid.

Lymph Nodes

A few prominent colic lymph nodes are visualized, the largest measuring 0.96 cm in length. See also *Other*.

Other

A 0.49 x 0.32 cm irregular hypoechoic nodule is observed in the cranial abdomen, just caudal to the liver.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

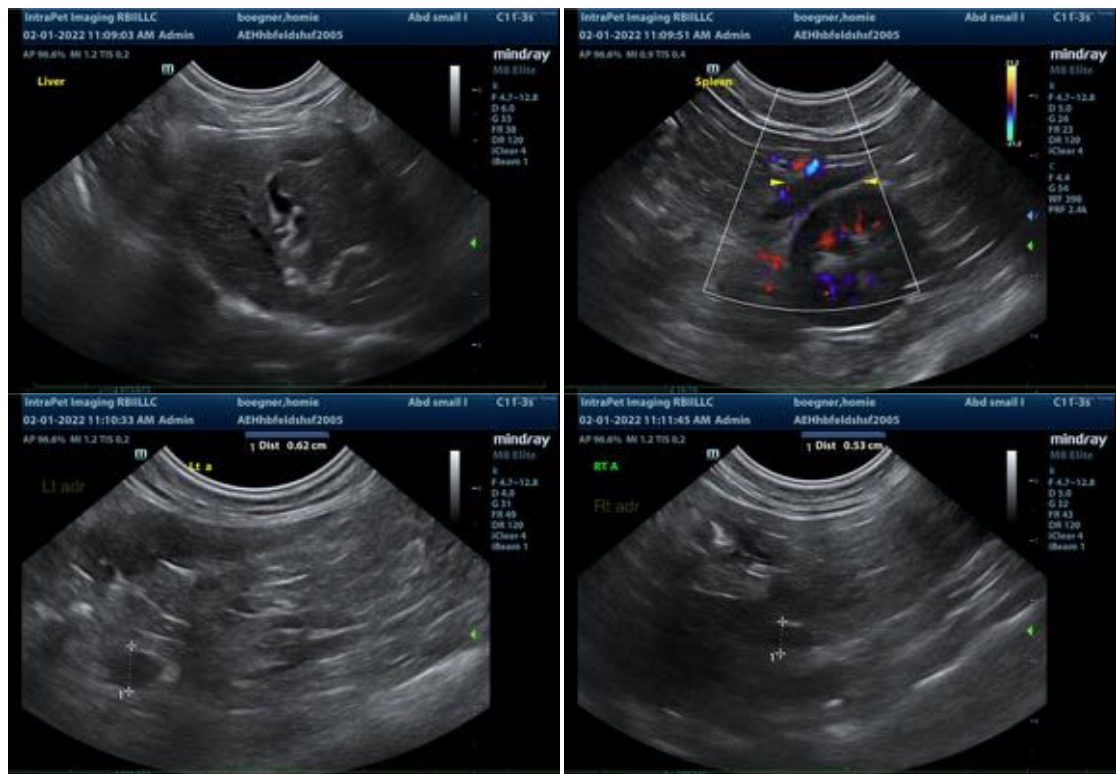
- Bowel pattern consistent with inflammatory bowel disease. Emerging lymphoma is also possible but considered less likely at this time.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- Age-related pancreatic remodeling +/- fibrosis. Concurrent low-grade inflammation may also be present, particularly if the patient is exhibiting a positive Murphy's sign on abdominal palpation.
- The origin of the hypoechoic nodule in the cranial abdomen is unclear. It may be a prominent lymph node or may be arising from pancreas, mesentery, other. Differentials include reactive lymph node, hyperplastic pancreatic nodule, pancreatic neoplasia (i.e., insulinoma), other.
- Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.

Secondary Findings:

- The splenic contraction is likely secondary to dehydration.
- Bilateral degenerative renal changes with dystrophic mineralization and right non-obstructive nephrolithiasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- To further assess for causes of hypoglycemia, consider the following:
 1. Pre- and post-prandial serum bile acids to assess hepatic function. Also consider a liver FNA if clotting status is appropriate.
 2. Paired insulin and glucose measurements
 3. Three-view thoracic radiographs to assess for occult infection/neoplasia
- Regarding the bowel changes, consider a GI panel (send to Texas A&M).
- While awaiting test results, continue supportive care and broad-spectrum antibiotic therapy.







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