

DATE PRESENTING CLINICAL SIGNS

1/19/2022

History: Patient presented as a new client on 1/13/22 for routine senior exam. Pet has a history of hypoglycemia and IBD. IBD is managed with metronidazole per the owner. Pet also has a history of hypoglycemia. Hypoglycemia was worked up with an abdominal US 07/02/2020, no further testing done past this. No obvious insulinoma noted but recommended bloodwork had not been pursued. Owner reports pet's teeth chatter, usually happens just prior to falling asleep. On PE developing cataracts noted OU; erythema and alopecia noted on the right dorsal lumbar region; pet has intermittent small pink dermal masses as well. Medial patella luxation grade 2 appreciated left stifle.

PATIENT

Hershey Merritt

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Female Spayed

AGE

11-28-2008

Current Medications: Gabapentin 25mg PO SID-BID started 01/2022
RC GI LF diet started 07/2020-suspect this is correct date
Metronidazole (compounded) 0.5mL (owner has yet to confirm concentration of medication with us) PO BID unsure of start date as we did not RX. Provable 1 cap PO SID unsure of start date as we did not RX.
Lab Results: Attached separately. 1/13/22: In house blood glucose 70mg/dL
1/13/22: CBC: Hematocrit: 59.4% (38.3-56.5); Chem27: Glucose: 50mg/dL (63-114); ALT: 131U/L (18-121); AST: 69U/L (16-55); TT4: 1.7ug/dL (1.0-4.0). UA: SG: 1.015; pH: 5.0; rare bacteria (free catch sample); epi cells 1+; all other values within normal limits.
Date of Previous IntraPet Ultrasound: 7/2/2020.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

WEIGHT

6.3 Lbs.

INTERPRETED BY

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

HOSPITAL NAME

Westminster
Veterinary Hospital

REFERRING VET

Dr. Hall

INVOICE

10159

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 (2.78 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 moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.60 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. There is no evidence of pyelectasia, nephroliths or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.53 cm at cranial pole) (0.48 cm at caudal pole) (1.23 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.

The right adrenal gland is normal size (0.65 cm at cranial pole) (0.49 cm at caudal pole) (1.27 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.

Spleen

The spleen is normal in size (1.05 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 normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to spleen and diffusely mottled in appearance, with at least one small ill-defined hypoechoic nodule measuring 0.71 cm in length. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated echogenic suspended sludge is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal

The gastric lumen is not distended. The gastric wall is subjectively normal in thickness, although this is difficult to assess due to excessive rugal folds. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is diffusely thickened (up to 0.41 cm) with a normal layering pattern. There is evidence of mucosal speckling and linear striations in several segments. There is also mild thickening and irregularity of the submucosal layer in some regions. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

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 mesentery in the midabdominal cavity is mildly hyperechoic. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

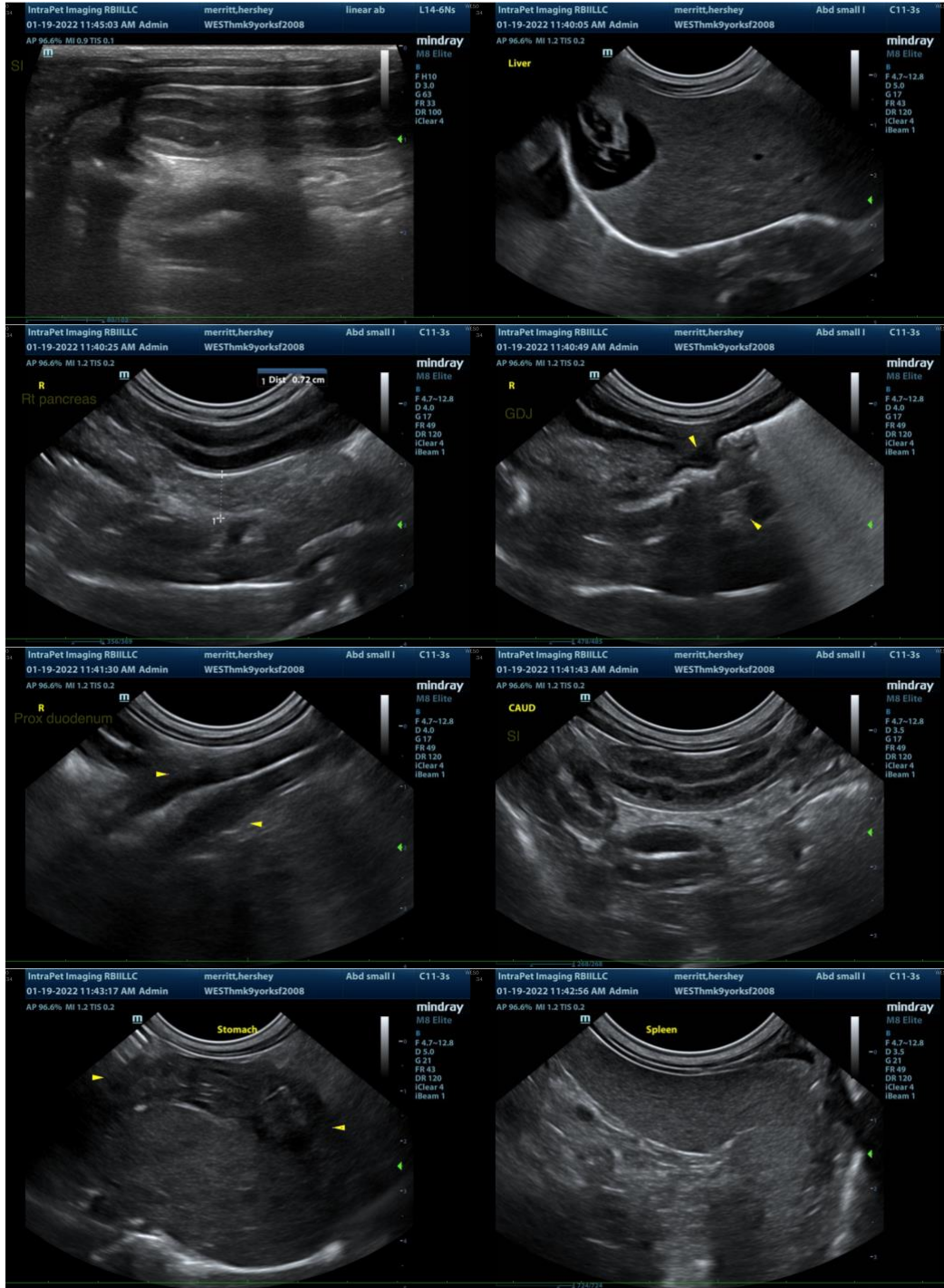
- The small intestinal wall changes could be consistent with inflammatory bowel disease, lymphangiectasia, infectious/parasitic disease, or emerging neoplasia (less likely)
- The mid-abdominal peritonitis is likely secondary to bowel pathology.
- The suspended gall bladder sludge could be consistent with a developing mucocele, cholestasis, or secondary to fasting.
- Non-specific diffuse hepatopathy. Possible differentials include inflammatory/immune-mediated disease, hepatotoxicosis (i.e., copper), reactive hepatopathy, infiltrative neoplasia (less likely), and/or benign age-related change (i.e., vacuolar hepatopathy, regenerative nodular hyperplasia).

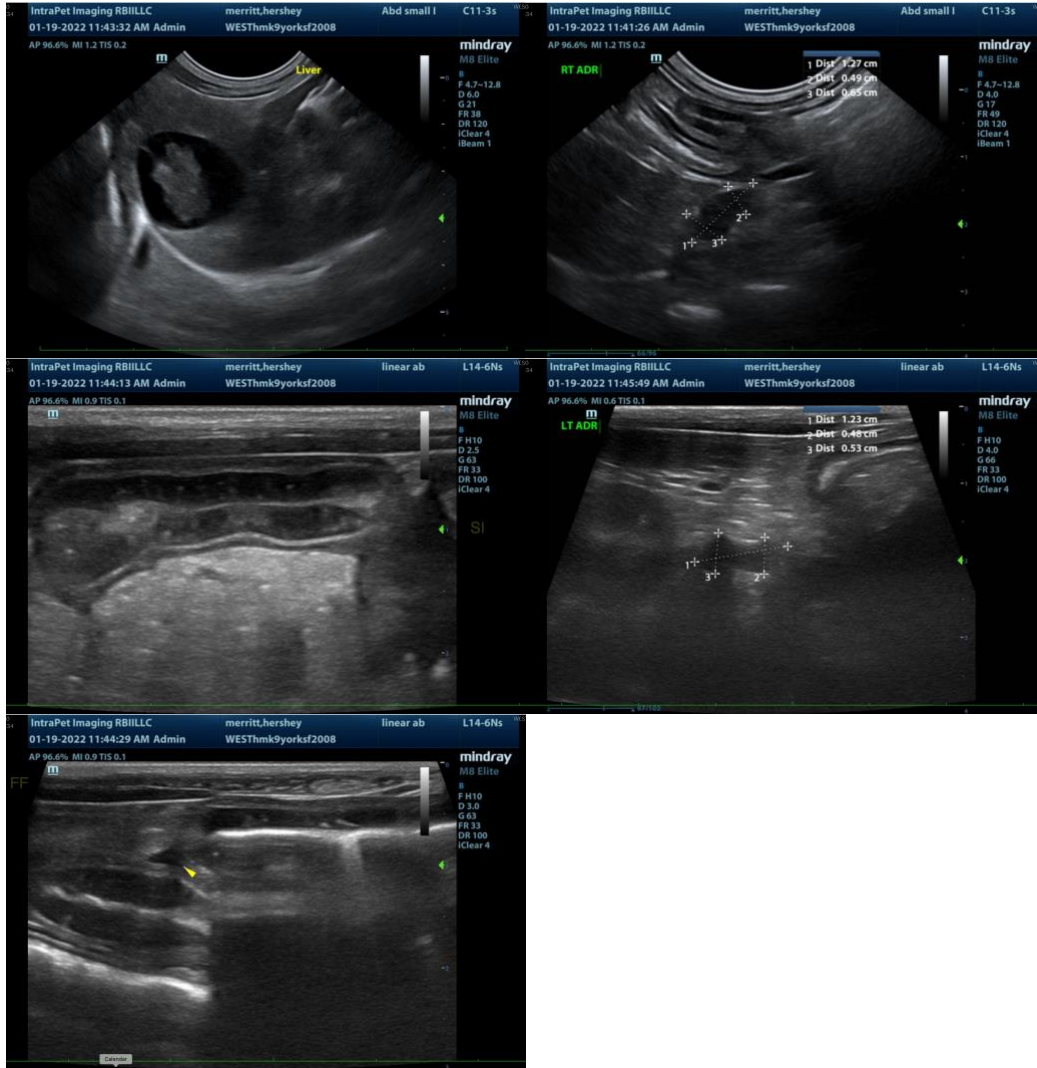
Secondary Findings

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis. Changes are similar to the previous sonogram.
- Bilateral age-related renal changes. Changes are similar to the previous sonogram.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If the patient is exhibiting gastrointestinal signs, further workup (i.e., malabsorption panel, fecal evaluation for ova and Giardia, GI biopsies), may be warranted.
- Regarding the gall bladder changes, consider the following:
 1. Initiation of Ursodiol therapy
 2. Alternatively, a repeat ultrasound of the gall bladder in three to four weeks can be considered, preferably two hours post- small meal. If changes are similar to the current sonogram, consider initiation of Ursodiol at that time
- Given the patient's age, chest x-rays are recommended to assess cardiopulmonary status.





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.

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