

**DATE**

1/4/2022

PATIENT

Harleigh Bollinger

SPECIES

Canine

BREED

Dachshund

SEX

Female, spayed

AGE

6/6/2007

WEIGHT

24.7 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Hickory VH

REFERRING VET

Dr. McNesby

INVOICE

12783

PRESENTING CLINICAL SIGNS

History: History of elevated liver values (ALKP/ALT) with suspect Hyperadrenocorticism. Patient presented to emergency clinic on Dec 24, 2021 for GI upset (vomiting/diarrhea). Abdominal radiographs demonstrated hepatomegaly and possible mid abdominal mass. Elevated (ALKP/ALT). Physical exam: recheck from ER T = 101.3 P = 120 R = 40 mm pink, moist, crt 2 sec. H/L auscult WNL Abd - soft, cranial organomegaly noted. no obvious mass palpable. rectal - soft diarrhea.

Current Medications: 12-25-21 Metronidazole 125 mg BID x 7 days, Provable Forte x 7 days, Omeprazole 10 mg BID x 5 days, Maropitant (Cerenia) 24 mg Q24 hours x4 days, Gabapentin 100 mg BID - TID x 5 days. Lab Results: Glucose 146 mg/dL (70-143), BUN 6 mg/dL (7-27), ALT 285 U/L (10-125), ALKP 1910 U/L (23-212), Amyl 475 U/L (500 -1500).

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, 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 (4.78 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths were visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydronephrosis. A small cortical cyst is observed at the caudal pole. Renal vasculature is normal.

The right kidney is normal in size (5.58 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths were visualized. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (0.97 cm at cranial pole) (1.08 cm at caudal pole) (2.33 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 enlarged (0.64 cm at cranial pole) (1.06 cm at caudal pole) (2.32 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.

Spleen

The spleen is normal in size (1.59 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. 1-2 tiny hyperechoic nodules are observed along the medial aspect. Splenic vasculature is normal.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature 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. A small to moderate amount of aggregated echogenic mostly gravity-dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not 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. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and slightly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

The abdominal lymph nodes are normal/not visible. The mesentery in the cranial abdomen, adjacent to the stomach is mildly hyperechoic. No free fluid is observed.

Other

A few ringdown lesions are visualized in the thorax.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

Bilateral adrenomegaly.

- 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.
- Gallbladder debris/sludge, non-mucocele.

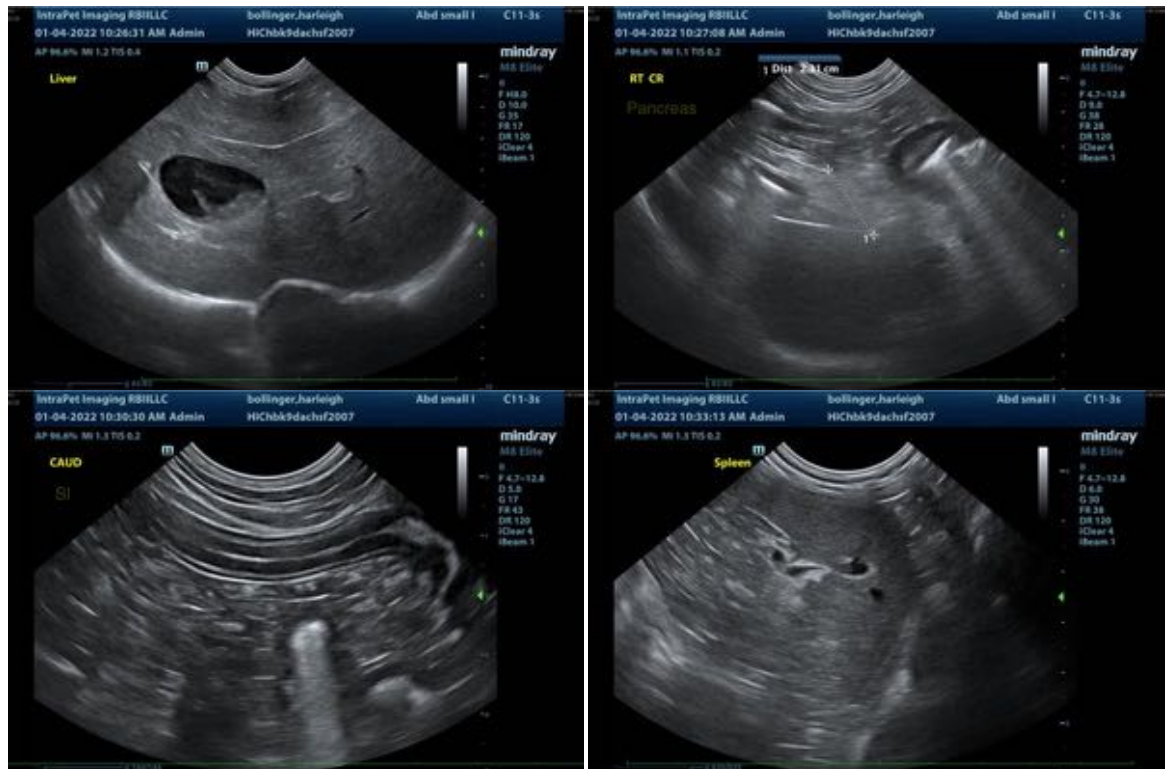
Secondary Findings:

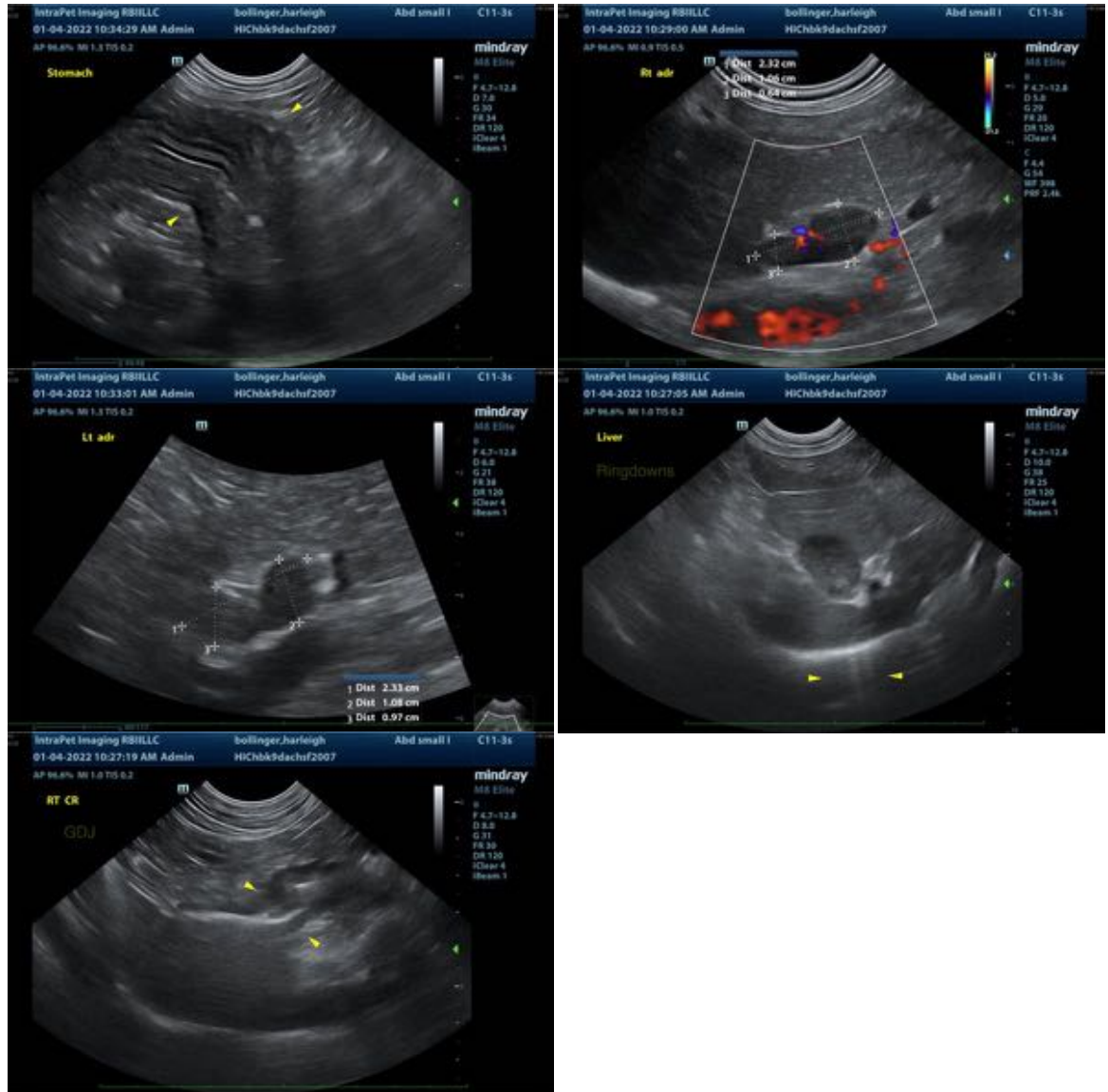
- Bilateral age-related renal changes with non-obstructive nephrolithiasis and dystrophic mineralization.
- Age-related pancreatic remodeling/fibrosis. Concurrent inflammation may be present, particularly if the patient exhibits discomfort on cranial abdominal palpation.
- The hyperechoic splenic nodules trend toward the benign (i.e., myelolipomas) or foci of lymphoid hyperplasia. Neoplasia is considered unlikely.
- The cranial peritonitis may be secondary to recent gastroenteritis and/or pancreatitis.
- The ring down lesions in the thorax are suggestive of pulmonary parenchymal disease.

*An obvious cause for the patient's gastrointestinal signs is not identified in this study. Considerations include acute gastroenteritis, low-grade pancreatitis, underlying metabolic disease, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If the patient is exhibiting clinical signs of Cushing's disease, further testing (i.e., ACTH stimulation test or low-dose dexamethasone suppression test) may be warranted. If Cushing's disease is confirmed, a baseline blood pressure measurement and UPC (if proteinuria is present) should be considered.
- Given the patient's age and suspected ringdown lesions, three-view thoracic radiographs are also recommended to assess cardiopulmonary status.
- Supportive care for acute gastroenteritis/pancreatitis is recommended. If clinical signs do not improve within 48-72 hours of medical management, a more advanced GI workup may be warranted. A fecal evaluation for ova and Giardia should be considered at this time.





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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