**DATE**

10/12/2021

PRESENTING CLINICAL SIGNS

History: Complaint - weight loss, increase in appetite and thirst, increased stool amount. PE - no significant findings. Hx hyperthyroidism since 2019, fluctuating weight over the last year.

PATIENT

Fancy Boy Herold

Current Medications: Methimazole transdermal 10mg twice daily since Dec 2020.

Lab Results: elevated liver values AST 114, ALT 696, ALP 188
 elevated T4 6.3.

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Feline

Sedation: Not needed.

Stat Report: Not requested.

BREED

Domestic longhair

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. A small amount of suspended echogenic debris is observed within the lumen. 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.

SEX

Male, neutered

AGE

7/12/2007

The left kidney is normal size (4.08 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

838 lbs.

The right kidney is normal size (3.91 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size (0.46 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Honeygo AH

The right adrenal gland is normal in size (0.49 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (0.69 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.

REFERRING VET

Dr. Weichert

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 gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

INVOICE

12348

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 diffusely gas distended. The small intestinal wall is normal to borderline

thickened (up to 0.29 cm) with a normal layering pattern and appropriate mural detail. There is slight disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. The colonic lumen contains shadowing fecal material. No obstructive disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

There is no evidence of free fluid. Several prominent mesenteric lymph nodes are visualized, the largest measuring 1.27 cm in diameter. Surrounding mesentery is mildly hyperechoic. In addition, a prominent (1.26 cm) lymph node is observed in the right cranial quadrant.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- An obvious cause for the elevated ALT is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, lymphoplasmacytic hepatitis, hepatic lipidosis, hepatopathy secondary to unregulated hyperthyroidism, hepatotoxicosis (i.e., secondary to Methimazole therapy), infiltrative neoplasia (less likely)) cannot be excluded.
- Bowel pattern consistent with inflammatory bowel disease with potential for emerging lymphoma.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

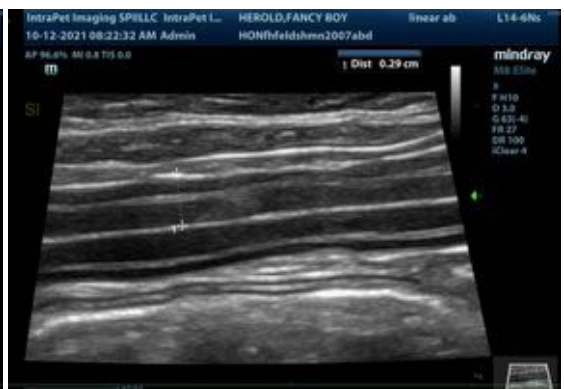
Secondary Findings:

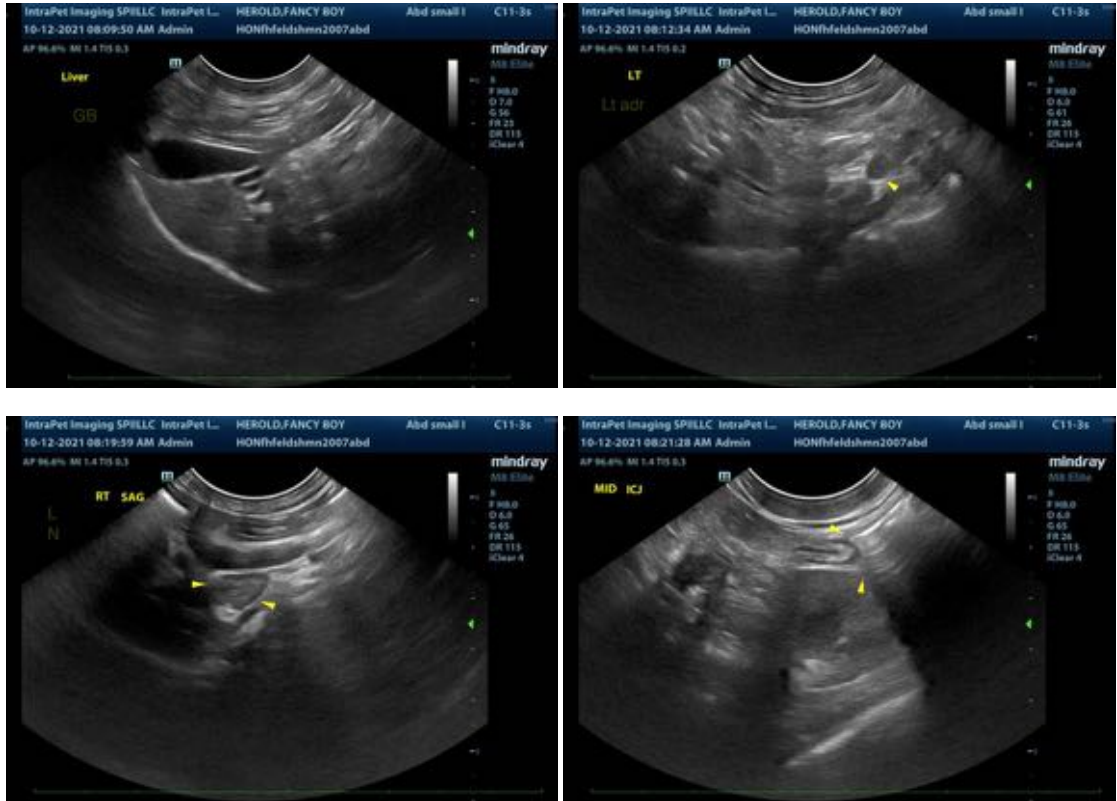
- Bilateral nephropathy with dystrophic mineralization
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider the following diagnostics/therapeutics:

1. Pre- and post-prandial serum bile acids
2. Fine needle aspirate of the liver (if clotting status is appropriate). A 25-gauge needle should be used.
3. GI panel including serum cobalamin, folate, TLI and PLI
4. Hypoallergenic diet trial
5. If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.
6. If the above diagnostics/therapeutics are inconclusive/ineffective, consider an abdominal exploratory with gastrointestinal and hepatic biopsies. Three-view thoracic radiographs should be performed prior to any anesthetic event.





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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