**DATE PRESENTING CLINICAL SIGNS**

12-27-21

History: chronic mild alt elevations; diagnosed with hyperthyroidism 9/18/21; mild ap and alt elevations at that time, similar at recheck bw in Nov. BW on 12/18/21 showed significant marked elevations alt and ap chronic ongoing weight loss: skittish cat that is difficult to med at home, on transdermal Methimazole 7.5 mg BID.

PATIENT

Poppy Wood

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

8/10/2011

WEIGHT

3.81 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce
RDCS, RVT

HOSPITAL NAME

Banfield Pet Hospital
of Towson

REFERRING VET

Dr. Mike

INVOICE

10069

Current Medications: SAME# 90 mg/ml with 9 ml milk thistle qd called into compounding pharmacy, Convenia (80 mg/ml) 0.38 ml SQ. , Methimazole transdermal.

Lab Results: (12/21/21) ap 743, alt 2713, tbil 2.8 (previously normal all visits), t4 9.6; wbc 3.1 (11/13/21) ap 132, alt 232, t4 7.4; wbc 3.96

(9/18/21) ap 141, alt 249, t4 13.3; wbc 7.88; (3/6/21) wbc 6.54; (12/21/20) wbc 4.19; (9/12/21) wbc 3.78. Date of Previous IntraPet Ultrasound: 4-8-2021.

Sedation: Liquid Gabapentin PO.

Stat Report: Not requested.

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 mostly 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 (3.72 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.80 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.45 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.31 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively prominent in size (1.20 cm in width at the level of the hilus) and elongated with a normal curvilinear peripheral contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

The gall bladder lumen is moderately distended. The wall is slightly thickened (up to 0.15 cm). A small to moderate amount of aggregated echogenic debris/sludge is observed, some of which is adhered to the luminal wall, and some of which is gravity dependent. The cystic and common bile ducts are normal/not seen.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and homogenous in appearance. A 0.83 x 0.77 irregular multiseptated cystic nodule is observed on the left side. There is a subtle increase in portal markings. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

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 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

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

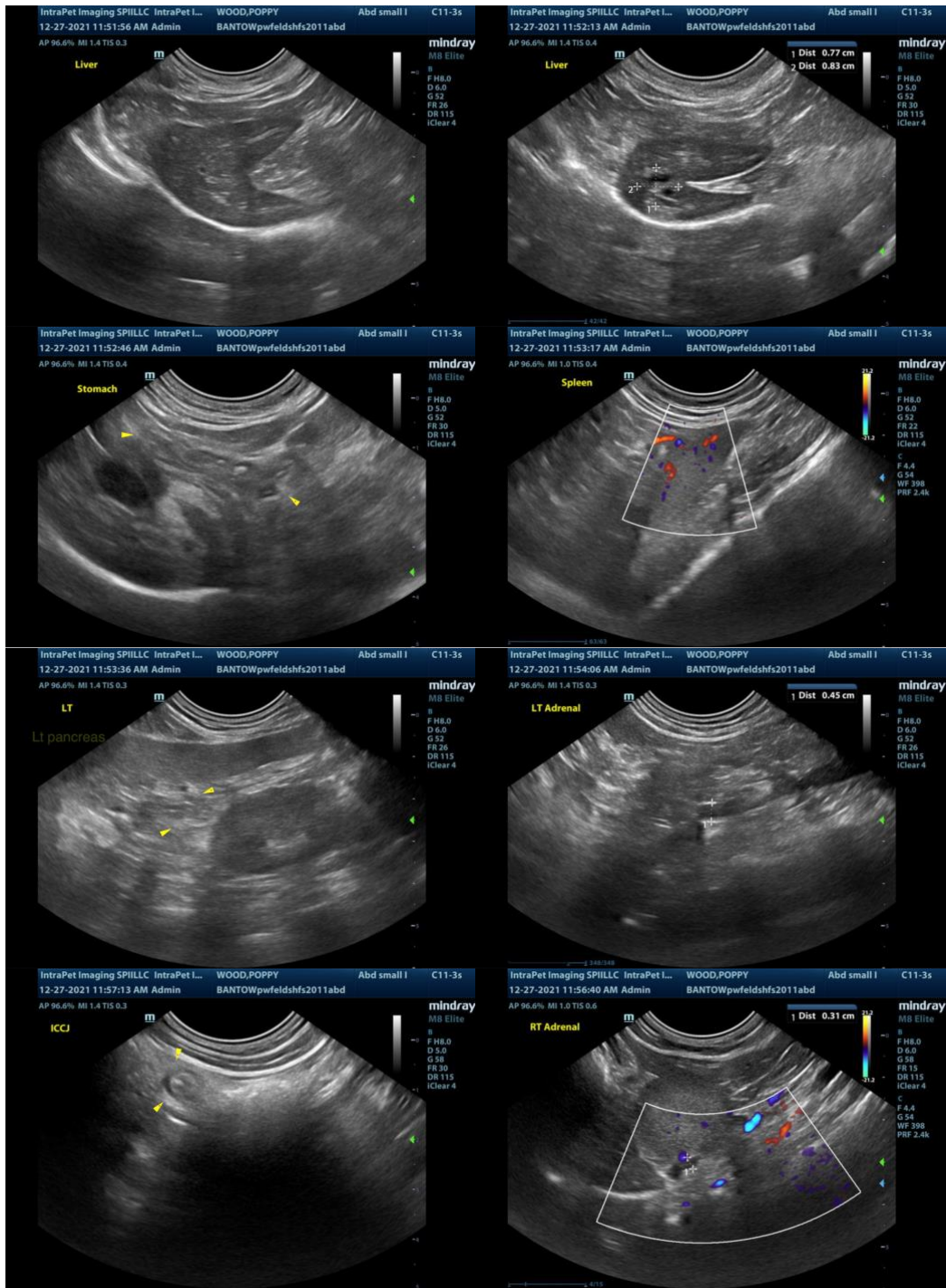
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, lymphoplasmacytic hepatitis, hepatic lipidosis, hepatotoxicosis (i.e., Methimazole), infiltrative neoplasia (less likely) cannot be excluded.
- The cystic hepatic nodule is most consistent with biliary cystadenoma or cystadenocarcinoma.
- The gall bladder wall changes could be consistent with cholecystitis and/or benign age-related hyperplasia.

Secondary Findings

- Minor bilateral age-related renal changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider discontinuation of Methimazole temporarily, to help determine if the liver enzyme elevations are due to drug toxicity.
- Consider a fine-needle aspirate of the liver if clotting status is appropriate. If cytology results are inconclusive, a surgical liver biopsy with aerobic and anaerobic bile cultures may be necessary to get a definitive diagnosis. If the patient is to undergo anesthesia, three-view thoracic radiographs are recommended to assess cardiopulmonary status.
- If a more conservative approach is desired, consider empirical treatment for cholangiohepatitis/cholecystitis with broad spectrum antibiotics, if not already performed.





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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