

**DATE PRESENTING CLINICAL SIGNS**

2/21/22

Presented 2/17/22 for a 24 hours history of vomiting and hyporexia. Weight loss noted since last visit (~4lbs). Elevation in liver values(see below). On PE ~5% dehydrated, otherwise WNL.

PATIENT

Fiona McConnel

Current Medications: None noted.

Lab Results: ALT 410 H, ALP 345 H, GGT 58 H, Tbili 1.5 H, USG 1.070

Radiographs: Suspect microhepatita based on gastric axis, diffuse gas dilation of small and large intestines.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, RDMS.

SPECIES

Canine

BREED

Sheepdog/Poodle mix

SEX

Female, intact

AGE

7/11/2011

WEIGHT

51.9 lbs.

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 (6.57 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.

The right kidney is normal size (6.57 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in length with a flattened contour (0.35 cm at cranial pole) (0.37 cm at caudal pole) (3.12 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 in length with a flattened contour at the caudal pole (1.02 cm at cranial pole) (0.33 cm at caudal pole) (2.76 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.

HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Michelotti

Spleen

The spleen is subjectively normal in size (1.64 cm in width at the level of the hilus) with a curved contour and normal peripheral margins. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

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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 gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. 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. A few prominent mesenteric lymph nodes are visualized, the largest measuring 3.45 x 1.06 cm. 1-2 prominent lymph nodes are also observed in the cranial abdomen.

Other

The ovaries are subjectively normal in size (left ovary 1.18 x 0.97 cm; right ovary 1.22 x 0.50 cm) with a normal shape and homogeneous parenchyma. No pathology is observed. The uterus appears normal in size (1.29 cm in width). No obvious abnormalities are seen.

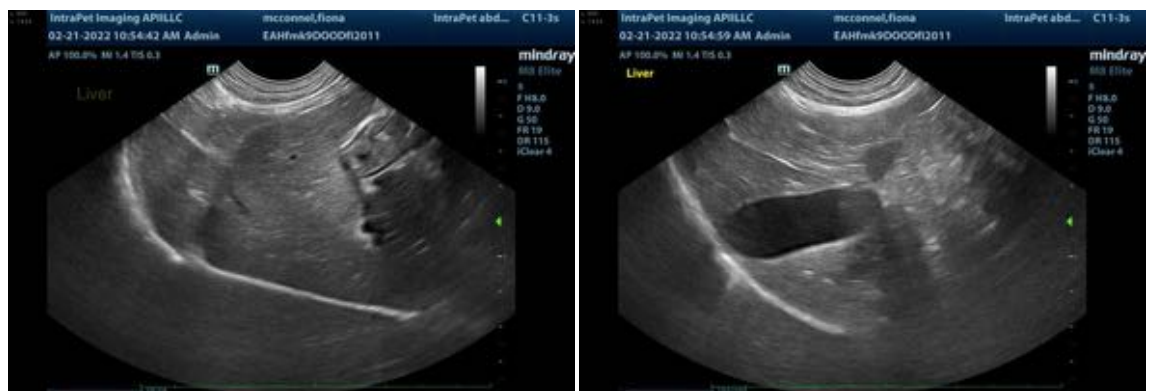
ULTRASONOGRAPHIC FINDINGS

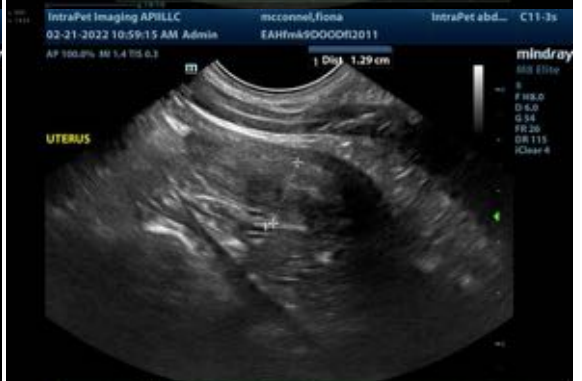
- The flattened adrenal glands may be a normal variant or could be consistent with early atrophy (i.e., secondary to hypoadrenocorticism).
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

*An obvious cause for the patient's elevated liver values is not identified in this study. Top differentials include bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, hepatotoxicity (i.e., copper). Infiltrative neoplasia (i.e., lymphoma) is possible but considered unlikely given the sonographic appearance.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Hepatic tissue sampling (i.e., fine needle aspirate or surgical biopsy) is recommended to get a definitive diagnosis. Surgical biopsies would be ideal as cytology results may not be representative of global organ pathology. If surgery is pursued, bile cultures (aerobic and anaerobic) as well as acquisition of additional hepatic tissue samples for possible copper quantitation are recommended.





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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