



PATIENT PRESENTING CLINICAL SIGNS

Achilles Pflanz History: Pet presented last week for gastroenteritis. Radiograph was taken of his abdomen and liver appears enlarged. Pet is clinically doing better, but owner mentioned decreased appetite. History of elevated Alkp in December

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: December ALKP: 2184 ALT: 132

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Mixed

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

SEX

Neutered Male

The region of the prostate is not visualized due to its pelvic location.

AGE

12 years

The left kidney is normal in size (7.12 cm in length) with a normal shape, architecture and 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, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

63.4 lbs

The right kidney is normal in size (7.98 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The adrenal glands are not definitively visualized in the available images. However, no obvious pathology is observed in this region.

INTERPRETED BY

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

Spleen

The spleen is normal in size (2.25 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

IMAGING PERFORMED BY

Dr Reyes

Liver

The liver is subjectively enlarged with swollen, slightly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and heterogeneous in appearance. There is a questionable 5.60 cm isoechoic to slightly heterogeneous, mildly cavitated mass in the mid- to right-liver. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

HOSPITAL NAME

Dr Beltran

The gall bladder 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/not seen.

REFERRING VET

Mobile Vet
Ultrasound

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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discrete masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

INVOICE

12469

DATE

3.20.23

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

- Questionable mid- to right-hepatic mass (seen in one video clip). This lesion may represent a tumor, regenerative nodule, inflammatory focus, imaging artifact, other.
- The diffuse hepatic parenchymal changes could be consistent with regenerative nodular hyperplasia, vacuolar hepatopathy, or less likely, inflammatory disease, infiltrative neoplasia or other hepatopathy.

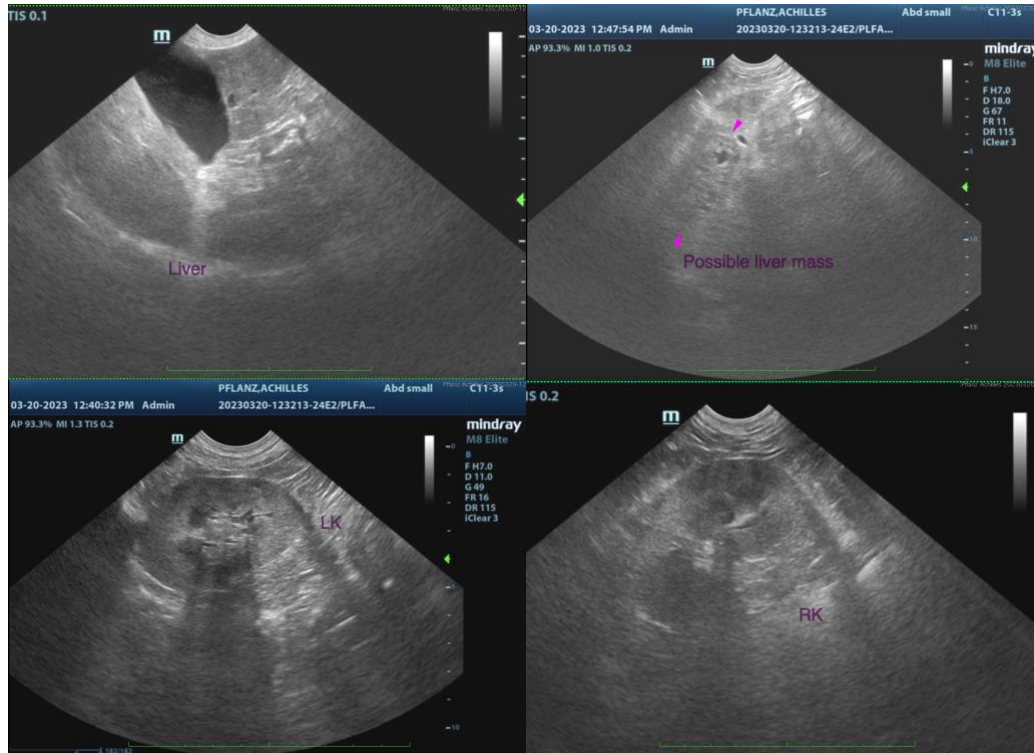
Secondary Findings

- Bilateral chronic age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Additional sonographic images of the liver would be useful to better evaluate for a hepatic mass. Additional imaging of the adrenal regions would also be beneficial to evaluate for underlying adrenal pathology. If further sonographic imaging is not possible, consider an abdominal CT scan to further characterize these regions. Three-view thoracic radiographs are recommended prior to any anesthetic event.





ADDENDUM: (Additional images of the liver and adrenal glands submitted 3/27/23)

Three still images and 10 additional video clips were added to the study. In the newly-submitted images, a >7.70 cm irregular, hyperechoic-to-heterogenous cavitated liver mass is observed on the right side. The lesion causes capsular expansion.

Adrenal glands

The left adrenal gland is normal size (0.75 cm at cranial pole) (0.69 cm at caudal pole) with a 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.

What is thought to be right adrenal gland is normal in size (0.64 cm at cranial pole) (0.66 cm at caudal pole) with a normal shape and smooth peripheral contours. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

A 0.53 cm hypoechoic splenic nodule is obstruction mid-spleen.

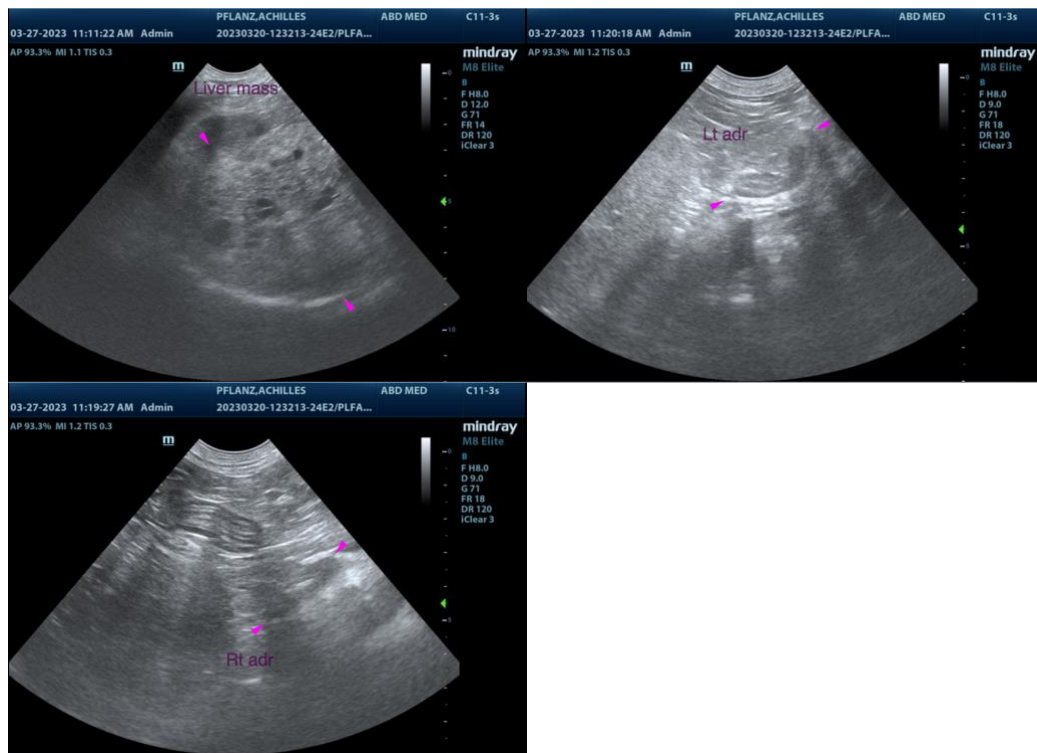
Findings

- Large right hepatic mass. Neoplasia (i.e., adenoma, adenocarcinoma, hemangiosarcoma, round cell tumor, other) is suspected with a lower possibility of a non-malignant process (i.e., inflammatory focus).

- The splenic nodule trends toward the benign (i.e., focus of lymphoid hyperplasia or similar) with a lower possibility of an emerging tumor.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases. If there is no evidence of pulmonary metastatic disease and an aggressive approach is desired, consider excisional biopsy of the hepatic mass. An abdominal CT scan would be useful in presurgical planning.



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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