



PATIENT

Angel Hettenbach

PRESENTING CLINICAL SIGNS

Hepatocellular hepatopathy, vomiting, renal dz- stable

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

12yr

WEIGHT

6lb

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

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HOSPITAL NAME

Franklin Lakes AH

REFERRING VET

Rizzo

INVOICE
14290ag

DATE
07/05/2023

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone to a depth of 2cm. The ureters were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The left kidney revealed moderate degenerative changes with slight pyelectasia. Corticomedullary mineralization and loss of corticomedullary definition was present. Diffuse hyperechoic fibrosis pattern was present. Subnormal blood flow to the left kidney was present on Doppler. The right kidney was dystrophic and fibrosed with minor pyelectasia and a 0.4 cm pelvic calculus as well as smaller calculi. The right kidney is not likely to be functional. The patient has likely been undergoing chronic obstructive disease with secondary fibrosis. The left kidney measured 3.04 cm in length. The right kidney measured 1.73 cm in length.

Adrenal Glands

Both adrenal glands were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.3 cm.

Spleen

The spleen presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

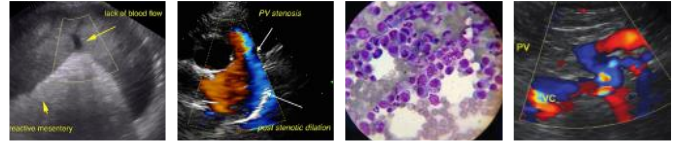
The liver images submitted revealed diffuse parenchymal remodeling with nodular changes. Thickened irregular gallbladder and apical polyps were present. Hypoechoic nodular changes were also noted. The common bile duct was followed to the duodenal papilla and measured 3.0 mm. Mildly thickened duodenal papilla was noted.

Gastrointestinal

The gastrointestinal tract revealed minor variable thickening and echogenic submucosal changes most consistent with low grade end result of chronic GI disease such as IBD and may be related to malassimilation of nutrients if any weight loss is present. No obvious neoplastic patterns were noted and luminal content was unremarkable.

Pancreas

The base and limbs of the pancreas were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain



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upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation, then low-grade smoldering chronic pancreatitis should be suspected.

Free Abdomen

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No omental masses, overt lymphadenopathy or peritoneal effusion was present.

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ULTRASONOGRAPHIC FINDINGS

- Fibrosing cholangitis liver pattern with thickened irregular gallbladder. Possible cholangiocarcinoma.
- End stage right renal disease with degenerative left renal disease.
- Age related pancreatic changes.

SEX

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

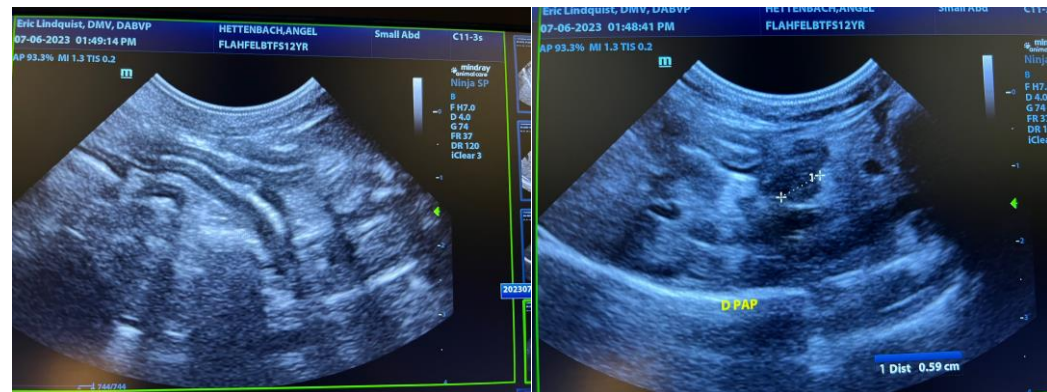
The liver exhibits diffuse end stage disease. A core liver biopsy would be necessary for a definitive diagnosis assuming normal clotting status. Cholecystectomy with liver inspection and biopsy could be considered. However, neoplasia is a strong potential. A poor long term prognosis is indicated.

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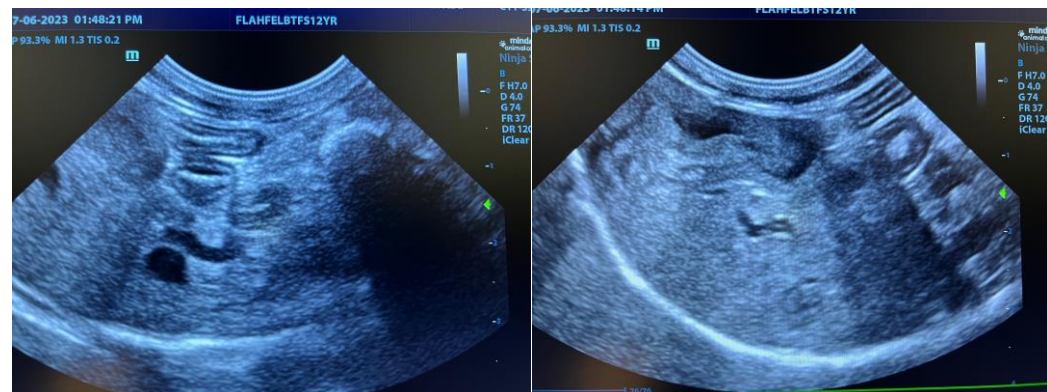
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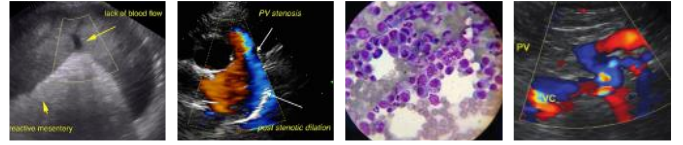
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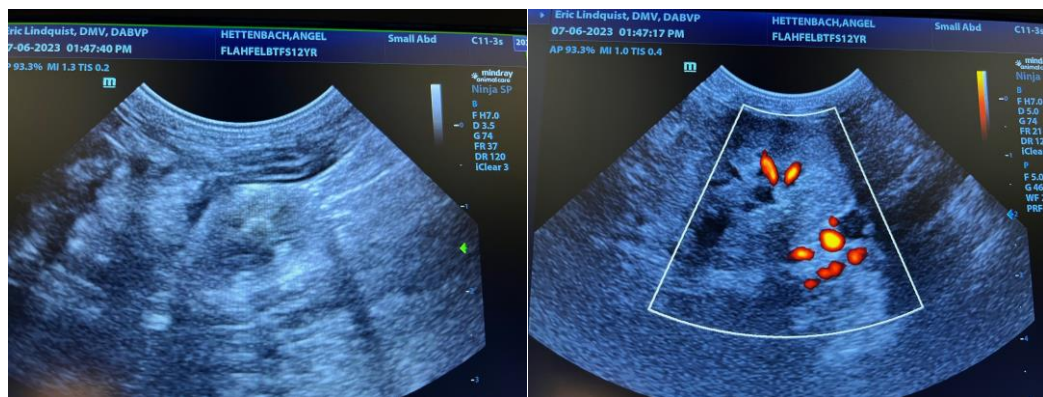
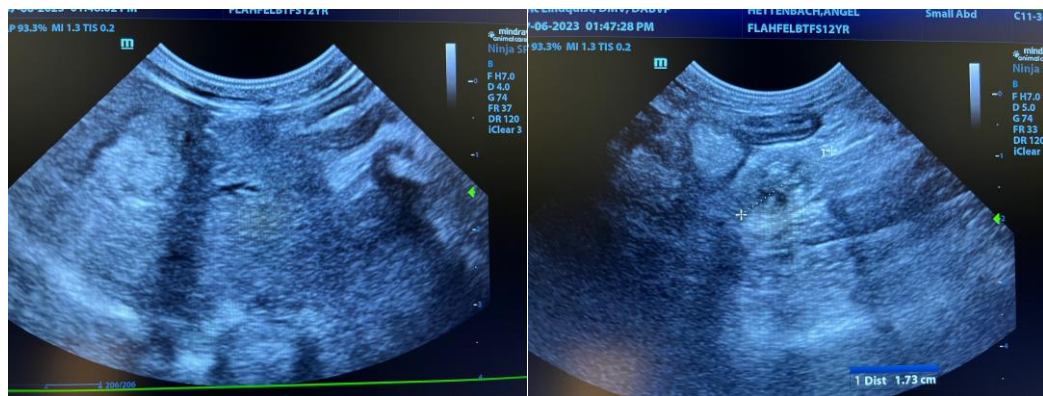
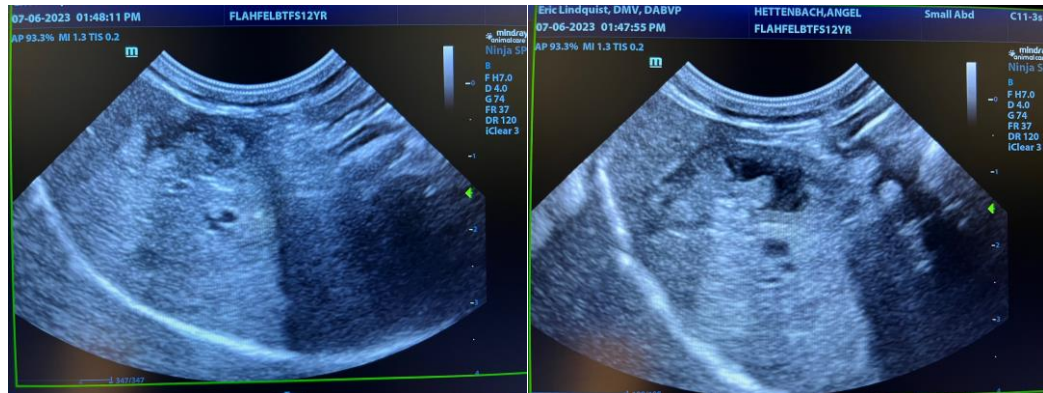
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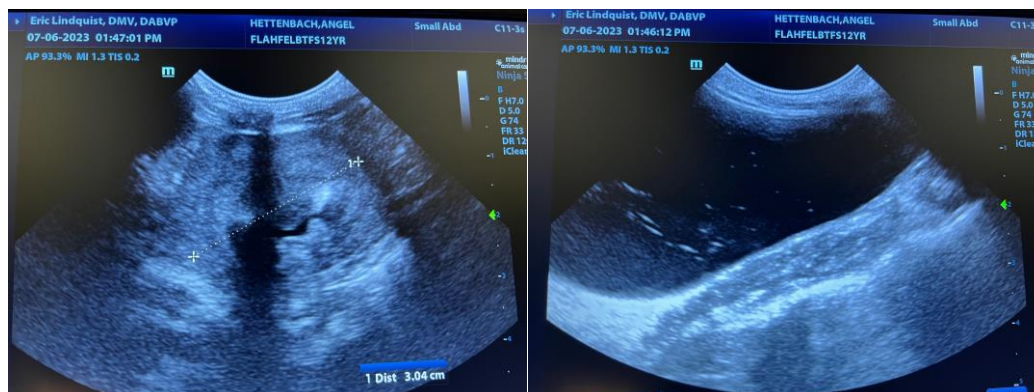
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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