



PATIENT PRESENTING CLINICAL SIGNS

Emma Zumbers

History: Weight loss. History of loose stools and vomiting, currently stools have improved On Prednisone, Forti-Flora,

SPECIES

Feline

Abnormal PE/Chem/CBC/UA Results: TLI fasting - ref: 12-82ug/L 278.4ug/L Pancreatic Lipases immunoreactivity fasting - ref: <3.5 ug/L 11.6ug/L Cobalamin Fasting - 290-1500ng/L 866 ng/L Folate Fasting - ref: 9.7-21.6 29.6ng/L MSU report: Thyroid Panel Total Thyroxine (TT4) (CLIA) 22 Ref. range 9-46 Total Triiodothyronine (TT3) RIA) 0.7 Ref. range 0.6-1.4 Free T4 by dialysis (RIA) 30 Ref. range 10-50 BUN 41; all other CBC/Chem/T4 normal

BREED

Siamese

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

SEX

Spayed female

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. 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 was noted. Ureteral papillae were normal.

AGE

14 years

The **kidneys** revealed normal structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney was normal in size and measured 3.57 cm. The right kidney was subnormal in size and measured 2.5 cm.

WEIGHT

4.3 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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.

IMAGING PERFORMED BY

Chaley Hunt, LVT

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 was noted.

HOSPITAL NAME

Eight St VC

REFERRING VET

Dr. Withers

Liver

The **liver** was mildly enlarged with subtle, heterogenous parenchymal changes with multi-focal nodular changes. A 5.0 cm left-sided liver nodule was noted. The gallbladder was over distended. The cystic duct was tortuous with generalized enlargement. The common bile duct was dilated and measured 0.75 cm and followed with a tissue thickening of 0.57 x 0.36 cm prior to the dilation. Lobar biliary ducts were also dilated. This is consistent with post hepatic obstruction. No pathological hepatic lymphadenopathy was evident.

INVOICE

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DATE

6/28/23



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Gastrointestinal

There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. The colon was fluid filled. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

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 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.

ULTRASONOGRAPHIC FINDINGS

Post hepatic obstruction. Undefined hepatic nodules, strong concern for neoplasia.

Dilated common bile duct and inflammatory polyp or potential neoplastic lesion at the distal portion of the common bile duct and duodenal papilla. Inflammatory polyp versus carcinoma.

Dystrophic right kidney, hypertrophied left kidney. Mild degenerative renal changes.

Age related pancreatic changes.

Fluid filled colon.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Bilirubin and ALKP values should be monitored carefully in this patient as the sonographic appearance is that of post hepatic obstruction. This may be an age related change. If bilirubin and ALKP are not altered and adequate bile appears to be passing; however, this is a concerning sonographic presentation. The Prednisone therapy may be suppressing a more significant presentation. FNA of the liver nodules is warranted. If bilirubin elevations occur then bile duct deviation procedure is warranted.



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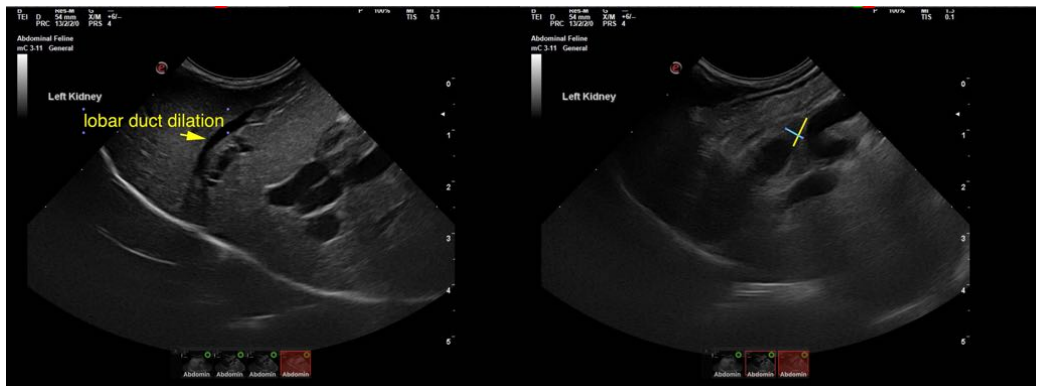
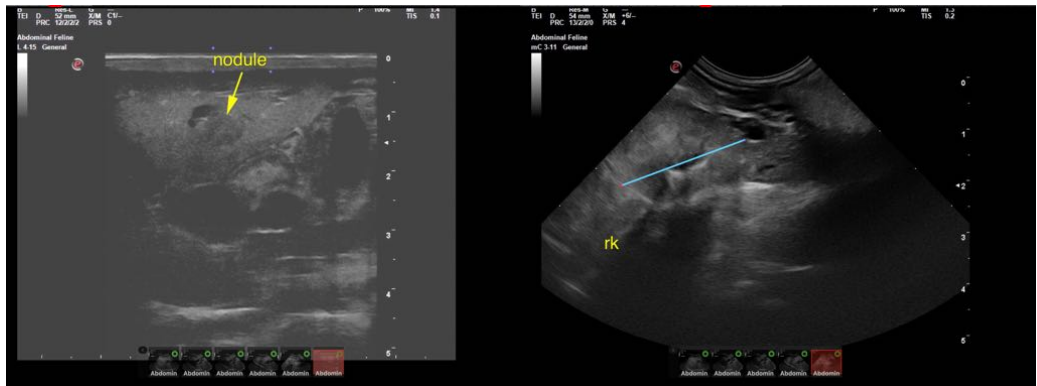
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com