



PATIENT

Cosmo Laninga

SPECIES

Canine

BREED

Havanese Cross

SEX

Neutered male

AGE

7 years

WEIGHT

10 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Animal Clinic
Downtown

REFERRING VET

Dr. Waldman

INVOICE

43179

DATE

3/7/23

PRESENTING CLINICAL SIGNS

History: Severe elevation of ALPK for last number of months. Patient is non clinical
Abnormal PE/Chem/CBC/UA Results: Elevation of ALPK for last few months mild elevation ALP

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

The **kidneys** were normal in size and contour. There was loss of corticomedullary definition noted. There are slight areas of mineralization. The left kidney measured 4.47 cm. The right kidney measured 4.68 cm.

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 0.42 cm. The right adrenal gland measured 0.34 cm at the cranial pole and 0.45 cm at the caudal pole.

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.

Liver

Exam of the cranial abdomen demonstrated excessive **liver** size, swollen contour, with conserved uniform architecture. Parenchymal echogenicity was diffusely isoechoic to the spleen and falciform fat. The base of the caudate process revealed hyperechoic 2.0 x 1.5 cm nodule. This is consistent with lipogranuloma or possibility of low grade carcinoma versus hyperplasia. The portal vein to vena cava ratio was 1:1. The gallbladder was mildly over distended with minor striating bile, yet not to the level of mucocele formation.



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Gastrointestinal

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The **gastrointestinal tract** revealed mildly increased submucosal echogenicity and thickness. The curvilinear patterns were maintained. The gastrointestinal lumen is unremarkable.

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Pancreas

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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.

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ULTRASONOGRAPHIC FINDINGS

AGE

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Increased portal markings. Benign hepatopathy with remodeling and nodule.

WEIGHT

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Minor excessive gallbladder debris.

Mild, chronic GI changes.

Mild chronic renal changes with pinpoint nephrolithiasis.

Otherwise unremarkable abdomen.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the general hepatic parenchyma is indicated. Ursodiol therapy can be justified. Recheck sonogram after 6-8 weeks of Ursodiol therapy is indicated.

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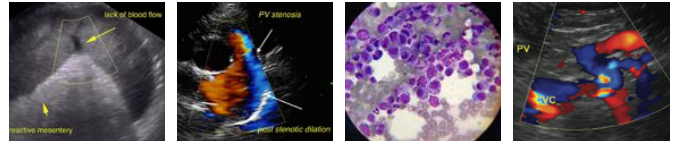
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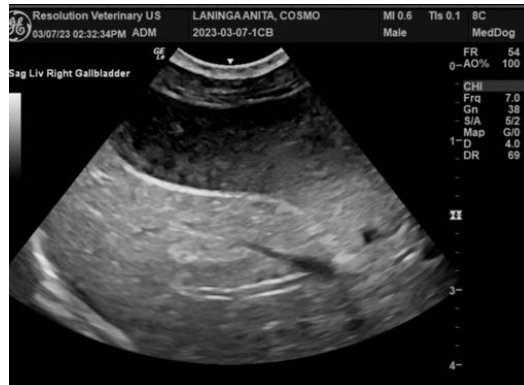
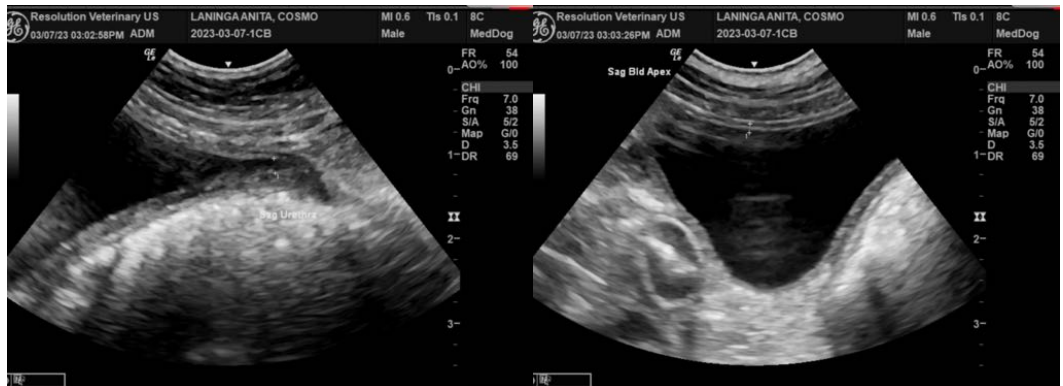
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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