



PATIENT

Hopi Hessel

SPECIES

Canine

BREED

Dachshund Cross

SEX

Neutered male

AGE

12 years

WEIGHT

8.5 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Permenter

HOSPITAL NAME

Viking VH

REFERRING VET

Dr. Permenter

INVOICE

43236

DATE

3/10/23

PRESENTING CLINICAL SIGNS

History: Referred from regular vet for persistent elevation of ALP and ALT. Poor appetite, intermittent vomiting, diarrhea, and weight loss, hypoproteinemic

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** revealed normal size and 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 measured 4.0 cm. The right kidney measured 4.4 cm.

Adrenal Glands

The left **adrenal gland** was mildly enlarged and mildly swollen.

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

The **liver** was enlarged, irregular and heterogenous with parenchymal changes. There was no evidence of passive congestion as cause of the ascites. The hepatic veins were of normal size. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident. Pleural effusion was noted through the diaphragm with areas of caudal lung consolidation.

Gastrointestinal

The stomach was filled with progressively shadowing material that is consistent with ingesta along with gastric wall thickening measuring 1.0 cm. The intestines revealed diffuse, hyperechoic fogging or overlay throughout the small intestine as well as areas of mucosal striations and speckling. This striation



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+ fogging effect appeared to exclusively affect the mucosal layer with the submucosa, muscularis and serosa left in-tact. Reactive mesentery was present associated with the serosa indicative of active inflammation. This is most consistent with protein losing enteropathy/lymphangectasia. Full thickness biopsies or endoscopy guided biopsies would be ideal to confirm. No obstructive disease or obvious suspicion of neoplasia.

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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. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

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Free Abdomen

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A large amount of mildly echogenic free fluid was noted in the abdomen. Enhanced, nodular omentum was noted in the cranial abdomen.

WEIGHT

8.5 kg

ULTRASONOGRAPHIC FINDINGS

Gastric thickening. Mucosal fogging.

Ascites with enhanced surrounding omentum and nodular changes in the region of the pancreas. Concurrent pleural effusion.

Non-specific benign hepatopathy.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is concern for carcinomatosis, lymphomatosis or similar pathology. Abdominocentesis and cytospin is recommended of the free fluid as well as pleurocentesis. The third spacing of fluid is likely owing to protein losing enteropathy given the mucosal striations. Treatment for protein losing enteropathy is indicated.

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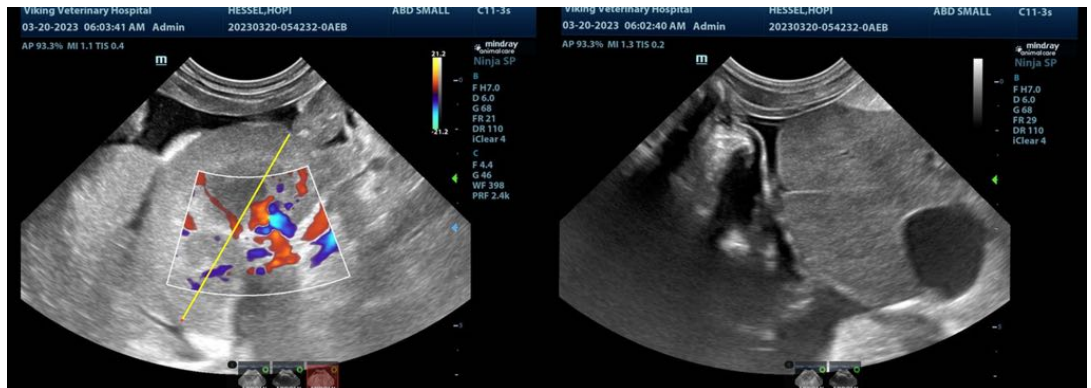
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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info@SonoPath.com

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